MITSUBISHI MATERIALS

AROCS
OUTIL MECA

# PERÇAGE

DIA EDGE

NEW

# MITSUBISHI MATERIALS

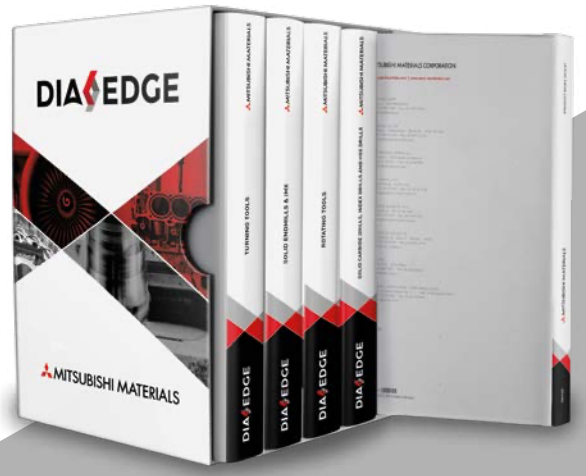
## PRÉSENTATION DU NOUVEAU CATALOGUE GÉNÉRAL C009 – 2022/2023

**CIBLÉ, COMPACT, PRATIQUE.**

La vaste gamme d'outils Mitsubishi Materials est désormais présentée par domaine d'application, offrant aux utilisateurs un accès rapide et facile à l'information recherchée.

Ce coffret compte 5 volumes :

- **TOURNAGE**
- **PERÇAGE**
- **FRAISAGE MONOBLOC**
- **FRAISAGE À PLAQUETTES**
- **MPLUS**




**NOUVEAU DESIGN**

**NOUVELLES DIMENSIONS**

**UTILISATION SIMPLIFIÉE**

**DOMAINE D'APPLICATIONS**

Ce coffret facilite le stockage et offre l'espace nécessaire aux prochaines publications comme les brochures « Nouveautés Produits » à paraitre au cours du cycle de vie de 2 ans du catalogue général. Pour compléter la collection, vous pourrez ajouter les catalogues supplémentaires dans l'espace prévu à cet effet et effectuer les remplacements au fil des 2 ans.

**REMARQUES :**

- Cette publication remplace toutes les éditions parues auparavant.
- Les brochures « Nouveautés Produits" sont publiées 2 fois par an en Avril et en Octobre.
- Ce nouveau catalogue général ne peut être commandé que sous la forme du coffret de 5 volumes **(référence C009F).**

**VERSION DIGITALE**

Pour accéder à la version digitale du catalogue, veuillez scanner le QR code ou visiter notre site www.mhg-mediastore.net

# PERÇAGE

**PERFORMANCES – REDÉFINITION DES PARAMÈTRES**

Le secteur industriel évolue rapidement, c'est pourquoi Mitsubishi Materials s'efforce continuellement de figurer parmi les pionniers du marché.

Les perpétuels échanges avec les partenaires et les clients permettent de proposer des solutions adaptées à chaque situation.

Du foret à plaquettes MVX (jusqu'à 6xD) au MPS1 super-long, Mitsubishi Materials propose des solutions individuelles pour toutes les applications de perçage.

DIAEDGE

# CRÉER UN MEILLEUR AVENIR AVEC NOS CLIENTS

DIAEDGE, notre nouvelle marque rassemble nos outils de technologies de pointe pour tous les utilisateurs passionnés.

Notre objectif n'est pas seulement d'offrir des outils à valeur ajoutée, mais aussi de réfléchir avec nos clients, de partager nos inspirations et de continuer à relever ensemble de nouveaux défis.

MITSUBISHI MATERIALS

2022/2023

# INDEX

## PERÇAGE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| DONNÉES TECHNIQUES | P001 |
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| INFORMATIONS GÉNÉRALES | |

# LEXIQUE OUTILS DE PERCAGE

## ●Organisation de la section outils de percage.

### ①Organisation suivant l'application du foret.

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PHOTO DU PRODUIT

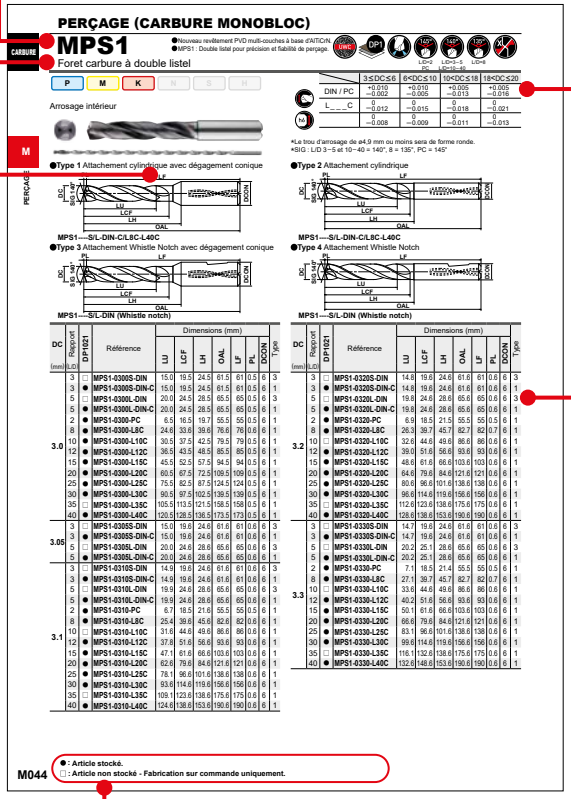
NOM PRODUIT

PRODUIT

TOLÉRANCE DIAMÈTRE

PRODUIT

GÉOMÉTRIE



PERÇAGE (CARBURE MONOBLOC)

MPS1

●Nouveau revêtement PVD multi-couches à base d'ATiCrN
●MPS1 : Double listel pour précision et fiabilité de perçage

Foret carbure à double listel

P M K N S H

Arrosage intérieur

●Type 1 Attachement cylindrique avec dégagement conique

●Type 2 Attachement cylindrique

●Type 3 Attachement Whistle Notch avec dégagement conique

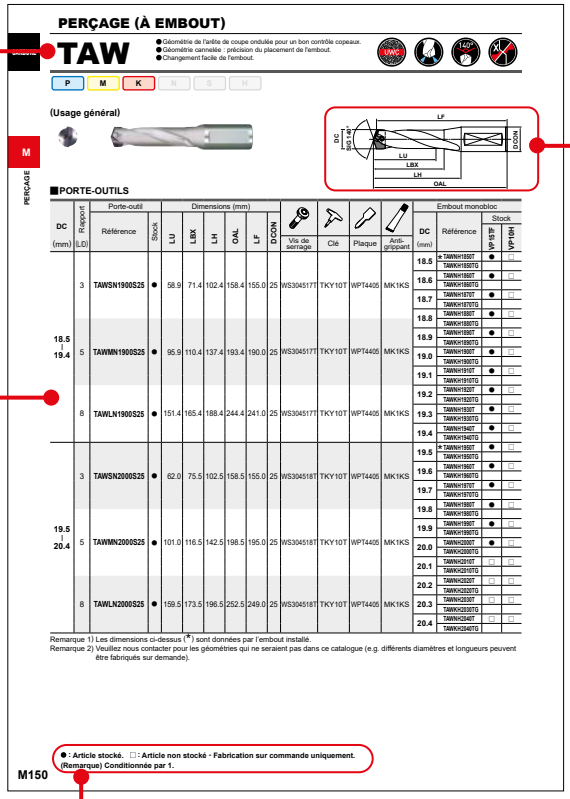
●Type 4 Attachement Whistle Notch

| DC (mm) | LD | Reprod. | DP1021 | Référence | Stock | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.0 | 3 | | □ | MPS1-0300S-DIN | | 15.0 | 19.5 | 24.5 | 61.5 | 61 | 0.5 | 6 | 3 |
| | 3 | ● | □ | MPS1-0300S-DIN-C | | 15.0 | 19.5 | 24.5 | 61.5 | 61 | 0.5 | 6 | 1 |
| | 5 | □ | □ | MPS1-0300L-DIN | | 20.0 | 24.5 | 28.5 | 65.5 | 65 | 0.5 | 6 | 3 |
| | 5 | ● | □ | MPS1-0300L-DIN-C | | 20.0 | 24.5 | 28.5 | 65.5 | 65 | 0.5 | 6 | 1 |
| | 2 | ● | □ | MPS1-0300-PC | | 6.5 | 16.5 | 19.7 | 55.5 | 55 | 0.5 | 6 | 1 |
| | 8 | ● | □ | MPS1-0300-L8C | | 24.6 | 33.6 | 39.6 | 76.6 | 76 | 0.6 | 6 | 1 |
| | 10 | ● | □ | MPS1-0300-L10C | | 30.5 | 37.5 | 42.5 | 79.5 | 79 | 0.5 | 6 | 1 |
| | 12 | ● | □ | MPS1-0300-L12C | | 36.5 | 43.5 | 48.5 | 85.5 | 85 | 0.5 | 6 | 1 |
| | 15 | ● | □ | MPS1-0300-L15C | | 45.5 | 52.5 | 57.5 | 94.5 | 94 | 0.5 | 6 | 1 |
| | 20 | ● | □ | MPS1-0300-L20C | | 60.5 | 67.5 | 72.5 | 109.5 | 109 | 0.5 | 6 | 1 |
| | 25 | ● | □ | MPS1-0300-L25C | | 75.5 | 82.5 | 87.5 | 124.5 | 124 | 0.5 | 6 | 1 |
| | 30 | ● | □ | MPS1-0300-L30C | | 90.5 | 97.5 | 102.5 | 139.5 | 139 | 0.5 | 6 | 1 |
| | 35 | □ | □ | MPS1-0300-L35C | | 105.5 | 113.5 | 121.5 | 158.5 | 158 | 0.5 | 6 | 1 |
| | 40 | ● | □ | MPS1-0300-L40C | | 120.5 | 128.5 | 136.5 | 173.5 | 173 | 0.5 | 6 | 1 |
| 3.05 | 3 | □ | □ | MPS1-0305S-DIN | | 15.0 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 3 |
| | 3 | ● | □ | MPS1-0305S-DIN-C | | 15.0 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 1 |
| | 5 | □ | □ | MPS1-0305L-DIN | | 20.0 | 24.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 3 |
| | 5 | ● | □ | MPS1-0305L-DIN-C | | 20.0 | 24.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 1 |
| 3.1 | 3 | □ | □ | MPS1-0310S-DIN | | 14.9 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 3 |
| | 3 | ● | □ | MPS1-0310S-DIN-C | | 14.9 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 1 |
| | 5 | □ | □ | MPS1-0310L-DIN | | 19.9 | 24.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 3 |
| | 5 | ● | □ | MPS1-0310L-DIN-C | | 19.9 | 24.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 1 |
| | 2 | ● | □ | MPS1-0310-PC | | 6.7 | 18.5 | 21.6 | 55.5 | 55 | 0.5 | 6 | 1 |
| | 8 | ● | □ | MPS1-0310-L8C | | 25.4 | 39.6 | 45.6 | 82.6 | 82 | 0.6 | 6 | 1 |
| | 10 | □ | □ | MPS1-0310-L10C | | 31.6 | 44.6 | 49.6 | 86.6 | 86 | 0.6 | 6 | 1 |
| | 12 | ● | □ | MPS1-0310-L12C | | 37.8 | 51.6 | 56.6 | 93.6 | 93 | 0.6 | 6 | 1 |
| | 15 | ● | □ | MPS1-0310-L15C | | 47.1 | 61.6 | 66.6 | 103.6 | 103 | 0.6 | 6 | 1 |
| | 20 | ● | □ | MPS1-0310-L20C | | 62.6 | 79.6 | 84.6 | 121.6 | 121 | 0.6 | 6 | 1 |
| | 25 | ● | □ | MPS1-0310-L25C | | 78.1 | 96.6 | 101.6 | 138.6 | 138 | 0.6 | 6 | 1 |
| | 30 | ● | □ | MPS1-0310-L30C | | 93.6 | 114.6 | 119.6 | 156.6 | 156 | 0.6 | 6 | 1 |
| | 35 | □ | □ | MPS1-0310-L35C | | 109.1 | 123.6 | 138.6 | 175.6 | 175 | 0.6 | 6 | 1 |
| | 40 | ● | □ | MPS1-0310-L40C | | 124.6 | 138.6 | 153.6 | 190.6 | 190 | 0.6 | 6 | 1 |

| DC (mm) | LD | Reprod. | DP1021 | Référence | Stock | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.2 | 3 | □ | □ | MPS1-0320S-DIN | | 14.8 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 3 |
| | 3 | ● | □ | MPS1-0320S-DIN-C | | 14.8 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 1 |
| | 5 | □ | □ | MPS1-0320L-DIN | | 19.8 | 24.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 3 |
| | 5 | ● | □ | MPS1-0320L-DIN-C | | 19.8 | 24.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 1 |
| | 2 | ● | □ | MPS1-0320-PC | | 6.9 | 18.5 | 21.5 | 55.5 | 55 | 0.5 | 6 | 1 |
| | 8 | ● | □ | MPS1-0320-L8C | | 26.3 | 39.7 | 45.7 | 82.7 | 82 | 0.7 | 6 | 1 |
| | 10 | □ | □ | MPS1-0320-L10C | | 32.6 | 44.6 | 49.6 | 86.6 | 86 | 0.6 | 6 | 1 |
| | 12 | ● | □ | MPS1-0320-L12C | | 39.0 | 51.6 | 56.6 | 93.6 | 93 | 0.6 | 6 | 1 |
| | 15 | ● | □ | MPS1-0320-L15C | | 48.6 | 61.6 | 66.6 | 103.6 | 103 | 0.6 | 6 | 1 |
| | 20 | ● | □ | MPS1-0320-L20C | | 64.6 | 79.6 | 84.6 | 121.6 | 121 | 0.6 | 6 | 1 |
| | 25 | ● | □ | MPS1-0320-L25C | | 80.6 | 96.6 | 101.6 | 138.6 | 138 | 0.6 | 6 | 1 |
| | 30 | ● | □ | MPS1-0320-L30C | | 96.6 | 114.6 | 119.6 | 156.6 | 156 | 0.6 | 6 | 1 |
| | 35 | □ | □ | MPS1-0320-L35C | | 112.6 | 123.6 | 138.6 | 175.6 | 175 | 0.6 | 6 | 1 |
| | 40 | ● | □ | MPS1-0320-L40C | | 128.6 | 138.6 | 153.6 | 190.6 | 190 | 0.6 | 6 | 1 |
| 3.3 | 3 | □ | □ | MPS1-0330S-DIN | | 14.7 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 3 |
| | 3 | ● | □ | MPS1-0330S-DIN-C | | 14.7 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 1 |
| | 5 | □ | □ | MPS1-0330L-DIN | | 20.2 | 25.1 | 28.6 | 65.6 | 65 | 0.6 | 6 | 3 |
| | 5 | ● | □ | MPS1-0330L-DIN-C | | 20.2 | 25.1 | 28.6 | 65.6 | 65 | 0.6 | 6 | 1 |
| | 2 | ● | □ | MPS1-0330-PC | | 7.1 | 18.5 | 21.4 | 55.5 | 55 | 0.5 | 6 | 1 |
| | 8 | ● | □ | MPS1-0330-L8C | | 27.1 | 39.7 | 45.7 | 82.7 | 82 | 0.7 | 6 | 1 |
| | 10 | ● | □ | MPS1-0330-L10C | | 33.6 | 44.6 | 49.6 | 86.6 | 86 | 0.6 | 6 | 1 |
| | 12 | ● | □ | MPS1-0330-L12C | | 40.2 | 51.6 | 56.6 | 93.6 | 93 | 0.6 | 6 | 1 |
| | 15 | ● | □ | MPS1-0330-L15C | | 50.1 | 61.6 | 66.6 | 103.6 | 103 | 0.6 | 6 | 1 |
| | 20 | ● | □ | MPS1-0330-L20C | | 66.6 | 79.6 | 84.6 | 121.6 | 121 | 0.6 | 6 | 1 |
| | 25 | ● | □ | MPS1-0330-L25C | | 83.1 | 96.6 | 101.6 | 138.6 | 138 | 0.6 | 6 | 1 |
| | 30 | ● | □ | MPS1-0330-L30C | | 99.6 | 114.6 | 119.6 | 156.6 | 156 | 0.6 | 6 | 1 |
| | 35 | □ | □ | MPS1-0330-L35C | | 116.1 | 132.6 | 138.6 | 175.6 | 175 | 0.6 | 6 | 1 |
| | 40 | ● | □ | MPS1-0330-L40C | | 132.6 | 148.6 | 153.6 | 190.6 | 190 | 0.6 | 6 | 1 |

●: Article stocké.
□: Article non stocké - Fabrication sur commande uniquement.

M044



PERÇAGE (À EMBOUT)

TAW

●Géométrie de l'arête de coupe ondulée pour un bon contrôle copeaux.
●Géométrie cannelée : précision du placement de l'embout.
●Changement facile de l'embout.

P M K N S H

(Usage général)

■PORTE-OUTILS

| DC (mm) | LD | Report | Référence | Stock | Dimensions (mm) LU | LBX | LH | OAL | LF | DCON | Vis de serrage | Clé | Plaque | Anti-grippant | Embout monobloc DC (mm) | Référence | Stock VP15TF | Stock VP15HH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.5 – 19.4 | 3 | | TAWSN1900S25 | ● | 58.9 | 71.4 | 102.4 | 158.4 | 155.0 | 25 | WS304517T | TKY10T | WPT4405 | MK1KS | 18.5 | TAWNH1850T | ● | □ |
| | | | | | | | | | | | | | | | | TAWNH1850TG | | |
| | | | | | | | | | | | | | | | 18.6 | TAWNH1860T | ● | □ |
| | | | | | | | | | | | | | | | | TAWNH1860TG | | |
| | | | | | | | | | | | | | | | 18.7 | TAWNH1870T | ● | □ |
| | | | | | | | | | | | | | | | | TAWNH1870TG | | |
| | | | | | | | | | | | | | | | 18.8 | TAWNH1880T | ● | □ |
| | | | | | | | | | | | | | | | | TAWNH1880TG | | |
| | 5 | | TAWMN1900S25 | ● | 95.9 | 110.4 | 137.4 | 193.4 | 190.0 | 25 | WS304517T | TKY10T | WPT4405 | MK1KS | 18.9 | TAWNH1890T | ● | □ |
| | | | | | | | | | | | | | | | | TAWNH1890TG | | |
| | | | | | | | | | | | | | | | 19.0 | TAWNH1900T | ● | □ |
| | | | | | | | | | | | | | | | | TAWNH1900TG | | |
| | | | | | | | | | | | | | | | 19.1 | TAWNH1910T | ● | □ |
| | | | | | | | | | | | | | | | | TAWNH1910TG | | |
| | 8 | | TAWLN1900S25 | ● | 151.4 | 165.4 | 188.4 | 244.4 | 241.0 | 25 | WS304517T | TKY10T | WPT4405 | MK1KS | 19.2 | TAWNH1920T | ● | □ |
| | | | | | | | | | | | | | | | | TAWNH1920TG | | |
| | | | | | | | | | | | | | | | 19.3 | TAWNH1930T | ● | □ |
| | | | | | | | | | | | | | | | | TAWNH1930TG | | |
| | | | | | | | | | | | | | | | 19.4 | TAWNH1940T | ● | □ |
| | | | | | | | | | | | | | | | | TAWNH1940TG | | |
| 19.5 – 20.4 | 3 | | TAWSN2000S25 | ● | 62.0 | 75.5 | 102.5 | 158.5 | 155.0 | 25 | WS304518T | TKY10T | WPT4405 | MK1KS | 19.5 | TAWNH1950T | ● | □ |
| | | | | | | | | | | | | | | | | TAWNH1950TG | | |
| | | | | | | | | | | | | | | | 19.6 | TAWNH1960T | ● | □ |
| | | | | | | | | | | | | | | | | TAWNH1960TG | | |
| | | | | | | | | | | | | | | | 19.7 | TAWNH1970T | ● | □ |
| | | | | | | | | | | | | | | | | TAWNH1970TG | | |
| | | | | | | | | | | | | | | | 19.8 | TAWNH1980T | ● | □ |
| | | | | | | | | | | | | | | | | TAWNH1980TG | | |
| | 5 | | TAWMN2000S25 | ● | 101.0 | 116.5 | 142.5 | 198.5 | 195.0 | 25 | WS304518T | TKY10T | WPT4405 | MK1KS | 19.9 | TAWNH1990T | ● | □ |
| | | | | | | | | | | | | | | | | TAWNH1990TG | | |
| | | | | | | | | | | | | | | | 20.0 | TAWNH2000T | ● | □ |
| | | | | | | | | | | | | | | | | TAWNH2000TG | | |
| | | | | | | | | | | | | | | | 20.1 | TAWNH2010T | □ | □ |
| | | | | | | | | | | | | | | | | TAWNH2010TG | | |
| | | | | | | | | | | | | | | | 20.2 | TAWNH2020T | □ | □ |
| | | | | | | | | | | | | | | | | TAWNH2020TG | | |
| | 8 | | TAWLN2000S25 | ● | 159.5 | 173.5 | 196.5 | 252.5 | 249.0 | 25 | WS304518T | TKY10T | WPT4405 | MK1KS | 20.3 | TAWNH2030T | □ | □ |
| | | | | | | | | | | | | | | | | TAWNH2030TG | | |
| | | | | | | | | | | | | | | | 20.4 | TAWNH2040T | □ | □ |
| | | | | | | | | | | | | | | | | TAWNH2040TG | | |

Remarque 1) Les dimensions ci-dessus (*) sont données par l'embout installé.
Remarque 2) Veuillez nous contacter pour les géométries qui ne seraient pas dans ce catalogue (e.g. différents diamètres et longueurs peuvent être fabriqués sur demande).

●: Article stocké. □: Article non stocké - Fabrication sur commande uniquement.
(Remarque) Conditionnée par 1.

M150

**PRODUITS STANDARDS**
**Indique le diamètre, la référence, l'état de stock, le nombre de dents, les dimensions, et les pièces détachées pour le produit indiqué.**

**LÉGENDE DES INDICATEURS DE L'ÉTAT DE STOCK en bas à gauche de la double page.**

# OUTILS DE PERÇAGE


**IDENTIFICATION DES RÉFÉRENCES ARTICLES** ····· **M002**
**DESCRIPTION DES SYMBOLES** ····· **M003**
**SÉLECTION DES FORETS** ····· **M004**

**FORETS STANDARDS**

**CARBURE MONOBLOC**

**MSE** ····· [Micro-foret carbure monobloc] ····· **M008**
**MSP** ····· [Foret à pointer] ····· **M011**
**DLE** ····· [Foret carbure monobloc à pointer et à chanfreiner] ····· **M012**
**MINI-MFE** ····· [Foret carbure monobloc à fond plat] ····· **M018**
NEW **MINI-DWAE** ···· [Pour le décolletage] ····· **M020**
NEW **DWAE** ····· [Pour le décolletage] ····· **M021**
**MINI-MVS** ····· [Foret à double listel avec arrosage interne] ····· **M036**
**MINI-MWS** ····· [Foret à simple listel avec arrosage interne] ····· **M040**
**MPS1** ····· [Foret carbure à double listel] ····· **M044**
**MPS** ····· [Foret carbure à double listel] ····· **M062**
**MSL** ····· [Foret carbure super long à simple listel] ····· **M074**
**MICRO-MGS** ··· [Micro foret ¾ carbure avec arrosage interne] ····· **M079**
**MMS** ····· [Foret carbure avec arrosage interne pour acier inoxydable] ··· **M082**
**DSAS** ····· [Pour les alliages réfractaires] ····· **M096**
NEW **MNS** ····· [Foret carbure avec 4 trous d'arrosage pour les aluminiums] ··· **M100**
**MAE/MAS** ····· [Foret carbure haute précision pour les aluminiums] ····· **M124**
**MHS** ····· [Foret carbure de précision pour les matières traitées] ····· **M130**

**POUR COMPOSITES**

**MCC** ····· [Foret machine pour CFRP] ····· **M188**
**MCA** ····· [Foret machine pour CFRP + Al] ····· **M189**
**MCT** ····· [Foret machine pour CFRP + Ti] ····· **M190**
**MCW** ····· [Foret machine pour CFRP] ····· **M191**
**MCCH** ····· [Foret pour unité autonome / CFRP] ····· **M192**
**MCAH** ····· [Foret pour unité autonome / CFRP + Al] ····· **M193**

**À PLAQUETTES / À EMBOUT**

**STAW** ····· [Foret à embout pour petits diamètres] ····· **M141**
**TAW** ····· [Foret à embout pour grands diamètres] ····· **M150**
**MVX** ····· [Foret à plaquettes] ····· **M160**
**DOUILLE D'EXCENTRATION** ····· **M172**

**FORETS HSS**

**FORETS VIOLET**

**VAPDS** ····· [Foret court HSS-Co pour l'acier] ····· **M174**
**VAPDM** ····· [Foret semi-long HSS-Co pour l'acier] ····· **M179**
**VSD** ····· [Foret HSS long] ····· **M183**
**VAPDSCB** ····· [Foret HSS-Co à fond plat] ····· **M185**


*Référence par ordre alphébétique

| | | |
|---|---|---|
| M012 **DLE** | M130 **MHS** | M011 **MSP** |
| M096 **DSAS** | M079 **MICRO-MGS** | M160 **MVX** |
| M021 **DWAE** | M020 **MINI-DWAE** | M168 **MVX (EMBOUT MONOBLOC)** |
| M172 **JFS (DOUILLE)** | M018 **MINI-MFE** | M141 **STAW** |
| M124 **MAE** | M036 **MINI-MVS** | M144 **STAW (EMBOUT MONOBLOC)** |
| M124 **MAS** | M040 **MINI-MWS** | M150 **TAW** |
| M189 **MCA** | M082 **MMS** | M155 **TAW (EMBOUT MONOBLOC)** |
| M193 **MCAH** | M100 **MNS** | M179 **VAPDM** |
| M188 **MCC** | M062 **MPS** | M174 **VAPDS** |
| M192 **MCCH** | M044 **MPS1** | M185 **VAPDSCB** |
| M190 **MCT** | M008 **MSE** | M183 **VSD** |
| M191 **MCW** | M074 **MSL** | |

⚠ Dès maintenant, veuillez remplacer tous les forets aux références en caractères gris (MPS, MSL) par des produits équivalents de la série MPS1. La production de ces produits est progressivement réduite et prendra fin en mars 2023.

# IDENTIFICATION DES RÉFÉRENCES ARTICLES

## CODE PRODUIT DES FORETS



| MV | S | 0300 | X | S |
|---|---|---|---|---|

### Nom par type de foret

**DLE** : Forets DLE
**DSA** : Forets DSAS
**DWA** : Forets DWAE
**MPS1** : Forets MPS1
**MV** : Forets MVS
**MW** : Forets MWS
**MF** : Forets MFE
**MG** : Forets MGS
**MSL** : Forets MSL
**MP** : Forets MPS
**MA** : Forets MAE/MAS
**MS** : Forets MSE
**MM** : Forets MMS
**MN** : Forets MNS
**MH** : Forets MHS
**MC** : Forets MC

### Arrosage

**E** : Arrosage extérieur
**S** : Arrosage intérieur

### Diamètre

**Exemple**
**0050** → $\phi$ 0.5
**0300** → $\phi$ 3.0

### L/D

**S** : 2D
**M** : 3D
**L** : 5D
(MAE / MAS foret de type 6D)
**L8C** : 8D
**L10C** : 10D
**L12C** : 12D
**L15C** : 15D
**L20C** : 20D
**L25C** : 25D
**L30C** : 30D
**L40C** : 40D
**X** : 12D
**X8DB** : 8D
**X10DB** : 10D
**X15DB** : 15D
**X20DB** : 20D
**X25DB** : 25D
**X30DB** : 30D

### Diamètre de la queue

**A** : Queue du même diamètre que le foret
**B** : Queue renforcée
**C** : Attachement cylindrique
**S***** : Diamètre de queue

* Exceptions en partie incluses.

| VA | PD | S | D0050 |
|---|---|---|---|

### Nom par type de foret

**VA** : Foret de précision revêtu violet Acier HSS
**V** : Foret violet

### Applications

**SD** : Application générale
**PD** : Pour usinage de haute précision

### Longueur d'hélice

**S** : Courte
**M** : Moyenne

### Diamètre

**Exemple**
**D0300** → $\phi$ 3.0
**D0050** → $\phi$ 0.5

* Exceptions en partie incluses.

⚠ Dès maintenant, veuillez remplacer tous les forets aux références en caractères gris (MPS, MSL) par des produits équivalents de la série MPS1. La production de ces produits est progressivement réduite et prendra fin en mars 2023.

# DESCRIPTION DES SYMBOLES

## Matériau de coupe

**Carbure ultra-micro-grain**
Le substrat utilisé est un carbure ultra micro-grain.

**Acier allié HSS**
Le substrat utilisé est une nuance HSS fortement alliée.

**Acier rapide HSS Cobalt**
Le substrat utilisé est un acier rapide HSS Cobalt.

**Acier rapide**
Le substrat utilisé est un acier rapide.

## Amaincissement de l'âme

**Amincissement en X**
Amincissement de l'âme en X

**Amincissement en Z**
Amincissement de l'âme en Z

**Amincissement en XR**
Amincissement de l'âme en XR

**Amincissement en N**
Amincissement de l'âme en N

## Tolérances

**Tolérance du diamètre d'usinage**

**Tolérance du diamètre de queue**

## Trous d'arrosage

**Avec trous d'arrosage**

## Plage Groupe Matière

### 1ère Recommandation

P M K N S H

### Pas de recommendation

P M K N S H

## Revêtement

**Revêtement MIRACLE**
Le revêtement original MIRACLE (Al, Ti)N.
En outre, approprié pour l'usinage à sec.

**Revêtement PVD**
DP102A est une nuance de carbure revêtu PVD spécifique aux forets de petit diamètre avec une résistance à l'usure à basse vitesse fortement améliorée.

**Revêtement PVD**
Excellente résistance à l'usure dans une très grande gamme de matières.

**Revêtement PVD**
Un carbure à ultra-micro-grain idéal pour l'acier inoxydable et un revêtement PVD particulièrement résistant à la chaleur et au collage.

**Revêtement PVD**
DP9020 réunit une grande résistance à l'usure mais et à la chaleur pour une plus grande durée de vie dans les réfractaires.

**Revêtement VIOLET**
Durée de vie augmentée de 2-3 fois par rapport au revêtement standard TiN

**Revêtement diamant CVD**
L'utilisation d'un revêtement diamant micrograins multicouches améliore considérablement la résistance à l'usure et l'état de surface.

## Angle et arête vive.

**Angle de pointe**
Indique l'angle de pointe en bout de foret.

# SÉLECTION DES FORETS



| Matériau de coupe | Diamètres | Rapport (L/D) | Code produit | Arrosage | Revêtement | Matière P – Acier carbone, Alliage acier | Matière M – Acier inoxydable | Matière K – Fonte | Matière N – Alliage léger | Matière S – Alliage réfractaire | Matière H – Acier traité | Forme | Pages – Dimensions | Pages – Conditions de coupe |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbure Monobloc | ϕ0.1 – ϕ0.99 | 5 – 12 | **MSE** | Extérieur | VP | ◎ | ○ | ◎ | ○ | ○ | | MSP = foret pilote pour MSE | M008 | M009 |
| | ϕ1.0 – ϕ16.0 | – | **DLE** | Extérieur | DP1 DP1A | ◎ | ◎ | ◎ | | | | SIG=60°, 90°, 120°, 145° | M012 | M016 |
| | ϕ0.75 – ϕ2.95 | 2 | **MINI-MFE** | Extérieur | DP1A | ◎ | ◎ | ◎ | ○ | | | | M018 | M019 |
| | ϕ1.0 – ϕ2.9 | 2,4 | NEW **MINI-DWAE** | Extérieur | DP1A | ◎ | ◎ | ◎ | | | | | M020 | M027 |
| | ϕ3.0 – ϕ14.0 | 2,4 | NEW **DWAE** | Extérieur | DP1A | ◎ | ◎ | ◎ | | | | | M021 | M027 |
| | ϕ1.0 – ϕ2.9 | *2 – 30 | **MINI-MVS** | Intérieur | DP1 | ◎ | ◎ | ○ | ○ | ○ | |  | M036 | M038 |
| | ϕ0.5 – ϕ0.99 | 1 – 12 | **MINI-MWS** | Intérieur | VP | ◎ | ◎ | ○ | ○ | ○ | | | M040 | M042 |
| | ϕ3.0 – ϕ20.0 | 3 – 40 | **MPS1** | Intérieur | DP1 | ◎ | ○ | ◎ | | | | MPS1-xxxx-PC=foret pilote pour MPS1 | M044 | M059 |
| | ϕ3.0 – ϕ20.0 | 3 – 40 | **MPS** | Intérieur | VP | ◎ | ○ | ◎ | | ○ | | | M062 | M077 |
| | ϕ3.0 – ϕ14.0 | 20 – 30 | **MSL** | Intérieur | VP | ◎ | ◎ | ◎ | | ○ | |  | M074 | M077 |
| | ϕ0.95 – ϕ12.0 | 1 – 30 | **MHS** | Intérieur | VP | ○ | ○ | | | ○ | ◎ | | M130 | M138 |
| | ϕ3.0 – ϕ20.0 | 3, 5 | **MMS** | Intérieur | DP7 | | ◎ | | | | | | M082 | M094 |
| | ϕ3.0 – ϕ12.0 | 3 | NEW **DSAS** | Intérieur | DP9 | | | | | ◎ | | | M096 | M099 |
| | ϕ0.7 – ϕ3.0 | – 80 | **MICRO-MGS** | Intérieur | – | ◎ | ◎ | ◎ | ◎ | | | | M079 | M080 |

*2=trou pilote. Tolerance est +0.014 etprofondeur du trou est DCx2.

⚠ Dès maintenant, veuillez remplacer tous les forets aux références en caractères gris (MPS, MSL) par des produits équivalents de la série MPS1. La production de ces produits est progressivement réduite et prendra fin en mars 2023.

| Matériau de coupe | Diamètres | Rapport (L/D) | Code produit | Arrosage | Revêtement | Matière P – Acier carbone, Alliage acier | Matière M – Acier inoxydable | Matière K – Fonte | Matière N – Alliage léger | Matière S – Alliage réfractaire | Matière H – Acier traité | Forme | Pages – Dimensions | Pages – Conditions de coupe |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbure Monobloc | ϕ3.0 −ϕ16.0 | 3 | **MAE** | Extérieur | – | | | ○ | ◎ | | | | **M124** | **M129** |
| | ϕ3.0 −ϕ16.0 | 3, 6 | **MAS** | Intérieur | – | | | ○ | ◎ | | | | **M124** | **M129** |
| | ϕ3.0 −ϕ20.0 | 3 – 30 | **MNS** | Intérieur | – | | | | ◎ | | | | **M100** | **M120** |
| | ϕ4.76 −ϕ11.14 | 3 | **MCC** | Extérieur | DD | Pour Composites | | | | | | | **M188** | **M188** |
| | ϕ6.38 −ϕ9.55 | 5 | **MCA** | Intérieur | DD | Pour Composites + Al | | | | | | | **M189** | **M189** |
| | ϕ6.38 −ϕ9.55 | 5 | **MCT** | Intérieur | – | Pour Composites + Ti | | | | | | | **M190** | **M190** |
| | ϕ6.38 −ϕ9.55 | 5 | **MCW** | Intérieur | DD | Pour CFRPT | | | | | | | **M191** | **M191** |
| | ϕ2.5 −ϕ9.55 | 2 – 15 | **MCCH** | Extérieur | – | Pour Composites | | | | | | | **M192** | Pour UPA |
| | ϕ2.5 −ϕ9.55 | 3 – 15 | **MCAH** | Extérieur | – | Pour Composites + Al | | | | | | | **M193** | Pour UPA |
| Acier HSS | ϕ0.5 −ϕ13.0 | 2 – 3 | **VAPDS** | Extérieur | V | ◎ | ○ | ○ | | | | | **M174** | **M178** |
| | ϕ0.5 −ϕ32.0 | 3 – 6 | **VAPDM** | Extérieur | V | ◎ | ○ | ○ | | | | | **M179** | **M182** |
| | ϕ0.5 −ϕ13.0 | 3 – 6 | **VSD** | Extérieur | V | ◎ | ○ | | | | | | **M183** | **M184** |
| | ϕ2.0 −ϕ32.0 | 2 – 3 | **VAPDSCB** | Extérieur | V | ◎ | ○ | ○ | ○ | | | | **M185** | **M187** |
| A embout / plaquettes | ϕ10.0 −ϕ18.4 | 1.5 – 8 | **STAW** | Intérieur | VP | ◎ | ○ | ◎ | | | | | **M141** | **M146** |
| | ϕ18.5 −ϕ30.4 | 3 – 8 | **TAW** | Intérieur | VP | ◎ | ○ | ◎ | | | | | **M150** | **M157** |
| | ϕ17.0 −ϕ63.0 | 2 – 6 | **MVX** | Intérieur | – | ◎ | ○ | ◎ | ○ | | ○ | | **M160** | **M169** |

◎ : 1ère Recommandation / ○ : 2nde Recommandation

# SÉRIES DE FORETS

1ère Recommandation

P M K N S H

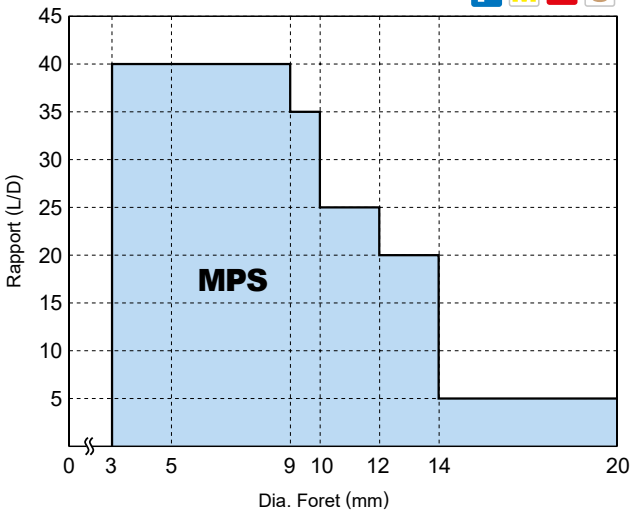
2nde Recommandation

P M K N S H

## ■CARBURE MONOBLOC

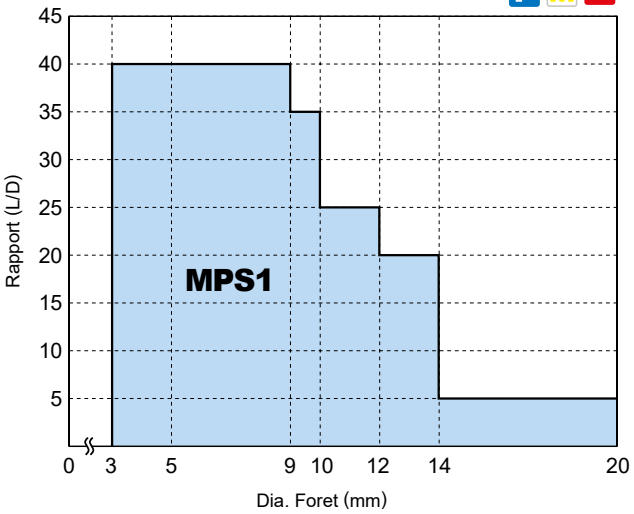
### MPS (Double listels)

P M K S



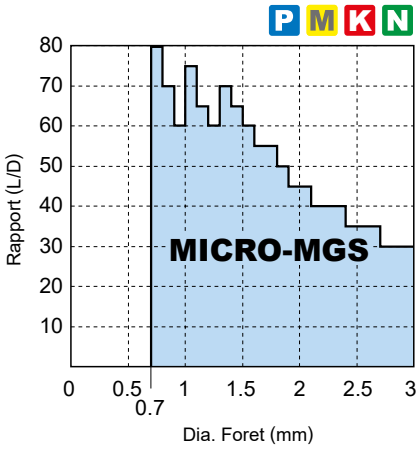

### MPS1 (Double listels)

P M K



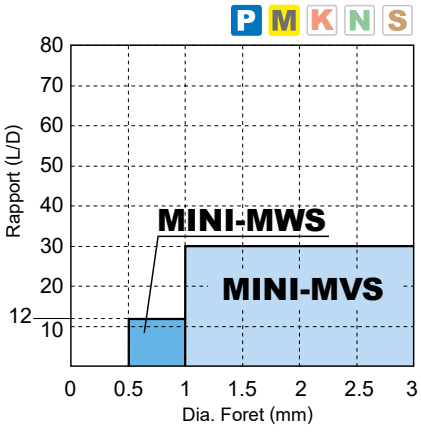

### MICRO-MGS

P M K N



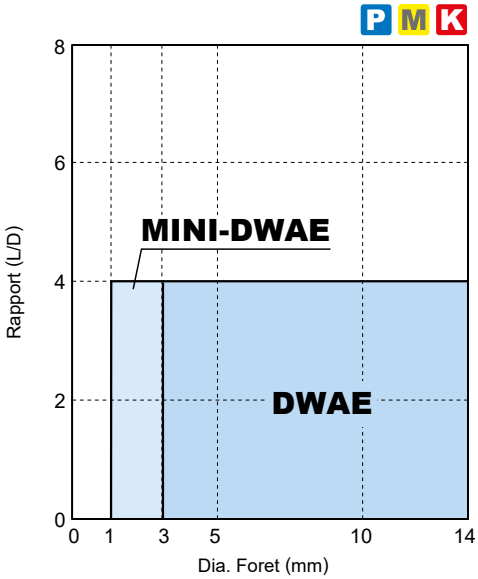

### MINI-MVS,MINI-MWS

P M K N S



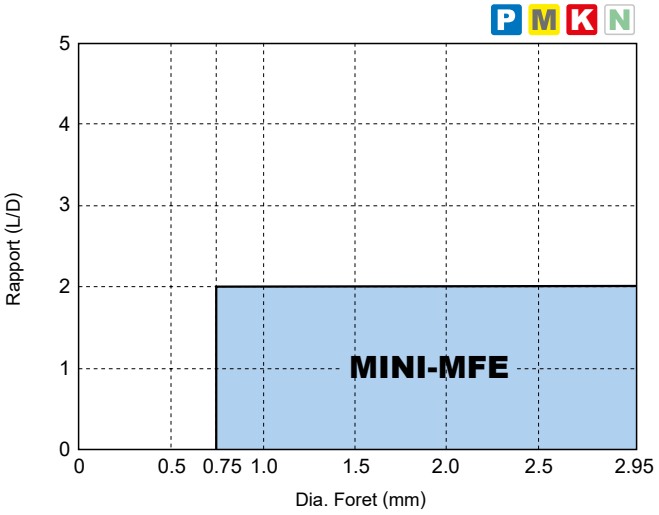

### MINI-DWAE,DWAE

P M K




### MINI-MFE

P M K N



1ère Recommandation

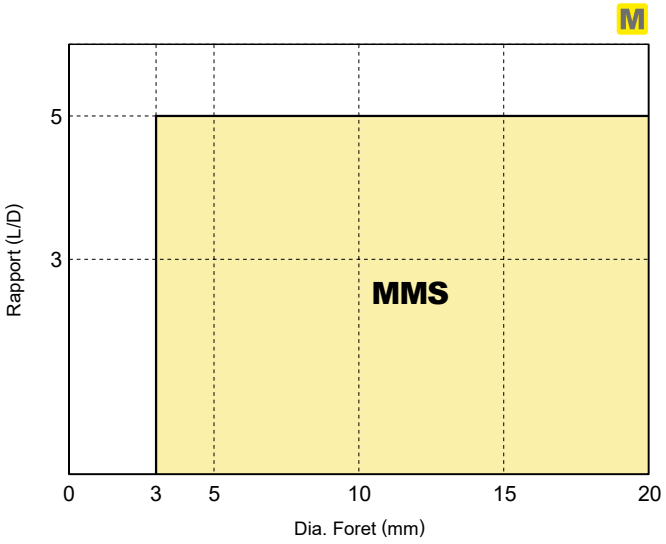
P M K N S H

2nde Recommandation

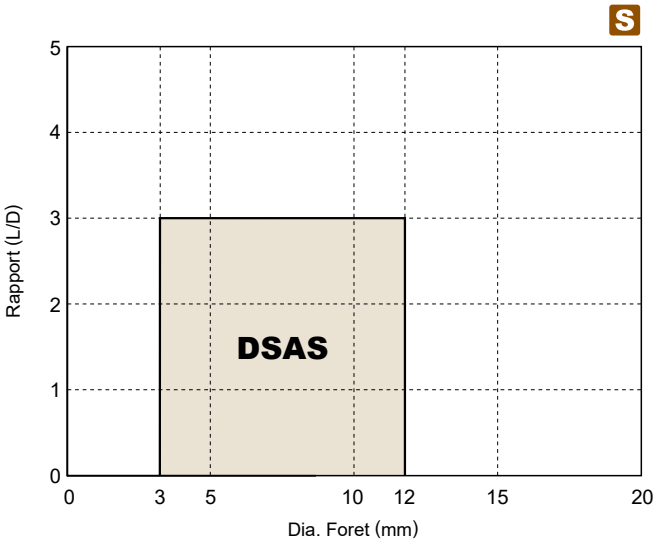
P M K N S H

## ■CARBURE MONOBLOC

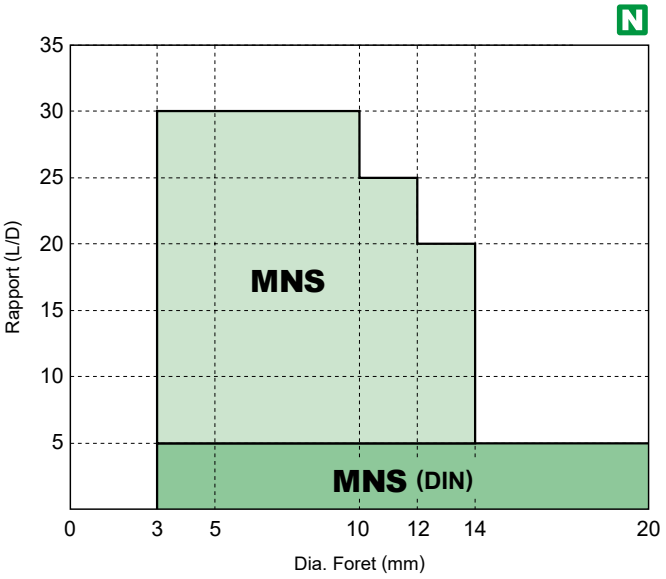
### MMS (Pour l'acier inoxydable)



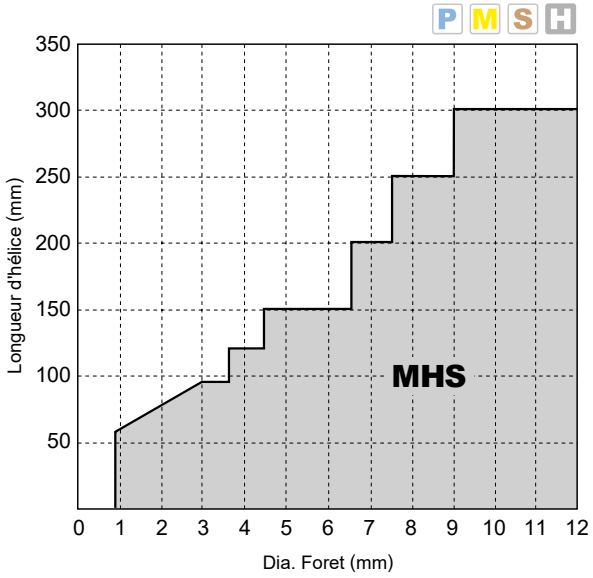

### DSAS (Pour les alliages réfractaires)




### MNS (Pour l'aluminium)

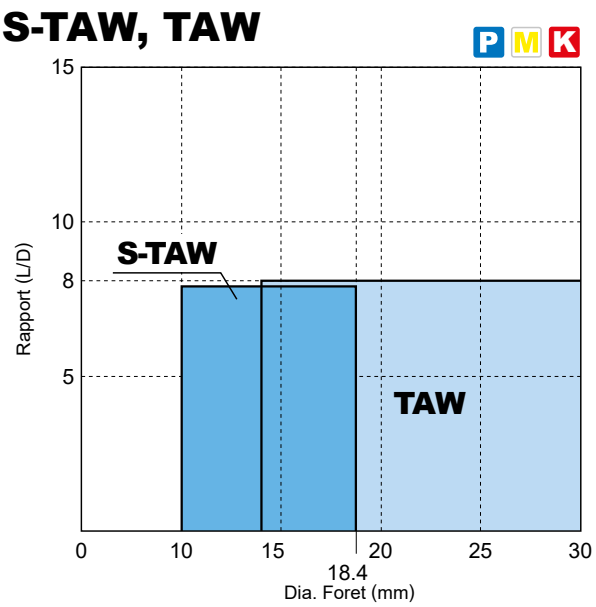



### MHS (Pour l'acier traité)

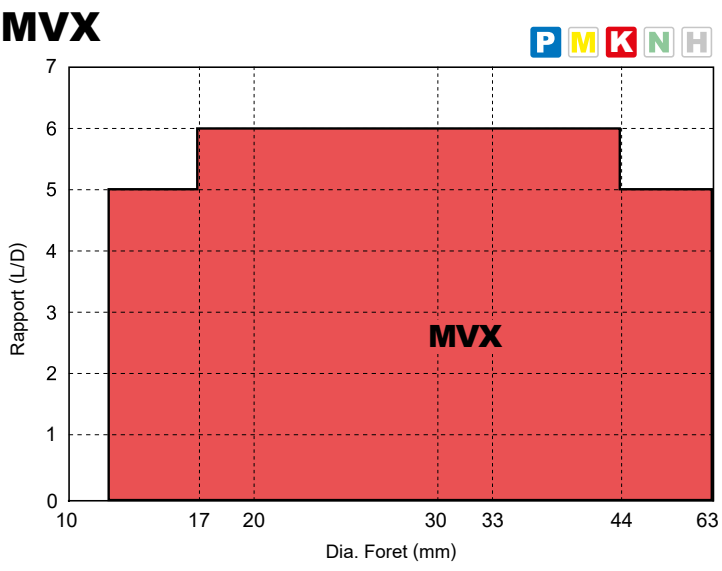



## ■À PLAQUETTES

### S-TAW, TAW




### MVX



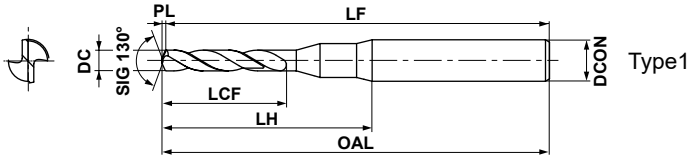
# PERÇAGE (CARBURE MONOBLOC)

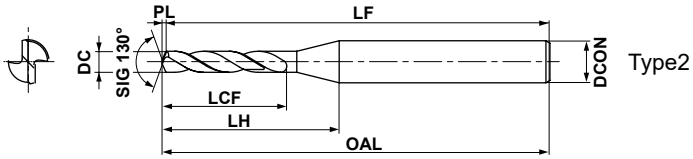
# MSE

- Goujures dégagées pour prévenir le bourrage copeaux.
- Usinage stable de petits diamètres.

P M K N S H

Arrosage extérieur




| | |
|---|---|
| 0.10≤DC≤0.99 | $^{0}_{-0.009}$ |
| DCON=3 | $^{0}_{-0.006}$ |

● MSE forets recommandés pour l'utilisation avec attachements de frettage.

| DC (mm) | VP20MF | VP15TF | Référence | Dimensions (mm) LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|
| 0.10 | ● | | MSE0010SB | 1.2 | 9.7 | 38.0 | 38 | 0.02 | 3 | 1 |
| 0.11 | ★ | | MSE0011SB | 1.2 | 9.7 | 38.0 | 38 | 0.03 | 3 | 1 |
| 0.12 | ★ | | MSE0012SB | 1.4 | 9.7 | 38.0 | 38 | 0.03 | 3 | 1 |
| 0.13 | ★ | | MSE0013SB | 1.4 | 9.7 | 38.0 | 38 | 0.03 | 3 | 1 |
| 0.14 | ★ | | MSE0014SB | 2.0 | 9.7 | 38.0 | 38 | 0.03 | 3 | 1 |
| 0.15 | ● | | MSE0015SB | 2.0 | 9.7 | 38.0 | 38 | 0.03 | 3 | 1 |
| 0.16 | ★ | | MSE0016SB | 2.0 | 9.7 | 38.0 | 38 | 0.04 | 3 | 1 |
| 0.17 | ★ | | MSE0017SB | 2.0 | 9.7 | 38.0 | 38 | 0.04 | 3 | 1 |
| 0.18 | ★ | | MSE0018SB | 2.0 | 9.7 | 38.0 | 38 | 0.04 | 3 | 1 |
| 0.19 | ★ | | MSE0019SB | 2.0 | 9.7 | 38.0 | 38 | 0.04 | 3 | 1 |
| 0.20 | ● | | MSE0020SB | 2.6 | 9.8 | 38.1 | 38 | 0.05 | 3 | 1 |
| 0.21 | ★ | | MSE0021SB | 2.6 | 9.8 | 38.1 | 38 | 0.05 | 3 | 1 |
| 0.22 | ★ | | MSE0022SB | 2.6 | 9.8 | 38.1 | 38 | 0.05 | 3 | 1 |
| 0.23 | ★ | | MSE0023SB | 2.6 | 9.8 | 38.1 | 38 | 0.05 | 3 | 1 |
| 0.24 | ★ | | MSE0024SB | 3.1 | 9.8 | 38.1 | 38 | 0.06 | 3 | 1 |
| 0.25 | ● | | MSE0025SB | 3.1 | 9.8 | 38.1 | 38 | 0.06 | 3 | 1 |
| 0.26 | ★ | | MSE0026SB | 3.1 | 9.8 | 38.1 | 38 | 0.06 | 3 | 1 |
| 0.27 | ★ | | MSE0027SB | 3.1 | 9.8 | 38.1 | 38 | 0.06 | 3 | 1 |
| 0.28 | ★ | | MSE0028SB | 3.1 | 9.8 | 38.1 | 38 | 0.07 | 3 | 1 |
| 0.29 | ★ | | MSE0029SB | 3.1 | 9.8 | 38.1 | 38 | 0.07 | 3 | 1 |
| 0.30 | | ● | MSE0030SB | 5.1 | 10.3 | 38.1 | 38 | 0.07 | 3 | 2 |
| 0.31 | | ★ | MSE0031SB | 5.1 | 10.3 | 38.1 | 38 | 0.07 | 3 | 2 |
| 0.32 | | ★ | MSE0032SB | 5.1 | 10.3 | 38.1 | 38 | 0.07 | 3 | 2 |
| 0.33 | | ★ | MSE0033SB | 5.1 | 10.3 | 38.1 | 38 | 0.08 | 3 | 2 |
| 0.34 | | ★ | MSE0034SB | 6.1 | 11.3 | 38.1 | 38 | 0.08 | 3 | 2 |
| 0.35 | | ● | MSE0035SB | 6.1 | 11.2 | 38.1 | 38 | 0.08 | 3 | 2 |
| 0.36 | | ★ | MSE0036SB | 6.1 | 11.2 | 38.1 | 38 | 0.08 | 3 | 2 |
| 0.37 | | ★ | MSE0037SB | 6.1 | 11.2 | 38.1 | 38 | 0.09 | 3 | 2 |
| 0.38 | | ★ | MSE0038SB | 6.1 | 11.2 | 38.1 | 38 | 0.09 | 3 | 2 |
| 0.39 | | ★ | MSE0039SB | 6.1 | 11.2 | 38.1 | 38 | 0.09 | 3 | 2 |
| 0.40 | | ● | MSE0040SB | 7.1 | 12.2 | 38.1 | 38 | 0.09 | 3 | 2 |
| 0.41 | | ★ | MSE0041SB | 7.1 | 12.1 | 38.1 | 38 | 0.10 | 3 | 2 |
| 0.42 | | ★ | MSE0042SB | 7.1 | 12.1 | 38.1 | 38 | 0.10 | 3 | 2 |
| 0.43 | | ★ | MSE0043SB | 7.1 | 12.1 | 38.1 | 38 | 0.10 | 3 | 2 |

| DC (mm) | VP20MF | VP15TF | Référence | Dimensions (mm) LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|
| 0.44 | | ★ | MSE0044SB | 7.1 | 12.1 | 38.1 | 38 | 0.10 | 3 | 2 |
| 0.45 | | ● | MSE0045SB | 7.1 | 12.1 | 38.1 | 38 | 0.10 | 3 | 2 |
| 0.46 | | ★ | MSE0046SB | 7.1 | 12.0 | 38.1 | 38 | 0.11 | 3 | 2 |
| 0.47 | | ★ | MSE0047SB | 7.1 | 12.0 | 38.1 | 38 | 0.11 | 3 | 2 |
| 0.48 | | ★ | MSE0048SB | 7.1 | 12.0 | 38.1 | 38 | 0.11 | 3 | 2 |
| 0.49 | | ★ | MSE0049SB | 7.1 | 12.0 | 38.1 | 38 | 0.11 | 3 | 2 |
| 0.50 | | ● | MSE0050SB | 7.1 | 12.0 | 38.1 | 38 | 0.12 | 3 | 2 |
| 0.51 | | ★ | MSE0051SB | 7.1 | 11.9 | 38.1 | 38 | 0.12 | 3 | 2 |
| 0.52 | | ★ | MSE0052SB | 7.1 | 11.9 | 38.1 | 38 | 0.12 | 3 | 2 |
| 0.53 | | ★ | MSE0053SB | 7.1 | 11.9 | 38.1 | 38 | 0.12 | 3 | 2 |
| 0.54 | | ★ | MSE0054SB | 7.1 | 11.9 | 38.1 | 38 | 0.13 | 3 | 2 |
| 0.55 | | ● | MSE0055SB | 7.1 | 11.9 | 38.1 | 38 | 0.13 | 3 | 2 |
| 0.56 | | ★ | MSE0056SB | 7.1 | 11.9 | 38.1 | 38 | 0.13 | 3 | 2 |
| 0.57 | | ★ | MSE0057SB | 7.1 | 11.8 | 38.1 | 38 | 0.13 | 3 | 2 |
| 0.58 | | ★ | MSE0058SB | 7.1 | 11.8 | 38.1 | 38 | 0.14 | 3 | 2 |
| 0.59 | | ★ | MSE0059SB | 7.1 | 11.8 | 38.1 | 38 | 0.14 | 3 | 2 |
| 0.60 | | ● | MSE0060SB | 7.1 | 11.8 | 38.1 | 38 | 0.14 | 3 | 2 |
| 0.61 | | ★ | MSE0061SB | 7.1 | 11.8 | 38.1 | 38 | 0.14 | 3 | 2 |
| 0.62 | | ★ | MSE0062SB | 7.1 | 11.7 | 38.1 | 38 | 0.14 | 3 | 2 |
| 0.63 | | ★ | MSE0063SB | 7.2 | 11.8 | 38.2 | 38 | 0.15 | 3 | 2 |
| 0.64 | | ★ | MSE0064SB | 7.2 | 11.8 | 38.2 | 38 | 0.15 | 3 | 2 |
| 0.65 | | ● | MSE0065SB | 7.2 | 11.8 | 38.2 | 38 | 0.15 | 3 | 2 |
| 0.66 | | ★ | MSE0066SB | 7.2 | 11.8 | 38.2 | 38 | 0.15 | 3 | 2 |
| 0.67 | | ★ | MSE0067SB | 7.2 | 11.7 | 38.2 | 38 | 0.16 | 3 | 2 |
| 0.68 | | ★ | MSE0068SB | 7.2 | 11.7 | 38.2 | 38 | 0.16 | 3 | 2 |
| 0.69 | | ★ | MSE0069SB | 7.2 | 11.7 | 38.2 | 38 | 0.16 | 3 | 2 |
| 0.70 | | ● | MSE0070SB | 8.2 | 12.7 | 38.2 | 38 | 0.16 | 3 | 2 |
| 0.71 | | ★ | MSE0071SB | 8.2 | 12.7 | 38.2 | 38 | 0.17 | 3 | 2 |
| 0.72 | | ★ | MSE0072SB | 8.2 | 12.7 | 38.2 | 38 | 0.17 | 3 | 2 |
| 0.73 | | ★ | MSE0073SB | 8.2 | 12.6 | 38.2 | 38 | 0.17 | 3 | 2 |
| 0.74 | | ★ | MSE0074SB | 8.2 | 12.6 | 38.2 | 38 | 0.17 | 3 | 2 |
| 0.75 | | ● | MSE0075SB | 8.2 | 12.6 | 38.2 | 38 | 0.17 | 3 | 2 |
| 0.76 | | ★ | MSE0076SB | 8.2 | 12.6 | 38.2 | 38 | 0.18 | 3 | 2 |
| 0.77 | | ★ | MSE0077SB | 8.2 | 12.6 | 38.2 | 38 | 0.18 | 3 | 2 |

Remarque 1) Veuillez nous contacter pour les géométries qui ne seraient pas dans ce catalogue (e.g. différents diamètres et longueurs peuvent être fabriqués sur demande).

● : Article stocké. ★ : Article standard Japon.

| DC (mm) | VP20MF | VP15TF | Référence | Dimensions (mm) LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|
| **0.78** | | ★ | **MSE0078SB** | 8.2 | 12.5 | 38.2 | 38 | 0.18 | 3 | 2 |
| **0.79** | | ★ | **MSE0079SB** | 8.2 | 12.5 | 38.2 | 38 | 0.18 | 3 | 2 |
| **0.80** | | ● | **MSE0080SB** | 10.2 | 14.5 | 38.2 | 38 | 0.19 | 3 | 2 |
| **0.81** | | ★ | **MSE0081SB** | 10.2 | 14.5 | 38.2 | 38 | 0.19 | 3 | 2 |
| **0.82** | | ★ | **MSE0082SB** | 10.2 | 14.5 | 38.2 | 38 | 0.19 | 3 | 2 |
| **0.83** | | ★ | **MSE0083SB** | 10.2 | 14.5 | 38.2 | 38 | 0.19 | 3 | 2 |
| **0.84** | | ★ | **MSE0084SB** | 10.2 | 14.4 | 38.2 | 38 | 0.20 | 3 | 2 |
| **0.85** | | ● | **MSE0085SB** | 10.2 | 14.4 | 38.2 | 38 | 0.20 | 3 | 2 |
| **0.86** | | ★ | **MSE0086SB** | 10.2 | 14.4 | 38.2 | 38 | 0.20 | 3 | 2 |
| **0.87** | | ★ | **MSE0087SB** | 10.2 | 14.4 | 38.2 | 38 | 0.20 | 3 | 2 |
| **0.88** | | ★ | **MSE0088SB** | 10.2 | 14.4 | 38.2 | 38 | 0.21 | 3 | 2 |

| DC (mm) | VP20MF | VP15TF | Référence | Dimensions (mm) LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|
| **0.89** | | ★ | **MSE0089SB** | 10.2 | 14.3 | 38.2 | 38 | 0.21 | 3 | 2 |
| **0.90** | | ● | **MSE0090SB** | 10.2 | 14.3 | 38.2 | 38 | 0.21 | 3 | 2 |
| **0.91** | | ★ | **MSE0091SB** | 10.2 | 14.3 | 38.2 | 38 | 0.21 | 3 | 2 |
| **0.92** | | ★ | **MSE0092SB** | 10.2 | 14.3 | 38.2 | 38 | 0.21 | 3 | 2 |
| **0.93** | | ★ | **MSE0093SB** | 10.2 | 14.3 | 38.2 | 38 | 0.22 | 3 | 2 |
| **0.94** | | ★ | **MSE0094SB** | 10.2 | 14.2 | 38.2 | 38 | 0.22 | 3 | 2 |
| **0.95** | | ● | **MSE0095SB** | 10.2 | 14.2 | 38.2 | 38 | 0.22 | 3 | 2 |
| **0.96** | | ★ | **MSE0096SB** | 10.2 | 14.2 | 38.2 | 38 | 0.22 | 3 | 2 |
| **0.97** | | ★ | **MSE0097SB** | 10.2 | 14.2 | 38.2 | 38 | 0.23 | 3 | 2 |
| **0.98** | | ★ | **MSE0098SB** | 10.2 | 14.2 | 38.2 | 38 | 0.23 | 3 | 2 |
| **0.99** | | ● | **MSE0099SB** | 10.2 | 14.2 | 38.2 | 38 | 0.23 | 3 | 2 |

## CONDITIONS DE COUPE RECOMMANDÉES

| Matière | P | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Acier doux (≤180HB) Ck10 | | | | | Acier carbone, Acier allié (180−280HB) Ck45, 41CrMo4 | | | | |
| Diamètre foret **DC** (mm) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.−max.) (mm/tour) | Passe (mm) | Avance table (mm/min) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.−max.) (mm/tour) | Passe (mm) | Avance table (mm/min) |
| **0.10** | 6 | 20000 | 0.002 (0.001−0.003) | 0.02 | 40 | 6 | 20000 | 0.002 (0.001−0.003) | 0.02 | 40 |
| **0.12** | 8 | 20000 | 0.002 (0.001−0.003) | 0.02 | 40 | 8 | 20000 | 0.002 (0.001−0.003) | 0.02 | 40 |
| **0.16** | 10 | 20000 | 0.002 (0.001−0.003) | 0.02 | 40 | 10 | 20000 | 0.002 (0.001−0.003) | 0.02 | 40 |
| **0.20** | 13 | 20000 | 0.003 (0.002−0.004) | 0.04 | 60 | 13 | 20000 | 0.003 (0.002−0.004) | 0.04 | 60 |
| **0.25** | 16 | 20000 | 0.003 (0.002−0.004) | 0.04 | 60 | 16 | 20000 | 0.003 (0.002−0.004) | 0.04 | 60 |
| **0.32** | 20 | 20000 | 0.004 (0.003−0.005) | 0.05 | 80 | 20 | 20000 | 0.004 (0.003−0.005) | 0.05 | 80 |
| **0.40** | 25 | 20000 | 0.004 (0.003−0.005) | 0.05 | 80 | 25 | 20000 | 0.004 (0.003−0.005) | 0.05 | 80 |
| **0.50** | 31 | 20000 | 0.006 (0.005−0.007) | 0.10 | 120 | 31 | 20000 | 0.006 (0.005−0.007) | 0.10 | 120 |
| **0.63** | 40 | 20000 | 0.008 (0.006−0.010) | 0.10 | 160 | 40 | 20000 | 0.008 (0.006−0.010) | 0.10 | 160 |
| **0.80** | 50 | 20000 | 0.020 (0.015−0.025) | 0.30 | 400 | 50 | 20000 | 0.015 (0.012−0.018) | 0.30 | 300 |
| **0.99** | 62 | 20000 | 0.040 (0.030−0.050) | 0.30 | 800 | 62 | 20000 | 0.020 (0.015−0.025) | 0.30 | 400 |

| Matière | P | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Acier carbone, Acier allié (280−350HB) 36CrNiMo4 | | | | | Acier pré-traité (35−45HRC) X36CrMo17 | | | | |
| Diamètre foret **DC** (mm) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.−max.) (mm/tour) | Passe (mm) | Avance table (mm/min) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.−max.) (mm/tour) | Passe (mm) | Avance table (mm/min) |
| **0.10** | 6 | 20000 | 0.002 (0.001−0.003) | 0.02 | 40 | 6 | 20000 | 0.002 (0.001−0.003) | 0.02 | 40 |
| **0.12** | 8 | 20000 | 0.002 (0.001−0.003) | 0.02 | 40 | 8 | 20000 | 0.002 (0.001−0.003) | 0.02 | 40 |
| **0.16** | 10 | 20000 | 0.002 (0.001−0.003) | 0.02 | 40 | 10 | 20000 | 0.002 (0.001−0.003) | 0.02 | 40 |
| **0.20** | 13 | 20000 | 0.003 (0.002−0.004) | 0.04 | 60 | 13 | 20000 | 0.003 (0.002−0.004) | 0.04 | 60 |
| **0.25** | 16 | 20000 | 0.003 (0.002−0.004) | 0.04 | 60 | 16 | 20000 | 0.003 (0.002−0.004) | 0.04 | 60 |
| **0.32** | 20 | 20000 | 0.004 (0.003−0.005) | 0.05 | 80 | 20 | 20000 | 0.004 (0.003−0.005) | 0.05 | 80 |
| **0.40** | 25 | 20000 | 0.004 (0.003−0.005) | 0.05 | 80 | 25 | 20000 | 0.004 (0.003−0.005) | 0.05 | 80 |
| **0.50** | 31 | 20000 | 0.006 (0.005−0.007) | 0.10 | 120 | 31 | 20000 | 0.006 (0.005−0.007) | 0.10 | 120 |
| **0.63** | 40 | 20000 | 0.008 (0.006−0.010) | 0.10 | 160 | 40 | 20000 | 0.008 (0.006−0.010) | 0.10 | 160 |
| **0.80** | 50 | 20000 | 0.015 (0.012−0.018) | 0.30 | 300 | 50 | 20000 | 0.015 (0.012−0.018) | 0.30 | 300 |
| **0.99** | 62 | 20000 | 0.020 (0.015−0.025) | 0.30 | 400 | 62 | 20000 | 0.020 (0.015−0.025) | 0.30 | 400 |

Remarque 1) Pour percer des trous de diamètres jusqu'à ϕ0.3mm, il est recommandé d'utiliser un foret à pointer.
Remarque 2) Modifier les conditions de coupe en fonction de la rigidité de la pièce et de la machine.
Remarque 3) Pour le perçage de trous supérieurs à DCx5, réduire les profondeurs de passes ci-dessus indiquées.
Remarque 4) L'utilisation d'huile soluble (diluée 20x) est recommandée pour percer en appliquant les conditions de coupe ci-dessus.
Baisser la vitesse de rotation, si vous utilisez de l'huile entière ou la pulvérisation.
Remarque 5) Les matières marquées de "−" dans le tableau ci-dessus sont difficiles à usiner avec l'arrosage extérieur.

# PERÇAGE (CARBURE MONOBLOC)

# MSE

- Goujures dégagées pour prévenir le bourrage copeaux.
- Usinage stable de petits diamètres.

## CONDITIONS DE COUPE RECOMMANDÉES

| Matière | M<br>Acier inoxydable austénitique (≤200HB)<br>X5CrNi1810, X5CrNiMo17-12-2 | | | | | K<br>Fonte grise (≤350MPa)<br>GG30 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Diamètre foret **DC** (mm) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Passe (mm) | Avance table (mm/min) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Passe (mm) | Avance table (mm/min) |
| **0.10** | 6 | 20000 | 0.002 (0.001—0.003) | 0.02 | 40 | 6 | 20000 | 0.002 (0.001—0.003) | 0.02 | 40 |
| **0.12** | 8 | 20000 | 0.002 (0.001—0.003) | 0.02 | 40 | 8 | 20000 | 0.002 (0.001—0.003) | 0.02 | 40 |
| **0.16** | 10 | 20000 | 0.002 (0.001—0.003) | 0.02 | 40 | 10 | 20000 | 0.002 (0.001—0.003) | 0.02 | 40 |
| **0.20** | 11 | 18000 | 0.003 (0.002—0.004) | 0.04 | 54 | 13 | 20000 | 0.003 (0.002—0.004) | 0.04 | 60 |
| **0.25** | 14 | 18000 | 0.003 (0.002—0.004) | 0.04 | 54 | 16 | 20000 | 0.003 (0.002—0.004) | 0.04 | 60 |
| **0.32** | 15 | 15000 | 0.004 (0.003—0.005) | 0.05 | 60 | 20 | 20000 | 0.004 (0.003—0.005) | 0.05 | 80 |
| **0.40** | 19 | 15000 | 0.004 (0.003—0.005) | 0.05 | 60 | 25 | 20000 | 0.004 (0.003—0.005) | 0.05 | 80 |
| **0.50** | 16 | 10000 | 0.006 (0.005—0.007) | 0.10 | 60 | 31 | 20000 | 0.006 (0.005—0.007) | 0.10 | 120 |
| **0.63** | 20 | 10000 | 0.008 (0.006—0.010) | 0.10 | 80 | 40 | 20000 | 0.008 (0.006—0.010) | 0.10 | 160 |
| **0.80** | 15 | 6000 | 0.015 (0.012—0.018) | 0.20 | 90 | 50 | 20000 | 0.020 (0.015—0.025) | 0.30 | 400 |
| **0.99** | 19 | 6000 | 0.020 (0.015—0.025) | 0.20 | 120 | 62 | 20000 | 0.040 (0.030—0.050) | 0.30 | 800 |

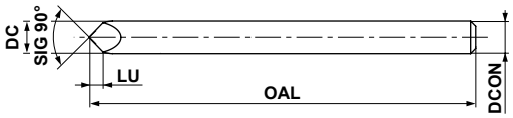
| Matière | N<br>Alliage aluminium (Si<5%) | | | | | S<br>Alliage réfractaire<br>Inconel718 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Diamètre foret **DC** (mm) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Passe (mm) | Avance table (mm/min) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Passe (mm) | Avance table (mm/min) |
| **0.10** | 6 | 20000 | 0.002 (0.001—0.003) | 0.05 | 40 | 2 | 7000 | 0.001 (0.0005—0.001) | 0.02 | 7 |
| **0.12** | 8 | 20000 | 0.003 (0.002—0.004) | 0.05 | 60 | 3 | 7000 | 0.001 (0.0005—0.001) | 0.02 | 7 |
| **0.16** | 10 | 20000 | 0.004 (0.003—0.005) | 0.05 | 80 | 4 | 7000 | 0.001 (0.0005—0.001) | 0.02 | 7 |
| **0.20** | 13 | 20000 | 0.006 (0.005—0.007) | 0.10 | 120 | 3 | 5000 | 0.002 (0.001—0.002) | 0.04 | 10 |
| **0.25** | 16 | 20000 | 0.008 (0.006—0.010) | 0.10 | 160 | 4 | 5000 | 0.002 (0.001—0.002) | 0.04 | 10 |
| **0.32** | 20 | 20000 | 0.010 (0.008—0.012) | 0.30 | 200 | 4 | 4000 | 0.002 (0.001—0.002) | 0.05 | 8 |
| **0.40** | 25 | 20000 | 0.020 (0.015—0.025) | 0.30 | 400 | 5 | 4000 | 0.002 (0.001—0.002) | 0.05 | 8 |
| **0.50** | 31 | 20000 | 0.030 (0.025—0.035) | 0.50 | 600 | 5 | 3000 | 0.003 (0.001—0.003) | 0.10 | 9 |
| **0.63** | 40 | 20000 | 0.040 (0.035—0.045) | 0.50 | 800 | 6 | 3000 | 0.004 (0.002—0.004) | 0.10 | 12 |
| **0.80** | 50 | 20000 | 0.050 (0.045—0.055) | 0.80 | 1000 | 5 | 1800 | 0.006 (0.004—0.006) | 0.20 | 10.8 |
| **0.99** | 62 | 20000 | 0.060 (0.055—0.065) | 0.80 | 1200 | 6 | 1800 | 0.010 (0.008—0.010) | 0.20 | 18 |

Remarque 1) Pour percer des trous de diamètres jusqu'à ϕ0.3mm, il est recommandé d'utiliser un foret à pointer.
Remarque 2) Modifier les conditions de coupe en fonction de la rigidité de la pièce et de la machine.
Remarque 3) Pour le perçage de trous supérieurs à DCx5, réduire les profondeurs de passes ci-dessus indiquées.
Remarque 4) L'utilisation d'huile soluble (diluée 20x) est recommandée pour percer en appliquant les conditions de coupe ci-dessus.
Baisser la vitesse de rotation, si vous utilisez de l'huile entière ou la pulvérisation.
Remarque 5) Les matières marquées de "—" dans le tableau ci-dessus sont difficiles à usiner avec l'arrosage extérieur.

# MSP

FORET À POINTER

P M K N S H




| Référence | Nuance | Stock | Dimensions (mm) | | | | Plage Diamètres (mm) |
|---|---|---|---|---|---|---|---|
| | | | DC | LU | OAL | DCON | |
| **MSP0300SB** | **VP15TF** | ● | 3.0 | 1.5 | 38.0 | 3.0 | **0.1—3.0** |

## CONDITIONS DE COUPE RECOMMANDÉES

| Gamme taille de trou (mm) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Avance table (mm/min) |
|---|---|---|---|
| **0.1—3.0** | 10000 | 0.0005 (0.00025—0.001) | 5 |

● : **Article stocké.**

# PERÇAGE (CARBURE MONOBLOC)

## DLE

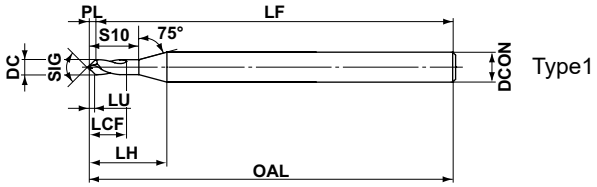
Série de forets à pointer et à chanfreiner

UWC DP1 DP1A 60° 90° 120° 145° X

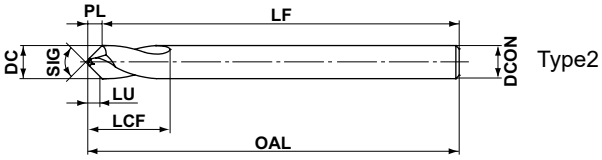
P M K N S H

Arrosage extérieur

### Angle de pointe SIG 60°, 90°

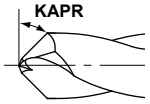



Type1




Type2

### Angle de pointe SIG 120°, 145°




h7

| DCON=3 | 3<DCON≤6 | 6<DCON≤10 | 10<DCON≤16 |
|---|---|---|---|
| 0 −0.010 | 0 −0.012 | 0 −0.015 | 0 −0.018 |

| DC (mm) | SIG | DP1020 | DP102A | Référence | Dimensions (mm) LU | LCF | LH | S10 | OAL | LF | PL | KAPR | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NEW 3.0 | 60° | ● | | DLE0300S030P060 | 2.0 | 9 | — | — | 45 | 42.9 | 2.1 | 60° | 3 | 2 |
| NEW 4.0 | 60° | ● | | DLE0400S040P060 | 2.7 | 12 | — | — | 50 | 47.2 | 2.8 | 60° | 4 | 2 |
| NEW 5.0 | 60° | ● | | DLE0500S050P060 | 3.4 | 14 | — | — | 60 | 56.5 | 3.5 | 60° | 5 | 2 |
| NEW 6.0 | 60° | ● | | DLE0600S060P060 | 4.0 | 15 | — | — | 66 | 61.8 | 4.2 | 60° | 6 | 2 |
| NEW 7.0 | 60° | ● | | DLE0700S070P060 | 4.7 | 18 | — | — | 74 | 69.1 | 4.9 | 60° | 7 | 2 |
| NEW 8.0 | 60° | ● | | DLE0800S080P060 | 5.4 | 20 | — | — | 74 | 68.4 | 5.6 | 60° | 8 | 2 |
| NEW 10.0 | 60° | ● | | DLE1000S100P060 | 6.8 | 24 | — | — | 84 | 77.0 | 7.0 | 60° | 10 | 2 |
| NEW 12.0 | 60° | ● | | DLE1200S120P060 | 8.1 | 28 | — | — | 95 | 86.6 | 8.4 | 60° | 12 | 2 |
| NEW 1.0 | 90° | | ● | DLE0100S030P090 | 0.35 | 2 | 6.7 | 3.0 | 45 | 44.6 | 0.4 | 45° | 3 | 1 |
| NEW 1.5 | 90° | | ● | DLE0150S030P090 | 0.55 | 3 | 7.3 | 4.5 | 45 | 44.4 | 0.6 | 45° | 3 | 1 |
| NEW 2.0 | 90° | | ● | DLE0200S030P090 | 0.8 | 4 | 7.9 | 6.1 | 45 | 44.1 | 0.9 | 45° | 3 | 1 |
| NEW 2.5 | 90° | | ● | DLE0250S030P090 | 1.0 | 5 | 7.9 | 7.1 | 45 | 43.9 | 1.1 | 45° | 3 | 1 |
| 3.0 | 90° | ● | | DLE0300S030P090 | 1.2 | 9 | — | — | 45 | 43.7 | 1.3 | 45° | 3 | 2 |
| 4.0 | 90° | ● | | DLE0400S040P090 | 1.6 | 12 | — | — | 50 | 48.3 | 1.7 | 45° | 4 | 2 |
| 5.0 | 90° | ● | | DLE0500S050P090 | 2.0 | 14 | — | — | 60 | 57.9 | 2.1 | 45° | 5 | 2 |
| 6.0 | 90° | ● | | DLE0600S060P090 | 2.4 | 15 | — | — | 66 | 63.4 | 2.6 | 45° | 6 | 2 |
| 7.0 | 90° | ● | | DLE0700S070P090 | 2.8 | 18 | — | — | 74 | 71.0 | 3.0 | 45° | 7 | 2 |
| 8.0 | 90° | ● | | DLE0800S080P090 | 3.2 | 20 | — | — | 74 | 70.6 | 3.4 | 45° | 8 | 2 |
| 10.0 | 90° | ● | | DLE1000S100P090 | 4.1 | 24 | — | — | 84 | 79.7 | 4.3 | 45° | 10 | 2 |
| 12.0 | 90° | ● | | DLE1200S120P090 | 4.9 | 28 | — | — | 95 | 89.9 | 5.1 | 45° | 12 | 2 |
| 16.0 | 90° | ● | | DLE1600S160P090 | 6.6 | 35 | — | — | 113 | 106.2 | 6.8 | 45° | 16 | 2 |

Remarque 1) Dans la zone d'environ 0,25x **DC**, (zone du double angle de pointe), la zone centrale n'aura pas un fond de trou à 60° ou 90°. Il est également impossible de chanfreiner avec cette partie du foret.

Remarque 2) Le diamètre de pointage doit être inférieur au diamètre DC du foret long. La longueur utile LU ne doit être utilisée qu'à titre indicatif.

● : Article stocké. ★ : Article standard Japon.

| DC (mm) | SIG | DP1020 | DP102A | Référence | Dimensions (mm) | | | | | | | | | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | LU | LCF | LH | S10 | OAL | LF | PL | KAPR | DCON | |
| NEW 3.0 | 120° | ● | | **DLE0300S030P120** | 0.8 | 9 | — | — | 45 | 44.1 | 0.9 | 30° | 3 | 2 |
| NEW 4.0 | 120° | ● | | **DLE0400S040P120** | 1.1 | 12 | — | — | 50 | 48.8 | 1.2 | 30° | 4 | 2 |
| NEW 5.0 | 120° | ● | | **DLE0500S050P120** | 1.3 | 14 | — | — | 60 | 58.6 | 1.4 | 30° | 5 | 2 |
| NEW 6.0 | 120° | ● | | **DLE0600S060P120** | 1.6 | 15 | — | — | 66 | 64.3 | 1.7 | 30° | 6 | 2 |
| NEW 7.0 | 120° | ● | | **DLE0700S070P120** | 1.9 | 18 | — | — | 74 | 72.0 | 2.0 | 30° | 7 | 2 |
| NEW 8.0 | 120° | ● | | **DLE0800S080P120** | 2.2 | 20 | — | — | 74 | 71.7 | 2.3 | 30° | 8 | 2 |
| NEW 10.0 | 120° | ● | | **DLE1000S100P120** | 2.8 | 24 | — | — | 84 | 81.1 | 2.9 | 30° | 10 | 2 |
| NEW 12.0 | 120° | ● | | **DLE1200S120P120** | 3.3 | 28 | — | — | 95 | 91.5 | 3.5 | 30° | 12 | 2 |
| NEW 3.0 | 145° | ● | | **DLE0300S030P145** | 0.4 | 9 | — | — | 45 | 44.5 | 0.5 | 17.5° | 3 | 2 |
| NEW 4.0 | 145° | ● | | **DLE0400S040P145** | 0.5 | 12 | — | — | 50 | 49.4 | 0.6 | 17.5° | 4 | 2 |
| NEW 5.0 | 145° | ● | | **DLE0500S050P145** | 0.7 | 14 | — | — | 60 | 59.2 | 0.8 | 17.5° | 5 | 2 |
| NEW 6.0 | 145° | ● | | **DLE0600S060P145** | 0.8 | 15 | — | — | 66 | 65.1 | 0.9 | 17.5° | 6 | 2 |
| NEW 7.0 | 145° | ● | | **DLE0700S070P145** | 1.0 | 18 | — | — | 74 | 72.9 | 1.1 | 17.5° | 7 | 2 |
| NEW 8.0 | 145° | ● | | **DLE0800S080P145** | 1.1 | 20 | — | — | 74 | 72.7 | 1.3 | 17.5° | 8 | 2 |
| NEW 10.0 | 145° | ● | | **DLE1000S100P145** | 1.4 | 24 | — | — | 84 | 82.4 | 1.6 | 17.5° | 10 | 2 |
| NEW 12.0 | 145° | ● | | **DLE1200S120P145** | 1.7 | 28 | — | — | 95 | 93.1 | 1.9 | 17.5° | 12 | 2 |

Remarque 1) Le diamètre de pointage doit être inférieur au diamètre DC du foret long. La longueur utile LU ne doit être utilisée qu'à titre indicatif.

CONDITIONS DE COUPE ➤ M016
MÉTHODE D'UTILISATION ➤ M016
DONNÉES TECHNIQUES ➤ P001

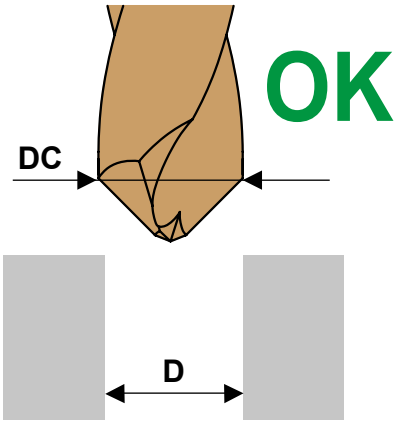
# DLE

Série de forets à pointer et à chanfreiner

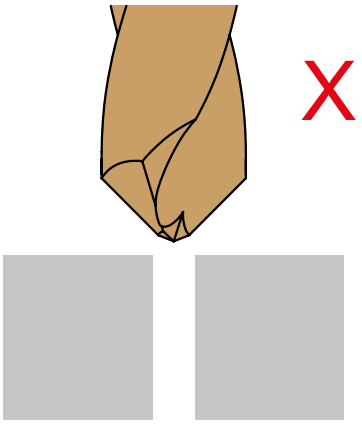
## SÉLECTION DU DIAMÈTRE DE FORET

## CHANFREINAGE

En fonction du diamètre du **D** du trou à chanfreiner, sélectionnez le diamètre **DC** du foret dans la plage suivante : **D < DC < 2D**.

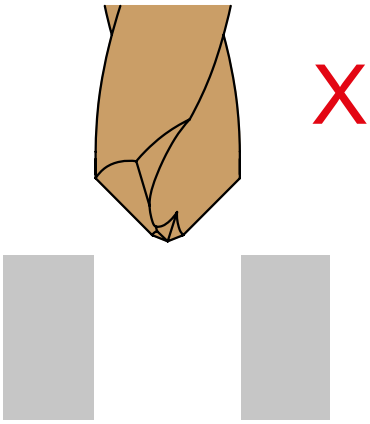



Exemple : Si le diamètre **D** du trou à chanfreiner est de 5 mm, le diamètre **DC** du foret doit être supérieur à 5 mm et inférieur à 10 mm. Sélectionnez un DC de 6 mm, 7 mm ou 8 mm.




**Si DC est égal ou supérieur à 2D :**

Le chanfreinage est impossible si le diamètre **DC** du foret est trop grand par rapport au diamètre **D** du trou à chanfreiner (égal ou supérieur à **2D**).

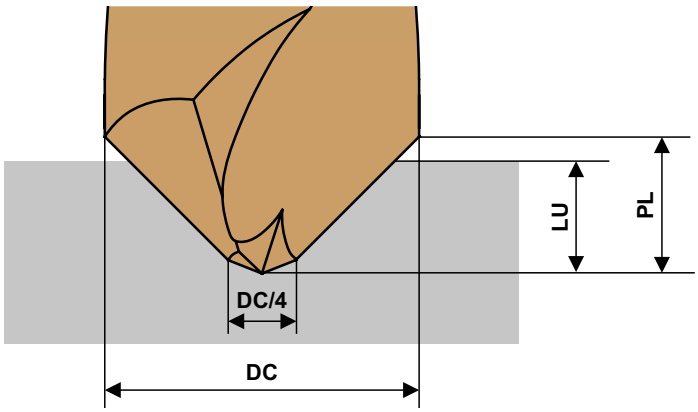



**Si DC est égal à D :**

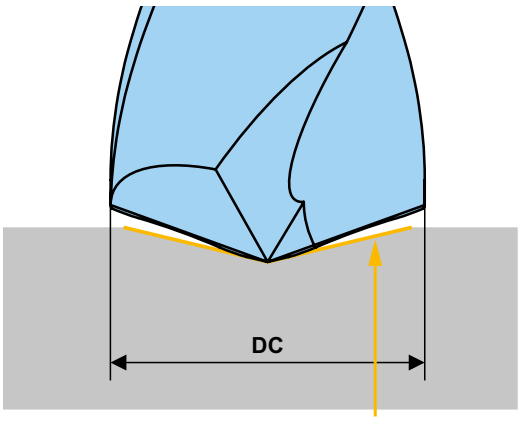
Le chanfreinage est impossible si le diamètre **DC** du foret est égal au diamètre **D** du trou à chanfreiner.

## POINTAGE

Le diamètre de pointage doit être inférieur au diamètre du foret (diamètre d'usinage) **DC**. La longueur utile **LU** ne doit être utilisée qu'à titre indicatif.
La zone centrale des trous (env. 25% du diamètre) formée par le double angle de pointe ne sera pas usinée aux angles nominaux de 60° et 90°. Il est également impossible de chanfreiner dans avec la partie centrales du foret. Pour obtenir un centrage par la pointe du foret long, sélectionner un foret à pointer avec un angle de pointe supérieur à celui du foret long.

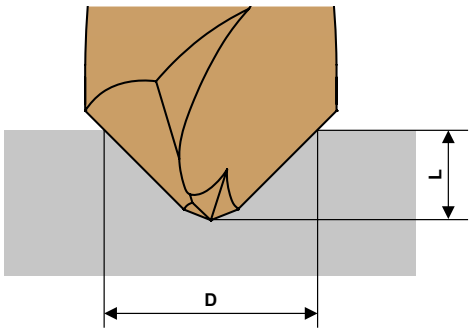



Centrage par la pointe




DLE à angle de pointe SIG 145°

# Profondeur de perçage (L) en fonction du diamètre d'outil




(mm)

| DC | SIG 90° | | | |
|---|---|---|---|---|
| | Min. | | Max. | |
| | D | L | D | L |
| **1.0** | 0.5 | 0.18 | 0.8 | 0.33 |
| **1.5** | 0.8 | 0.29 | 1.3 | 0.54 |
| **2.0** | 1.0 | 0.35 | 1.9 | 0.8 |
| **2.5** | 1.3 | 0.47 | 2.4 | 1.0 |
| **3.0** | 1.5 | 0.5 | 2.8 | 1.2 |
| **4.0** | 2.0 | 0.7 | 3.8 | 1.6 |
| **5.0** | 2.5 | 0.9 | 4.7 | 2.0 |
| **6.0** | 3.0 | 1.1 | 5.7 | 2.4 |
| **7.0** | 3.5 | 1.2 | 6.6 | 2.8 |
| **8.0** | 4.0 | 1.4 | 7.6 | 3.2 |
| **10.0** | 5.0 | 1.8 | 9.7 | 4.1 |
| **12.0** | 6.0 | 2.1 | 11.6 | 4.9 |
| **16.0** | 8.0 | 2.8 | 15.5 | 6.6 |

(mm)

| DC | SIG 60° | | | | SIG 120° | | | | SIG 145° | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Min. | | Max. | | Min. | | Max. | | Min. | | Max. | |
| | D | L | D | L | D | L | D | L | D | L | D | L |
| **3.0** | 1.5 | 0.8 | 2.9 | 2.0 | 1.5 | 0.4 | 2.8 | 0.8 | 1.5 | 0.2 | 2.5 | 0.4 |
| **4.0** | 2.0 | 1.1 | 3.9 | 2.7 | 2.0 | 0.6 | 3.8 | 1.1 | 2.0 | 0.3 | 3.2 | 0.5 |
| **5.0** | 2.5 | 1.3 | 4.9 | 3.4 | 2.5 | 0.7 | 4.5 | 1.3 | 2.5 | 0.4 | 4.4 | 0.7 |
| **6.0** | 3.0 | 1.6 | 5.8 | 4.0 | 3.0 | 0.9 | 5.5 | 1.6 | 3.0 | 0.5 | 5.1 | 0.8 |
| **7.0** | 3.5 | 1.9 | 6.8 | 4.7 | 3.5 | 1.0 | 6.6 | 1.9 | 3.5 | 0.6 | 6.3 | 1.0 |
| **8.0** | 4.0 | 2.1 | 7.8 | 5.4 | 4.0 | 1.2 | 7.6 | 2.2 | 4.0 | 0.6 | 7.0 | 1.1 |
| **10.0** | 5.0 | 2.7 | 9.8 | 6.8 | 5.0 | 1.4 | 9.7 | 2.8 | 5.0 | 0.8 | 8.9 | 1.4 |
| **12.0** | 6.0 | 3.2 | 11.6 | 8.1 | 6.0 | 1.7 | 11.4 | 3.3 | 6.0 | 0.9 | 10.8 | 1.7 |

# DLE

Série de forets à pointer et à chanfreiner

## Angle de pointe SIG 60°

### CONDITIONS DE COUPE RECOMMANDÉES

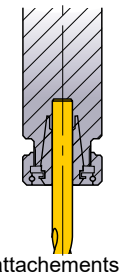
| Matière | P | | | | | |
|---|---|---|---|---|---|---|
| | Acier doux (≤180HB)<br>DIN C10E etc. | | Acier carbone, Acier allié (180—280HB)<br>DIN Ck45, 41CrMo4 etc. | | Acier carbone, Acier allié (280—350HB)<br>DIN 40CrNiMoA etc. | |
| Diamètre foret **DC** (mm) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) |
| **3.0** | 7900 | 0.05 (0.03—0.07) | 6800 | 0.05 (0.03—0.07) | 6300 | 0.04 (0.02—0.06) |
| **4.0** | 5900 | 0.05 (0.03—0.07) | 5100 | 0.05 (0.03—0.07) | 4700 | 0.04 (0.02—0.06) |
| **5.0** | 5000 | 0.06 (0.04—0.08) | 4400 | 0.06 (0.04—0.08) | 4100 | 0.05 (0.03—0.07) |
| **6.0** | 4200 | 0.06 (0.04—0.08) | 3700 | 0.06 (0.04—0.08) | 3400 | 0.05 (0.03—0.07) |
| **7.0** | 3600 | 0.07 (0.04—0.09) | 3100 | 0.07 (0.04—0.09) | 2900 | 0.05 (0.03—0.07) |
| **8.0** | 3100 | 0.07 (0.04—0.09) | 2700 | 0.07 (0.04—0.09) | 2500 | 0.05 (0.03—0.07) |
| **10.0** | 2700 | 0.08 (0.04—0.10) | 2300 | 0.08 (0.04—0.10) | 2200 | 0.06 (0.03—0.08) |
| **12.0** | 2200 | 0.08 (0.04—0.10) | 1900 | 0.08 (0.04—0.10) | 1800 | 0.06 (0.03—0.08) |

| Matière | M | | K | | | |
|---|---|---|---|---|---|---|
| | Acier inoxydable austénitique (≤200HB)<br>DIN X5CrNi189, X5CrNiMo1810 etc. | | Fonte grise (≤350MPa)<br>DIN GG30 etc. | | Fonte ductile (≤450MPa)<br>DIN GGG40.3 etc. | |
| Diamètre foret **DC** (mm) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) |
| **3.0** | 1500 | 0.03 (0.01—0.05) | 7900 | 0.05 (0.03—0.07) | 5800 | 0.05 (0.03—0.07) |
| **4.0** | 1100 | 0.03 (0.01—0.05) | 5900 | 0.05 (0.03—0.07) | 4300 | 0.05 (0.03—0.07) |
| **5.0** | 1200 | 0.04 (0.02—0.06) | 5000 | 0.06 (0.04—0.08) | 3800 | 0.06 (0.04—0.08) |
| **6.0** | 1000 | 0.04 (0.02—0.06) | 4200 | 0.06 (0.04—0.08) | 3100 | 0.06 (0.04—0.08) |
| **7.0** | 900 | 0.04 (0.02—0.06) | 3600 | 0.07 (0.04—0.09) | 2700 | 0.06 (0.04—0.08) |
| **8.0** | 790 | 0.04 (0.02—0.06) | 3100 | 0.07 (0.04—0.09) | 2300 | 0.06 (0.04—0.08) |
| **10.0** | 630 | 0.04 (0.02—0.06) | 2700 | 0.08 (0.04—0.10) | 1900 | 0.07 (0.04—0.09) |
| **12.0** | 530 | 0.04 (0.02—0.06) | 2200 | 0.08 (0.04—0.10) | 1500 | 0.07 (0.04—0.09) |

Remarque 1) Utiliser un outil plus large (DC) que celui requis pour le trou central mais pas plus grand que 2 x DC.
Remarque 2) Lors du pointage sur une surface oblique ou bombée, veuillez réduire l'avance.
Remarque 3) Veuillez réduire les conditions de coupe pour le rainurage en V et le chanfreinage.
Remarque 4) Lorsque des vibrations ou des bruits anormaux aparaissent, veuillez réduire la durée de temporisation ou la vitesse de rotation.
Remarque 5) Lors du pointage, veillez à ne pas dépasser la longueur utile (LU).

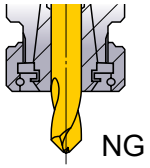
### ■ MÉTHODE D'UTILISATION

**Fixation du foret**



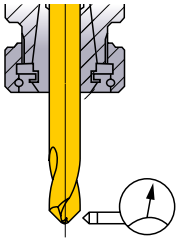
Les attachements de type à pince serrent le foret solidement.

**Longueur du foret**



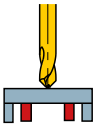

Ne pas serrer sur les goujures.

**Tolérance d'installation**

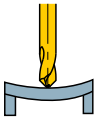


Concentricité ≤ 0.03mm

**Pièce mince**

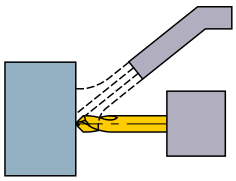


**OK**
Rigidifier le montage



X
En cas d'effort et de déformation

**Méthode d'arrosage**



Deux positions d'arrosage : au bout et par le centre sont idéales.

# Angle de pointe SIG 90°, 120° et 145°

## CONDITIONS DE COUPE RECOMMANDÉES

| Matière | P | | | | | |
|---|---|---|---|---|---|---|
| | Acier doux (≤180HB)<br>DIN C10E etc. | | Acier carbone, Acier allié (180—280HB)<br>DIN Ck45, 41CrMo4 etc. | | Acier carbone, Acier allié (280—350HB)<br>DIN 40CrNiMoA etc. | |
| Diamètre foret **DC** (mm) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) |
| **1.0** | 9500 | 0.02 (0.01—0.03) | 6300 | 0.02 (0.01—0.03) | 4700 | 0.02 (0.01—0.03) |
| **1.5** | 9500 | 0.02 (0.01—0.03) | 7400 | 0.02 (0.01—0.03) | 6300 | 0.02 (0.01—0.03) |
| **2.0** | 9500 | 0.04 (0.03—0.05) | 7900 | 0.04 (0.03—0.05) | 7100 | 0.04 (0.03—0.05) |
| **2.5** | 9500 | 0.04 (0.03—0.05) | 8200 | 0.04 (0.03—0.05) | 7600 | 0.04 (0.03—0.05) |
| **3.0** | 7900 | 0.06 (0.04—0.08) | 6800 | 0.06 (0.04—0.08) | 6300 | 0.05 (0.03—0.07) |
| **4.0** | 5900 | 0.06 (0.04—0.08) | 5100 | 0.06 (0.04—0.08) | 4700 | 0.05 (0.03—0.07) |
| **5.0** | 5000 | 0.07 (0.05—0.09) | 4400 | 0.07 (0.05—0.09) | 4100 | 0.06 (0.04—0.08) |
| **6.0** | 4200 | 0.07 (0.05—0.09) | 3700 | 0.07 (0.05—0.09) | 3400 | 0.06 (0.04—0.08) |
| **7.0** | 3600 | 0.08 (0.05—0.10) | 3100 | 0.08 (0.05—0.10) | 2900 | 0.06 (0.04—0.08) |
| **8.0** | 3100 | 0.08 (0.05—0.10) | 2700 | 0.08 (0.05—0.10) | 2500 | 0.06 (0.04—0.08) |
| **10.0** | 2700 | 0.09 (0.05—0.11) | 2300 | 0.09 (0.05—0.11) | 2200 | 0.07 (0.04—0.09) |
| **12.0** | 2200 | 0.09 (0.05—0.11) | 1900 | 0.09 (0.05—0.11) | 1800 | 0.07 (0.04—0.09) |
| **16.0** | 1700 | 0.12 (0.10—0.14) | 1500 | 0.12 (0.10—0.14) | 1400 | 0.08 (0.06—0.10) |

| Matière | M | | K | | | |
|---|---|---|---|---|---|---|
| | Acier inoxydable austénitique (≤200HB)<br>DIN X5CrNi189, X5CrNiMo1810 etc. | | Fonte grise (≤350MPa)<br>DIN GG30 etc. | | Fonte ductile (≤450MPa)<br>DIN GGG40.3 etc. | |
| Diamètre foret **DC** (mm) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) |
| **1.0** | 6300 | 0.01 (0.005—0.015) | 9500 | 0.02 (0.01—0.03) | 3100 | 0.02 (0.01—0.03) |
| **1.5** | 4200 | 0.01 (0.005—0.015) | 9500 | 0.02 (0.01—0.03) | 5300 | 0.02 (0.01—0.03) |
| **2.0** | 3100 | 0.04 (0.03—0.05) | 9500 | 0.04 (0.03—0.05) | 6300 | 0.04 (0.03—0.05) |
| **2.5** | 2500 | 0.04 (0.03—0.05) | 9500 | 0.04 (0.03—0.05) | 7000 | 0.04 (0.03—0.05) |
| **3.0** | 2100 | 0.04 (0.02—0.06) | 7900 | 0.06 (0.04—0.08) | 5800 | 0.06 (0.04—0.08) |
| **4.0** | 1600 | 0.04 (0.02—0.06) | 5900 | 0.06 (0.04—0.08) | 4300 | 0.06 (0.04—0.08) |
| **5.0** | 1200 | 0.06 (0.04—0.08) | 5000 | 0.07 (0.05—0.09) | 3800 | 0.07 (0.05—0.09) |
| **6.0** | 1000 | 0.06 (0.04—0.08) | 4200 | 0.07 (0.05—0.09) | 3100 | 0.07 (0.05—0.09) |
| **7.0** | 900 | 0.06 (0.04—0.08) | 3600 | 0.08 (0.05—0.10) | 2700 | 0.07 (0.05—0.09) |
| **8.0** | 790 | 0.06 (0.04—0.08) | 3100 | 0.08 (0.05—0.10) | 2300 | 0.07 (0.05—0.09) |
| **10.0** | 630 | 0.06 (0.04—0.08) | 2700 | 0.09 (0.05—0.11) | 1900 | 0.08 (0.05—0.10) |
| **12.0** | 530 | 0.06 (0.04—0.08) | 2200 | 0.09 (0.05—0.11) | 1500 | 0.08 (0.05—0.10) |
| **16.0** | 390 | 0.08 (0.06—0.10) | 1700 | 0.12 (0.10—0.14) | 1100 | 0.11 (0.09—0.13) |

Remarque 1) Utiliser un outil plus large (DC) que celui requis pour le trou central mais pas plus grand que 2 x DC.
Remarque 2) Lors du pointage sur une surface oblique ou bombée, veuillez réduire l'avance.
Remarque 3) Veuillez réduire les conditions de coupe pour le rainurage en V et le chanfreinage.
Remarque 4) Lorsque des vibrations ou des bruits anormaux aparaissent, veuillez réduire la durée de temporisation ou la vitesse de rotation.
Remarque 5) Lors du pointage, veillez à ne pas dépasser la longueur utile (LU).

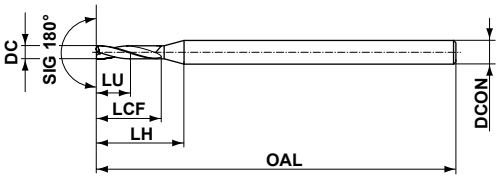
# PERÇAGE (CARBURE MONOBLOC)

## MINI-MFE

Pour petits diamètres

P M K N S H

Arrosage extérieur




Type1

| 0.75≤DC≤2.95 | |
|---|---|
| 0 −0.014 | |
| DCON=3 | DCON=4 |
| 0 −0.006 | 0 −0.008 |

| DC (mm) | Rapport (L/D) | DP102A | Référence | Dimensions (mm) LU | LCF | LH | OAL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|
| 0.75 | 2 | ★ | **MFE0075X02S030** | 1.5 | 3.0 | 7.7 | 45 | 3 | 1 |
| 0.80 | 2 | ★ | **MFE0080X02S030** | 1.6 | 3.2 | 7.8 | 45 | 3 | 1 |
| 0.85 | 2 | ★ | **MFE0085X02S030** | 1.7 | 3.4 | 7.9 | 45 | 3 | 1 |
| 0.90 | 2 | ★ | **MFE0090X02S030** | 1.8 | 3.6 | 8.0 | 45 | 3 | 1 |
| 0.95 | 2 | ★ | **MFE0095X02S030** | 1.9 | 3.8 | 8.1 | 45 | 3 | 1 |
| 1.00 | 2 | ★ | **MFE0100X02S030** | 2.0 | 4.0 | 8.2 | 45 | 3 | 1 |
| 1.05 | 2 | ★ | **MFE0105X02S030** | 2.1 | 4.2 | 8.3 | 45 | 3 | 1 |
| 1.10 | 2 | ★ | **MFE0110X02S030** | 2.2 | 4.4 | 8.4 | 45 | 3 | 1 |
| 1.15 | 2 | ★ | **MFE0115X02S030** | 2.3 | 4.6 | 8.6 | 45 | 3 | 1 |
| 1.20 | 2 | ★ | **MFE0120X02S030** | 2.4 | 4.8 | 8.7 | 45 | 3 | 1 |
| 1.25 | 2 | ★ | **MFE0125X02S030** | 2.5 | 5.0 | 8.8 | 45 | 3 | 1 |
| 1.30 | 2 | ★ | **MFE0130X02S030** | 2.6 | 5.2 | 8.9 | 45 | 3 | 1 |
| 1.35 | 2 | ★ | **MFE0135X02S030** | 2.7 | 5.4 | 9.0 | 45 | 3 | 1 |
| 1.40 | 2 | ★ | **MFE0140X02S030** | 2.8 | 5.6 | 9.1 | 45 | 3 | 1 |
| 1.45 | 2 | ★ | **MFE0145X02S030** | 2.9 | 5.8 | 9.2 | 45 | 3 | 1 |
| 1.50 | 2 | ★ | **MFE0150X02S030** | 3.0 | 6.0 | 9.3 | 45 | 3 | 1 |
| 1.55 | 2 | ★ | **MFE0155X02S030** | 3.1 | 6.2 | 9.4 | 45 | 3 | 1 |
| 1.60 | 2 | ★ | **MFE0160X02S030** | 3.2 | 6.4 | 9.5 | 45 | 3 | 1 |
| 1.65 | 2 | ★ | **MFE0165X02S030** | 3.3 | 6.6 | 9.6 | 45 | 3 | 1 |
| 1.70 | 2 | ★ | **MFE0170X02S030** | 3.4 | 6.8 | 9.7 | 45 | 3 | 1 |
| 1.75 | 2 | ★ | **MFE0175X02S030** | 3.5 | 7.0 | 9.8 | 45 | 3 | 1 |
| 1.80 | 2 | ★ | **MFE0180X02S030** | 3.6 | 7.2 | 9.9 | 45 | 3 | 1 |
| 1.85 | 2 | ★ | **MFE0185X02S030** | 3.7 | 7.4 | 10.0 | 45 | 3 | 1 |
| 1.90 | 2 | ★ | **MFE0190X02S030** | 3.8 | 7.6 | 10.2 | 45 | 3 | 1 |
| 1.95 | 2 | ★ | **MFE0195X02S030** | 3.9 | 7.8 | 10.3 | 45 | 3 | 1 |
| 2.00 | 2 | ★ | **MFE0200X02S040** | 4.0 | 8.0 | 12.2 | 50 | 4 | 1 |
| 2.05 | 2 | ★ | **MFE0205X02S040** | 4.1 | 8.2 | 12.3 | 50 | 4 | 1 |
| 2.10 | 2 | ★ | **MFE0210X02S040** | 4.2 | 8.4 | 12.4 | 50 | 4 | 1 |
| 2.15 | 2 | ★ | **MFE0215X02S040** | 4.3 | 8.6 | 12.6 | 50 | 4 | 1 |
| 2.20 | 2 | ★ | **MFE0220X02S040** | 4.4 | 8.8 | 12.7 | 50 | 4 | 1 |
| 2.25 | 2 | ★ | **MFE0225X02S040** | 4.5 | 9.0 | 12.8 | 50 | 4 | 1 |
| 2.30 | 2 | ★ | **MFE0230X02S040** | 4.6 | 9.2 | 12.9 | 50 | 4 | 1 |
| 2.35 | 2 | ★ | **MFE0235X02S040** | 4.7 | 9.4 | 13.0 | 50 | 4 | 1 |
| 2.40 | 2 | ★ | **MFE0240X02S040** | 4.8 | 9.6 | 13.1 | 50 | 4 | 1 |
| 2.45 | 2 | ★ | **MFE0245X02S040** | 4.9 | 9.8 | 13.2 | 50 | 4 | 1 |
| 2.50 | 2 | ★ | **MFE0250X02S040** | 5.0 | 10.0 | 13.3 | 50 | 4 | 1 |
| 2.55 | 2 | ★ | **MFE0255X02S040** | 5.1 | 10.2 | 13.4 | 50 | 4 | 1 |
| 2.60 | 2 | ★ | **MFE0260X02S040** | 5.2 | 10.4 | 13.5 | 50 | 4 | 1 |
| 2.65 | 2 | ★ | **MFE0265X02S040** | 5.3 | 10.6 | 13.6 | 50 | 4 | 1 |
| 2.70 | 2 | ★ | **MFE0270X02S040** | 5.4 | 10.8 | 13.7 | 50 | 4 | 1 |
| 2.75 | 2 | ★ | **MFE0275X02S040** | 5.5 | 11.0 | 13.8 | 50 | 4 | 1 |
| 2.80 | 2 | ★ | **MFE0280X02S040** | 5.6 | 11.2 | 13.9 | 50 | 4 | 1 |
| 2.85 | 2 | ★ | **MFE0285X02S040** | 5.7 | 11.4 | 14.0 | 50 | 4 | 1 |
| 2.90 | 2 | ★ | **MFE0290X02S040** | 5.8 | 11.6 | 14.2 | 50 | 4 | 1 |
| 2.95 | 2 | ★ | **MFE0295X02S040** | 5.9 | 11.8 | 14.3 | 50 | 4 | 1 |

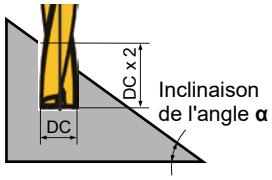
★ : **Article standard Japon.**

# CONDITIONS DE COUPE RECOMMANDÉES

| Matière | | P | | | | | |
|---|---|---|---|---|---|---|---|
| | | Acier doux (≤180HB)<br>C10E etc. | | Acier carbone, Acier allié (180—280HB)<br>DIN Ck45, 41CrMo4 etc. | | Acier carbone, Acier allié (280—350HB)<br>DIN 40CrNiMoA etc. | |
| Diamètre foret **DC** (mm) | **L/D** | Régime ($min^{-1}$) | α=0° Avance (min.—max.) (mm/tour) | Régime ($min^{-1}$) | α=0° Avance (min.—max.) (mm/tour) | Régime ($min^{-1}$) | α=0° Avance (min.—max.) (mm/tour) |
| **0.75** | **≤2** | 23300 | 0.030 (0.010—0.050) | 19000 | 0.030 (0.010—0.050) | 16900 | 0.030 (0.010—0.050) |
| **1.0** | **≤2** | 17500 | 0.030 (0.010—0.050) | 14300 | 0.030 (0.010—0.050) | 12700 | 0.030 (0.010—0.050) |
| **1.5** | **≤2** | 12200 | 0.035 (0.015—0.055) | 10000 | 0.035 (0.015—0.055) | 8400 | 0.035 (0.015—0.050) |
| **2.0** | **≤2** | 9500 | 0.040 (0.020—0.060) | 7900 | 0.040 (0.020—0.060) | 6700 | 0.040 (0.020—0.060) |
| **2.5** | **≤2** | 7900 | 0.050 (0.030—0.070) | 6600 | 0.050 (0.030—0.070) | 5700 | 0.050 (0.030—0.070) |
| **2.95** | **≤2** | 7900 | 0.060 (0.040—0.080) | 7900 | 0.060 (0.040—0.080) | 6800 | 0.060 (0.040—0.080) |

| Matière | | M | | K | | | |
|---|---|---|---|---|---|---|---|
| | | Acier inoxydable austénitique (≤200HB)<br>DIN X5CrNi189, X5CrNiMo1810 etc. | | Fonte grise (≤350MPa)<br>DIN GG30 etc. | | Fonte ductile (≤450MPa)<br>DIN GGG40.3 etc. | |
| Diamètre foret **DC** (mm) | **L/D** | Régime ($min^{-1}$) | α=0° Avance (min.—max.) (mm/tour) | Régime ($min^{-1}$) | α=0° Avance (min.—max.) (mm/tour) | Régime ($min^{-1}$) | α=0° Avance (min.—max.) (mm/tour) |
| **0.75** | **≤2** | 10600 | 0.007 (0.003—0.011) | 23300 | 0.030 (0.010—0.050) | 16900 | 0.010 (0.005—0.015) |
| **1.0** | **≤2** | 7900 | 0.007 (0.003—0.011) | 17500 | 0.030 (0.010—0.050) | 12700 | 0.010 (0.005—0.015) |
| **1.5** | **≤2** | 5300 | 0.010 (0.005—0.015) | 12200 | 0.035 (0.015—0.055) | 10000 | 0.020 (0.010—0.030) |
| **2.0** | **≤2** | 4700 | 0.015 (0.010—0.020) | 9500 | 0.040 (0.020—0.060) | 8700 | 0.030 (0.015—0.045) |
| **2.5** | **≤2** | 3800 | 0.015 (0.010—0.020) | 7900 | 0.050 (0.030—0.070) | 7300 | 0.045 (0.025—0.065) |
| **2.95** | **≤2** | 3100 | 0.020 (0.010—0.030) | 7900 | 0.060 (0.040—0.080) | 6800 | 0.050 (0.040—0.060) |

| Matière | | N | |
|---|---|---|---|
| | | Alliage aluminium (Si<5%)<br>JIS A6061, A7075 etc. | |
| Diamètre foret **DC** (mm) | **L/D** | Régime ($min^{-1}$) | α=0° Avance (min.—max.) (mm/tour) |
| **0.75** | **≤2** | 42400 | 0.020 (0.010—0.030) |
| **1.0** | **≤2** | 31800 | 0.020 (0.010—0.030) |
| **1.5** | **≤2** | 21200 | 0.020 (0.010—0.030) |
| **2.0** | **≤2** | 17500 | 0.050 (0.030—0.070) |
| **2.5** | **≤2** | 14000 | 0.060 (0.040—0.090) |
| **2.95** | **≤2** | 11600 | 0.060 (0.040—0.090) |




Remarque 1) La profondeur de perçage recommandée est de 2x DC. Cette profondeur est prise depuis le point haut lors d'un perçage oblique. (Reportez-vous au schéma ci-dessus)

Remarque 2) Les conditions de coupe ci-dessus sont données pour un perçage sur surface plate.
Pour une attaque oblique, réglez la vitesse d'avance en fonction de l'angle d'inclinaison :
Lorsque l'angle d'inclinaison α est inférieur ou égal à 30°, réglez la vitesse d'avance à 70 % de la vitesse de référence.
Lorsque l'angle d'inclinaison α est supérieur à 30°, réglez la vitesse d'avance à 50 % de la vitesse de référence.

Remarque 3) Ce produit est conçu pour le perçage uniquement. Il ne peut pas être utilisé en fraisage ou en perçage hélicoïdal.

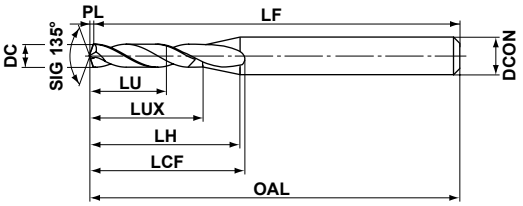
# PERÇAGE (CARBURE MONOBLOC)

# MINI-DWAE NEW Taille mini

UWC DP1A 135° XR X DC<2.0

P M K N S H

Arrosage extérieur




Type1

| DC≤3 | |
|---|---|
| 0 −0.014 | |

| DCON=3 | DCON=4 |
|---|---|
| 0 −0.006 | 0 −0.008 |

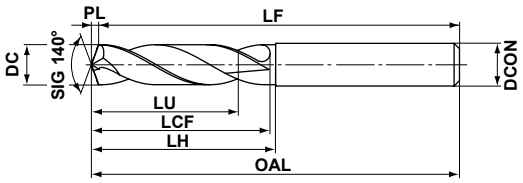
| DC (mm) | Rapport (L/D) | DP102A | Référence | Dimensions (mm) LU | LUX | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.0 | 2 | ● | DWAE0100X02S030 | 2.2 | 5.0 | 7.7 | 8.7 | 45.0 | 44.8 | 0.2 | 3 | 1 |
| 1.0 | 4 | ● | DWAE0100X04S030 | 4.2 | 7.0 | 9.9 | 10.7 | 45.0 | 44.8 | 0.2 | 3 | 1 |
| 1.1 | 2 | ★ | DWAE0110X02S030 | 2.4 | 5.4 | 8.1 | 8.9 | 45.0 | 44.8 | 0.2 | 3 | 1 |
| 1.1 | 4 | ★ | DWAE0110X04S030 | 4.6 | 7.6 | 10.5 | 11.1 | 45.0 | 44.8 | 0.2 | 3 | 1 |
| 1.2 | 2 | ★ | DWAE0120X02S030 | 2.6 | 5.8 | 8.5 | 9.2 | 45.0 | 44.8 | 0.2 | 3 | 1 |
| 1.2 | 4 | ★ | DWAE0120X04S030 | 5.0 | 8.2 | 11.1 | 11.6 | 45.0 | 44.8 | 0.2 | 3 | 1 |
| 1.3 | 2 | ★ | DWAE0130X02S030 | 2.9 | 6.3 | 9.0 | 9.5 | 45.0 | 44.7 | 0.3 | 3 | 1 |
| 1.3 | 4 | ★ | DWAE0130X04S030 | 5.5 | 8.9 | 11.9 | 12.1 | 45.0 | 44.7 | 0.3 | 3 | 1 |
| 1.4 | 2 | ★ | DWAE0140X02S030 | 3.1 | 6.7 | 9.4 | 9.7 | 45.0 | 44.7 | 0.3 | 3 | 1 |
| 1.4 | 4 | ★ | DWAE0140X04S030 | 5.9 | 9.5 | 12.5 | 12.5 | 45.0 | 44.7 | 0.3 | 3 | 1 |
| 1.5 | 2 | ● | DWAE0150X02S030 | 3.3 | 7.1 | 9.8 | 9.9 | 45.0 | 44.7 | 0.3 | 3 | 1 |
| 1.5 | 4 | ● | DWAE0150X04S030 | 6.3 | 10.1 | 13.1 | 12.9 | 45.0 | 44.7 | 0.3 | 3 | 1 |
| 1.6 | 2 | ★ | DWAE0160X02S030 | 3.5 | 7.5 | 10.2 | 10.1 | 45.0 | 44.7 | 0.3 | 3 | 1 |
| 1.6 | 4 | ★ | DWAE0160X04S030 | 6.7 | 10.7 | 13.7 | 13.3 | 45.0 | 44.7 | 0.3 | 3 | 1 |
| 1.7 | 2 | ★ | DWAE0170X02S030 | 3.8 | 8.0 | 10.7 | 10.4 | 45.0 | 44.6 | 0.4 | 3 | 1 |
| 1.7 | 4 | ★ | DWAE0170X04S030 | 7.2 | 11.4 | 14.4 | 13.8 | 45.0 | 44.6 | 0.4 | 3 | 1 |
| 1.8 | 2 | ★ | DWAE0180X02S030 | 4.0 | 8.4 | 11.1 | 10.6 | 45.0 | 44.6 | 0.4 | 3 | 1 |
| 1.8 | 4 | ★ | DWAE0180X04S030 | 7.6 | 12.0 | 15.1 | 14.2 | 45.0 | 44.6 | 0.4 | 3 | 1 |
| 1.9 | 2 | ★ | DWAE0190X02S030 | 4.2 | 8.8 | 11.5 | 10.9 | 45.0 | 44.6 | 0.4 | 3 | 1 |
| 1.9 | 4 | ★ | DWAE0190X04S030 | 8.0 | 12.6 | 15.7 | 14.7 | 45.0 | 44.6 | 0.4 | 3 | 1 |
| 2.0 | 2 | ● | DWAE0200X02S040 | 4.4 | 9.2 | 12.8 | 12.9 | 50.0 | 49.6 | 0.4 | 4 | 1 |
| 2.0 | 4 | ● | DWAE0200X04S040 | 8.4 | 13.2 | 17.2 | 16.9 | 50.0 | 49.6 | 0.4 | 4 | 1 |
| 2.1 | 2 | ★ | DWAE0210X02S040 | 4.6 | 9.6 | 13.2 | 13.1 | 50.0 | 49.6 | 0.4 | 4 | 1 |
| 2.1 | 4 | ★ | DWAE0210X04S040 | 8.8 | 13.8 | 17.8 | 17.3 | 50.0 | 49.6 | 0.4 | 4 | 1 |
| 2.2 | 2 | ★ | DWAE0220X02S040 | 4.9 | 10.1 | 13.7 | 13.5 | 50.0 | 49.5 | 0.5 | 4 | 1 |
| 2.2 | 4 | ★ | DWAE0220X04S040 | 9.3 | 14.5 | 18.5 | 17.9 | 50.0 | 49.5 | 0.5 | 4 | 1 |
| 2.3 | 2 | ★ | DWAE0230X02S040 | 5.1 | 10.5 | 14.1 | 13.7 | 50.0 | 49.5 | 0.5 | 4 | 1 |
| 2.3 | 4 | ★ | DWAE0230X04S040 | 9.7 | 15.1 | 19.2 | 18.3 | 50.0 | 49.5 | 0.5 | 4 | 1 |
| 2.4 | 2 | ★ | DWAE0240X02S040 | 5.3 | 10.9 | 14.5 | 13.9 | 50.0 | 49.5 | 0.5 | 4 | 1 |
| 2.4 | 4 | ★ | DWAE0240X04S040 | 10.1 | 15.7 | 19.8 | 18.7 | 50.0 | 49.5 | 0.5 | 4 | 1 |
| 2.5 | 2 | ● | DWAE0250X02S040 | 5.5 | 11.3 | 14.9 | 14.1 | 50.0 | 49.5 | 0.5 | 4 | 1 |
| 2.5 | 4 | ● | DWAE0250X04S040 | 10.5 | 16.3 | 20.4 | 19.1 | 50.0 | 49.5 | 0.5 | 4 | 1 |
| 2.6 | 2 | ★ | DWAE0260X02S040 | 5.7 | 11.7 | 15.3 | 14.3 | 50.0 | 49.5 | 0.5 | 4 | 1 |
| 2.6 | 4 | ★ | DWAE0260X04S040 | 10.9 | 16.9 | 21.0 | 19.5 | 50.0 | 49.5 | 0.5 | 4 | 1 |
| 2.7 | 2 | ★ | DWAE0270X02S040 | 6.0 | 12.2 | 15.8 | 14.6 | 50.0 | 49.4 | 0.6 | 4 | 1 |
| 2.7 | 4 | ★ | DWAE0270X04S040 | 11.4 | 17.6 | 21.7 | 20.0 | 50.0 | 49.4 | 0.6 | 4 | 1 |
| 2.8 | 2 | ★ | DWAE0280X02S040 | 6.2 | 12.6 | 16.2 | 14.8 | 50.0 | 49.4 | 0.6 | 4 | 1 |
| 2.8 | 4 | ★ | DWAE0280X04S040 | 11.8 | 18.2 | 22.4 | 20.4 | 50.0 | 49.4 | 0.6 | 4 | 1 |
| 2.9 | 2 | ★ | DWAE0290X02S040 | 6.4 | 13.0 | 16.6 | 15.1 | 50.0 | 49.4 | 0.6 | 4 | 1 |
| 2.9 | 4 | ★ | DWAE0290X04S040 | 12.2 | 18.8 | 23.0 | 20.9 | 50.0 | 49.4 | 0.6 | 4 | 1 |

● : Article stocké. ★ : Article standard Japon.

# DWAE NEW

P M K N S H

Arrosage extérieur




Type1

| DC=3 | 3<DC≤6 | 6<DC≤10 | 10<DC≤14 |
|---|---|---|---|
| 0 −0.014 | 0 −0.018 | 0 −0.022 | 0 −0.027 |
| DCON=3 | 3<DCON≤6 | 6<DCON≤10 | 10<DCON≤14 |
| 0 −0.006 | 0 −0.008 | 0 −0.009 | 0 −0.011 |

| DC (mm) | Rapport (L/D) | DP102A | Référence | Dimensions (mm) | | | | | | | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | LU | LCF | LH | OAL | LF | PL | DCON | |
| 3.0 | 2 | ● | DWAE0300X02S030 | 6.5 | 12.5 | 14.5 | 45.5 | 45 | 0.5 | 3 | 1 |
| 3.0 | 4 | ● | DWAE0300X04S030 | 12.5 | 21.5 | 23.5 | 55.5 | 55 | 0.5 | 3 | 1 |
| 3.1 | 2 | ● | DWAE0310X02S040 | 6.8 | 12.6 | 14.6 | 55.6 | 55 | 0.6 | 4 | 1 |
| 3.1 | 4 | ● | DWAE0310X04S040 | 13.0 | 21.6 | 23.6 | 60.6 | 60 | 0.6 | 4 | 1 |
| 3.2 | 2 | ● | DWAE0320X02S040 | 7.0 | 13.6 | 15.6 | 55.6 | 55 | 0.6 | 4 | 1 |
| 3.2 | 4 | ● | DWAE0320X04S040 | 13.4 | 22.6 | 24.6 | 60.6 | 60 | 0.6 | 4 | 1 |
| 3.3 | 2 | ● | DWAE0330X02S040 | 7.2 | 13.6 | 15.6 | 55.6 | 55 | 0.6 | 4 | 1 |
| 3.3 | 4 | ● | DWAE0330X04S040 | 13.8 | 23.6 | 25.6 | 60.6 | 60 | 0.6 | 4 | 1 |
| 3.4 | 2 | ● | DWAE0340X02S040 | 7.4 | 13.6 | 15.6 | 55.6 | 55 | 0.6 | 4 | 1 |
| 3.4 | 4 | ● | DWAE0340X04S040 | 14.2 | 23.6 | 25.6 | 60.6 | 60 | 0.6 | 4 | 1 |
| 3.5 | 2 | ● | DWAE0350X02S040 | 7.6 | 14.6 | 16.6 | 55.6 | 55 | 0.6 | 4 | 1 |
| 3.5 | 4 | ● | DWAE0350X04S040 | 14.6 | 24.6 | 26.6 | 60.6 | 60 | 0.6 | 4 | 1 |
| 3.6 | 2 | ● | DWAE0360X02S040 | 7.9 | 14.7 | 16.7 | 55.7 | 55 | 0.7 | 4 | 1 |
| 3.6 | 4 | ● | DWAE0360X04S040 | 15.1 | 25.7 | 27.7 | 60.7 | 60 | 0.7 | 4 | 1 |
| 3.7 | 2 | ● | DWAE0370X02S040 | 8.1 | 14.7 | 16.7 | 55.7 | 55 | 0.7 | 4 | 1 |
| 3.7 | 4 | ● | DWAE0370X04S040 | 15.5 | 25.7 | 27.7 | 60.7 | 60 | 0.7 | 4 | 1 |
| 3.8 | 2 | ● | DWAE0380X02S040 | 8.3 | 15.7 | 17.7 | 55.7 | 55 | 0.7 | 4 | 1 |
| 3.8 | 4 | ● | DWAE0380X04S040 | 15.9 | 26.7 | 28.7 | 60.7 | 60 | 0.7 | 4 | 1 |
| 3.9 | 2 | ● | DWAE0390X02S040 | 8.5 | 15.7 | 17.7 | 55.7 | 55 | 0.7 | 4 | 1 |
| 3.9 | 4 | ● | DWAE0390X04S040 | 16.3 | 27.7 | 29.7 | 60.7 | 60 | 0.7 | 4 | 1 |
| 4.0 | 2 | ● | DWAE0400X02S040 | 8.7 | 15.7 | 17.7 | 55.7 | 55 | 0.7 | 4 | 1 |
| 4.0 | 4 | ● | DWAE0400X04S040 | 16.7 | 27.7 | 29.7 | 60.7 | 60 | 0.7 | 4 | 1 |
| 4.1 | 2 | ● | DWAE0410X02S050 | 8.9 | 16.7 | 18.7 | 62.7 | 62 | 0.7 | 5 | 1 |
| 4.1 | 4 | ● | DWAE0410X04S050 | 17.1 | 28.7 | 30.7 | 80.7 | 80 | 0.7 | 5 | 1 |
| 4.2 | 2 | ● | DWAE0420X02S050 | 9.2 | 16.8 | 18.8 | 62.8 | 62 | 0.8 | 5 | 1 |
| 4.2 | 4 | ● | DWAE0420X04S050 | 17.6 | 29.8 | 31.8 | 80.8 | 80 | 0.8 | 5 | 1 |
| 4.3 | 2 | ● | DWAE0430X02S050 | 9.4 | 17.8 | 19.8 | 62.8 | 62 | 0.8 | 5 | 1 |
| 4.3 | 4 | ● | DWAE0430X04S050 | 18.0 | 30.8 | 32.8 | 80.8 | 80 | 0.8 | 5 | 1 |
| 4.4 | 2 | ● | DWAE0440X02S050 | 9.6 | 17.8 | 19.8 | 62.8 | 62 | 0.8 | 5 | 1 |
| 4.4 | 4 | ● | DWAE0440X04S050 | 18.4 | 30.8 | 32.8 | 80.8 | 80 | 0.8 | 5 | 1 |

CONDITIONS DE COUPE ➤ M027
DONNÉES TECHNIQUES ➤ P001

# DWAE NEW

| DC (mm) | Rapport (L/D) | DP102A | Référence | Dimensions (mm) | | | | | | | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | LU | LCF | LH | OAL | LF | PL | DCON | |
| 4.5 | 2 | ● | DWAE0450X02S050 | 9.8 | 17.8 | 19.8 | 62.8 | 62 | 0.8 | 5 | 1 |
| 4.5 | 4 | ● | DWAE0450X04S050 | 18.8 | 31.8 | 33.8 | 80.8 | 80 | 0.8 | 5 | 1 |
| 4.6 | 2 | ● | DWAE0460X02S050 | 10.0 | 18.8 | 20.8 | 62.8 | 62 | 0.8 | 5 | 1 |
| 4.6 | 4 | ● | DWAE0460X04S050 | 19.2 | 32.8 | 34.8 | 80.8 | 80 | 0.8 | 5 | 1 |
| 4.7 | 2 | ● | DWAE0470X02S050 | 10.3 | 18.9 | 20.9 | 62.9 | 62 | 0.9 | 5 | 1 |
| 4.7 | 4 | ● | DWAE0470X04S050 | 19.7 | 32.9 | 34.9 | 80.9 | 80 | 0.9 | 5 | 1 |
| 4.8 | 2 | ● | DWAE0480X02S050 | 10.5 | 18.9 | 20.9 | 62.9 | 62 | 0.9 | 5 | 1 |
| 4.8 | 4 | ● | DWAE0480X04S050 | 20.1 | 33.9 | 35.9 | 80.9 | 80 | 0.9 | 5 | 1 |
| 4.9 | 2 | ● | DWAE0490X02S050 | 10.7 | 19.9 | 21.9 | 62.9 | 62 | 0.9 | 5 | 1 |
| 4.9 | 4 | ● | DWAE0490X04S050 | 20.5 | 34.9 | 36.9 | 80.9 | 80 | 0.9 | 5 | 1 |
| 5.0 | 2 | ● | DWAE0500X02S050 | 10.9 | 19.9 | 21.9 | 62.9 | 62 | 0.9 | 5 | 1 |
| 5.0 | 4 | ● | DWAE0500X04S050 | 20.9 | 34.9 | 36.9 | 80.9 | 80 | 0.9 | 5 | 1 |
| 5.1 | 2 | ★ | DWAE0510X02S060 | 11.1 | 21.9 | 23.9 | 66.9 | 66 | 0.9 | 6 | 1 |
| 5.1 | 4 | ★ | DWAE0510X04S060 | 21.3 | 35.9 | 37.9 | 80.9 | 80 | 0.9 | 6 | 1 |
| 5.2 | 2 | ● | DWAE0520X02S060 | 11.3 | 21.9 | 23.9 | 66.9 | 66 | 0.9 | 6 | 1 |
| 5.2 | 4 | ● | DWAE0520X04S060 | 21.7 | 36.9 | 38.9 | 80.9 | 80 | 0.9 | 6 | 1 |
| 5.3 | 2 | ★ | DWAE0530X02S060 | 11.6 | 22.0 | 24.0 | 67.0 | 66 | 1.0 | 6 | 1 |
| 5.3 | 4 | ★ | DWAE0530X04S060 | 22.2 | 37.0 | 39.0 | 81.0 | 80 | 1.0 | 6 | 1 |
| 5.4 | 2 | ● | DWAE0540X02S060 | 11.8 | 22.0 | 24.0 | 67.0 | 66 | 1.0 | 6 | 1 |
| 5.4 | 4 | ● | DWAE0540X04S060 | 22.6 | 38.0 | 40.0 | 81.0 | 80 | 1.0 | 6 | 1 |
| 5.5 | 2 | ★ | DWAE0550X02S060 | 12.0 | 22.0 | 24.0 | 67.0 | 66 | 1.0 | 6 | 1 |
| 5.5 | 4 | ★ | DWAE0550X04S060 | 23.0 | 39.0 | 41.0 | 81.0 | 80 | 1.0 | 6 | 1 |
| 5.6 | 2 | ● | DWAE0560X02S060 | 12.2 | 24.0 | 26.0 | 67.0 | 66 | 1.0 | 6 | 1 |
| 5.6 | 4 | ● | DWAE0560X04S060 | 23.4 | 39.0 | 41.0 | 81.0 | 80 | 1.0 | 6 | 1 |
| 5.7 | 2 | ★ | DWAE0570X02S060 | 12.4 | 24.0 | 26.0 | 67.0 | 66 | 1.0 | 6 | 1 |
| 5.7 | 4 | ★ | DWAE0570X04S060 | 23.8 | 39.0 | 41.0 | 81.0 | 80 | 1.0 | 6 | 1 |
| 5.8 | 2 | ● | DWAE0580X02S060 | 12.7 | 24.1 | 26.1 | 67.1 | 66 | 1.1 | 6 | 1 |
| 5.8 | 4 | ● | DWAE0580X04S060 | 24.3 | 41.1 | 43.1 | 81.1 | 80 | 1.1 | 6 | 1 |
| 5.9 | 2 | ★ | DWAE0590X02S060 | 12.9 | 24.1 | 26.1 | 67.1 | 66 | 1.1 | 6 | 1 |
| 5.9 | 4 | ★ | DWAE0590X04S060 | 24.7 | 41.1 | 43.1 | 81.1 | 80 | 1.1 | 6 | 1 |
| 6.0 | 2 | ● | DWAE0600X02S060 | 13.1 | 24.1 | 26.1 | 67.1 | 66 | 1.1 | 6 | 1 |
| 6.0 | 4 | ● | DWAE0600X04S060 | 25.1 | 42.1 | 44.1 | 81.1 | 80 | 1.1 | 6 | 1 |
| 6.1 | 2 | ★ | DWAE0610X02S070 | 13.3 | 26.1 | 28.1 | 75.1 | 74 | 1.1 | 7 | 1 |
| 6.1 | 4 | ★ | DWAE0610X04S070 | 25.5 | 44.1 | 46.1 | 84.1 | 83 | 1.1 | 7 | 1 |
| 6.2 | 2 | ● | DWAE0620X02S070 | 13.5 | 26.1 | 28.1 | 75.1 | 74 | 1.1 | 7 | 1 |
| 6.2 | 4 | ● | DWAE0620X04S070 | 25.9 | 44.1 | 46.1 | 84.1 | 83 | 1.1 | 7 | 1 |
| 6.3 | 2 | ★ | DWAE0630X02S070 | 13.7 | 26.1 | 28.1 | 75.1 | 74 | 1.1 | 7 | 1 |
| 6.3 | 4 | ★ | DWAE0630X04S070 | 26.3 | 44.1 | 46.1 | 84.1 | 83 | 1.1 | 7 | 1 |
| 6.4 | 2 | ● | DWAE0640X02S070 | 14.0 | 26.2 | 28.2 | 75.2 | 74 | 1.2 | 7 | 1 |
| 6.4 | 4 | ● | DWAE0640X04S070 | 26.8 | 44.2 | 46.2 | 84.2 | 83 | 1.2 | 7 | 1 |
| 6.5 | 2 | ★ | DWAE0650X02S070 | 14.2 | 26.2 | 28.2 | 75.2 | 74 | 1.2 | 7 | 1 |
| 6.5 | 4 | ★ | DWAE0650X04S070 | 27.2 | 44.2 | 46.2 | 84.2 | 83 | 1.2 | 7 | 1 |

● : Article stocké. ★ : Article standard Japon.

| DC (mm) | Rapport (L/D) | DP102A | Référence | Dimensions (mm) | | | | | | | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | LU | LCF | LH | OAL | LF | PL | DCON | |
| **6.6** | 2 | ● | **DWAE0660X02S070** | 14.4 | 28.2 | 30.2 | 75.2 | 74 | 1.2 | 7 | 1 |
| **6.6** | 4 | ● | **DWAE0660X04S070** | 27.6 | 46.2 | 48.2 | 84.2 | 83 | 1.2 | 7 | 1 |
| **6.7** | 2 | ★ | **DWAE0670X02S070** | 14.6 | 28.2 | 30.2 | 75.2 | 74 | 1.2 | 7 | 1 |
| **6.7** | 4 | ★ | **DWAE0670X04S070** | 28.0 | 46.2 | 48.2 | 84.2 | 83 | 1.2 | 7 | 1 |
| **6.8** | 2 | ● | **DWAE0680X02S070** | 14.8 | 28.2 | 30.2 | 75.2 | 74 | 1.2 | 7 | 1 |
| **6.8** | 4 | ● | **DWAE0680X04S070** | 28.4 | 46.2 | 48.2 | 84.2 | 83 | 1.2 | 7 | 1 |
| **6.9** | 2 | ★ | **DWAE0690X02S070** | 15.1 | 28.3 | 30.3 | 75.3 | 74 | 1.3 | 7 | 1 |
| **6.9** | 4 | ★ | **DWAE0690X04S070** | 28.9 | 46.3 | 48.3 | 84.3 | 83 | 1.3 | 7 | 1 |
| **7.0** | 2 | ● | **DWAE0700X02S070** | 15.3 | 28.3 | 30.3 | 75.3 | 74 | 1.3 | 7 | 1 |
| **7.0** | 4 | ● | **DWAE0700X04S070** | 29.3 | 46.3 | 48.3 | 84.3 | 83 | 1.3 | 7 | 1 |
| **7.1** | 2 | ★ | **DWAE0710X02S080** | 15.5 | 29.3 | 31.3 | 80.3 | 79 | 1.3 | 8 | 1 |
| **7.1** | 4 | ★ | **DWAE0710X04S080** | 29.7 | 51.3 | 53.3 | 91.3 | 90 | 1.3 | 8 | 1 |
| **7.2** | 2 | ● | **DWAE0720X02S080** | 15.7 | 29.3 | 31.3 | 80.3 | 79 | 1.3 | 8 | 1 |
| **7.2** | 4 | ● | **DWAE0720X04S080** | 30.1 | 51.3 | 53.3 | 91.3 | 90 | 1.3 | 8 | 1 |
| **7.3** | 2 | ★ | **DWAE0730X02S080** | 15.9 | 29.3 | 31.3 | 80.3 | 79 | 1.3 | 8 | 1 |
| **7.3** | 4 | ★ | **DWAE0730X04S080** | 30.5 | 51.3 | 53.3 | 91.3 | 90 | 1.3 | 8 | 1 |
| **7.4** | 2 | ● | **DWAE0740X02S080** | 16.1 | 29.3 | 31.3 | 80.3 | 79 | 1.3 | 8 | 1 |
| **7.4** | 4 | ● | **DWAE0740X04S080** | 30.9 | 51.3 | 53.3 | 91.3 | 90 | 1.3 | 8 | 1 |
| **7.5** | 2 | ★ | **DWAE0750X02S080** | 16.4 | 29.4 | 31.4 | 80.4 | 79 | 1.4 | 8 | 1 |
| **7.5** | 4 | ★ | **DWAE0750X04S080** | 31.4 | 51.4 | 53.4 | 91.4 | 90 | 1.4 | 8 | 1 |
| **7.6** | 2 | ● | **DWAE0760X02S080** | 16.6 | 31.4 | 33.4 | 80.4 | 79 | 1.4 | 8 | 1 |
| **7.6** | 4 | ● | **DWAE0760X04S080** | 31.8 | 53.4 | 55.4 | 91.4 | 90 | 1.4 | 8 | 1 |
| **7.7** | 2 | ★ | **DWAE0770X02S080** | 16.8 | 31.4 | 33.4 | 80.4 | 79 | 1.4 | 8 | 1 |
| **7.7** | 4 | ★ | **DWAE0770X04S080** | 32.2 | 53.4 | 55.4 | 91.4 | 90 | 1.4 | 8 | 1 |
| **7.8** | 2 | ● | **DWAE0780X02S080** | 17.0 | 31.4 | 33.4 | 80.4 | 79 | 1.4 | 8 | 1 |
| **7.8** | 4 | ● | **DWAE0780X04S080** | 32.6 | 53.4 | 55.4 | 91.4 | 90 | 1.4 | 8 | 1 |
| **7.9** | 2 | ★ | **DWAE0790X02S080** | 17.2 | 31.4 | 33.4 | 80.4 | 79 | 1.4 | 8 | 1 |
| **7.9** | 4 | ★ | **DWAE0790X04S080** | 33.0 | 53.4 | 55.4 | 91.4 | 90 | 1.4 | 8 | 1 |
| **8.0** | 2 | ● | **DWAE0800X02S080** | 17.5 | 31.5 | 33.5 | 80.5 | 79 | 1.5 | 8 | 1 |
| **8.0** | 4 | ● | **DWAE0800X04S080** | 33.5 | 53.5 | 55.5 | 91.5 | 90 | 1.5 | 8 | 1 |
| **8.1** | 2 | ★ | **DWAE0810X02S090** | 17.7 | 33.5 | 35.5 | 85.5 | 84 | 1.5 | 9 | 1 |
| **8.1** | 4 | ★ | **DWAE0810X04S090** | 33.9 | 57.5 | 59.5 | 99.5 | 98 | 1.5 | 9 | 1 |
| **8.2** | 2 | ● | **DWAE0820X02S090** | 17.9 | 33.5 | 35.5 | 85.5 | 84 | 1.5 | 9 | 1 |
| **8.2** | 4 | ● | **DWAE0820X04S090** | 34.3 | 57.5 | 59.5 | 99.5 | 98 | 1.5 | 9 | 1 |
| **8.3** | 2 | ★ | **DWAE0830X02S090** | 18.1 | 33.5 | 35.5 | 85.5 | 84 | 1.5 | 9 | 1 |
| **8.3** | 4 | ★ | **DWAE0830X04S090** | 34.7 | 57.5 | 59.5 | 99.5 | 98 | 1.5 | 9 | 1 |
| **8.4** | 2 | ● | **DWAE0840X02S090** | 18.3 | 33.5 | 35.5 | 85.5 | 84 | 1.5 | 9 | 1 |
| **8.4** | 4 | ● | **DWAE0840X04S090** | 35.1 | 57.5 | 59.5 | 99.5 | 98 | 1.5 | 9 | 1 |
| **8.5** | 2 | ★ | **DWAE0850X02S090** | 18.5 | 33.5 | 35.5 | 85.5 | 84 | 1.5 | 9 | 1 |
| **8.5** | 4 | ★ | **DWAE0850X04S090** | 35.5 | 57.5 | 59.5 | 99.5 | 98 | 1.5 | 9 | 1 |
| **8.6** | 2 | ● | **DWAE0860X02S090** | 18.8 | 34.6 | 36.6 | 85.6 | 84 | 1.6 | 9 | 1 |
| **8.6** | 4 | ● | **DWAE0860X04S090** | 36.0 | 61.6 | 63.6 | 99.6 | 98 | 1.6 | 9 | 1 |
| **8.7** | 2 | ★ | **DWAE0870X02S090** | 19.0 | 34.6 | 36.6 | 85.6 | 84 | 1.6 | 9 | 1 |
| **8.7** | 4 | ★ | **DWAE0870X04S090** | 36.4 | 61.6 | 63.6 | 99.6 | 98 | 1.6 | 9 | 1 |

CONDITIONS DE COUPE ➤ M027
DONNÉES TECHNIQUES ➤ P001

# DWAE NEW

| DC (mm) | Rapport (L/D) | DP102A | Référence | Dimensions (mm) | | | | | | | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | LU | LCF | LH | OAL | LF | PL | DCON | |
| 8.8 | 2 | ● | DWAE0880X02S090 | 19.2 | 34.6 | 36.6 | 85.6 | 84 | 1.6 | 9 | 1 |
| 8.8 | 4 | ● | DWAE0880X04S090 | 36.8 | 61.6 | 63.6 | 99.6 | 98 | 1.6 | 9 | 1 |
| 8.9 | 2 | ★ | DWAE0890X02S090 | 19.4 | 34.6 | 36.6 | 85.6 | 84 | 1.6 | 9 | 1 |
| 8.9 | 4 | ★ | DWAE0890X04S090 | 37.2 | 61.6 | 63.6 | 99.6 | 98 | 1.6 | 9 | 1 |
| 9.0 | 2 | ● | DWAE0900X02S090 | 19.6 | 34.6 | 36.6 | 85.6 | 84 | 1.6 | 9 | 1 |
| 9.0 | 4 | ● | DWAE0900X04S090 | 37.6 | 61.6 | 63.6 | 99.6 | 98 | 1.6 | 9 | 1 |
| 9.1 | 2 | ★ | DWAE0910X02S100 | 19.9 | 36.7 | 38.7 | 90.7 | 89 | 1.7 | 10 | 1 |
| 9.1 | 4 | ★ | DWAE0910X04S100 | 38.1 | 63.7 | 65.7 | 106.7 | 105 | 1.7 | 10 | 1 |
| 9.2 | 2 | ● | DWAE0920X02S100 | 20.1 | 36.7 | 38.7 | 90.7 | 89 | 1.7 | 10 | 1 |
| 9.2 | 4 | ● | DWAE0920X04S100 | 38.5 | 63.7 | 65.7 | 106.7 | 105 | 1.7 | 10 | 1 |
| 9.3 | 2 | ★ | DWAE0930X02S100 | 20.3 | 36.7 | 38.7 | 90.7 | 89 | 1.7 | 10 | 1 |
| 9.3 | 4 | ★ | DWAE0930X04S100 | 38.9 | 63.7 | 65.7 | 106.7 | 105 | 1.7 | 10 | 1 |
| 9.4 | 2 | ● | DWAE0940X02S100 | 20.5 | 36.7 | 38.7 | 90.7 | 89 | 1.7 | 10 | 1 |
| 9.4 | 4 | ● | DWAE0940X04S100 | 39.3 | 63.7 | 65.7 | 106.7 | 105 | 1.7 | 10 | 1 |
| 9.5 | 2 | ★ | DWAE0950X02S100 | 20.7 | 36.7 | 38.7 | 90.7 | 89 | 1.7 | 10 | 1 |
| 9.5 | 4 | ★ | DWAE0950X04S100 | 39.7 | 63.7 | 65.7 | 106.7 | 105 | 1.7 | 10 | 1 |
| 9.6 | 2 | ● | DWAE0960X02S100 | 20.9 | 37.7 | 39.7 | 90.7 | 89 | 1.7 | 10 | 1 |
| 9.6 | 4 | ● | DWAE0960X04S100 | 40.1 | 66.7 | 68.7 | 106.7 | 105 | 1.7 | 10 | 1 |
| 9.7 | 2 | ★ | DWAE0970X02S100 | 21.2 | 37.8 | 39.8 | 90.8 | 89 | 1.8 | 10 | 1 |
| 9.7 | 4 | ★ | DWAE0970X04S100 | 40.6 | 66.8 | 68.8 | 106.8 | 105 | 1.8 | 10 | 1 |
| 9.8 | 2 | ● | DWAE0980X02S100 | 21.4 | 37.8 | 39.8 | 90.8 | 89 | 1.8 | 10 | 1 |
| 9.8 | 4 | ● | DWAE0980X04S100 | 41.0 | 66.8 | 68.8 | 106.8 | 105 | 1.8 | 10 | 1 |
| 9.9 | 2 | ★ | DWAE0990X02S100 | 21.6 | 37.8 | 39.8 | 90.8 | 89 | 1.8 | 10 | 1 |
| 9.9 | 4 | ★ | DWAE0990X04S100 | 41.4 | 66.8 | 68.8 | 106.8 | 105 | 1.8 | 10 | 1 |
| 10.0 | 2 | ● | DWAE1000X02S100 | 21.8 | 37.8 | 39.8 | 90.8 | 89 | 1.8 | 10 | 1 |
| 10.0 | 4 | ● | DWAE1000X04S100 | 41.8 | 66.8 | 68.8 | 106.8 | 105 | 1.8 | 10 | 1 |
| 10.1 | 2 | ● | DWAE1010X02S110 | 22.0 | 40.8 | 42.8 | 101.8 | 100 | 1.8 | 11 | 1 |
| 10.1 | 4 | ● | DWAE1010X04S110 | 42.2 | 71.8 | 73.8 | 115.8 | 114 | 1.8 | 11 | 1 |
| 10.2 | 2 | ● | DWAE1020X02S110 | 22.3 | 40.9 | 42.9 | 101.9 | 100 | 1.9 | 11 | 1 |
| 10.2 | 4 | ● | DWAE1020X04S110 | 42.7 | 71.9 | 73.9 | 115.9 | 114 | 1.9 | 11 | 1 |
| 10.3 | 2 | ● | DWAE1030X02S110 | 22.5 | 40.9 | 42.9 | 101.9 | 100 | 1.9 | 11 | 1 |
| 10.3 | 4 | ● | DWAE1030X04S110 | 43.1 | 71.9 | 73.9 | 115.9 | 114 | 1.9 | 11 | 1 |
| 10.4 | 2 | ● | DWAE1040X02S110 | 22.7 | 40.9 | 42.9 | 101.9 | 100 | 1.9 | 11 | 1 |
| 10.4 | 4 | ● | DWAE1040X04S110 | 43.5 | 71.9 | 73.9 | 115.9 | 114 | 1.9 | 11 | 1 |
| 10.5 | 2 | ● | DWAE1050X02S110 | 22.9 | 40.9 | 42.9 | 101.9 | 100 | 1.9 | 11 | 1 |
| 10.5 | 4 | ● | DWAE1050X04S110 | 43.9 | 71.9 | 73.9 | 115.9 | 114 | 1.9 | 11 | 1 |
| 10.6 | 2 | ● | DWAE1060X02S110 | 23.1 | 41.9 | 43.9 | 101.9 | 100 | 1.9 | 11 | 1 |
| 10.6 | 4 | ● | DWAE1060X04S110 | 44.3 | 72.9 | 74.9 | 115.9 | 114 | 1.9 | 11 | 1 |
| 10.7 | 2 | ● | DWAE1070X02S110 | 23.3 | 41.9 | 43.9 | 101.9 | 100 | 1.9 | 11 | 1 |
| 10.7 | 4 | ● | DWAE1070X04S110 | 44.7 | 72.9 | 74.9 | 115.9 | 114 | 1.9 | 11 | 1 |
| 10.8 | 2 | ● | DWAE1080X02S110 | 23.6 | 42.0 | 44.0 | 102.0 | 100 | 2.0 | 11 | 1 |
| 10.8 | 4 | ● | DWAE1080X04S110 | 45.2 | 73.0 | 75.0 | 116.0 | 114 | 2.0 | 11 | 1 |

● : Article stocké. ★ : Article standard Japon.

| DC (mm) | Rapport (L/D) | DP102A | Référence | Dimensions (mm) | | | | | | | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | LU | LCF | LH | OAL | LF | PL | DCON | |
| **10.9** | 2 | ● | **DWAE1090X02S110** | 23.8 | 42.0 | 44.0 | 102.0 | 100 | 2.0 | 11 | 1 |
| **10.9** | 4 | ● | **DWAE1090X04S110** | 45.6 | 73.0 | 75.0 | 116.0 | 114 | 2.0 | 11 | 1 |
| **11.0** | 2 | ● | **DWAE1100X02S110** | 24.0 | 42.0 | 44.0 | 102.0 | 100 | 2.0 | 11 | 1 |
| **11.0** | 4 | ● | **DWAE1100X04S110** | 46.0 | 73.0 | 75.0 | 116.0 | 114 | 2.0 | 11 | 1 |
| **11.1** | 2 | ● | **DWAE1110X02S120** | 24.2 | 45.0 | 47.0 | 102.0 | 100 | 2.0 | 12 | 1 |
| **11.1** | 4 | ● | **DWAE1110X04S120** | 46.4 | 77.0 | 79.0 | 123.0 | 121 | 2.0 | 12 | 1 |
| **11.2** | 2 | ● | **DWAE1120X02S120** | 24.4 | 45.0 | 47.0 | 102.0 | 100 | 2.0 | 12 | 1 |
| **11.2** | 4 | ● | **DWAE1120X04S120** | 46.8 | 77.0 | 79.0 | 123.0 | 121 | 2.0 | 12 | 1 |
| **11.3** | 2 | ● | **DWAE1130X02S120** | 24.7 | 45.1 | 47.1 | 102.1 | 100 | 2.1 | 12 | 1 |
| **11.3** | 4 | ● | **DWAE1130X04S120** | 47.3 | 77.1 | 79.1 | 123.1 | 121 | 2.1 | 12 | 1 |
| **11.4** | 2 | ● | **DWAE1140X02S120** | 24.9 | 45.1 | 47.1 | 102.1 | 100 | 2.1 | 12 | 1 |
| **11.4** | 4 | ● | **DWAE1140X04S120** | 47.7 | 77.1 | 79.1 | 123.1 | 121 | 2.1 | 12 | 1 |
| **11.5** | 2 | ● | **DWAE1150X02S120** | 25.1 | 45.1 | 47.1 | 102.1 | 100 | 2.1 | 12 | 1 |
| **11.5** | 4 | ● | **DWAE1150X04S120** | 48.1 | 77.1 | 79.1 | 123.1 | 121 | 2.1 | 12 | 1 |
| **11.6** | 2 | ● | **DWAE1160X02S120** | 25.3 | 47.1 | 49.1 | 102.1 | 100 | 2.1 | 12 | 1 |
| **11.6** | 4 | ● | **DWAE1160X04S120** | 48.5 | 79.1 | 81.1 | 123.1 | 121 | 2.1 | 12 | 1 |
| **11.7** | 2 | ● | **DWAE1170X02S120** | 25.5 | 47.1 | 49.1 | 102.1 | 100 | 2.1 | 12 | 1 |
| **11.7** | 4 | ● | **DWAE1170X04S120** | 48.9 | 79.1 | 81.1 | 123.1 | 121 | 2.1 | 12 | 1 |
| **11.8** | 2 | ● | **DWAE1180X02S120** | 25.7 | 47.1 | 49.1 | 102.1 | 100 | 2.1 | 12 | 1 |
| **11.8** | 4 | ● | **DWAE1180X04S120** | 49.3 | 79.1 | 81.1 | 123.1 | 121 | 2.1 | 12 | 1 |
| **11.9** | 2 | ● | **DWAE1190X02S120** | 26.0 | 47.2 | 49.2 | 102.2 | 100 | 2.2 | 12 | 1 |
| **11.9** | 4 | ● | **DWAE1190X04S120** | 49.8 | 79.2 | 81.2 | 123.2 | 121 | 2.2 | 12 | 1 |
| **12.0** | 2 | ● | **DWAE1200X02S120** | 26.2 | 47.2 | 49.2 | 102.2 | 100 | 2.2 | 12 | 1 |
| **12.0** | 4 | ● | **DWAE1200X04S120** | 50.2 | 79.2 | 81.2 | 123.2 | 121 | 2.2 | 12 | 1 |
| **12.1** | 2 | ● | **DWAE1210X02S130** | 26.4 | 49.2 | 51.2 | 102.2 | 100 | 2.2 | 13 | 1 |
| **12.1** | 4 | ● | **DWAE1210X04S130** | 50.6 | 82.2 | 84.2 | 139.2 | 137 | 2.2 | 13 | 1 |
| **12.2** | 2 | ● | **DWAE1220X02S130** | 26.6 | 49.2 | 51.2 | 102.2 | 100 | 2.2 | 13 | 1 |
| **12.2** | 4 | ● | **DWAE1220X04S130** | 51.0 | 82.2 | 84.2 | 139.2 | 137 | 2.2 | 13 | 1 |
| **12.3** | 2 | ● | **DWAE1230X02S130** | 26.8 | 49.2 | 51.2 | 102.2 | 100 | 2.2 | 13 | 1 |
| **12.3** | 4 | ● | **DWAE1230X04S130** | 51.4 | 82.2 | 84.2 | 139.2 | 137 | 2.2 | 13 | 1 |
| **12.4** | 2 | ● | **DWAE1240X02S130** | 27.1 | 49.3 | 51.3 | 102.3 | 100 | 2.3 | 13 | 1 |
| **12.4** | 4 | ● | **DWAE1240X04S130** | 51.9 | 82.3 | 84.3 | 139.3 | 137 | 2.3 | 13 | 1 |
| **12.5** | 2 | ● | **DWAE1250X02S130** | 27.3 | 49.3 | 51.3 | 102.3 | 100 | 2.3 | 13 | 1 |
| **12.5** | 4 | ● | **DWAE1250X04S130** | 52.3 | 82.3 | 84.3 | 139.3 | 137 | 2.3 | 13 | 1 |
| **12.6** | 2 | ● | **DWAE1260X02S130** | 27.5 | 52.3 | 54.3 | 102.3 | 100 | 2.3 | 13 | 1 |
| **12.6** | 4 | ● | **DWAE1260X04S130** | 52.7 | 84.3 | 86.3 | 139.3 | 137 | 2.3 | 13 | 1 |
| **12.7** | 2 | ● | **DWAE1270X02S130** | 27.7 | 52.3 | 54.3 | 102.3 | 100 | 2.3 | 13 | 1 |
| **12.7** | 4 | ● | **DWAE1270X04S130** | 53.1 | 84.3 | 86.3 | 139.3 | 137 | 2.3 | 13 | 1 |
| **12.8** | 2 | ● | **DWAE1280X02S130** | 27.9 | 52.3 | 54.3 | 102.3 | 100 | 2.3 | 13 | 1 |
| **12.8** | 4 | ● | **DWAE1280X04S130** | 53.5 | 84.3 | 86.3 | 139.3 | 137 | 2.3 | 13 | 1 |
| **12.9** | 2 | ● | **DWAE1290X02S130** | 28.1 | 52.3 | 54.3 | 102.3 | 100 | 2.3 | 13 | 1 |
| **12.9** | 4 | ● | **DWAE1290X04S130** | 53.9 | 84.3 | 86.3 | 139.3 | 137 | 2.3 | 13 | 1 |

CONDITIONS DE COUPE ➤ M027
DONNÉES TECHNIQUES ➤ P001

# DWAE NEW

| DC (mm) | Rapport (L/D) | DP102A | Référence | Dimensions (mm) | | | | | | | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | LU | LCF | LH | OAL | LF | PL | DCON | |
| **13.0** | 2 | ● | **DWAE1300X02S130** | 28.4 | 52.4 | 54.4 | 102.4 | 100 | 2.4 | 13 | 1 |
| **13.0** | 4 | ● | **DWAE1300X04S130** | 54.4 | 84.4 | 86.4 | 139.4 | 137 | 2.4 | 13 | 1 |
| **13.1** | 2 | ● | **DWAE1310X02S140** | 28.6 | 55.4 | 57.4 | 102.4 | 100 | 2.4 | 14 | 1 |
| **13.1** | 4 | ● | **DWAE1310X04S140** | 54.8 | 92.4 | 94.4 | 149.4 | 147 | 2.4 | 14 | 1 |
| **13.2** | 2 | ● | **DWAE1320X02S140** | 28.8 | 55.4 | 57.4 | 102.4 | 100 | 2.4 | 14 | 1 |
| **13.2** | 4 | ● | **DWAE1320X04S140** | 55.2 | 92.4 | 94.4 | 149.4 | 147 | 2.4 | 14 | 1 |
| **13.3** | 2 | ● | **DWAE1330X02S140** | 29.0 | 55.4 | 57.4 | 102.4 | 100 | 2.4 | 14 | 1 |
| **13.3** | 4 | ● | **DWAE1330X04S140** | 55.6 | 92.4 | 94.4 | 149.4 | 147 | 2.4 | 14 | 1 |
| **13.4** | 2 | ● | **DWAE1340X02S140** | 29.2 | 55.4 | 57.4 | 102.4 | 100 | 2.4 | 14 | 1 |
| **13.4** | 4 | ● | **DWAE1340X04S140** | 56.0 | 92.4 | 94.4 | 149.4 | 147 | 2.4 | 14 | 1 |
| **13.5** | 2 | ● | **DWAE1350X02S140** | 29.5 | 55.5 | 57.5 | 102.5 | 100 | 2.5 | 14 | 1 |
| **13.5** | 4 | ● | **DWAE1350X04S140** | 56.5 | 92.5 | 94.5 | 149.5 | 147 | 2.5 | 14 | 1 |
| **13.6** | 2 | ● | **DWAE1360X02S140** | 29.7 | 57.5 | 59.5 | 102.5 | 100 | 2.5 | 14 | 1 |
| **13.6** | 4 | ● | **DWAE1360X04S140** | 56.9 | 97.5 | 99.5 | 149.5 | 147 | 2.5 | 14 | 1 |
| **13.7** | 2 | ● | **DWAE1370X02S140** | 29.9 | 57.5 | 59.5 | 102.5 | 100 | 2.5 | 14 | 1 |
| **13.7** | 4 | ● | **DWAE1370X04S140** | 57.3 | 97.5 | 99.5 | 149.5 | 147 | 2.5 | 14 | 1 |
| **13.8** | 2 | ● | **DWAE1380X02S140** | 30.1 | 57.5 | 59.5 | 102.5 | 100 | 2.5 | 14 | 1 |
| **13.8** | 4 | ● | **DWAE1380X04S140** | 57.7 | 97.5 | 99.5 | 149.5 | 147 | 2.5 | 14 | 1 |
| **13.9** | 2 | ● | **DWAE1390X02S140** | 30.3 | 57.5 | 59.5 | 102.5 | 100 | 2.5 | 14 | 1 |
| **13.9** | 4 | ● | **DWAE1390X04S140** | 58.1 | 97.5 | 99.5 | 149.5 | 147 | 2.5 | 14 | 1 |
| **14.0** | 2 | ● | **DWAE1400X02S140** | 30.5 | 57.5 | 59.5 | 102.5 | 100 | 2.5 | 14 | 1 |
| **14.0** | 4 | ● | **DWAE1400X04S140** | 58.5 | 97.5 | 99.5 | 149.5 | 147 | 2.5 | 14 | 1 |

● : Article stocké.

# CONDITIONS DE COUPE RECOMMANDÉES

| Matière | P | | | | P | | | |
|---|---|---|---|---|---|---|---|---|
| | Aciers doux (≤180 HB)<br>E36, C10,etc. | | | | Aciers carbone, aciers alliés (180—280 HB)<br>XC48, 42CD4 etc. | | | |
| Diamètre foret **DC** (mm) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Avance table (mm/min) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Avance table (mm/min) |
| **1.0** | 30 | 9500 | 0.03 (0.02—0.04) | 285 | 30 | 9500 | 0.03 (0.02—0.04) | 285 |
| **1.5** | 30 | 6300 | 0.05 (0.03—0.06) | 315 | 30 | 6300 | 0.05 (0.03—0.06) | 315 |
| **2.0** | 55 | 8700 | 0.06 (0.04—0.08) | 520 | 55 | 8700 | 0.06 (0.04—0.08) | 520 |
| **2.5** | 55 | 7000 | 0.08 (0.05—0.10) | 560 | 55 | 7000 | 0.08 (0.05—0.10) | 560 |
| **3.0** | 65 | 6800 | 0.09 (0.07—0.11) | 610 | 60 | 6300 | 0.09 (0.07—0.11) | 565 |
| **4.0** | 70 | 5500 | 0.12 (0.09—0.14) | 660 | 65 | 5100 | 0.12 (0.09—0.14) | 610 |
| **5.0** | 70 | 4400 | 0.15 (0.11—0.18) | 660 | 65 | 4100 | 0.15 (0.11—0.18) | 615 |
| **6.0** | 80 | 4200 | 0.18 (0.14—0.21) | 755 | 75 | 3900 | 0.18 (0.14—0.21) | 700 |
| **7.0** | 80 | 3600 | 0.21 (0.16—0.25) | 755 | 75 | 3400 | 0.21 (0.16—0.25) | 715 |
| **8.0** | 85 | 3300 | 0.23 (0.18—0.28) | 760 | 80 | 3100 | 0.23 (0.18—0.28) | 715 |
| **10.0** | 90 | 2800 | 0.27 (0.21—0.32) | 755 | 85 | 2700 | 0.27 (0.21—0.32) | 730 |
| **12.0** | 95 | 2500 | 0.28 (0.22—0.34) | 700 | 90 | 2300 | 0.28 (0.22—0.34) | 645 |
| **14.0** | 95 | 2100 | 0.29 (0.23—0.35) | 610 | 90 | 2000 | 0.29 (0.23—0.35) | 580 |

| Matière | P | | | | M | | | |
|---|---|---|---|---|---|---|---|---|
| | Aciers carbone, aciers alliés (280—350 HB)<br>40CMD8 etc. | | | | Aciers inoxydables austénitiques (≤200 HB)<br>Aciers inoxydables ferritiques et martensitiques (>200 HB)<br>304, 316<br>Z15CN16-02, Z33C13, etc. | | | |
| Diamètre foret **DC** (mm) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Avance table (mm/min) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Avance table (mm/min) |
| **1.0** | 25 | 7900 | 0.02 (0.01—0.03) | 160 | 30 | 9500 | 0.02 (0.01—0.03) | 190 |
| **1.5** | 25 | 5300 | 0.04 (0.02—0.05) | 210 | 30 | 6300 | 0.04 (0.02—0.05) | 250 |
| **2.0** | 50 | 7900 | 0.05 (0.03—0.07) | 395 | 35 | 5500 | 0.04 (0.02—0.06) | 220 |
| **2.5** | 50 | 6300 | 0.07 (0.04—0.09) | 440 | 35 | 4400 | 0.06 (0.03—0.08) | 265 |
| **3.0** | 55 | 5800 | 0.08 (0.06—0.09) | 465 | 40 | 4200 | 0.07 (0.04—0.10) | 295 |
| **4.0** | 60 | 4700 | 0.11 (0.08—0.13) | 515 | 40 | 3100 | 0.08 (0.05—0.10) | 250 |
| **5.0** | 60 | 3800 | 0.13 (0.10—0.16) | 495 | 40 | 2500 | 0.10 (0.05—0.15) | 250 |
| **6.0** | 70 | 3700 | 0.16 (0.12—0.19) | 590 | 40 | 2100 | 0.11 (0.06—0.15) | 230 |
| **7.0** | 70 | 3100 | 0.18 (0.14—0.22) | 560 | 40 | 1800 | 0.12 (0.06—0.18) | 215 |
| **8.0** | 75 | 2900 | 0.21 (0.16—0.25) | 610 | 40 | 1500 | 0.13 (0.06—0.20) | 195 |
| **10.0** | 80 | 2500 | 0.24 (0.20—0.28) | 600 | 40 | 1200 | 0.14 (0.08—0.20) | 170 |
| **12.0** | 85 | 2200 | 0.25 (0.20—0.30) | 550 | 40 | 1000 | 0.18 (0.10—0.25) | 180 |
| **14.0** | 85 | 1900 | 0.25 (0.20—0.30) | 475 | 40 | 900 | 0.18 (0.10—0.25) | 160 |

Remarque 1) Les conditions de coupe ci-dessus sont valables pour un arrosage à l'huile soluble. Pour les aciers inoxydables, l'utilisation d'huile entière est recommandé.
Remarque 2) En cas d'utilisation d'huile entière, réduire la vitesse de coupe de 20 %.
Remarque 3) Vérifier le contrôle du copeau, effectuer des cycles de brise-copeaux si nécessaire. * Pas des brise-copeaux : 0,2 à 1,0 DC
Remarque 4) Ajuster les conditions de coupe en fonction de la machine, de la raideur de bridage et d'attachement, de la géométrie pièce, etc.
Remarque 5) Des profondeurs d'usinage supérieures à la longueur utile (LU) ne sont pas recommandées.
Remarque 6) Respecter un faux-rond inférieur à 0,03 mm.
Remarque 7) Ne pas serrer le foret sur les goujures.

# PERÇAGE (CARBURE MONOBLOC)

## CONDITIONS DE COUPE RECOMMANDÉES

| Matière | K | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Fonte grise (≤350 MPa)<br>Ft-25, etc. | | | | Fonte ductile (≤450 MPa)<br>FGS400, etc. | | | |
| Diamètre foret **DC** (mm) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Avance table (mm/min) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Avance table (mm/min) |
| **1.0** | 30 | 9500 | 0.03 (0.02—0.04) | 285 | 25 | 7900 | 0.02 (0.01—0.03) | 160 |
| **1.5** | 30 | 6300 | 0.05 (0.03—0.06) | 315 | 25 | 5300 | 0.04 (0.02—0.05) | 210 |
| **2.0** | 55 | 8700 | 0.06 (0.04—0.08) | 520 | 50 | 7900 | 0.05 (0.03—0.07) | 395 |
| **2.5** | 55 | 7000 | 0.08 (0.05—0.10) | 560 | 50 | 6300 | 0.07 (0.04—0.09) | 440 |
| **3.0** | 65 | 6800 | 0.09 (0.07—0.11) | 610 | 55 | 5800 | 0.09 (0.05—0.12) | 520 |
| **4.0** | 70 | 5500 | 0.12 (0.09—0.14) | 660 | 60 | 4700 | 0.12 (0.07—0.17) | 565 |
| **5.0** | 70 | 4400 | 0.15 (0.11—0.18) | 660 | 60 | 3800 | 0.14 (0.08—0.20) | 530 |
| **6.0** | 80 | 4200 | 0.18 (0.14—0.21) | 755 | 70 | 3700 | 0.15 (0.10—0.20) | 555 |
| **7.0** | 80 | 3600 | 0.21 (0.16—0.25) | 755 | 70 | 3100 | 0.18 (0.12—0.23) | 560 |
| **8.0** | 85 | 3300 | 0.23 (0.18—0.28) | 760 | 75 | 2900 | 0.20 (0.15—0.25) | 580 |
| **10.0** | 90 | 2800 | 0.27 (0.21—0.32) | 755 | 80 | 2500 | 0.23 (0.18—0.28) | 575 |
| **12.0** | 95 | 2500 | 0.28 (0.22—0.34) | 700 | 85 | 2200 | 0.25 (0.20—0.30) | 550 |
| **14.0** | 95 | 2100 | 0.29 (0.23—0.35) | 610 | 85 | 1900 | 0.25 (0.20—0.30) | 475 |

Remarque 1) Les conditions de coupe ci-dessus sont valables pour un arrosage à l'huile soluble. Pour les aciers inoxydables, l'utilisation d'huile entière est recommandé.
Remarque 2) En cas d'utilisation d'huile entière, réduire la vitesse de coupe de 20 %.
Remarque 3) Vérifier le contrôle du copeau, effectuer des cycles de brise-copeaux si nécessaire. * Pas des brise-copeaux : 0,2 à 1,0 DC
Remarque 4) Ajuster les conditions de coupe en fonction de la machine, de la raideur de bridage et d'attachement, de la géométrie pièce, etc.
Remarque 5) Des profondeurs d'usinage supérieures à la longueur utile (LU) ne sont pas recommandées.
Remarque 6) Respecter un faux-rond inférieur à 0,03 mm.
Remarque 7) Ne pas serrer le foret sur les goujures.

# Notes

# Notes

# SÉRIES DE FORETS

# Notes

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# PERÇAGE

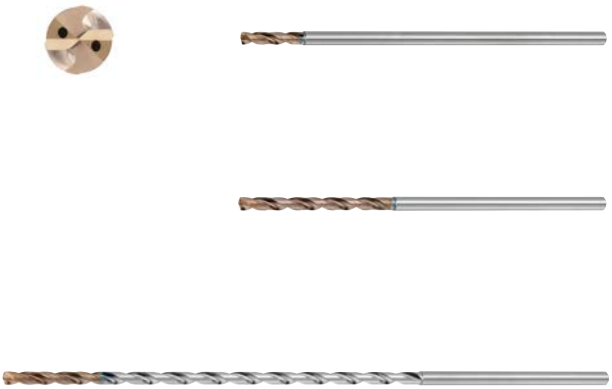
# PERÇAGE (CARBURE MONOBLOC)

# MINI-MVS

- Les arêtes de coupe droites améliorent le contrôle du copeau et la résistance à l'écaillage.
- Le double listel permet d'atteindre une précision et un équilibre parfaits avec un foret de petit diamètre.

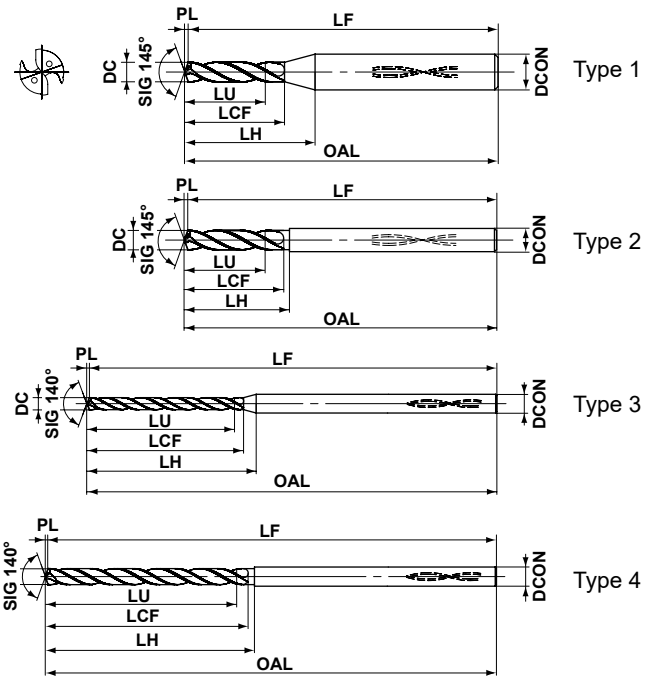
P M K N S H

Arrosage intérieur










| Référence | 1≤DC≤2.9 |
|---|---|
| MVS-**X02**- (foret pilote) | $^{+0.014}_{0}$ |
| Autres | $^{0}_{-0.014}$ |
| Référence | DCON |
| MVS | $^{0}_{-0.006}$ |

| DC (mm) | Rapport (L/D) | DP1020 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.0 | *2 | ● | MVS0100X02S030 | 2.2 | 5.2 | 8.9 | 55.2 | 55 | 0.2 | 3 | 1 |
| | 7 | ● | MVS0100X07S030 | 7.2 | 10.2 | 14.2 | 55.2 | 55 | 0.2 | 3 | 3 |
| | 12 | ● | MVS0100X12S030 | 12.2 | 15.2 | 19.2 | 55.2 | 55 | 0.2 | 3 | 3 |
| | 20 | ● | MVS0100X20S030 | 20.2 | 24.2 | 28.2 | 60.2 | 60 | 0.2 | 3 | 3 |
| | 25 | ● | MVS0100X25S030 | 25.2 | 28.2 | 32.2 | 66.2 | 66 | 0.2 | 3 | 3 |
| | 30 | ● | MVS0100X30S030 | 30.2 | 33.2 | 37.2 | 72.2 | 72 | 0.2 | 3 | 3 |
| 1.1 | *2 | ● | MVS0110X02S030 | 2.4 | 5.6 | 9.1 | 55.2 | 55 | 0.2 | 3 | 1 |
| | 7 | ● | MVS0110X07S030 | 7.9 | 11.2 | 15.2 | 55.2 | 55 | 0.2 | 3 | 3 |
| | 12 | ● | MVS0110X12S030 | 13.4 | 17.2 | 21.2 | 55.2 | 55 | 0.2 | 3 | 3 |
| | 20 | ● | MVS0110X20S030 | 22.2 | 25.2 | 29.2 | 60.2 | 60 | 0.2 | 3 | 3 |
| | 25 | ● | MVS0110X25S030 | 27.7 | 31.2 | 34.2 | 66.2 | 66 | 0.2 | 3 | 3 |
| | 30 | ● | MVS0110X30S030 | 33.2 | 36.2 | 40.2 | 72.2 | 72 | 0.2 | 3 | 3 |
| 1.2 | *2 | ● | MVS0120X02S030 | 2.6 | 6.2 | 9.6 | 55.2 | 55 | 0.2 | 3 | 1 |
| | 7 | ● | MVS0120X07S030 | 8.6 | 12.2 | 15.2 | 55.2 | 55 | 0.2 | 3 | 3 |
| | 12 | ● | MVS0120X12S030 | 14.6 | 18.2 | 21.2 | 55.2 | 55 | 0.2 | 3 | 3 |
| | 20 | ● | MVS0120X20S030 | 24.2 | 28.2 | 31.2 | 60.2 | 60 | 0.2 | 3 | 3 |
| | 25 | ● | MVS0120X25S030 | 30.2 | 34.2 | 37.2 | 66.2 | 66 | 0.2 | 3 | 3 |
| | 30 | ● | MVS0120X30S030 | 36.2 | 40.2 | 43.2 | 72.2 | 72 | 0.2 | 3 | 3 |
| 1.3 | *2 | ● | MVS0130X02S030 | 2.8 | 6.6 | 9.8 | 55.2 | 55 | 0.2 | 3 | 1 |
| | 7 | ● | MVS0130X07S030 | 9.3 | 13.2 | 16.2 | 55.2 | 55 | 0.2 | 3 | 3 |
| | 12 | ● | MVS0130X12S030 | 15.8 | 20.2 | 23.2 | 55.2 | 55 | 0.2 | 3 | 3 |
| | 20 | ● | MVS0130X20S030 | 26.2 | 30.2 | 33.2 | 68.2 | 68 | 0.2 | 3 | 3 |
| | 25 | ● | MVS0130X25S030 | 32.7 | 36.2 | 40.2 | 74.2 | 74 | 0.2 | 3 | 3 |
| | 30 | ● | MVS0130X30S030 | 39.2 | 43.2 | 46.2 | 82.2 | 82 | 0.2 | 3 | 3 |

| DC (mm) | Rapport (L/D) | DP1020 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.4 | *2 | ● | MVS0140X02S030 | 3.0 | 7.2 | 10.2 | 55.2 | 55 | 0.2 | 3 | 1 |
| | 7 | ● | MVS0140X07S030 | 10.1 | 14.3 | 17.3 | 55.3 | 55 | 0.3 | 3 | 3 |
| | 12 | ● | MVS0140X12S030 | 17.1 | 21.3 | 24.3 | 55.3 | 55 | 0.3 | 3 | 3 |
| | 20 | ● | MVS0140X20S030 | 28.3 | 32.3 | 35.3 | 68.3 | 68 | 0.3 | 3 | 3 |
| | 25 | ● | MVS0140X25S030 | 35.3 | 39.3 | 42.3 | 74.3 | 74 | 0.3 | 3 | 3 |
| | 30 | ● | MVS0140X30S030 | 42.3 | 46.3 | 49.3 | 82.3 | 82 | 0.3 | 3 | 3 |
| 1.5 | *2 | ● | MVS0150X02S030 | 3.2 | 7.6 | 10.4 | 55.2 | 55 | 0.2 | 3 | 1 |
| | 7 | ● | MVS0150X07S030 | 10.8 | 15.3 | 18.3 | 55.3 | 55 | 0.3 | 3 | 3 |
| | 12 | ● | MVS0150X12S030 | 18.3 | 23.3 | 26.3 | 55.3 | 55 | 0.3 | 3 | 3 |
| | 20 | ● | MVS0150X20S030 | 30.3 | 35.3 | 37.3 | 68.3 | 68 | 0.3 | 3 | 3 |
| | 25 | ● | MVS0150X25S030 | 37.8 | 42.3 | 45.3 | 74.3 | 74 | 0.3 | 3 | 3 |
| | 30 | ● | MVS0150X30S030 | 45.3 | 50.3 | 52.3 | 82.3 | 82 | 0.3 | 3 | 3 |
| 1.6 | *2 | ● | MVS0160X02S030 | 3.5 | 8.3 | 10.9 | 68.3 | 68 | 0.3 | 3 | 1 |
| | 7 | ● | MVS0160X07S030 | 11.5 | 16.3 | 19.3 | 68.3 | 68 | 0.3 | 3 | 3 |
| | 12 | ● | MVS0160X12S030 | 19.5 | 24.3 | 27.3 | 68.3 | 68 | 0.3 | 3 | 3 |
| | 20 | ● | MVS0160X20S030 | 32.3 | 37.3 | 39.3 | 78.3 | 78 | 0.3 | 3 | 3 |
| | 25 | ● | MVS0160X25S030 | 40.3 | 45.3 | 47.3 | 86.3 | 86 | 0.3 | 3 | 3 |
| | 30 | ● | MVS0160X30S030 | 48.3 | 53.3 | 55.3 | 95.3 | 95 | 0.3 | 3 | 3 |
| 1.7 | *2 | ● | MVS0170X02S030 | 3.7 | 8.7 | 11.1 | 68.3 | 68 | 0.3 | 3 | 1 |
| | 7 | ● | MVS0170X07S030 | 12.2 | 17.3 | 19.3 | 68.3 | 68 | 0.3 | 3 | 3 |
| | 12 | ● | MVS0170X12S030 | 20.7 | 26.3 | 28.3 | 68.3 | 68 | 0.3 | 3 | 3 |
| | 20 | ● | MVS0170X20S030 | 34.3 | 39.3 | 42.3 | 78.3 | 78 | 0.3 | 3 | 3 |
| | 25 | ● | MVS0170X25S030 | 42.8 | 48.3 | 50.3 | 86.3 | 86 | 0.3 | 3 | 3 |
| | 30 | ● | MVS0170X30S030 | 51.3 | 56.3 | 59.3 | 95.3 | 95 | 0.3 | 3 | 3 |

*2=Trou pilote. Tolerance est +0.014 etprofondeur du trou est DCx2.

● : **Article stocké.**

| DC (mm) | Rapport (L/D) | DP1020 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.8 | *2 | ● | MVS0180X02S030 | 3.9 | 9.3 | 11.5 | 68.3 | 68 | 0.3 | 3 | 1 |
| | 7 | ● | MVS0180X07S030 | 12.9 | 18.3 | 20.3 | 68.3 | 68 | 0.3 | 3 | 3 |
| | 12 | ● | MVS0180X12S030 | 21.9 | 27.3 | 29.3 | 68.3 | 68 | 0.3 | 3 | 3 |
| | 20 | ● | MVS0180X20S030 | 36.3 | 41.3 | 44.3 | 84.3 | 84 | 0.3 | 3 | 3 |
| | 25 | ● | MVS0180X25S030 | 45.3 | 50.3 | 53.3 | 94.3 | 94 | 0.3 | 3 | 3 |
| | 30 | ● | MVS0180X30S030 | 54.3 | 59.3 | 62.3 | 102.3 | 102 | 0.3 | 3 | 3 |
| 1.9 | *2 | ● | MVS0190X02S030 | 4.1 | 9.7 | 11.8 | 68.3 | 68 | 0.3 | 3 | 1 |
| | 7 | ● | MVS0190X07S030 | 13.6 | 19.3 | 21.3 | 68.3 | 68 | 0.3 | 3 | 3 |
| | 12 | ● | MVS0190X12S030 | 23.1 | 29.3 | 31.3 | 68.3 | 68 | 0.3 | 3 | 3 |
| | 20 | ● | MVS0190X20S030 | 38.3 | 44.3 | 46.3 | 84.3 | 84 | 0.3 | 3 | 3 |
| | 25 | ● | MVS0190X25S030 | 47.8 | 53.3 | 55.3 | 94.3 | 94 | 0.3 | 3 | 3 |
| | 30 | ● | MVS0190X30S030 | 57.3 | 63.3 | 65.3 | 102.3 | 102 | 0.3 | 3 | 3 |
| 2.0 | *2 | ● | MVS0200X02S030 | 4.3 | 10.3 | 12.2 | 68.3 | 68 | 0.3 | 3 | 1 |
| | 7 | ● | MVS0200X07S030 | 14.4 | 20.4 | 22.4 | 68.4 | 68 | 0.4 | 3 | 3 |
| | 12 | ● | MVS0200X12S030 | 24.4 | 30.4 | 32.4 | 68.4 | 68 | 0.4 | 3 | 3 |
| | 20 | ● | MVS0200X20S030 | 40.4 | 46.4 | 48.4 | 84.4 | 84 | 0.4 | 3 | 3 |
| | 25 | ● | MVS0200X25S030 | 50.4 | 56.4 | 58.4 | 94.4 | 94 | 0.4 | 3 | 3 |
| | 30 | ● | MVS0200X30S030 | 60.4 | 66.4 | 68.4 | 102.4 | 102 | 0.4 | 3 | 3 |
| 2.1 | *2 | ● | MVS0210X02S030 | 4.5 | 10.7 | 12.4 | 74.3 | 74 | 0.3 | 3 | 1 |
| | 7 | ● | MVS0210X07S030 | 15.1 | 21.4 | 23.4 | 74.4 | 74 | 0.4 | 3 | 3 |
| | 12 | ● | MVS0210X12S030 | 25.6 | 32.4 | 34.4 | 74.4 | 74 | 0.4 | 3 | 3 |
| | 20 | ● | MVS0210X20S030 | 42.4 | 48.4 | 50.4 | 94.4 | 94 | 0.4 | 3 | 3 |
| | 25 | ● | MVS0210X25S030 | 52.9 | 59.4 | 60.4 | 107.4 | 107 | 0.4 | 3 | 3 |
| | 30 | ● | MVS0210X30S030 | 63.4 | 69.4 | 71.4 | 118.4 | 118 | 0.4 | 3 | 3 |
| 2.2 | *2 | ● | MVS0220X02S030 | 4.7 | 11.3 | 12.8 | 74.3 | 74 | 0.3 | 3 | 1 |
| | 7 | ● | MVS0220X07S030 | 15.8 | 22.4 | 23.4 | 74.4 | 74 | 0.4 | 3 | 3 |
| | 12 | ● | MVS0220X12S030 | 26.8 | 33.4 | 34.4 | 74.4 | 74 | 0.4 | 3 | 3 |
| | 20 | ● | MVS0220X20S030 | 44.4 | 51.4 | 52.4 | 94.4 | 94 | 0.4 | 3 | 3 |
| | 25 | ● | MVS0220X25S030 | 55.4 | 62.4 | 63.4 | 107.4 | 107 | 0.4 | 3 | 3 |
| | 30 | ● | MVS0220X30S030 | 66.4 | 73.4 | 74.4 | 118.4 | 118 | 0.4 | 3 | 3 |
| 2.3 | *2 | ● | MVS0230X02S030 | 5.0 | 11.8 | 13.1 | 74.4 | 74 | 0.4 | 3 | 1 |
| | 7 | ● | MVS0230X07S030 | 16.5 | 23.4 | 24.4 | 74.4 | 74 | 0.4 | 3 | 3 |
| | 12 | ● | MVS0230X12S030 | 28.0 | 35.4 | 36.4 | 74.4 | 74 | 0.4 | 3 | 3 |
| | 20 | ● | MVS0230X20S030 | 46.4 | 53.4 | 54.4 | 94.4 | 94 | 0.4 | 3 | 3 |
| | 25 | ● | MVS0230X25S030 | 57.9 | 64.4 | 66.4 | 107.4 | 107 | 0.4 | 3 | 3 |
| | 30 | ● | MVS0230X30S030 | 69.4 | 76.4 | 77.4 | 118.4 | 118 | 0.4 | 3 | 3 |
| 2.4 | *2 | ● | MVS0240X02S030 | 5.2 | 12.4 | 13.5 | 74.4 | 74 | 0.4 | 3 | 1 |
| | 7 | ● | MVS0240X07S030 | 17.2 | 24.4 | 25.4 | 74.4 | 74 | 0.4 | 3 | 3 |
| | 12 | ● | MVS0240X12S030 | 29.2 | 36.4 | 37.4 | 74.4 | 74 | 0.4 | 3 | 3 |
| | 20 | ● | MVS0240X20S030 | 48.4 | 55.4 | 56.4 | 94.4 | 94 | 0.4 | 3 | 3 |
| | 25 | ● | MVS0240X25S030 | 60.4 | 67.4 | 68.4 | 107.4 | 107 | 0.4 | 3 | 3 |
| | 30 | ● | MVS0240X30S030 | 72.4 | 79.4 | 80.4 | 118.4 | 118 | 0.4 | 3 | 3 |
| 2.5 | *2 | ● | MVS0250X02S030 | 5.4 | 12.8 | 13.7 | 74.4 | 74 | 0.4 | 3 | 1 |
| | 7 | ● | MVS0250X07S030 | 18.0 | 25.5 | 26.5 | 74.5 | 74 | 0.5 | 3 | 3 |
| | 12 | ● | MVS0250X12S030 | 30.5 | 38.5 | 39.5 | 74.5 | 74 | 0.5 | 3 | 3 |
| | 20 | ● | MVS0250X20S030 | 50.5 | 58.5 | 59.5 | 94.5 | 94 | 0.5 | 3 | 3 |
| | 25 | ● | MVS0250X25S030 | 63.0 | 70.5 | 71.5 | 107.5 | 107 | 0.5 | 3 | 3 |
| | 30 | ● | MVS0250X30S030 | 75.5 | 83.5 | 84.5 | 118.5 | 118 | 0.5 | 3 | 3 |

| DC (mm) | Rapport (L/D) | DP1020 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.6 | *2 | ● | MVS0260X02S030 | 5.6 | 13.4 | 13.4 | 81.4 | 81 | 0.4 | 3 | 2 |
| | 7 | ● | MVS0260X07S030 | 18.7 | 26.5 | 26.5 | 81.5 | 81 | 0.5 | 3 | 4 |
| | 12 | ● | MVS0260X12S030 | 31.7 | 39.5 | 39.5 | 81.5 | 81 | 0.5 | 3 | 4 |
| | 20 | ● | MVS0260X20S030 | 52.5 | 60.5 | 60.5 | 103.5 | 103 | 0.5 | 3 | 4 |
| | 25 | ● | MVS0260X25S030 | 65.5 | 73.5 | 73.5 | 117.5 | 117 | 0.5 | 3 | 4 |
| | 30 | ● | MVS0260X30S030 | 78.5 | 86.5 | 86.5 | 132.5 | 132 | 0.5 | 3 | 4 |
| 2.7 | *2 | ● | MVS0270X02S030 | 5.8 | 13.8 | 13.8 | 81.4 | 81 | 0.4 | 3 | 2 |
| | 7 | ● | MVS0270X07S030 | 19.4 | 27.5 | 27.5 | 81.5 | 81 | 0.5 | 3 | 4 |
| | 12 | ● | MVS0270X12S030 | 32.9 | 41.5 | 41.5 | 81.5 | 81 | 0.5 | 3 | 4 |
| | 20 | ● | MVS0270X20S030 | 54.5 | 62.5 | 62.5 | 103.5 | 103 | 0.5 | 3 | 4 |
| | 25 | ● | MVS0270X25S030 | 68.0 | 76.5 | 76.5 | 117.5 | 117 | 0.5 | 3 | 4 |
| | 30 | ● | MVS0270X30S030 | 81.5 | 89.5 | 89.5 | 132.5 | 132 | 0.5 | 3 | 4 |
| 2.8 | *2 | ● | MVS0280X02S030 | 6.0 | 14.4 | 14.4 | 81.4 | 81 | 0.4 | 3 | 2 |
| | 7 | ● | MVS0280X07S030 | 20.1 | 28.5 | 28.5 | 81.5 | 81 | 0.5 | 3 | 4 |
| | 12 | ● | MVS0280X12S030 | 34.1 | 42.5 | 42.5 | 81.5 | 81 | 0.5 | 3 | 4 |
| | 20 | ● | MVS0280X20S030 | 56.5 | 64.5 | 64.5 | 103.5 | 103 | 0.5 | 3 | 4 |
| | 25 | ● | MVS0280X25S030 | 70.5 | 78.5 | 78.5 | 117.5 | 117 | 0.5 | 3 | 4 |
| | 30 | ● | MVS0280X30S030 | 84.5 | 92.5 | 92.5 | 132.5 | 132 | 0.5 | 3 | 4 |
| 2.9 | *2 | ● | MVS0290X02S030 | 6.3 | 14.9 | 14.9 | 81.5 | 81 | 0.5 | 3 | 2 |
| | 7 | ● | MVS0290X07S030 | 20.8 | 29.5 | 29.5 | 81.5 | 81 | 0.5 | 3 | 4 |
| | 12 | ● | MVS0290X12S030 | 35.3 | 44.5 | 44.5 | 81.5 | 81 | 0.5 | 3 | 4 |
| | 20 | ● | MVS0290X20S030 | 58.5 | 67.5 | 67.5 | 103.5 | 103 | 0.5 | 3 | 4 |
| | 25 | ● | MVS0290X25S030 | 73.0 | 81.5 | 81.5 | 117.5 | 117 | 0.5 | 3 | 4 |
| | 30 | ● | MVS0290X30S030 | 87.5 | 96.5 | 96.5 | 132.5 | 132 | 0.5 | 3 | 4 |

*2=Trou pilote. Tolerance est +0.014 etprofondeur du trou est DCx2.

CONDITIONS DE COUPE ➤ M038
MÉTHODE D'UTILISATION ➤ M039
DONNÉES TECHNIQUES ➤ P001

# MINI-MVS

## CONDITIONS DE COUPE RECOMMANDÉES

| Matière | | P | | | | | |
|---|---|---|---|---|---|---|---|
| | | Acier doux (≤180HB) | | Acier carbone Acier allié (180—280HB) | | Acier carbone Acier allié (280—350HB) | |
| Diamètre foret **DC** (mm) | **L/D** | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) |
| **1.0** | **2*,7DC** | 15900 | 0.04 (0.02—0.05) | 15900 | 0.04 (0.02—0.05) | 12700 | 0.04 (0.02—0.05) |
| | **≥ 12DC** | 15900 | 0.02 (0.01—0.03) | 12700 | 0.02 (0.01—0.03) | 9500 | 0.02 (0.01—0.03) |
| **1.5** | **2*,7DC** | 10600 | 0.05 (0.03—0.08) | 10600 | 0.05 (0.03—0.08) | 8400 | 0.05 (0.03—0.08) |
| | **≥ 12DC** | 10600 | 0.05 (0.02—0.08) | 8400 | 0.05 (0.03—0.08) | 6300 | 0.05 (0.02—0.08) |
| **2.0** | **2*,7DC** | 7900 | 0.07 (0.04—0.10) | 7900 | 0.07 (0.04—0.10) | 6300 | 0.07 (0.04—0.10) |
| | **≥ 12DC** | 7900 | 0.07 (0.04—0.10) | 7900 | 0.07 (0.04—0.10) | 7900 | 0.07 (0.04—0.10) |
| **2.5** | **2*,7DC** | 7600 | 0.09 (0.05—0.13) | 7600 | 0.09 (0.05—0.13) | 6300 | 0.09 (0.05—0.13) |
| | **≥ 12DC** | 7600 | 0.09 (0.06—0.13) | 6300 | 0.09 (0.06—0.13) | 6300 | 0.08 (0.05—0.13) |

| Matière | | M | | K | | | |
|---|---|---|---|---|---|---|---|
| | | Acier inoxydable austénitique (≤200HB) | | Fonte grise (≤350MPa) | | Fonte ductile (≤450MPa) | |
| Diamètre foret **DC** (mm) | **L/D** | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) |
| **1.0** | **2*,7DC** | 9500 | 0.03 (0.02—0.05) | 15900 | 0.04 (0.02—0.05) | 12700 | 0.04 (0.02—0.05) |
| | **≥ 12DC** | 9500 | 0.02 (0.01—0.03) | 12700 | 0.02 (0.01—0.03) | 9500 | 0.02 (0.01—0.03) |
| **1.5** | **2*,7DC** | 6300 | 0.05 (0.03—0.07) | 10600 | 0.05 (0.03—0.08) | 8400 | 0.05 (0.03—0.08) |
| | **≥ 12DC** | 6300 | 0.05 (0.02—0.08) | 8400 | 0.05 (0.03—0.08) | 6300 | 0.05 (0.02—0.08) |
| **2.0** | **2*,7DC** | 4700 | 0.06 (0.04—0.08) | 7900 | 0.07 (0.04—0.10) | 6300 | 0.07 (0.04—0.10) |
| | **≥ 12DC** | 4700 | 0.07 (0.04—0.10) | 7900 | 0.07 (0.04—0.10) | 7900 | 0.07 (0.04—0.10) |
| **2.5** | **2*,7DC** | 5000 | 0.08 (0.05—0.10) | 7600 | 0.09 (0.05—0.13) | 6300 | 0.09 (0.05—0.13) |
| | **≥ 12DC** | 3800 | 0.08 (0.05—0.12) | 6300 | 0.09 (0.06—0.13) | 6300 | 0.08 (0.05—0.12) |

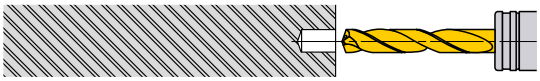
| Matière | | N | | S | |
|---|---|---|---|---|---|
| | | Alliage aluminium (Si<5%) | | Alliage réfractaire | |
| Diamètre foret **DC** (mm) | **L/D** | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) |
| **1.0** | **2*,7DC** | 19000 | 0.05 (0.03—0.08) | 3100 | 0.02 (0.01—0.03) |
| | **≥ 12DC** | 15900 | 0.05 (0.03—0.08) | 3100 | 0.02 (0.01—0.03) |
| **1.5** | **2*,7DC** | 16900 | 0.07 (0.05—0.12) | 2100 | 0.03 (0.02—0.04) |
| | **≥ 12DC** | 14800 | 0.08 (0.05—0.12) | 2100 | 0.03 (0.02—0.04) |
| **2.0** | **2*,7DC** | 14300 | 0.10 (0.06—0.15) | 2300 | 0.04 (0.03—0.05) |
| | **≥ 12DC** | 12700 | 0.11 (0.06—0.15) | 2300 | 0.04 (0.03—0.05) |
| **2.5** | **2*,7DC** | 12700 | 0.13 (0.08—0.20) | 1900 | 0.05 (0.04—0.06) |
| | **≥ 12DC** | 11400 | 0.14 (0.08—0.20) | 1900 | 0.05 (0.04—0.06) |

*2=Trou pilote. La profondeur est de 2xDC.

## ■ GUIDE OPÉRATIONNEL POUR LE FORET LONG TYPE MINI-MVS (L/D ≥ 10)

# TROUS BORGNES

### ■ 1. Perçage du trou pilote

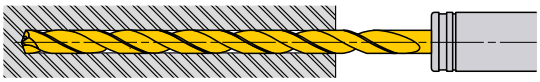


①Utilisez un foret avec une extrémité plus large (plus plate) que celle du foret super-long. Utiliser la goujure la plus courte possible.
②Veillez à percer un avant-trou très précis.
③Profondeur de perçage : environ 1DC ou plus.
(Ajustez la profondeur de l'avant-trou selon la longueur du foret super-long.)

### ■ 2. Introduction du foret long

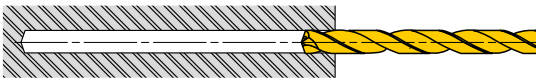
①Insérez le foret dans l'avant-trou à faible vitesse. (Vitesse de rotation 1000min$^{-1}$, avance 0.2mm－0.3mm/tour)
②Arrêtez le foret long à 0.5mm－1mm du fond de l'avant-trou.

### ■ 3. Perçage profond



①Commencez à percer avec la vitesse et l'avance recommandées, avec un cycle sans débourrage (avance continue).

### ■ 4. Retrait du foret

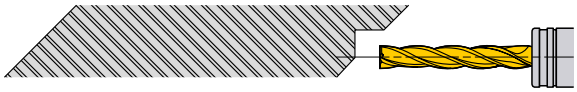


①Après le perçage, diminuez la vitesse de rotation à environ 0.5mm-1mm de l'extrémité du trou. (Vitesse de rotation d'env. 1 000 min$^{-1}$)
②Retirez le foret jusqu'à l'entrée de l'avant-trou, avec une vitesse d'avance de 3000mm/min.
③Enfin, sortez l'outil du trou avec une vitesse de coupe de 20m-30m/min et une vitesse d'avance de 0.2mm-0.3mm/tour.

# ATTAQUE OBLIQUE ET TROUS DÉBOUCHANTS

● Perçage et trous débouchants sur des faces ou des angles irréguliers

### ■ 1. Lamage

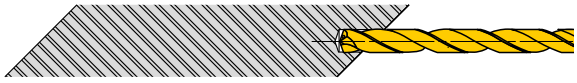


①Usinez à plat sur la face irrégulière à l'aide d'une fraise capable de lamage. Utilisez un diamètre de lamage identique au diamètre du trou profond à percer.

### ■ 2. Perçage du trou pilote

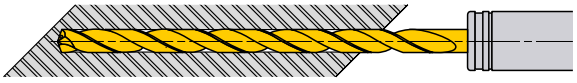
①Utilisez un foret avec une extrémité plus large (plus plate) que celle du foret super-long. Utiliser la goujure la plus courte possible.
②Veillez à percer un avant-trou très précis.
③Profondeur de perçage : environ 1DC ou plus.
(Ajustez la profondeur de l'avant-trou selon la longueur du foret super-long.)

### ■ 3. Introduction du foret long



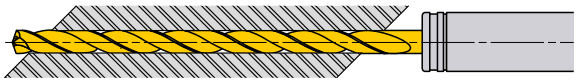
①Insérez le foret dans l'avant-trou à faible vitesse. (Vitesse de rotation 1000min$^{-1}$, avance 0.2mm－0.3mm/tour)
②Arrêtez le foret long à 0.5mm－1mm du fond de l'avant-trou.

### ■ 4. Perçage profond



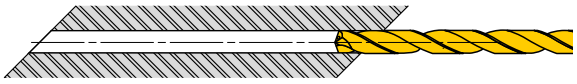
①Commencez à percer avec la vitesse et l'avance recommandées, avec un cycle sans débourrage (avance continue).

### ■ 5. Déboucher



①Lors de la traversée, l'arête de coupe peut être endommagée.
②Diminuez la vitesse d'avance au moment de l'introduction.

### ■ 6. Retrait du foret



①Enfin, sortez l'outil du trou avec une vitesse de coupe de 20m-30m/min et une vitesse d'avance de 0.2mm-0.3mm/tour.
②Retirez le foret jusqu'à l'entrée de l'avant-trou, avec une vitesse d'avance de 3000mm/min.

# PERÇAGE (CARBURE MONOBLOC)

# MINI-MWS

- Micro-foret avec arrosage central pour un perçage profond stable.
- Pour un perçage extrêmement précis et efficace des aciers au carbone jusqu'aux matières difficiles à usiner.

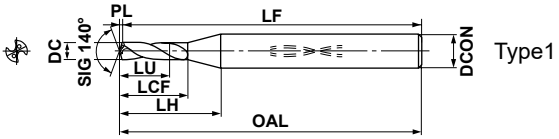
P M K N S H

0.5≤DC<1
+0.009
0
h6
0
−0.006

Arrosage intérieur

## Type SB

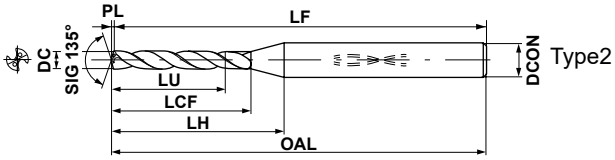
(Pour trous pilotes)




Type1

0.5≤DC<1
0
−0.009
h6
0
−0.006

## Type LB/XB




Type2

● MWS forets recommandés pour l'utilisation avec attachements de frettage.

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.50 | 1 | ● | MWS0050SB | 0.6 | 2.6 | 7.3 | 47.1 | 47 | 0.09 | 3 | 1 |
| | 5 | ★ | MWS0050LB | 2.6 | 8.1 | 13.1 | 47.1 | 47 | 0.10 | 3 | 2 |
| | 12 | ★ | MWS0050XB | 6.1 | 16.1 | 21.1 | 47.1 | 47 | 0.10 | 3 | 2 |
| 0.51 | 1 | ★ | MWS0051SB | 0.6 | 2.7 | 7.3 | 47.1 | 47 | 0.09 | 3 | 1 |
| | 5 | ★ | MWS0051LB | 2.7 | 8.1 | 13.1 | 47.1 | 47 | 0.11 | 3 | 2 |
| | 12 | ★ | MWS0051XB | 6.2 | 16.1 | 21.1 | 47.1 | 47 | 0.11 | 3 | 2 |
| 0.52 | 1 | ★ | MWS0052SB | 0.6 | 2.7 | 7.3 | 47.1 | 47 | 0.09 | 3 | 1 |
| | 5 | ★ | MWS0052LB | 2.7 | 8.1 | 13.1 | 47.1 | 47 | 0.11 | 3 | 2 |
| | 12 | ★ | MWS0052XB | 6.4 | 16.1 | 21.1 | 47.1 | 47 | 0.11 | 3 | 2 |
| 0.53 | 1 | ★ | MWS0053SB | 0.6 | 2.7 | 7.3 | 47.1 | 47 | 0.10 | 3 | 1 |
| | 5 | ★ | MWS0053LB | 2.8 | 8.1 | 13.1 | 47.1 | 47 | 0.11 | 3 | 2 |
| | 12 | ★ | MWS0053XB | 6.5 | 16.1 | 21.1 | 47.1 | 47 | 0.11 | 3 | 2 |
| 0.54 | 1 | ★ | MWS0054SB | 0.6 | 2.7 | 7.3 | 47.1 | 47 | 0.10 | 3 | 1 |
| | 5 | ★ | MWS0054LB | 2.8 | 8.1 | 13.1 | 47.1 | 47 | 0.11 | 3 | 2 |
| | 12 | ★ | MWS0054XB | 6.6 | 16.1 | 21.1 | 47.1 | 47 | 0.11 | 3 | 2 |
| 0.55 | 1 | ● | MWS0055SB | 0.7 | 2.7 | 7.3 | 47.1 | 47 | 0.10 | 3 | 1 |
| | 5 | ★ | MWS0055LB | 2.9 | 8.1 | 13.1 | 47.1 | 47 | 0.11 | 3 | 2 |
| | 12 | ★ | MWS0055XB | 6.7 | 16.1 | 21.1 | 47.1 | 47 | 0.11 | 3 | 2 |
| 0.56 | 1 | ★ | MWS0056SB | 0.7 | 3.0 | 7.6 | 47.1 | 47 | 0.10 | 3 | 1 |
| | 5 | ★ | MWS0056LB | 2.9 | 8.1 | 13.1 | 47.1 | 47 | 0.12 | 3 | 2 |
| | 12 | ★ | MWS0056XB | 6.8 | 16.1 | 21.1 | 47.1 | 47 | 0.12 | 3 | 2 |
| 0.57 | 1 | ★ | MWS0057SB | 0.7 | 3.0 | 7.5 | 47.1 | 47 | 0.10 | 3 | 1 |
| | 5 | ★ | MWS0057LB | 3.0 | 8.1 | 13.1 | 47.1 | 47 | 0.12 | 3 | 2 |
| | 12 | ★ | MWS0057XB | 7.0 | 16.1 | 21.1 | 47.1 | 47 | 0.12 | 3 | 2 |
| 0.58 | 1 | ★ | MWS0058SB | 0.7 | 3.0 | 7.5 | 47.1 | 47 | 0.11 | 3 | 1 |
| | 5 | ★ | MWS0058LB | 3.0 | 8.1 | 13.1 | 47.1 | 47 | 0.12 | 3 | 2 |
| | 12 | ★ | MWS0058XB | 7.1 | 16.1 | 21.1 | 47.1 | 47 | 0.12 | 3 | 2 |
| 0.59 | 1 | ★ | MWS0059SB | 0.7 | 3.0 | 7.5 | 47.1 | 47 | 0.11 | 3 | 1 |
| | 5 | ★ | MWS0059LB | 3.1 | 8.1 | 12.1 | 47.1 | 47 | 0.12 | 3 | 2 |
| | 12 | ★ | MWS0059XB | 7.2 | 16.1 | 20.1 | 47.1 | 47 | 0.12 | 3 | 2 |
| 0.60 | 1 | ● | MWS0060SB | 0.7 | 3.0 | 7.5 | 47.1 | 47 | 0.11 | 3 | 1 |
| | 5 | ★ | MWS0060LB | 3.1 | 8.1 | 12.1 | 47.1 | 47 | 0.12 | 3 | 2 |
| | 12 | ★ | MWS0060XB | 7.3 | 16.1 | 20.1 | 47.1 | 47 | 0.12 | 3 | 2 |
| 0.61 | 1 | ★ | MWS0061SB | 0.7 | 3.2 | 7.7 | 47.1 | 47 | 0.11 | 3 | 1 |
| | 5 | ★ | MWS0061LB | 3.2 | 8.1 | 12.1 | 47.1 | 47 | 0.13 | 3 | 2 |
| | 12 | ★ | MWS0061XB | 7.5 | 16.1 | 20.1 | 47.1 | 47 | 0.13 | 3 | 2 |
| 0.62 | 1 | ★ | MWS0062SB | 0.7 | 3.2 | 7.6 | 47.1 | 47 | 0.11 | 3 | 1 |
| | 5 | ★ | MWS0062LB | 3.2 | 8.1 | 12.1 | 47.1 | 47 | 0.13 | 3 | 2 |
| | 12 | ★ | MWS0062XB | 7.6 | 16.1 | 20.1 | 47.1 | 47 | 0.13 | 3 | 2 |
| 0.63 | 1 | ★ | MWS0063SB | 0.7 | 3.2 | 7.6 | 47.1 | 47 | 0.11 | 3 | 1 |
| | 5 | ★ | MWS0063LB | 3.3 | 8.1 | 12.1 | 47.1 | 47 | 0.13 | 3 | 2 |
| | 12 | ★ | MWS0063XB | 7.7 | 16.1 | 20.1 | 47.1 | 47 | 0.13 | 3 | 2 |
| 0.64 | 1 | ★ | MWS0064SB | 0.8 | 3.2 | 7.6 | 47.1 | 47 | 0.12 | 3 | 1 |
| | 5 | ★ | MWS0064LB | 3.3 | 8.1 | 12.1 | 47.1 | 47 | 0.13 | 3 | 2 |
| | 12 | ★ | MWS0064XB | 7.8 | 16.1 | 20.1 | 47.1 | 47 | 0.13 | 3 | 2 |
| 0.65 | 1 | ● | MWS0065SB | 0.8 | 3.2 | 7.6 | 47.1 | 47 | 0.12 | 3 | 1 |
| | 5 | ★ | MWS0065LB | 3.4 | 8.1 | 12.1 | 47.1 | 47 | 0.13 | 3 | 2 |
| | 12 | ★ | MWS0065XB | 7.9 | 16.1 | 20.1 | 47.1 | 47 | 0.13 | 3 | 2 |

Remarque 1) Veuillez nous contacter pour les géométries qui ne seraient pas dans ce catalogue (e.g. différents diamètres et longueurs peuvent être fabriqués sur demande).

● : Article stocké. ★ : Article standard Japon.

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | ★ | **MWS0066SB** | 0.8 | 3.5 | 7.9 | 47.1 | 47 | 0.12 | 3 | 1 |
| **0.66** | 5 | ★ | **MWS0066LB** | 3.4 | 8.1 | 12.1 | 47.1 | 47 | 0.14 | 3 | 2 |
| | 12 | ★ | **MWS0066XB** | 8.1 | 16.1 | 20.1 | 47.1 | 47 | 0.14 | 3 | 2 |
| | 1 | ★ | **MWS0067SB** | 0.8 | 3.5 | 7.8 | 47.1 | 47 | 0.12 | 3 | 1 |
| **0.67** | 5 | ★ | **MWS0067LB** | 3.5 | 8.1 | 12.1 | 47.1 | 47 | 0.14 | 3 | 2 |
| | 12 | ★ | **MWS0067XB** | 8.2 | 16.1 | 20.1 | 47.1 | 47 | 0.14 | 3 | 2 |
| | 1 | ★ | **MWS0068SB** | 0.8 | 3.5 | 7.8 | 47.1 | 47 | 0.12 | 3 | 1 |
| **0.68** | 5 | ★ | **MWS0068LB** | 3.5 | 8.1 | 12.1 | 47.1 | 47 | 0.14 | 3 | 2 |
| | 12 | ★ | **MWS0068XB** | 8.3 | 16.1 | 20.1 | 47.1 | 47 | 0.14 | 3 | 2 |
| | 1 | ★ | **MWS0069SB** | 0.8 | 3.5 | 7.8 | 47.1 | 47 | 0.13 | 3 | 1 |
| **0.69** | 5 | ★ | **MWS0069LB** | 3.6 | 8.1 | 12.1 | 47.1 | 47 | 0.14 | 3 | 2 |
| | 12 | ★ | **MWS0069XB** | 8.4 | 16.1 | 20.1 | 47.1 | 47 | 0.14 | 3 | 2 |
| | 1 | ● | **MWS0070SB** | 0.8 | 3.5 | 7.8 | 47.1 | 47 | 0.13 | 3 | 1 |
| **0.70** | 5 | ★ | **MWS0070LB** | 3.6 | 8.1 | 12.1 | 47.1 | 47 | 0.14 | 3 | 2 |
| | 12 | ★ | **MWS0070XB** | 8.5 | 16.1 | 20.1 | 47.1 | 47 | 0.14 | 3 | 2 |
| | 1 | ★ | **MWS0071SB** | 0.8 | 3.7 | 8.0 | 50.1 | 50 | 0.13 | 3 | 1 |
| **0.71** | 5 | ★ | **MWS0071LB** | 3.7 | 10.1 | 14.1 | 50.1 | 50 | 0.15 | 3 | 2 |
| | 12 | ★ | **MWS0071XB** | 8.7 | 20.1 | 24.1 | 50.1 | 50 | 0.15 | 3 | 2 |
| | 1 | ★ | **MWS0072SB** | 0.9 | 3.7 | 8.0 | 50.1 | 50 | 0.13 | 3 | 1 |
| **0.72** | 5 | ★ | **MWS0072LB** | 3.8 | 10.1 | 14.1 | 50.1 | 50 | 0.15 | 3 | 2 |
| | 12 | ★ | **MWS0072XB** | 8.8 | 20.1 | 24.1 | 50.1 | 50 | 0.15 | 3 | 2 |
| | 1 | ★ | **MWS0073SB** | 0.9 | 3.7 | 7.9 | 50.1 | 50 | 0.13 | 3 | 1 |
| **0.73** | 5 | ★ | **MWS0073LB** | 3.8 | 10.1 | 14.1 | 50.1 | 50 | 0.15 | 3 | 2 |
| | 12 | ★ | **MWS0073XB** | 8.9 | 20.1 | 24.1 | 50.1 | 50 | 0.15 | 3 | 2 |
| | 1 | ★ | **MWS0074SB** | 0.9 | 3.7 | 7.9 | 50.1 | 50 | 0.13 | 3 | 1 |
| **0.74** | 5 | ★ | **MWS0074LB** | 3.9 | 10.1 | 14.1 | 50.1 | 50 | 0.15 | 3 | 2 |
| | 12 | ★ | **MWS0074XB** | 9.0 | 20.1 | 24.1 | 50.1 | 50 | 0.15 | 3 | 2 |
| | 1 | ● | **MWS0075SB** | 0.9 | 3.7 | 7.9 | 50.1 | 50 | 0.14 | 3 | 1 |
| **0.75** | 5 | ★ | **MWS0075LB** | 3.9 | 10.1 | 14.1 | 50.1 | 50 | 0.16 | 3 | 2 |
| | 12 | ★ | **MWS0075XB** | 9.2 | 20.1 | 24.1 | 50.1 | 50 | 0.16 | 3 | 2 |
| | 1 | ★ | **MWS0076SB** | 0.9 | 4.0 | 8.2 | 50.1 | 50 | 0.14 | 3 | 1 |
| **0.76** | 5 | ★ | **MWS0076LB** | 4.0 | 10.1 | 14.1 | 50.1 | 50 | 0.16 | 3 | 2 |
| | 12 | ★ | **MWS0076XB** | 9.3 | 20.1 | 24.1 | 50.1 | 50 | 0.16 | 3 | 2 |
| | 1 | ★ | **MWS0077SB** | 0.9 | 4.0 | 8.2 | 50.1 | 50 | 0.14 | 3 | 1 |
| **0.77** | 5 | ★ | **MWS0077LB** | 4.0 | 10.1 | 14.1 | 50.1 | 50 | 0.16 | 3 | 2 |
| | 12 | ★ | **MWS0077XB** | 9.4 | 20.1 | 24.1 | 50.1 | 50 | 0.16 | 3 | 2 |
| | 1 | ★ | **MWS0078SB** | 0.9 | 4.0 | 8.1 | 50.1 | 50 | 0.14 | 3 | 1 |
| **0.78** | 5 | ★ | **MWS0078LB** | 4.1 | 10.1 | 14.1 | 50.1 | 50 | 0.16 | 3 | 2 |
| | 12 | ★ | **MWS0078XB** | 9.5 | 20.1 | 24.1 | 50.1 | 50 | 0.16 | 3 | 2 |
| | 1 | ★ | **MWS0079SB** | 0.9 | 4.0 | 8.1 | 50.1 | 50 | 0.14 | 3 | 1 |
| **0.79** | 5 | ★ | **MWS0079LB** | 4.1 | 10.1 | 14.1 | 50.1 | 50 | 0.16 | 3 | 2 |
| | 12 | ★ | **MWS0079XB** | 9.6 | 20.1 | 24.1 | 50.1 | 50 | 0.16 | 3 | 2 |
| | 1 | ● | **MWS0080SB** | 1.0 | 4.1 | 8.2 | 50.2 | 50 | 0.15 | 3 | 1 |
| **0.80** | 5 | ★ | **MWS0080LB** | 4.2 | 10.2 | 14.2 | 50.2 | 50 | 0.17 | 3 | 2 |
| | 12 | ★ | **MWS0080XB** | 9.8 | 20.2 | 24.2 | 50.2 | 50 | 0.17 | 3 | 2 |
| | 1 | ★ | **MWS0081SB** | 1.0 | 4.3 | 8.4 | 50.2 | 50 | 0.15 | 3 | 1 |
| **0.81** | 5 | ★ | **MWS0081LB** | 4.2 | 10.2 | 14.2 | 50.2 | 50 | 0.17 | 3 | 2 |
| | 12 | ★ | **MWS0081XB** | 9.9 | 20.2 | 24.2 | 50.2 | 50 | 0.17 | 3 | 2 |
| | 1 | ★ | **MWS0082SB** | 1.0 | 4.3 | 8.4 | 50.2 | 50 | 0.15 | 3 | 1 |
| **0.82** | 5 | ★ | **MWS0082LB** | 4.3 | 10.2 | 14.2 | 50.2 | 50 | 0.17 | 3 | 2 |
| | 12 | ★ | **MWS0082XB** | 10.0 | 20.2 | 24.2 | 50.2 | 50 | 0.17 | 3 | 2 |
| | 1 | ★ | **MWS0083SB** | 1.0 | 4.3 | 8.3 | 50.2 | 50 | 0.15 | 3 | 1 |
| **0.83** | 5 | ★ | **MWS0083LB** | 4.3 | 10.2 | 14.2 | 50.2 | 50 | 0.17 | 3 | 2 |
| | 12 | ★ | **MWS0083XB** | 10.1 | 20.2 | 24.2 | 50.2 | 50 | 0.17 | 3 | 2 |
| | 1 | ★ | **MWS0084SB** | 1.0 | 4.3 | 8.3 | 50.2 | 50 | 0.15 | 3 | 1 |
| **0.84** | 5 | ★ | **MWS0084LB** | 4.4 | 10.2 | 14.2 | 50.2 | 50 | 0.17 | 3 | 2 |
| | 12 | ★ | **MWS0084XB** | 10.3 | 20.2 | 24.2 | 50.2 | 50 | 0.17 | 3 | 2 |
| | 1 | ● | **MWS0085SB** | 1.0 | 4.3 | 8.3 | 50.2 | 50 | 0.15 | 3 | 1 |
| **0.85** | 5 | ★ | **MWS0085LB** | 4.4 | 10.2 | 14.2 | 50.2 | 50 | 0.18 | 3 | 2 |
| | 12 | ★ | **MWS0085XB** | 10.4 | 20.2 | 24.2 | 50.2 | 50 | 0.18 | 3 | 2 |
| | 1 | ★ | **MWS0086SB** | 1.0 | 4.6 | 8.6 | 50.2 | 50 | 0.16 | 3 | 1 |
| **0.86** | 5 | ★ | **MWS0086LB** | 4.5 | 10.2 | 14.2 | 50.2 | 50 | 0.18 | 3 | 2 |
| | 12 | ★ | **MWS0086XB** | 10.5 | 20.2 | 24.2 | 50.2 | 50 | 0.18 | 3 | 2 |
| | 1 | ★ | **MWS0087SB** | 1.0 | 4.6 | 8.6 | 50.2 | 50 | 0.16 | 3 | 1 |
| **0.87** | 5 | ★ | **MWS0087LB** | 4.5 | 10.2 | 14.2 | 50.2 | 50 | 0.18 | 3 | 2 |
| | 12 | ★ | **MWS0087XB** | 10.6 | 20.2 | 24.2 | 50.2 | 50 | 0.18 | 3 | 2 |
| | 1 | ★ | **MWS0088SB** | 1.0 | 4.6 | 8.6 | 50.2 | 50 | 0.16 | 3 | 1 |
| **0.88** | 5 | ★ | **MWS0088LB** | 4.6 | 10.2 | 14.2 | 50.2 | 50 | 0.18 | 3 | 2 |
| | 12 | ★ | **MWS0088XB** | 10.7 | 20.2 | 24.2 | 50.2 | 50 | 0.18 | 3 | 2 |
| | 1 | ★ | **MWS0089SB** | 1.1 | 4.6 | 8.5 | 50.2 | 50 | 0.16 | 3 | 1 |
| **0.89** | 5 | ★ | **MWS0089LB** | 4.6 | 10.2 | 14.2 | 50.2 | 50 | 0.18 | 3 | 2 |
| | 12 | ★ | **MWS0089XB** | 10.9 | 20.2 | 24.2 | 50.2 | 50 | 0.18 | 3 | 2 |
| | 1 | ● | **MWS0090SB** | 1.1 | 4.6 | 8.5 | 50.2 | 50 | 0.16 | 3 | 1 |
| **0.90** | 5 | ★ | **MWS0090LB** | 4.7 | 10.2 | 14.2 | 50.2 | 50 | 0.19 | 3 | 2 |
| | 12 | ★ | **MWS0090XB** | 11.0 | 20.2 | 24.2 | 50.2 | 50 | 0.19 | 3 | 2 |
| | 1 | ★ | **MWS0091SB** | 1.1 | 4.8 | 8.7 | 50.2 | 50 | 0.17 | 3 | 1 |
| **0.91** | 5 | ★ | **MWS0091LB** | 4.7 | 10.2 | 14.2 | 50.2 | 50 | 0.19 | 3 | 2 |
| | 12 | ★ | **MWS0091XB** | 11.1 | 20.2 | 24.2 | 50.2 | 50 | 0.19 | 3 | 2 |
| | 1 | ★ | **MWS0092SB** | 1.1 | 4.8 | 8.7 | 50.2 | 50 | 0.17 | 3 | 1 |
| **0.92** | 5 | ★ | **MWS0092LB** | 4.8 | 10.2 | 14.2 | 50.2 | 50 | 0.19 | 3 | 2 |
| | 12 | ★ | **MWS0092XB** | 11.2 | 20.2 | 24.2 | 50.2 | 50 | 0.19 | 3 | 2 |
| | 1 | ★ | **MWS0093SB** | 1.1 | 4.8 | 8.7 | 50.2 | 50 | 0.17 | 3 | 1 |
| **0.93** | 5 | ★ | **MWS0093LB** | 4.8 | 10.2 | 14.2 | 50.2 | 50 | 0.19 | 3 | 2 |
| | 12 | ★ | **MWS0093XB** | 11.4 | 20.2 | 24.2 | 50.2 | 50 | 0.19 | 3 | 2 |
| | 1 | ★ | **MWS0094SB** | 1.1 | 4.8 | 8.6 | 50.2 | 50 | 0.17 | 3 | 1 |
| **0.94** | 5 | ★ | **MWS0094LB** | 4.9 | 10.2 | 14.2 | 50.2 | 50 | 0.19 | 3 | 2 |
| | 12 | ★ | **MWS0094XB** | 11.5 | 20.2 | 24.2 | 50.2 | 50 | 0.19 | 3 | 2 |
| | 1 | ● | **MWS0095SB** | 1.1 | 4.8 | 8.6 | 50.2 | 50 | 0.17 | 3 | 1 |
| **0.95** | 5 | ★ | **MWS0095LB** | 5.0 | 10.2 | 14.2 | 50.2 | 50 | 0.20 | 3 | 2 |
| | 12 | ★ | **MWS0095XB** | 11.6 | 20.2 | 24.2 | 50.2 | 50 | 0.20 | 3 | 2 |
| | 1 | ★ | **MWS0096SB** | 1.1 | 5.1 | 8.9 | 50.2 | 50 | 0.17 | 3 | 1 |
| **0.96** | 5 | ★ | **MWS0096LB** | 5.0 | 10.2 | 14.2 | 50.2 | 50 | 0.20 | 3 | 2 |
| | 12 | ★ | **MWS0096XB** | 11.7 | 20.2 | 24.2 | 50.2 | 50 | 0.20 | 3 | 2 |
| | 1 | ★ | **MWS0097SB** | 1.2 | 5.1 | 8.9 | 50.2 | 50 | 0.18 | 3 | 1 |
| **0.97** | 5 | ★ | **MWS0097LB** | 5.1 | 10.2 | 14.2 | 50.2 | 50 | 0.20 | 3 | 2 |
| | 12 | ★ | **MWS0097XB** | 11.8 | 20.2 | 24.2 | 50.2 | 50 | 0.20 | 3 | 2 |
| | 1 | ★ | **MWS0098SB** | 1.2 | 5.1 | 8.9 | 50.2 | 50 | 0.18 | 3 | 1 |
| **0.98** | 5 | ★ | **MWS0098LB** | 5.1 | 10.2 | 14.2 | 50.2 | 50 | 0.20 | 3 | 2 |
| | 12 | ★ | **MWS0098XB** | 12.0 | 20.2 | 24.2 | 50.2 | 50 | 0.20 | 3 | 2 |
| | 1 | ★ | **MWS0099SB** | 1.2 | 5.1 | 8.9 | 50.2 | 50 | 0.18 | 3 | 1 |
| **0.99** | 5 | ★ | **MWS0099LB** | 5.2 | 10.2 | 14.2 | 50.2 | 50 | 0.21 | 3 | 2 |
| | 12 | ★ | **MWS0099XB** | 12.1 | 20.2 | 24.2 | 50.2 | 50 | 0.21 | 3 | 2 |

Remarque 1) Veuillez nous contacter pour les géométries qui ne seraient pas dans ce catalogue (e.g. différents diamètres et longueurs peuvent être fabriqués sur demande).

# MINI-MWS

## CONDITIONS DE COUPE RECOMMANDÉES

### ■ Forets SB/LB/XB (L/D<10)

| Matière | P | | | | P | | | |
|---|---|---|---|---|---|---|---|---|
| | Acier doux (≤180HB) Ck10 | | | | Acier carbone, Acier allié (180—280HB) Ck45, 42CrMo4 | | | |
| Diamètre foret **DC** (mm) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Avance table (mm/min) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Avance table (mm/min) |
| **0.5** | 40 | 25400 | 0.010 (0.005—0.015) | 250 | 40 | 25400 | 0.010 (0.005—0.015) | 250 |
| **0.63** | 40 | 20200 | 0.014 (0.008—0.020) | 280 | 40 | 20200 | 0.014 (0.008—0.020) | 280 |
| **0.8** | 45 | 17900 | 0.028 (0.016—0.040) | 500 | 45 | 17900 | 0.028 (0.016—0.040) | 500 |
| **1.0** | 50 | 15900 | 0.035 (0.020—0.050) | 555 | 50 | 15900 | 0.035 (0.020—0.050) | 555 |

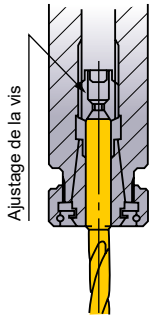
| Matière | P | | | | M | | | |
|---|---|---|---|---|---|---|---|---|
| | Acier carbone, Acier allié (280—350HB) 36CrNiMo4 | | | | Acier inoxydable austénitique (≤200HB) X5CrNi1810, X5CrNiMo17-12-2 | | | |
| Diamètre foret **DC** (mm) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Avance table (mm/min) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Avance table (mm/min) |
| **0.5** | 30 | 19000 | 0.010 (0.005—0.015) | 190 | 20 | 12700 | 0.008 (0.005—0.010) | 100 |
| **0.63** | 30 | 15100 | 0.014 (0.008—0.020) | 210 | 20 | 10100 | 0.010 (0.008—0.013) | 100 |
| **0.8** | 35 | 13900 | 0.028 (0.016—0.040) | 385 | 25 | 9900 | 0.020 (0.016—0.026) | 195 |
| **1.0** | 40 | 12700 | 0.035 (0.020—0.050) | 440 | 30 | 9500 | 0.030 (0.020—0.044) | 285 |

| Matière | K | | | | K | | | |
|---|---|---|---|---|---|---|---|---|
| | Fonte grise (≤350MPa) GG30 | | | | Fonte ductile (≤450MPa) GGG45 | | | |
| Diamètre foret **DC** (mm) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Avance table (mm/min) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Avance table (mm/min) |
| **0.5** | 40 | 25400 | 0.010 (0.005—0.015) | 250 | 30 | 19000 | 0.010 (0.005—0.015) | 190 |
| **0.63** | 40 | 20200 | 0.014 (0.008—0.020) | 280 | 30 | 15100 | 0.014 (0.008—0.020) | 210 |
| **0.8** | 45 | 17900 | 0.028 (0.016—0.040) | 500 | 35 | 13900 | 0.028 (0.016—0.040) | 385 |
| **1.0** | 50 | 15900 | 0.035 (0.020—0.050) | 555 | 40 | 12700 | 0.035 (0.020—0.050) | 440 |

| Matière | N | | | | S | | | |
|---|---|---|---|---|---|---|---|---|
| | Alliage aluminium (Si<5%) | | | | Alliage réfractaire Inconel718 | | | |
| Diamètre foret **DC** (mm) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Avance table (mm/min) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Avance table (mm/min) |
| **0.5** | 40 | 25400 | 0.014 (0.008—0.020) | 355 | 10 | 6300 | 0.006 (0.004—0.008) | 35 |
| **0.63** | 40 | 20200 | 0.020 (0.012—0.030) | 400 | 10 | 5000 | 0.008 (0.007—0.010) | 40 |
| **0.8** | 45 | 17900 | 0.036 (0.024—0.050) | 640 | 10 | 3900 | 0.016 (0.013—0.021) | 60 |
| **1.0** | 60 | 19000 | 0.050 (0.030—0.075) | 950 | 10 | 3100 | 0.020 (0.016—0.027) | 60 |

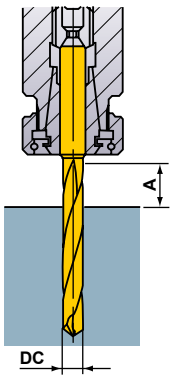
## ■ MÉTHODE D'UTILISATION

### Fixation du foret



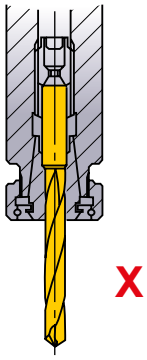

Les attachements de type à pince serrent le foret solidement.

### Longueur du foret




A ≥ DC x 2.0

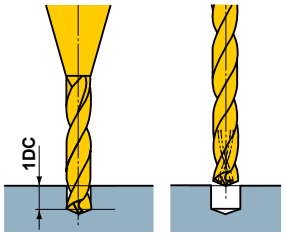
### Installation du foret



X

Ne pas serrer sur les goujures.

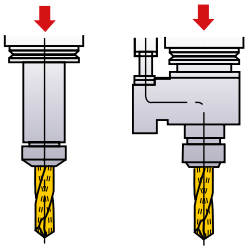
### Installation du foret




①Pour le trou pilote, utilisez le foret type SB.
②Utilisez le centrage comme guide lorsque vous employez un foret avec trou d'arrosage. Selon la méthode de coupe utilisée, un brise-copeaux est recommandé.

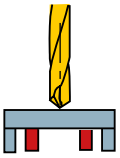
### Type d'arrosage

Arrosage par la broche | Arrosage par joint tournant



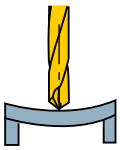
Pression recommandée du liquide de refroidissement: ≥30 bar
Nécessaire: au moins 15 bar

### Pièce mince



Rigidifier le montage

OK



En cas d'effort et de déformation

X

### Liquide réfrigérant : manipulation

1) De fines particules de copeaux viennent obstruer les trous d'huile des forets de petits diamètres. Utiliser toujours un filtre à mailles fines par mesure de prévention.

2) Les particules de saletés et poussières adhèrent au liquide de refroidissement et empêchent un bon écoulement. Le remplacement régulier du liquide de coupe est recommandé.

## ■ MODE D'EMPLOI

●Veuillez utiliser un filtre à mailles fines (maille≤5$\mu$m) pour éviter que les trous d'huile s'obstruent.

# PERÇAGE (CARBURE MONOBLOC)

# MPS1

Foret carbure à double listel

- Nouveau revêtement PVD multi-couches à base d'AlTiCrN.
- MPS1 : Double listel pour précision et fiabilité de perçage.

UWC | DP1 | 145° L/D=2 PC | 140° L/D=3–5 L/D=10–40 | 135° L/D=8 | X

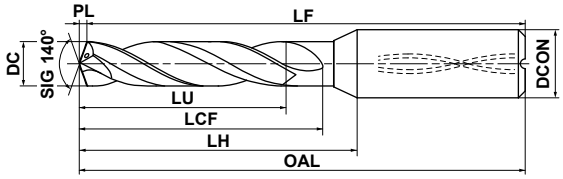
P | M | K | N | S | H

Arrosage intérieur

| | 3≤DC≤6 | 6<DC≤10 | 10<DC≤18 | 18<DC≤20 |
|---|---|---|---|---|
| DIN / PC | +0.010 −0.002 | +0.010 −0.005 | +0.005 −0.013 | +0.005 −0.016 |
| L___C | 0 −0.012 | 0 −0.015 | 0 −0.018 | 0 −0.021 |
| h6 | 0 −0.008 | 0 −0.009 | 0 −0.011 | 0 −0.013 |

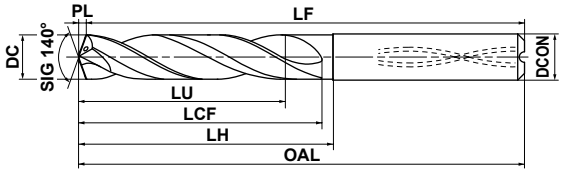
*Le trou d'arrosage de ø4,9 mm ou moins sera de forme ronde.
*SIG : L/D 3−5 et 10−40 = 140°, 8 = 135°, PC = 145°

**●Type 1** Attachement cylindrique avec dégagement conique



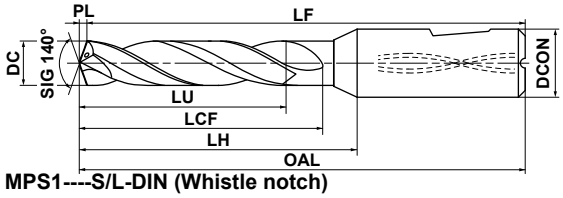

**MPS1----S/L-DIN-C/L8C-L40C**

**●Type 2** Attachement cylindrique



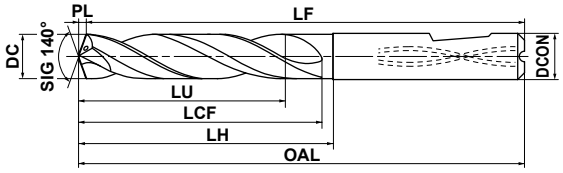

**MPS1----S/L-DIN-C/L8C-L40C**

**●Type 3** Attachement Whistle Notch avec dégagement conique




**MPS1----S/L-DIN (Whistle notch)**

**●Type 4** Attachement Whistle Notch




**MPS1----S/L-DIN (Whistle notch)**

| DC (mm) | Rapport (L/D) | DP1021 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.0 | 3 | □ | MPS1-0300S-DIN | 15.0 | 19.5 | 24.5 | 61.5 | 61 | 0.5 | 6 | 3 |
| | 3 | ● | MPS1-0300S-DIN-C | 15.0 | 19.5 | 24.5 | 61.5 | 61 | 0.5 | 6 | 1 |
| | 5 | □ | MPS1-0300L-DIN | 20.0 | 24.5 | 28.5 | 65.5 | 65 | 0.5 | 6 | 3 |
| | 5 | ● | MPS1-0300L-DIN-C | 20.0 | 24.5 | 28.5 | 65.5 | 65 | 0.5 | 6 | 1 |
| | 2 | ● | MPS1-0300-PC | 6.5 | 16.5 | 19.7 | 55.5 | 55 | 0.5 | 6 | 1 |
| | 8 | ● | MPS1-0300-L8C | 24.6 | 33.6 | 39.6 | 76.6 | 76 | 0.6 | 6 | 1 |
| | 10 | ● | MPS1-0300-L10C | 30.5 | 37.5 | 42.5 | 79.5 | 79 | 0.5 | 6 | 1 |
| | 12 | ● | MPS1-0300-L12C | 36.5 | 43.5 | 48.5 | 85.5 | 85 | 0.5 | 6 | 1 |
| | 15 | ● | MPS1-0300-L15C | 45.5 | 52.5 | 57.5 | 94.5 | 94 | 0.5 | 6 | 1 |
| | 20 | ● | MPS1-0300-L20C | 60.5 | 67.5 | 72.5 | 109.5 | 109 | 0.5 | 6 | 1 |
| | 25 | ● | MPS1-0300-L25C | 75.5 | 82.5 | 87.5 | 124.5 | 124 | 0.5 | 6 | 1 |
| | 30 | ● | MPS1-0300-L30C | 90.5 | 97.5 | 102.5 | 139.5 | 139 | 0.5 | 6 | 1 |
| | 35 | □ | MPS1-0300-L35C | 105.5 | 113.5 | 121.5 | 158.5 | 158 | 0.5 | 6 | 1 |
| | 40 | ● | MPS1-0300-L40C | 120.5 | 128.5 | 136.5 | 173.5 | 173 | 0.5 | 6 | 1 |
| 3.05 | 3 | □ | MPS1-0305S-DIN | 15.0 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 3 |
| | 3 | ● | MPS1-0305S-DIN-C | 15.0 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 1 |
| | 5 | □ | MPS1-0305L-DIN | 20.0 | 24.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 3 |
| | 5 | ● | MPS1-0305L-DIN-C | 20.0 | 24.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 1 |
| 3.1 | 3 | □ | MPS1-0310S-DIN | 14.9 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 3 |
| | 3 | ● | MPS1-0310S-DIN-C | 14.9 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 1 |
| | 5 | □ | MPS1-0310L-DIN | 19.9 | 24.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 3 |
| | 5 | ● | MPS1-0310L-DIN-C | 19.9 | 24.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 1 |
| | 2 | ● | MPS1-0310-PC | 6.7 | 18.5 | 21.6 | 55.5 | 55 | 0.5 | 6 | 1 |
| | 8 | ● | MPS1-0310-L8C | 25.4 | 39.6 | 45.6 | 82.6 | 82 | 0.6 | 6 | 1 |
| | 10 | □ | MPS1-0310-L10C | 31.6 | 44.6 | 49.6 | 86.6 | 86 | 0.6 | 6 | 1 |
| | 12 | ● | MPS1-0310-L12C | 37.8 | 51.6 | 56.6 | 93.6 | 93 | 0.6 | 6 | 1 |
| | 15 | ● | MPS1-0310-L15C | 47.1 | 61.6 | 66.6 | 103.6 | 103 | 0.6 | 6 | 1 |
| | 20 | ● | MPS1-0310-L20C | 62.6 | 79.6 | 84.6 | 121.6 | 121 | 0.6 | 6 | 1 |
| | 25 | ● | MPS1-0310-L25C | 78.1 | 96.6 | 101.6 | 138.6 | 138 | 0.6 | 6 | 1 |
| | 30 | ● | MPS1-0310-L30C | 93.6 | 114.6 | 119.6 | 156.6 | 156 | 0.6 | 6 | 1 |
| | 35 | □ | MPS1-0310-L35C | 109.1 | 123.6 | 138.6 | 175.6 | 175 | 0.6 | 6 | 1 |
| | 40 | ● | MPS1-0310-L40C | 124.6 | 138.6 | 153.6 | 190.6 | 190 | 0.6 | 6 | 1 |

| DC (mm) | Rapport (L/D) | DP1021 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.2 | 3 | □ | MPS1-0320S-DIN | 14.8 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 3 |
| | 3 | ● | MPS1-0320S-DIN-C | 14.8 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 1 |
| | 5 | □ | MPS1-0320L-DIN | 19.8 | 24.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 3 |
| | 5 | ● | MPS1-0320L-DIN-C | 19.8 | 24.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 1 |
| | 2 | ● | MPS1-0320-PC | 6.9 | 18.5 | 21.5 | 55.5 | 55 | 0.5 | 6 | 1 |
| | 8 | ● | MPS1-0320-L8C | 26.3 | 39.7 | 45.7 | 82.7 | 82 | 0.7 | 6 | 1 |
| | 10 | □ | MPS1-0320-L10C | 32.6 | 44.6 | 49.6 | 86.6 | 86 | 0.6 | 6 | 1 |
| | 12 | ● | MPS1-0320-L12C | 39.0 | 51.6 | 56.6 | 93.6 | 93 | 0.6 | 6 | 1 |
| | 15 | ● | MPS1-0320-L15C | 48.6 | 61.6 | 66.6 | 103.6 | 103 | 0.6 | 6 | 1 |
| | 20 | ● | MPS1-0320-L20C | 64.6 | 79.6 | 84.6 | 121.6 | 121 | 0.6 | 6 | 1 |
| | 25 | ● | MPS1-0320-L25C | 80.6 | 96.6 | 101.6 | 138.6 | 138 | 0.6 | 6 | 1 |
| | 30 | ● | MPS1-0320-L30C | 96.6 | 114.6 | 119.6 | 156.6 | 156 | 0.6 | 6 | 1 |
| | 35 | □ | MPS1-0320-L35C | 112.6 | 123.6 | 138.6 | 175.6 | 175 | 0.6 | 6 | 1 |
| | 40 | ● | MPS1-0320-L40C | 128.6 | 138.6 | 153.6 | 190.6 | 190 | 0.6 | 6 | 1 |
| 3.3 | 3 | □ | MPS1-0330S-DIN | 14.7 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 3 |
| | 3 | ● | MPS1-0330S-DIN-C | 14.7 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 1 |
| | 5 | □ | MPS1-0330L-DIN | 20.2 | 25.1 | 28.6 | 65.6 | 65 | 0.6 | 6 | 3 |
| | 5 | ● | MPS1-0330L-DIN-C | 20.2 | 25.1 | 28.6 | 65.6 | 65 | 0.6 | 6 | 1 |
| | 2 | ● | MPS1-0330-PC | 7.1 | 18.5 | 21.4 | 55.5 | 55 | 0.5 | 6 | 1 |
| | 8 | ● | MPS1-0330-L8C | 27.1 | 39.7 | 45.7 | 82.7 | 82 | 0.7 | 6 | 1 |
| | 10 | □ | MPS1-0330-L10C | 33.6 | 44.6 | 49.6 | 86.6 | 86 | 0.6 | 6 | 1 |
| | 12 | ● | MPS1-0330-L12C | 40.2 | 51.6 | 56.6 | 93.6 | 93 | 0.6 | 6 | 1 |
| | 15 | ● | MPS1-0330-L15C | 50.1 | 61.6 | 66.6 | 103.6 | 103 | 0.6 | 6 | 1 |
| | 20 | ● | MPS1-0330-L20C | 66.6 | 79.6 | 84.6 | 121.6 | 121 | 0.6 | 6 | 1 |
| | 25 | ● | MPS1-0330-L25C | 83.1 | 96.6 | 101.6 | 138.6 | 138 | 0.6 | 6 | 1 |
| | 30 | ● | MPS1-0330-L30C | 99.6 | 114.6 | 119.6 | 156.6 | 156 | 0.6 | 6 | 1 |
| | 35 | □ | MPS1-0330-L35C | 116.1 | 132.6 | 138.6 | 175.6 | 175 | 0.6 | 6 | 1 |
| | 40 | ● | MPS1-0330-L40C | 132.6 | 148.6 | 153.6 | 190.6 | 190 | 0.6 | 6 | 1 |

**● : Article stocké.**
**□ : Article non stocké - Fabrication sur commande uniquement.**

| DC (mm) | Rapport (L/D) | DP1021 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.4 | 3 | □ | MPS1-0340S-DIN | 14.5 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 3 |
| | 3 | ● | MPS1-0340S-DIN-C | 14.5 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 1 |
| | 5 | □ | MPS1-0340L-DIN | 20.0 | 25.1 | 28.6 | 65.6 | 65 | 0.6 | 6 | 3 |
| | 5 | ● | MPS1-0340L-DIN-C | 20.0 | 25.1 | 28.6 | 65.6 | 65 | 0.6 | 6 | 1 |
| | 2 | ● | MPS1-0340-PC | 7.3 | 18.5 | 21.3 | 55.5 | 55 | 0.5 | 6 | 1 |
| | 8 | ● | MPS1-0340-L8C | 27.9 | 39.7 | 45.7 | 82.7 | 82 | 0.7 | 6 | 1 |
| | 10 | □ | MPS1-0340-L10C | 34.6 | 44.6 | 49.6 | 86.6 | 86 | 0.6 | 6 | 1 |
| | 12 | ● | MPS1-0340-L12C | 41.4 | 51.6 | 56.6 | 93.6 | 93 | 0.6 | 6 | 1 |
| | 15 | ● | MPS1-0340-L15C | 51.6 | 61.6 | 66.6 | 103.6 | 103 | 0.6 | 6 | 1 |
| | 20 | ● | MPS1-0340-L20C | 68.6 | 79.6 | 84.6 | 121.6 | 121 | 0.6 | 6 | 1 |
| | 25 | ● | MPS1-0340-L25C | 85.6 | 96.6 | 101.6 | 138.6 | 138 | 0.6 | 6 | 1 |
| | 30 | ● | MPS1-0340-L30C | 102.6 | 114.6 | 119.6 | 156.6 | 156 | 0.6 | 6 | 1 |
| | 35 | □ | MPS1-0340-L35C | 119.6 | 132.6 | 138.6 | 175.6 | 175 | 0.6 | 6 | 1 |
| | 40 | ● | MPS1-0340-L40C | 136.6 | 148.6 | 153.6 | 190.6 | 190 | 0.6 | 6 | 1 |
| 3.5 | 3 | □ | MPS1-0350S-DIN | 14.4 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 3 |
| | 3 | ● | MPS1-0350S-DIN-C | 14.4 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 1 |
| | 5 | □ | MPS1-0350L-DIN | 19.9 | 25.1 | 28.6 | 65.6 | 65 | 0.6 | 6 | 3 |
| | 5 | ● | MPS1-0350L-DIN-C | 19.9 | 25.1 | 28.6 | 65.6 | 65 | 0.6 | 6 | 1 |
| | 2 | ● | MPS1-0350-PC | 7.6 | 18.6 | 21.2 | 55.6 | 55 | 0.6 | 6 | 1 |
| | 8 | ● | MPS1-0350-L8C | 28.7 | 39.7 | 45.7 | 82.7 | 82 | 0.7 | 6 | 1 |
| | 10 | □ | MPS1-0350-L10C | 35.6 | 44.6 | 49.6 | 86.6 | 86 | 0.6 | 6 | 1 |
| | 12 | ● | MPS1-0350-L12C | 42.6 | 51.6 | 56.6 | 93.6 | 93 | 0.6 | 6 | 1 |
| | 15 | ● | MPS1-0350-L15C | 53.1 | 61.6 | 66.6 | 103.6 | 103 | 0.6 | 6 | 1 |
| | 20 | ● | MPS1-0350-L20C | 70.6 | 79.6 | 84.6 | 121.6 | 121 | 0.6 | 6 | 1 |
| | 25 | ● | MPS1-0350-L25C | 88.1 | 96.6 | 101.6 | 138.6 | 138 | 0.6 | 6 | 1 |
| | 30 | ● | MPS1-0350-L30C | 105.6 | 114.6 | 119.6 | 156.6 | 156 | 0.6 | 6 | 1 |
| | 35 | □ | MPS1-0350-L35C | 123.1 | 132.6 | 138.6 | 175.6 | 175 | 0.6 | 6 | 1 |
| | 40 | ● | MPS1-0350-L40C | 140.6 | 148.6 | 153.6 | 190.6 | 190 | 0.6 | 6 | 1 |
| 3.6 | 3 | □ | MPS1-0360S-DIN | 14.3 | 19.7 | 24.7 | 61.7 | 61 | 0.7 | 6 | 3 |
| | 3 | ● | MPS1-0360S-DIN-C | 14.3 | 19.7 | 24.7 | 61.7 | 61 | 0.7 | 6 | 1 |
| | 5 | □ | MPS1-0360L-DIN | 19.8 | 25.2 | 28.7 | 65.7 | 65 | 0.7 | 6 | 3 |
| | 5 | ● | MPS1-0360L-DIN-C | 19.8 | 25.2 | 28.7 | 65.7 | 65 | 0.7 | 6 | 1 |
| | 2 | ● | MPS1-0360-PC | 7.8 | 20.6 | 23.1 | 55.6 | 55 | 0.6 | 6 | 1 |
| | 8 | ● | MPS1-0360-L8C | 29.5 | 44.7 | 50.7 | 87.7 | 87 | 0.7 | 6 | 1 |
| | 10 | □ | MPS1-0360-L10C | 36.7 | 50.7 | 55.7 | 92.7 | 92 | 0.7 | 6 | 1 |
| | 12 | ● | MPS1-0360-L12C | 43.9 | 58.7 | 63.7 | 100.7 | 100 | 0.7 | 6 | 1 |
| | 15 | ● | MPS1-0360-L15C | 54.7 | 70.7 | 75.7 | 112.7 | 112 | 0.7 | 6 | 1 |
| | 20 | ● | MPS1-0360-L20C | 72.7 | 90.7 | 95.7 | 132.7 | 132 | 0.7 | 6 | 1 |
| | 25 | □ | MPS1-0360-L25C | 90.7 | 110.7 | 115.7 | 152.7 | 152 | 0.7 | 6 | 1 |
| | 30 | ● | MPS1-0360-L30C | 108.7 | 130.7 | 135.7 | 172.7 | 172 | 0.7 | 6 | 1 |
| | 35 | □ | MPS1-0360-L35C | 126.7 | 143.7 | 155.7 | 192.7 | 192 | 0.7 | 6 | 1 |
| | 40 | ● | MPS1-0360-L40C | 144.7 | 160.7 | 175.7 | 212.7 | 212 | 0.7 | 6 | 1 |
| 3.7 | 3 | □ | MPS1-0370S-DIN | 14.1 | 19.7 | 24.7 | 61.7 | 61 | 0.7 | 6 | 3 |
| | 3 | ● | MPS1-0370S-DIN-C | 14.1 | 19.7 | 24.7 | 61.7 | 61 | 0.7 | 6 | 1 |
| | 5 | □ | MPS1-0370L-DIN | 20.1 | 25.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 3 |
| | 5 | ● | MPS1-0370L-DIN-C | 20.1 | 25.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 1 |
| | 2 | ● | MPS1-0370-PC | 8.0 | 20.6 | 23.1 | 55.6 | 55 | 0.6 | 6 | 1 |
| | 8 | ● | MPS1-0370-L8C | 30.4 | 44.8 | 50.8 | 87.8 | 87 | 0.8 | 6 | 1 |
| | 10 | □ | MPS1-0370-L10C | 37.7 | 50.7 | 55.7 | 92.7 | 92 | 0.7 | 6 | 1 |
| | 12 | ● | MPS1-0370-L12C | 45.1 | 58.7 | 63.7 | 100.7 | 100 | 0.7 | 6 | 1 |
| | 15 | ● | MPS1-0370-L15C | 56.2 | 70.7 | 75.7 | 112.7 | 112 | 0.7 | 6 | 1 |
| | 20 | ● | MPS1-0370-L20C | 74.7 | 90.7 | 95.7 | 132.7 | 132 | 0.7 | 6 | 1 |
| | 25 | ● | MPS1-0370-L25C | 93.2 | 110.7 | 115.7 | 152.7 | 152 | 0.7 | 6 | 1 |
| | 30 | ● | MPS1-0370-L30C | 111.7 | 130.7 | 135.7 | 172.7 | 172 | 0.7 | 6 | 1 |
| | 35 | □ | MPS1-0370-L35C | 130.2 | 143.7 | 155.7 | 192.7 | 192 | 0.7 | 6 | 1 |
| | 40 | ● | MPS1-0370-L40C | 148.7 | 160.7 | 175.7 | 212.7 | 212 | 0.7 | 6 | 1 |

| DC (mm) | Rapport (L/D) | DP1021 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.8 | 3 | □ | MPS1-0380S-DIN | 18.0 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 3 |
| | 3 | ● | MPS1-0380S-DIN-C | 18.0 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 1 |
| | 5 | □ | MPS1-0380L-DIN | 28.0 | 33.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 3 |
| | 5 | ● | MPS1-0380L-DIN-C | 28.0 | 33.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 1 |
| | 2 | ● | MPS1-0380-PC | 8.2 | 20.6 | 23.0 | 55.6 | 55 | 0.6 | 6 | 1 |
| | 8 | ● | MPS1-0380-L8C | 31.2 | 44.8 | 50.8 | 87.8 | 87 | 0.8 | 6 | 1 |
| | 10 | □ | MPS1-0380-L10C | 38.7 | 50.7 | 55.7 | 92.7 | 92 | 0.7 | 6 | 1 |
| | 12 | ● | MPS1-0380-L12C | 46.3 | 58.7 | 63.7 | 100.7 | 100 | 0.7 | 6 | 1 |
| | 15 | ● | MPS1-0380-L15C | 57.7 | 70.7 | 75.7 | 112.7 | 112 | 0.7 | 6 | 1 |
| | 20 | ● | MPS1-0380-L20C | 76.7 | 90.7 | 95.7 | 132.7 | 132 | 0.7 | 6 | 1 |
| | 25 | ● | MPS1-0380-L25C | 95.7 | 110.7 | 115.7 | 152.7 | 152 | 0.7 | 6 | 1 |
| | 30 | ● | MPS1-0380-L30C | 114.7 | 130.7 | 135.7 | 172.7 | 172 | 0.7 | 6 | 1 |
| | 35 | □ | MPS1-0380-L35C | 133.7 | 150.7 | 155.7 | 192.7 | 192 | 0.7 | 6 | 1 |
| | 40 | ● | MPS1-0380-L40C | 152.7 | 170.7 | 175.7 | 212.7 | 212 | 0.7 | 6 | 1 |
| 3.9 | 3 | □ | MPS1-0390S-DIN | 17.9 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 3 |
| | 3 | ● | MPS1-0390S-DIN-C | 17.9 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 1 |
| | 5 | □ | MPS1-0390L-DIN | 27.9 | 33.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 3 |
| | 5 | ● | MPS1-0390L-DIN-C | 27.9 | 33.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 1 |
| | 2 | ● | MPS1-0390-PC | 8.4 | 20.6 | 22.9 | 55.6 | 55 | 0.6 | 6 | 1 |
| | 8 | ● | MPS1-0390-L8C | 32.0 | 44.8 | 50.8 | 87.8 | 87 | 0.8 | 6 | 1 |
| | 10 | □ | MPS1-0390-L10C | 39.7 | 50.7 | 55.7 | 92.7 | 92 | 0.7 | 6 | 1 |
| | 12 | ● | MPS1-0390-L12C | 47.5 | 58.7 | 63.7 | 100.7 | 100 | 0.7 | 6 | 1 |
| | 15 | ● | MPS1-0390-L15C | 59.2 | 70.7 | 75.7 | 112.7 | 112 | 0.7 | 6 | 1 |
| | 20 | ● | MPS1-0390-L20C | 78.7 | 90.7 | 95.7 | 132.7 | 132 | 0.7 | 6 | 1 |
| | 25 | □ | MPS1-0390-L25C | 98.2 | 110.7 | 115.7 | 152.7 | 152 | 0.7 | 6 | 1 |
| | 30 | ● | MPS1-0390-L30C | 117.7 | 130.7 | 135.7 | 172.7 | 172 | 0.7 | 6 | 1 |
| | 35 | □ | MPS1-0390-L35C | 137.2 | 150.7 | 155.7 | 192.7 | 192 | 0.7 | 6 | 1 |
| | 40 | ● | MPS1-0390-L40C | 156.7 | 170.7 | 175.7 | 212.7 | 212 | 0.7 | 6 | 1 |
| 4.0 | 3 | □ | MPS1-0400S-DIN | 17.7 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 3 |
| | 3 | ● | MPS1-0400S-DIN-C | 17.7 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 1 |
| | 5 | □ | MPS1-0400L-DIN | 27.7 | 33.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 3 |
| | 5 | ● | MPS1-0400L-DIN-C | 27.7 | 33.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 1 |
| | 2 | ● | MPS1-0400-PC | 8.6 | 20.6 | 22.8 | 55.6 | 55 | 0.6 | 6 | 1 |
| | 8 | ● | MPS1-0400-L8C | 32.8 | 44.8 | 50.8 | 87.8 | 87 | 0.8 | 6 | 1 |
| | 10 | ● | MPS1-0400-L10C | 40.7 | 50.7 | 55.7 | 92.7 | 92 | 0.7 | 6 | 1 |
| | 12 | ● | MPS1-0400-L12C | 48.7 | 58.7 | 63.7 | 100.7 | 100 | 0.7 | 6 | 1 |
| | 15 | ● | MPS1-0400-L15C | 60.7 | 70.7 | 75.7 | 112.7 | 112 | 0.7 | 6 | 1 |
| | 20 | ● | MPS1-0400-L20C | 80.7 | 90.7 | 95.7 | 132.7 | 132 | 0.7 | 6 | 1 |
| | 25 | ● | MPS1-0400-L25C | 100.7 | 110.7 | 115.7 | 152.7 | 152 | 0.7 | 6 | 1 |
| | 30 | ● | MPS1-0400-L30C | 120.7 | 130.7 | 135.7 | 172.7 | 172 | 0.7 | 6 | 1 |
| | 35 | □ | MPS1-0400-L35C | 140.7 | 150.7 | 155.7 | 192.7 | 192 | 0.7 | 6 | 1 |
| | 40 | ● | MPS1-0400-L40C | 160.7 | 170.7 | 175.7 | 212.7 | 212 | 0.7 | 6 | 1 |
| 4.05 | 3 | □ | MPS1-0405S-DIN | 17.7 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 3 |
| | 3 | ● | MPS1-0405S-DIN-C | 17.7 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 1 |
| | 5 | □ | MPS1-0405L-DIN | 27.7 | 33.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 3 |
| | 5 | ● | MPS1-0405L-DIN-C | 27.7 | 33.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 1 |

CONDITIONS DE COUPE ➤ M059
MÉTHODE D'UTILISATION ➤ M060
DONNÉES TECHNIQUES ➤ P001

# MPS1

Foret carbure à double listel

| DC (mm) | Rapport (L/D) | DP1021 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.1 | 3 | □ | MPS1-0410S-DIN | 17.6 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 3 |
| | 3 | ● | MPS1-0410S-DIN-C | 17.6 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 1 |
| | 5 | □ | MPS1-0410L-DIN | 27.6 | 33.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 3 |
| | 5 | ● | MPS1-0410L-DIN-C | 27.6 | 33.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 1 |
| | 2 | ● | MPS1-0410-PC | 8.8 | 22.6 | 24.7 | 62.6 | 62 | 0.6 | 6 | 1 |
| | 8 | ● | MPS1-0410-L8C | 33.6 | 50.8 | 55.8 | 92.8 | 92 | 0.8 | 6 | 1 |
| | 10 | □ | MPS1-0410-L10C | 41.7 | 58.7 | 62.7 | 99.7 | 99 | 0.7 | 6 | 1 |
| | 12 | ● | MPS1-0410-L12C | 49.9 | 67.7 | 71.7 | 108.7 | 108 | 0.7 | 6 | 1 |
| | 15 | ● | MPS1-0410-L15C | 62.2 | 80.7 | 84.7 | 121.7 | 121 | 0.7 | 6 | 1 |
| | 20 | ● | MPS1-0410-L20C | 82.7 | 103.7 | 107.7 | 144.7 | 144 | 0.7 | 6 | 1 |
| | 25 | ● | MPS1-0410-L25C | 103.2 | 125.7 | 129.7 | 166.7 | 166 | 0.7 | 6 | 1 |
| | 30 | ● | MPS1-0410-L30C | 123.7 | 148.7 | 152.7 | 189.7 | 189 | 0.7 | 6 | 1 |
| | 35 | □ | MPS1-0410-L35C | 144.2 | 164.7 | 174.7 | 211.7 | 211 | 0.7 | 6 | 1 |
| | 40 | ● | MPS1-0410-L40C | 164.7 | 184.7 | 198.7 | 235.7 | 235 | 0.7 | 6 | 1 |
| 4.2 | 3 | □ | MPS1-0420S-DIN | 17.5 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 3 |
| | 3 | ● | MPS1-0420S-DIN-C | 17.5 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 1 |
| | 5 | □ | MPS1-0420L-DIN | 28.0 | 34.3 | 36.8 | 73.8 | 73 | 0.8 | 6 | 3 |
| | 5 | ● | MPS1-0420L-DIN-C | 28.0 | 34.3 | 36.8 | 73.8 | 73 | 0.8 | 6 | 1 |
| | 2 | ● | MPS1-0420-PC | 9.1 | 22.7 | 24.6 | 62.7 | 62 | 0.7 | 6 | 1 |
| | 8 | ● | MPS1-0420-L8C | 34.5 | 50.9 | 55.9 | 92.9 | 92 | 0.9 | 6 | 1 |
| | 10 | □ | MPS1-0420-L10C | 42.8 | 58.8 | 62.8 | 99.8 | 99 | 0.8 | 6 | 1 |
| | 12 | ● | MPS1-0420-L12C | 51.2 | 67.8 | 71.8 | 108.8 | 108 | 0.8 | 6 | 1 |
| | 15 | ● | MPS1-0420-L15C | 63.8 | 80.8 | 84.8 | 121.8 | 121 | 0.8 | 6 | 1 |
| | 20 | ● | MPS1-0420-L20C | 84.8 | 103.8 | 107.8 | 144.8 | 144 | 0.8 | 6 | 1 |
| | 25 | ● | MPS1-0420-L25C | 105.8 | 125.8 | 129.8 | 166.8 | 166 | 0.8 | 6 | 1 |
| | 30 | ● | MPS1-0420-L30C | 126.8 | 148.8 | 152.8 | 189.8 | 189 | 0.8 | 6 | 1 |
| | 35 | ● | MPS1-0420-L35C | 147.8 | 164.8 | 174.8 | 211.8 | 211 | 0.8 | 6 | 1 |
| | 40 | ● | MPS1-0420-L40C | 168.8 | 184.8 | 198.8 | 235.8 | 235 | 0.8 | 6 | 1 |
| 4.3 | 3 | □ | MPS1-0430S-DIN | 17.3 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 3 |
| | 3 | ● | MPS1-0430S-DIN-C | 17.3 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 1 |
| | 5 | □ | MPS1-0430L-DIN | 27.8 | 34.3 | 36.8 | 73.8 | 73 | 0.8 | 6 | 3 |
| | 5 | ● | MPS1-0430L-DIN-C | 27.8 | 34.3 | 36.8 | 73.8 | 73 | 0.8 | 6 | 1 |
| | 2 | ● | MPS1-0430-PC | 9.3 | 22.7 | 24.5 | 62.7 | 62 | 0.7 | 6 | 1 |
| | 8 | ● | MPS1-0430-L8C | 35.3 | 50.9 | 55.9 | 92.9 | 92 | 0.9 | 6 | 1 |
| | 10 | □ | MPS1-0430-L10C | 43.8 | 58.8 | 62.8 | 99.8 | 99 | 0.8 | 6 | 1 |
| | 12 | ● | MPS1-0430-L12C | 52.4 | 67.8 | 71.8 | 108.8 | 108 | 0.8 | 6 | 1 |
| | 15 | ● | MPS1-0430-L15C | 65.3 | 80.8 | 84.8 | 121.8 | 121 | 0.8 | 6 | 1 |
| | 20 | ● | MPS1-0430-L20C | 86.8 | 103.8 | 107.8 | 144.8 | 144 | 0.8 | 6 | 1 |
| | 25 | ● | MPS1-0430-L25C | 108.3 | 125.8 | 129.8 | 166.8 | 166 | 0.8 | 6 | 1 |
| | 30 | ● | MPS1-0430-L30C | 129.8 | 148.8 | 152.8 | 189.8 | 189 | 0.8 | 6 | 1 |
| | 35 | □ | MPS1-0430-L35C | 151.3 | 170.8 | 174.8 | 211.8 | 211 | 0.8 | 6 | 1 |
| | 40 | ● | MPS1-0430-L40C | 172.8 | 194.8 | 198.8 | 235.8 | 235 | 0.8 | 6 | 1 |
| 4.4 | 3 | □ | MPS1-0440S-DIN | 17.2 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 3 |
| | 3 | ● | MPS1-0440S-DIN-C | 17.2 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 1 |
| | 5 | □ | MPS1-0440L-DIN | 27.7 | 34.3 | 36.8 | 73.8 | 73 | 0.8 | 6 | 3 |
| | 5 | ● | MPS1-0440L-DIN-C | 27.7 | 34.3 | 36.8 | 73.8 | 73 | 0.8 | 6 | 1 |
| | 2 | ● | MPS1-0440-PC | 9.5 | 22.7 | 24.4 | 62.7 | 62 | 0.7 | 6 | 1 |
| | 8 | ● | MPS1-0440-L8C | 36.1 | 50.9 | 55.9 | 92.9 | 92 | 0.9 | 6 | 1 |
| | 10 | □ | MPS1-0440-L10C | 44.8 | 58.8 | 62.8 | 99.8 | 99 | 0.8 | 6 | 1 |
| | 12 | ● | MPS1-0440-L12C | 53.6 | 67.8 | 71.8 | 108.8 | 108 | 0.8 | 6 | 1 |
| | 15 | ● | MPS1-0440-L15C | 66.8 | 80.8 | 84.8 | 121.8 | 121 | 0.8 | 6 | 1 |
| | 20 | □ | MPS1-0440-L20C | 88.8 | 103.8 | 107.8 | 144.8 | 144 | 0.8 | 6 | 1 |
| | 25 | □ | MPS1-0440-L25C | 110.8 | 125.8 | 129.8 | 166.8 | 166 | 0.8 | 6 | 1 |
| | 30 | □ | MPS1-0440-L30C | 132.8 | 148.8 | 152.8 | 189.8 | 189 | 0.8 | 6 | 1 |
| | 35 | □ | MPS1-0440-L35C | 154.8 | 170.8 | 174.8 | 211.8 | 211 | 0.8 | 6 | 1 |
| | 40 | ● | MPS1-0440-L40C | 176.8 | 194.8 | 198.8 | 235.8 | 235 | 0.8 | 6 | 1 |

| DC (mm) | Rapport (L/D) | DP1021 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.5 | 3 | □ | MPS1-0450S-DIN | 17.1 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 3 |
| | 3 | ● | MPS1-0450S-DIN-C | 17.1 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 1 |
| | 5 | □ | MPS1-0450L-DIN | 27.6 | 34.3 | 36.8 | 73.8 | 73 | 0.8 | 6 | 3 |
| | 5 | ● | MPS1-0450L-DIN-C | 27.6 | 34.3 | 36.8 | 73.8 | 73 | 0.8 | 6 | 1 |
| | 2 | ● | MPS1-0450-PC | 9.7 | 22.7 | 24.3 | 62.7 | 62 | 0.7 | 6 | 1 |
| | 8 | ● | MPS1-0450-L8C | 36.9 | 50.9 | 55.9 | 92.9 | 92 | 0.9 | 6 | 1 |
| | 10 | □ | MPS1-0450-L10C | 45.8 | 58.8 | 62.8 | 99.8 | 99 | 0.8 | 6 | 1 |
| | 12 | ● | MPS1-0450-L12C | 54.8 | 67.8 | 71.8 | 108.8 | 108 | 0.8 | 6 | 1 |
| | 15 | ● | MPS1-0450-L15C | 68.3 | 80.8 | 84.8 | 121.8 | 121 | 0.8 | 6 | 1 |
| | 20 | ● | MPS1-0450-L20C | 90.8 | 103.8 | 107.8 | 144.8 | 144 | 0.8 | 6 | 1 |
| | 25 | ● | MPS1-0450-L25C | 113.3 | 125.8 | 129.8 | 166.8 | 166 | 0.8 | 6 | 1 |
| | 30 | ● | MPS1-0450-L30C | 135.8 | 148.8 | 152.8 | 189.8 | 189 | 0.8 | 6 | 1 |
| | 35 | □ | MPS1-0450-L35C | 158.3 | 170.8 | 174.8 | 211.8 | 211 | 0.8 | 6 | 1 |
| | 40 | ● | MPS1-0450-L40C | 180.8 | 194.8 | 198.8 | 235.8 | 235 | 0.8 | 6 | 1 |
| 4.6 | 3 | □ | MPS1-0460S-DIN | 16.9 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 4 |
| | 3 | ● | MPS1-0460S-DIN-C | 16.9 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 2 |
| | 5 | □ | MPS1-0460L-DIN | 28.9 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 4 |
| | 5 | ● | MPS1-0460L-DIN-C | 28.9 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 2 |
| | 2 | ● | MPS1-0460-PC | 9.9 | 24.7 | 27.7 | 62.7 | 62 | 0.7 | 6 | 2 |
| | 8 | ● | MPS1-0460-L8C | 37.8 | 56.0 | 59.0 | 96.0 | 95 | 1.0 | 6 | 2 |
| | 10 | □ | MPS1-0460-L10C | 46.8 | 65.8 | 68.8 | 105.8 | 105 | 0.8 | 6 | 2 |
| | 12 | ● | MPS1-0460-L12C | 56.0 | 75.8 | 78.8 | 115.8 | 115 | 0.8 | 6 | 2 |
| | 15 | ● | MPS1-0460-L15C | 69.8 | 90.8 | 93.8 | 130.8 | 130 | 0.8 | 6 | 2 |
| | 20 | ● | MPS1-0460-L20C | 92.8 | 115.8 | 118.8 | 155.8 | 155 | 0.8 | 6 | 2 |
| | 25 | ● | MPS1-0460-L25C | 115.8 | 140.8 | 143.8 | 180.8 | 180 | 0.8 | 6 | 2 |
| | 30 | ● | MPS1-0460-L30C | 138.8 | 165.8 | 168.8 | 205.8 | 205 | 0.8 | 6 | 2 |
| | 35 | □ | MPS1-0460-L35C | 161.8 | 184.8 | 192.8 | 229.8 | 229 | 0.8 | 6 | 2 |
| | 40 | ● | MPS1-0460-L40C | 184.8 | 204.8 | 217.8 | 254.8 | 254 | 0.8 | 6 | 2 |
| 4.65 | 3 | □ | MPS1-0465S-DIN | 16.9 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 4 |
| | 3 | ● | MPS1-0465S-DIN-C | 16.9 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 2 |
| | 5 | □ | MPS1-0465L-DIN | 28.9 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 4 |
| | 5 | ● | MPS1-0465L-DIN-C | 28.9 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 2 |
| 4.7 | 3 | □ | MPS1-0470S-DIN | 16.8 | 23.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 4 |
| | 3 | ● | MPS1-0470S-DIN-C | 16.8 | 23.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 2 |
| | 5 | □ | MPS1-0470L-DIN | 28.8 | 35.9 | 36.9 | 73.9 | 73 | 0.9 | 6 | 4 |
| | 5 | ● | MPS1-0470L-DIN-C | 28.8 | 35.9 | 36.9 | 73.9 | 73 | 0.9 | 6 | 2 |
| | 2 | ● | MPS1-0470-PC | 10.1 | 24.7 | 27.7 | 62.7 | 62 | 0.7 | 6 | 2 |
| | 8 | ● | MPS1-0470-L8C | 38.6 | 56.0 | 59.0 | 96.0 | 95 | 1.0 | 6 | 2 |
| | 10 | □ | MPS1-0470-L10C | 47.9 | 65.9 | 68.9 | 105.9 | 105 | 0.9 | 6 | 2 |
| | 12 | ● | MPS1-0470-L12C | 57.3 | 75.9 | 78.9 | 115.9 | 115 | 0.9 | 6 | 2 |
| | 15 | ● | MPS1-0470-L15C | 71.4 | 90.9 | 93.9 | 130.9 | 130 | 0.9 | 6 | 2 |
| | 20 | ● | MPS1-0470-L20C | 94.9 | 115.9 | 118.9 | 155.9 | 155 | 0.9 | 6 | 2 |
| | 25 | ● | MPS1-0470-L25C | 118.4 | 140.9 | 143.9 | 180.9 | 180 | 0.9 | 6 | 2 |
| | 30 | ● | MPS1-0470-L30C | 141.9 | 165.9 | 168.9 | 205.9 | 205 | 0.9 | 6 | 2 |
| | 35 | □ | MPS1-0470-L35C | 165.4 | 184.9 | 192.9 | 229.9 | 229 | 0.9 | 6 | 2 |
| | 40 | ● | MPS1-0470-L40C | 188.9 | 204.9 | 217.9 | 254.9 | 254 | 0.9 | 6 | 2 |

● : Article stocké.

□ : Article non stocké - Fabrication sur commande uniquement.

| DC (mm) | Rapport (L/D) | DP1021 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.8 | 3 | □ | MPS1-0480S-DIN | 20.7 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 4 |
| | 3 | ● | MPS1-0480S-DIN-C | 20.7 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 2 |
| | 5 | □ | MPS1-0480L-DIN | 36.7 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 4 |
| | 5 | ● | MPS1-0480L-DIN-C | 36.7 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 2 |
| | 2 | ● | MPS1-0480-PC | 10.4 | 24.8 | 27.8 | 62.8 | 62 | 0.8 | 6 | 2 |
| | 8 | ● | MPS1-0480-L8C | 39.4 | 56.0 | 59.0 | 96.0 | 95 | 1.0 | 6 | 2 |
| | 10 | □ | MPS1-0480-L10C | 48.9 | 65.9 | 68.9 | 105.9 | 105 | 0.9 | 6 | 2 |
| | 12 | ● | MPS1-0480-L12C | 58.5 | 75.9 | 78.9 | 115.9 | 115 | 0.9 | 6 | 2 |
| | 15 | ● | MPS1-0480-L15C | 72.9 | 90.9 | 93.9 | 130.9 | 130 | 0.9 | 6 | 2 |
| | 20 | ● | MPS1-0480-L20C | 96.9 | 115.9 | 118.9 | 155.9 | 155 | 0.9 | 6 | 2 |
| | 25 | ● | MPS1-0480-L25C | 120.9 | 140.9 | 143.9 | 180.9 | 180 | 0.9 | 6 | 2 |
| | 30 | ● | MPS1-0480-L30C | 144.9 | 165.9 | 168.9 | 205.9 | 205 | 0.9 | 6 | 2 |
| | 35 | □ | MPS1-0480-L35C | 168.9 | 190.9 | 192.9 | 229.9 | 229 | 0.9 | 6 | 2 |
| | 40 | ● | MPS1-0480-L40C | 192.9 | 215.9 | 217.9 | 254.9 | 254 | 0.9 | 6 | 2 |
| 4.9 | 3 | □ | MPS1-0490S-DIN | 20.5 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 4 |
| | 3 | ● | MPS1-0490S-DIN-C | 20.5 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 2 |
| | 5 | □ | MPS1-0490L-DIN | 36.5 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 4 |
| | 5 | ● | MPS1-0490L-DIN-C | 36.5 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 2 |
| | 2 | ● | MPS1-0490-PC | 10.6 | 24.8 | 27.8 | 62.8 | 62 | 0.8 | 6 | 2 |
| | 8 | ● | MPS1-0490-L8C | 40.2 | 56.0 | 59.0 | 96.0 | 95 | 1.0 | 6 | 2 |
| | 10 | □ | MPS1-0490-L10C | 49.9 | 65.9 | 68.9 | 105.9 | 105 | 0.9 | 6 | 2 |
| | 12 | ● | MPS1-0490-L12C | 59.7 | 75.9 | 78.9 | 115.9 | 115 | 0.9 | 6 | 2 |
| | 15 | ● | MPS1-0490-L15C | 74.4 | 90.9 | 93.9 | 130.9 | 130 | 0.9 | 6 | 2 |
| | 20 | □ | MPS1-0490-L20C | 98.9 | 115.9 | 118.9 | 155.9 | 155 | 0.9 | 6 | 2 |
| | 25 | ● | MPS1-0490-L25C | 123.4 | 140.9 | 143.9 | 180.9 | 180 | 0.9 | 6 | 2 |
| | 30 | ● | MPS1-0490-L30C | 147.9 | 165.9 | 168.9 | 205.9 | 205 | 0.9 | 6 | 2 |
| | 35 | □ | MPS1-0490-L35C | 172.4 | 190.9 | 192.9 | 229.9 | 229 | 0.9 | 6 | 2 |
| | 40 | ● | MPS1-0490-L40C | 196.9 | 215.9 | 217.9 | 254.9 | 254 | 0.9 | 6 | 2 |
| 5.0 | 3 | □ | MPS1-0500S-DIN | 20.4 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 4 |
| | 3 | ● | MPS1-0500S-DIN-C | 20.4 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 2 |
| | 5 | □ | MPS1-0500L-DIN | 36.4 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 4 |
| | 5 | ● | MPS1-0500L-DIN-C | 36.4 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 2 |
| | 2 | ● | MPS1-0500-PC | 10.8 | 24.8 | 25.8 | 62.8 | 62 | 0.8 | 6 | 2 |
| | 8 | ● | MPS1-0500-L8C | 41.0 | 56.0 | 59.0 | 96.0 | 95 | 1.0 | 6 | 2 |
| | 10 | ● | MPS1-0500-L10C | 50.9 | 65.9 | 68.9 | 105.9 | 105 | 0.9 | 6 | 2 |
| | 12 | ● | MPS1-0500-L12C | 60.9 | 75.9 | 78.9 | 115.9 | 115 | 0.9 | 6 | 2 |
| | 15 | ● | MPS1-0500-L15C | 75.9 | 90.9 | 93.9 | 130.9 | 130 | 0.9 | 6 | 2 |
| | 20 | ● | MPS1-0500-L20C | 100.9 | 115.9 | 118.9 | 155.9 | 155 | 0.9 | 6 | 2 |
| | 25 | ● | MPS1-0500-L25C | 125.9 | 140.9 | 143.9 | 180.9 | 180 | 0.9 | 6 | 2 |
| | 30 | ● | MPS1-0500-L30C | 150.9 | 165.9 | 168.9 | 205.9 | 205 | 0.9 | 6 | 2 |
| | 35 | □ | MPS1-0500-L35C | 175.9 | 190.9 | 192.9 | 229.9 | 229 | 0.9 | 6 | 2 |
| | 40 | ● | MPS1-0500-L40C | 200.9 | 215.9 | 217.9 | 254.9 | 254 | 0.9 | 6 | 2 |
| 5.05 | 3 | □ | MPS1-0505S-DIN | 20.3 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 4 |
| | 3 | ● | MPS1-0505S-DIN-C | 20.3 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 2 |
| | 5 | □ | MPS1-0505L-DIN | 36.3 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 4 |
| | 5 | ● | MPS1-0505L-DIN-C | 36.3 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 2 |

| DC (mm) | Rapport (L/D) | DP1021 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.1 | 3 | □ | MPS1-0510S-DIN | 20.3 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 4 |
| | 3 | ● | MPS1-0510S-DIN-C | 20.3 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 2 |
| | 5 | □ | MPS1-0510L-DIN | 36.3 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 4 |
| | 5 | ● | MPS1-0510L-DIN-C | 36.3 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 2 |
| | 2 | ● | MPS1-0510-PC | 11.0 | 26.8 | 28.8 | 66.8 | 66 | 0.8 | 6 | 2 |
| | 8 | ● | MPS1-0510-L8C | 41.9 | 62.1 | 65.1 | 102.1 | 101 | 1.1 | 6 | 2 |
| | 10 | □ | MPS1-0510-L10C | 51.9 | 72.9 | 75.9 | 112.9 | 112 | 0.9 | 6 | 2 |
| | 12 | ● | MPS1-0510-L12C | 62.1 | 83.9 | 86.9 | 123.9 | 123 | 0.9 | 6 | 2 |
| | 15 | ● | MPS1-0510-L15C | 77.4 | 99.9 | 102.9 | 139.9 | 139 | 0.9 | 6 | 2 |
| | 20 | ● | MPS1-0510-L20C | 102.9 | 127.9 | 130.9 | 167.9 | 167 | 0.9 | 6 | 2 |
| | 25 | ● | MPS1-0510-L25C | 128.4 | 154.9 | 157.9 | 194.9 | 194 | 0.9 | 6 | 2 |
| | 30 | ● | MPS1-0510-L30C | 153.9 | 182.9 | 185.9 | 222.9 | 222 | 0.9 | 6 | 2 |
| | 35 | □ | MPS1-0510-L35C | 179.4 | 203.9 | 211.9 | 248.9 | 248 | 0.9 | 6 | 2 |
| | 40 | ● | MPS1-0510-L40C | 204.9 | 230.9 | 241.9 | 278.9 | 278 | 0.9 | 6 | 2 |
| 5.2 | 3 | □ | MPS1-0520S-DIN | 20.1 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 4 |
| | 3 | ● | MPS1-0520S-DIN-C | 20.1 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 2 |
| | 5 | □ | MPS1-0520L-DIN | 36.1 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 4 |
| | 5 | ● | MPS1-0520L-DIN-C | 36.1 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 2 |
| | 2 | ● | MPS1-0520-PC | 11.2 | 26.8 | 28.8 | 66.8 | 66 | 0.8 | 6 | 2 |
| | 8 | ● | MPS1-0520-L8C | 42.7 | 62.1 | 65.1 | 102.1 | 101 | 1.1 | 6 | 2 |
| | 10 | □ | MPS1-0520-L10C | 52.9 | 72.9 | 75.9 | 112.9 | 112 | 0.9 | 6 | 2 |
| | 12 | ● | MPS1-0520-L12C | 63.3 | 83.9 | 86.9 | 123.9 | 123 | 0.9 | 6 | 2 |
| | 15 | ● | MPS1-0520-L15C | 78.9 | 99.9 | 102.9 | 139.9 | 139 | 0.9 | 6 | 2 |
| | 20 | ● | MPS1-0520-L20C | 104.9 | 127.9 | 130.9 | 167.9 | 167 | 0.9 | 6 | 2 |
| | 25 | ● | MPS1-0520-L25C | 130.9 | 154.9 | 157.9 | 194.9 | 194 | 0.9 | 6 | 2 |
| | 30 | ● | MPS1-0520-L30C | 156.9 | 182.9 | 185.9 | 222.9 | 222 | 0.9 | 6 | 2 |
| | 35 | □ | MPS1-0520-L35C | 182.9 | 203.9 | 211.9 | 248.9 | 248 | 0.9 | 6 | 2 |
| | 40 | ● | MPS1-0520-L40C | 208.9 | 230.9 | 241.9 | 278.9 | 278 | 0.9 | 6 | 2 |
| 5.3 | 3 | □ | MPS1-0530S-DIN | 20.0 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 4 |
| | 3 | ● | MPS1-0530S-DIN-C | 20.0 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 2 |
| | 5 | □ | MPS1-0530L-DIN | 36.0 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 4 |
| | 5 | ● | MPS1-0530L-DIN-C | 36.0 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 2 |
| | 2 | ● | MPS1-0530-PC | 11.4 | 26.8 | 28.8 | 66.8 | 66 | 0.8 | 6 | 2 |
| | 8 | ● | MPS1-0530-L8C | 43.5 | 62.1 | 65.1 | 102.1 | 101 | 1.1 | 6 | 2 |
| | 10 | □ | MPS1-0530-L10C | 54.0 | 73.0 | 76.0 | 113.0 | 112 | 1.0 | 6 | 2 |
| | 12 | ● | MPS1-0530-L12C | 64.6 | 84.0 | 87.0 | 124.0 | 123 | 1.0 | 6 | 2 |
| | 15 | ● | MPS1-0530-L15C | 80.5 | 100.0 | 103.0 | 140.0 | 139 | 1.0 | 6 | 2 |
| | 20 | □ | MPS1-0530-L20C | 107.0 | 128.0 | 131.0 | 168.0 | 167 | 1.0 | 6 | 2 |
| | 25 | ● | MPS1-0530-L25C | 133.5 | 155.0 | 158.0 | 195.0 | 194 | 1.0 | 6 | 2 |
| | 30 | ● | MPS1-0530-L30C | 160.0 | 183.0 | 186.0 | 223.0 | 222 | 1.0 | 6 | 2 |
| | 35 | □ | MPS1-0530-L35C | 186.5 | 210.0 | 212.0 | 249.0 | 248 | 1.0 | 6 | 2 |
| | 40 | ● | MPS1-0530-L40C | 213.0 | 241.0 | 242.0 | 279.0 | 278 | 1.0 | 6 | 2 |
| 5.4 | 3 | □ | MPS1-0540S-DIN | 19.9 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 2 |
| | 3 | ● | MPS1-0540S-DIN-C | 19.9 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 4 |
| | 5 | □ | MPS1-0540L-DIN | 35.9 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 4 |
| | 5 | ● | MPS1-0540L-DIN-C | 35.9 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 2 |
| | 2 | ● | MPS1-0540-PC | 11.7 | 26.9 | 28.9 | 66.9 | 66 | 0.9 | 6 | 2 |
| | 8 | ● | MPS1-0540-L8C | 44.3 | 62.1 | 65.1 | 102.1 | 101 | 1.1 | 6 | 2 |
| | 10 | □ | MPS1-0540-L10C | 55.0 | 73.0 | 76.0 | 113.0 | 112 | 1.0 | 6 | 2 |
| | 12 | ● | MPS1-0540-L12C | 65.8 | 84.0 | 87.0 | 124.0 | 123 | 1.0 | 6 | 2 |
| | 15 | ● | MPS1-0540-L15C | 82.0 | 100.0 | 103.0 | 140.0 | 139 | 1.0 | 6 | 2 |
| | 20 | ● | MPS1-0540-L20C | 109.0 | 128.0 | 131.0 | 168.0 | 167 | 1.0 | 6 | 2 |
| | 25 | □ | MPS1-0540-L25C | 136.0 | 155.0 | 158.0 | 195.0 | 194 | 1.0 | 6 | 2 |
| | 30 | □ | MPS1-0540-L30C | 163.0 | 183.0 | 186.0 | 223.0 | 222 | 1.0 | 6 | 2 |
| | 35 | □ | MPS1-0540-L35C | 190.0 | 210.0 | 212.0 | 249.0 | 248 | 1.0 | 6 | 2 |
| | 40 | ● | MPS1-0540-L40C | 217.0 | 241.0 | 242.0 | 279.0 | 278 | 1.0 | 6 | 2 |

CONDITIONS DE COUPE ➤ M059
MÉTHODE D'UTILISATION ➤ M060
DONNÉES TECHNIQUES ➤ P001

# MPS1

Foret carbure à double listel

| DC (mm) | Rapport (L/D) | DP1021 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.5 | 3 | □ | MPS1-0550S-DIN | 19.8 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 4 |
| | 3 | ● | MPS1-0550S-DIN-C | 19.8 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 2 |
| | 5 | □ | MPS1-0550L-DIN | 35.8 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 4 |
| | 5 | ● | MPS1-0550L-DIN-C | 35.8 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 2 |
| | 2 | ● | MPS1-0550-PC | 11.9 | 26.9 | 28.9 | 66.9 | 66 | 0.9 | 6 | 2 |
| | 8 | ● | MPS1-0550-L8C | 45.1 | 62.1 | 65.1 | 102.1 | 101 | 1.1 | 6 | 2 |
| | 10 | □ | MPS1-0550-L10C | 56.0 | 73.0 | 76.0 | 113.0 | 112 | 1.0 | 6 | 2 |
| | 12 | ● | MPS1-0550-L12C | 67.0 | 84.0 | 87.0 | 124.0 | 123 | 1.0 | 6 | 2 |
| | 15 | ● | MPS1-0550-L15C | 83.5 | 100.0 | 103.0 | 140.0 | 139 | 1.0 | 6 | 2 |
| | 20 | ● | MPS1-0550-L20C | 111.0 | 128.0 | 131.0 | 168.0 | 167 | 1.0 | 6 | 2 |
| | 25 | ● | MPS1-0550-L25C | 138.5 | 155.0 | 158.0 | 195.0 | 194 | 1.0 | 6 | 2 |
| | 30 | ● | MPS1-0550-L30C | 166.0 | 183.0 | 186.0 | 223.0 | 222 | 1.0 | 6 | 2 |
| | 35 | □ | MPS1-0550-L35C | 193.5 | 210.0 | 212.0 | 249.0 | 248 | 1.0 | 6 | 2 |
| | 40 | ● | MPS1-0550-L40C | 221.0 | 241.0 | 242.0 | 279.0 | 278 | 1.0 | 6 | 2 |
| 5.55 | 3 | □ | MPS1-0555S-DIN | 19.7 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 4 |
| | 3 | ● | MPS1-0555S-DIN-C | 19.7 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 2 |
| | 5 | □ | MPS1-0555L-DIN | 35.7 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 4 |
| | 5 | ● | MPS1-0555L-DIN-C | 35.7 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 2 |
| 5.6 | 3 | □ | MPS1-0560S-DIN | 19.6 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 4 |
| | 3 | ● | MPS1-0560S-DIN-C | 19.6 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 2 |
| | 5 | □ | MPS1-0560L-DIN | 35.6 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 4 |
| | 5 | ● | MPS1-0560L-DIN-C | 35.6 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 2 |
| | 2 | ● | MPS1-0560-PC | 12.1 | 28.9 | 28.9 | 66.9 | 66 | 0.9 | 6 | 2 |
| | 8 | ● | MPS1-0560-L8C | 46.0 | 67.2 | 70.2 | 107.2 | 106 | 1.2 | 6 | 2 |
| | 10 | □ | MPS1-0560-L10C | 57.0 | 79.0 | 82.0 | 119.0 | 118 | 1.0 | 6 | 2 |
| | 12 | ● | MPS1-0560-L12C | 68.2 | 91.0 | 94.0 | 131.0 | 130 | 1.0 | 6 | 2 |
| | 15 | ● | MPS1-0560-L15C | 85.0 | 109.0 | 112.0 | 149.0 | 148 | 1.0 | 6 | 2 |
| | 20 | □ | MPS1-0560-L20C | 113.0 | 139.0 | 142.0 | 179.0 | 178 | 1.0 | 6 | 2 |
| | 25 | □ | MPS1-0560-L25C | 141.0 | 169.0 | 172.0 | 209.0 | 208 | 1.0 | 6 | 2 |
| | 30 | ● | MPS1-0560-L30C | 169.0 | 199.0 | 202.0 | 239.0 | 238 | 1.0 | 6 | 2 |
| | 35 | □ | MPS1-0560-L35C | 197.0 | 223.0 | 231.0 | 268.0 | 267 | 1.0 | 6 | 2 |
| | 40 | ● | MPS1-0560-L40C | 225.0 | 251.0 | 262.0 | 299.0 | 298 | 1.0 | 6 | 2 |
| 5.7 | 3 | □ | MPS1-0570S-DIN | 19.5 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 4 |
| | 3 | ● | MPS1-0570S-DIN-C | 19.5 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 2 |
| | 5 | □ | MPS1-0570L-DIN | 35.5 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 4 |
| | 5 | ● | MPS1-0570L-DIN-C | 35.5 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 2 |
| | 2 | ● | MPS1-0570-PC | 12.3 | 28.9 | 28.9 | 66.9 | 66 | 0.9 | 6 | 2 |
| | 8 | ● | MPS1-0570-L8C | 46.8 | 67.2 | 70.2 | 107.2 | 106 | 1.2 | 6 | 2 |
| | 10 | □ | MPS1-0570-L10C | 58.0 | 79.0 | 82.0 | 119.0 | 118 | 1.0 | 6 | 2 |
| | 12 | ● | MPS1-0570-L12C | 69.4 | 91.0 | 94.0 | 131.0 | 130 | 1.0 | 6 | 2 |
| | 15 | ● | MPS1-0570-L15C | 86.5 | 109.0 | 112.0 | 149.0 | 148 | 1.0 | 6 | 2 |
| | 20 | □ | MPS1-0570-L20C | 115.0 | 139.0 | 142.0 | 179.0 | 178 | 1.0 | 6 | 2 |
| | 25 | ● | MPS1-0570-L25C | 143.5 | 169.0 | 172.0 | 209.0 | 208 | 1.0 | 6 | 2 |
| | 30 | □ | MPS1-0570-L30C | 172.0 | 199.0 | 202.0 | 239.0 | 238 | 1.0 | 6 | 2 |
| | 35 | □ | MPS1-0570-L35C | 200.5 | 223.0 | 231.0 | 268.0 | 267 | 1.0 | 6 | 2 |
| | 40 | ● | MPS1-0570-L40C | 229.0 | 251.0 | 262.0 | 299.0 | 298 | 1.0 | 6 | 2 |

| DC (mm) | Rapport (L/D) | DP1021 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.8 | 3 | □ | MPS1-0580S-DIN | 19.4 | 28.1 | 29.1 | 66.1 | 65 | 1.1 | 6 | 4 |
| | 3 | ● | MPS1-0580S-DIN-C | 19.4 | 28.1 | 29.1 | 66.1 | 65 | 1.1 | 6 | 2 |
| | 5 | □ | MPS1-0580L-DIN | 35.4 | 44.1 | 45.1 | 82.1 | 81 | 1.1 | 6 | 4 |
| | 5 | ● | MPS1-0580L-DIN-C | 35.4 | 44.1 | 45.1 | 82.1 | 81 | 1.1 | 6 | 2 |
| | 2 | ● | MPS1-0580-PC | 12.5 | 28.9 | 28.9 | 66.9 | 66 | 0.9 | 6 | 2 |
| | 8 | ● | MPS1-0580-L8C | 47.6 | 67.2 | 70.2 | 107.2 | 106 | 1.2 | 6 | 2 |
| | 10 | □ | MPS1-0580-L10C | 59.1 | 79.1 | 82.1 | 119.1 | 118 | 1.1 | 6 | 2 |
| | 12 | ● | MPS1-0580-L12C | 70.7 | 91.1 | 94.1 | 131.1 | 130 | 1.1 | 6 | 2 |
| | 15 | ● | MPS1-0580-L15C | 88.1 | 109.1 | 112.1 | 149.1 | 148 | 1.1 | 6 | 2 |
| | 20 | ● | MPS1-0580-L20C | 117.1 | 139.1 | 142.1 | 179.1 | 178 | 1.1 | 6 | 2 |
| | 25 | □ | MPS1-0580-L25C | 146.1 | 169.1 | 172.1 | 209.1 | 208 | 1.1 | 6 | 2 |
| | 30 | ● | MPS1-0580-L30C | 175.1 | 199.1 | 202.1 | 239.1 | 238 | 1.1 | 6 | 2 |
| | 35 | □ | MPS1-0580-L35C | 204.1 | 229.1 | 231.1 | 268.1 | 267 | 1.1 | 6 | 2 |
| | 40 | ● | MPS1-0580-L40C | 233.1 | 261.1 | 262.1 | 299.1 | 298 | 1.1 | 6 | 2 |
| 5.9 | 3 | □ | MPS1-0590S-DIN | 19.2 | 28.1 | 29.1 | 66.1 | 65 | 1.1 | 6 | 4 |
| | 3 | ● | MPS1-0590S-DIN-C | 19.2 | 28.1 | 29.1 | 66.1 | 65 | 1.1 | 6 | 2 |
| | 5 | □ | MPS1-0590L-DIN | 35.2 | 44.1 | 45.1 | 82.1 | 81 | 1.1 | 6 | 4 |
| | 5 | ● | MPS1-0590L-DIN-C | 35.2 | 44.1 | 45.1 | 82.1 | 81 | 1.1 | 6 | 2 |
| | 2 | ● | MPS1-0590-PC | 12.7 | 28.9 | 28.9 | 66.9 | 66 | 0.9 | 6 | 2 |
| | 8 | ● | MPS1-0590-L8C | 48.4 | 67.2 | 70.2 | 107.2 | 106 | 1.2 | 6 | 2 |
| | 10 | □ | MPS1-0590-L10C | 60.1 | 79.1 | 82.1 | 119.1 | 118 | 1.1 | 6 | 2 |
| | 12 | ● | MPS1-0590-L12C | 71.9 | 91.1 | 94.1 | 131.1 | 130 | 1.1 | 6 | 2 |
| | 15 | ● | MPS1-0590-L15C | 89.6 | 109.1 | 112.1 | 149.1 | 148 | 1.1 | 6 | 2 |
| | 20 | ● | MPS1-0590-L20C | 119.1 | 139.1 | 142.1 | 179.1 | 178 | 1.1 | 6 | 2 |
| | 25 | ● | MPS1-0590-L25C | 148.6 | 169.1 | 172.1 | 209.1 | 208 | 1.1 | 6 | 2 |
| | 30 | □ | MPS1-0590-L30C | 178.1 | 199.1 | 202.1 | 239.1 | 238 | 1.1 | 6 | 2 |
| | 35 | □ | MPS1-0590-L35C | 207.6 | 229.1 | 231.1 | 268.1 | 267 | 1.1 | 6 | 2 |
| | 40 | ● | MPS1-0590-L40C | 237.1 | 261.1 | 262.1 | 299.1 | 298 | 1.1 | 6 | 2 |
| 6.0 | 3 | □ | MPS1-0600S-DIN | 19.1 | 28.1 | 29.1 | 66.1 | 65 | 1.1 | 6 | 4 |
| | 3 | ● | MPS1-0600S-DIN-C | 19.1 | 28.1 | 29.1 | 66.1 | 65 | 1.1 | 6 | 2 |
| | 5 | □ | MPS1-0600L-DIN | 35.1 | 44.1 | 45.1 | 82.1 | 81 | 1.1 | 6 | 4 |
| | 5 | ● | MPS1-0600L-DIN-C | 35.1 | 44.1 | 45.1 | 82.1 | 81 | 1.1 | 6 | 2 |
| | 2 | ● | MPS1-0600-PC | 12.9 | 28.9 | 28.9 | 66.9 | 66 | 0.9 | 6 | 2 |
| | 8 | ● | MPS1-0600-L8C | 49.2 | 67.2 | 70.2 | 107.2 | 106 | 1.2 | 6 | 2 |
| | 10 | ● | MPS1-0600-L10C | 61.1 | 79.1 | 82.1 | 119.1 | 118 | 1.1 | 6 | 2 |
| | 12 | ● | MPS1-0600-L12C | 73.1 | 91.1 | 94.1 | 131.1 | 130 | 1.1 | 6 | 2 |
| | 15 | ● | MPS1-0600-L15C | 91.1 | 109.1 | 112.1 | 149.1 | 148 | 1.1 | 6 | 2 |
| | 20 | ● | MPS1-0600-L20C | 121.1 | 139.1 | 142.1 | 179.1 | 178 | 1.1 | 6 | 2 |
| | 25 | ● | MPS1-0600-L25C | 151.1 | 169.1 | 172.1 | 209.1 | 208 | 1.1 | 6 | 2 |
| | 30 | ● | MPS1-0600-L30C | 181.1 | 199.1 | 202.1 | 239.1 | 238 | 1.1 | 6 | 2 |
| | 35 | □ | MPS1-0600-L35C | 211.1 | 229.1 | 231.1 | 268.1 | 267 | 1.1 | 6 | 2 |
| | 40 | ● | MPS1-0600-L40C | 241.1 | 261.1 | 262.1 | 299.1 | 298 | 1.1 | 6 | 2 |
| 6.05 | 3 | □ | MPS1-0605S-DIN | 25.0 | 34.1 | 42.1 | 79.1 | 78 | 1.1 | 8 | 4 |
| | 3 | ● | MPS1-0605S-DIN-C | 25.0 | 34.1 | 42.1 | 79.1 | 78 | 1.1 | 8 | 2 |
| | 5 | □ | MPS1-0605L-DIN | 44.0 | 53.1 | 54.1 | 91.1 | 90 | 1.1 | 8 | 4 |
| | 5 | ● | MPS1-0605L-DIN-C | 44.0 | 53.1 | 54.1 | 91.1 | 90 | 1.1 | 8 | 2 |

● : Article stocké.

□ : Article non stocké - Fabrication sur commande uniquement.

| DC (mm) | Rapport (L/D) | DP1021 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.1 | 3 | □ | MPS1-0610S-DIN | 25.0 | 34.1 | 42.1 | 79.1 | 78 | 1.1 | 8 | 4 |
| | 3 | ● | MPS1-0610S-DIN-C | 25.0 | 34.1 | 42.1 | 79.1 | 78 | 1.1 | 8 | 2 |
| | 5 | □ | MPS1-0610L-DIN | 44.0 | 53.1 | 54.1 | 91.1 | 90 | 1.1 | 8 | 4 |
| | 5 | ● | MPS1-0610L-DIN-C | 44.0 | 53.1 | 54.1 | 91.1 | 90 | 1.1 | 8 | 2 |
| | 2 | ● | MPS1-0610-PC | 13.2 | 32.0 | 35.0 | 75.0 | 74 | 1.0 | 8 | 2 |
| | 8 | ● | MPS1-0610-L8C | 50.1 | 73.3 | 76.3 | 113.3 | 112 | 1.3 | 8 | 2 |
| | 10 | □ | MPS1-0610-L10C | 62.1 | 86.1 | 89.1 | 126.1 | 125 | 1.1 | 8 | 2 |
| | 12 | ● | MPS1-0610-L12C | 74.3 | 99.1 | 102.1 | 139.1 | 138 | 1.1 | 8 | 2 |
| | 15 | ● | MPS1-0610-L15C | 92.6 | 118.1 | 121.1 | 158.1 | 157 | 1.1 | 8 | 2 |
| | 20 | ● | MPS1-0610-L20C | 123.1 | 151.1 | 154.1 | 191.1 | 190 | 1.1 | 8 | 2 |
| | 25 | ● | MPS1-0610-L25C | 153.6 | 183.1 | 186.1 | 223.1 | 222 | 1.1 | 8 | 2 |
| | 30 | ● | MPS1-0610-L30C | 184.1 | 216.1 | 219.1 | 256.1 | 255 | 1.1 | 8 | 2 |
| | 35 | □ | MPS1-0610-L35C | 214.6 | 241.1 | 250.1 | 287.1 | 286 | 1.1 | 8 | 2 |
| | 40 | ● | MPS1-0610-L40C | 245.1 | 271.1 | 284.1 | 321.1 | 320 | 1.1 | 8 | 2 |
| 6.2 | 3 | □ | MPS1-0620S-DIN | 24.8 | 34.1 | 42.1 | 79.1 | 78 | 1.1 | 8 | 4 |
| | 3 | ● | MPS1-0620S-DIN-C | 24.8 | 34.1 | 42.1 | 79.1 | 78 | 1.1 | 8 | 2 |
| | 5 | □ | MPS1-0620L-DIN | 43.8 | 53.1 | 54.1 | 91.1 | 90 | 1.1 | 8 | 4 |
| | 5 | ● | MPS1-0620L-DIN-C | 43.8 | 53.1 | 54.1 | 91.1 | 90 | 1.1 | 8 | 2 |
| | 2 | ● | MPS1-0620-PC | 13.4 | 32.0 | 35.0 | 75.0 | 74 | 1.0 | 8 | 2 |
| | 8 | ● | MPS1-0620-L8C | 50.9 | 73.3 | 76.3 | 113.3 | 112 | 1.3 | 8 | 2 |
| | 10 | □ | MPS1-0620-L10C | 63.1 | 86.1 | 89.1 | 126.1 | 125 | 1.1 | 8 | 2 |
| | 12 | ● | MPS1-0620-L12C | 75.5 | 99.1 | 102.1 | 139.1 | 138 | 1.1 | 8 | 2 |
| | 15 | ● | MPS1-0620-L15C | 94.1 | 118.1 | 121.1 | 158.1 | 157 | 1.1 | 8 | 2 |
| | 20 | ● | MPS1-0620-L20C | 125.1 | 151.1 | 154.1 | 191.1 | 190 | 1.1 | 8 | 2 |
| | 25 | □ | MPS1-0620-L25C | 156.1 | 183.1 | 186.1 | 223.1 | 222 | 1.1 | 8 | 2 |
| | 30 | ● | MPS1-0620-L30C | 187.1 | 216.1 | 219.1 | 256.1 | 255 | 1.1 | 8 | 2 |
| | 35 | □ | MPS1-0620-L35C | 218.1 | 241.1 | 250.1 | 287.1 | 286 | 1.1 | 8 | 2 |
| | 40 | ● | MPS1-0620-L40C | 249.1 | 271.1 | 284.1 | 321.1 | 320 | 1.1 | 8 | 2 |
| 6.3 | 3 | □ | MPS1-0630S-DIN | 24.7 | 34.1 | 42.1 | 79.1 | 78 | 1.1 | 8 | 4 |
| | 3 | ● | MPS1-0630S-DIN-C | 24.7 | 34.1 | 42.1 | 79.1 | 78 | 1.1 | 8 | 2 |
| | 5 | □ | MPS1-0630L-DIN | 43.7 | 53.1 | 54.1 | 91.1 | 90 | 1.1 | 8 | 4 |
| | 5 | ● | MPS1-0630L-DIN-C | 43.7 | 53.1 | 54.1 | 91.1 | 90 | 1.1 | 8 | 2 |
| | 2 | ● | MPS1-0630-PC | 13.6 | 32.0 | 35.0 | 75.0 | 74 | 1.0 | 8 | 2 |
| | 8 | ● | MPS1-0630-L8C | 51.7 | 73.3 | 76.3 | 113.3 | 112 | 1.3 | 8 | 2 |
| | 10 | □ | MPS1-0630-L10C | 64.1 | 86.1 | 89.1 | 126.1 | 125 | 1.1 | 8 | 2 |
| | 12 | ● | MPS1-0630-L12C | 76.7 | 99.1 | 102.1 | 139.1 | 138 | 1.1 | 8 | 2 |
| | 15 | ● | MPS1-0630-L15C | 95.6 | 118.1 | 121.1 | 158.1 | 157 | 1.1 | 8 | 2 |
| | 20 | ● | MPS1-0630-L20C | 127.1 | 151.1 | 154.1 | 191.1 | 190 | 1.1 | 8 | 2 |
| | 25 | □ | MPS1-0630-L25C | 158.6 | 183.1 | 186.1 | 223.1 | 222 | 1.1 | 8 | 2 |
| | 30 | ● | MPS1-0630-L30C | 190.1 | 216.1 | 219.1 | 256.1 | 255 | 1.1 | 8 | 2 |
| | 35 | □ | MPS1-0630-L35C | 221.6 | 248.1 | 250.1 | 287.1 | 286 | 1.1 | 8 | 2 |
| | 40 | ● | MPS1-0630-L40C | 253.1 | 281.1 | 284.1 | 321.1 | 320 | 1.1 | 8 | 2 |
| 6.4 | 3 | □ | MPS1-0640S-DIN | 24.6 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 4 |
| | 3 | ● | MPS1-0640S-DIN-C | 24.6 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 2 |
| | 5 | □ | MPS1-0640L-DIN | 43.6 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 4 |
| | 5 | ● | MPS1-0640L-DIN-C | 43.6 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 2 |
| | 2 | ● | MPS1-0640-PC | 13.8 | 32.0 | 35.0 | 75.0 | 74 | 1.0 | 8 | 2 |
| | 8 | ● | MPS1-0640-L8C | 52.5 | 73.3 | 76.3 | 113.3 | 112 | 1.3 | 8 | 2 |
| | 10 | □ | MPS1-0640-L10C | 65.2 | 86.2 | 89.2 | 126.2 | 125 | 1.2 | 8 | 2 |
| | 12 | ● | MPS1-0640-L12C | 78.0 | 99.2 | 102.2 | 139.2 | 138 | 1.2 | 8 | 2 |
| | 15 | ● | MPS1-0640-L15C | 97.2 | 118.2 | 121.2 | 158.2 | 157 | 1.2 | 8 | 2 |
| | 20 | ● | MPS1-0640-L20C | 129.2 | 151.2 | 154.2 | 191.2 | 190 | 1.2 | 8 | 2 |
| | 25 | ● | MPS1-0640-L25C | 161.2 | 183.2 | 186.2 | 223.2 | 222 | 1.2 | 8 | 2 |
| | 30 | ● | MPS1-0640-L30C | 193.2 | 216.2 | 219.2 | 256.2 | 255 | 1.2 | 8 | 2 |
| | 35 | □ | MPS1-0640-L35C | 225.2 | 248.2 | 250.2 | 287.2 | 286 | 1.2 | 8 | 2 |
| | 40 | ● | MPS1-0640-L40C | 257.2 | 281.2 | 284.2 | 321.2 | 320 | 1.2 | 8 | 2 |

| DC (mm) | Rapport (L/D) | DP1021 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.5 | 3 | □ | MPS1-0650S-DIN | 24.4 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 4 |
| | 3 | ● | MPS1-0650S-DIN-C | 24.4 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 2 |
| | 5 | □ | MPS1-0650L-DIN | 43.4 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 4 |
| | 5 | ● | MPS1-0650L-DIN-C | 43.4 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 2 |
| | 2 | ● | MPS1-0650-PC | 14.0 | 32.0 | 35.0 | 75.0 | 74 | 1.0 | 8 | 2 |
| | 8 | ● | MPS1-0650-L8C | 53.3 | 73.3 | 76.3 | 113.3 | 112 | 1.3 | 8 | 2 |
| | 10 | □ | MPS1-0650-L10C | 66.2 | 86.2 | 89.2 | 126.2 | 125 | 1.2 | 8 | 2 |
| | 12 | ● | MPS1-0650-L12C | 79.2 | 99.2 | 102.2 | 139.2 | 138 | 1.2 | 8 | 2 |
| | 15 | ● | MPS1-0650-L15C | 98.7 | 118.2 | 121.2 | 158.2 | 157 | 1.2 | 8 | 2 |
| | 20 | ● | MPS1-0650-L20C | 131.2 | 151.2 | 154.2 | 191.2 | 190 | 1.2 | 8 | 2 |
| | 25 | ● | MPS1-0650-L25C | 163.7 | 183.2 | 186.2 | 223.2 | 222 | 1.2 | 8 | 2 |
| | 30 | ● | MPS1-0650-L30C | 196.2 | 216.2 | 219.2 | 256.2 | 255 | 1.2 | 8 | 2 |
| | 35 | □ | MPS1-0650-L35C | 228.7 | 248.2 | 250.2 | 287.2 | 286 | 1.2 | 8 | 2 |
| | 40 | ● | MPS1-0650-L40C | 261.2 | 281.2 | 284.2 | 321.2 | 320 | 1.2 | 8 | 2 |
| 6.6 | 3 | □ | MPS1-0660S-DIN | 24.3 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 4 |
| | 3 | ● | MPS1-0660S-DIN-C | 24.3 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 2 |
| | 5 | □ | MPS1-0660L-DIN | 43.3 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 4 |
| | 5 | ● | MPS1-0660L-DIN-C | 43.3 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 2 |
| | 2 | ● | MPS1-0660-PC | 14.2 | 35.0 | 37.0 | 75.0 | 74 | 1.0 | 8 | 2 |
| | 8 | ● | MPS1-0660-L8C | 54.2 | 78.4 | 81.4 | 118.4 | 117 | 1.4 | 8 | 2 |
| | 10 | □ | MPS1-0660-L10C | 67.2 | 92.2 | 95.2 | 132.2 | 131 | 1.2 | 8 | 2 |
| | 12 | ● | MPS1-0660-L12C | 80.4 | 106.2 | 109.2 | 146.2 | 145 | 1.2 | 8 | 2 |
| | 15 | ● | MPS1-0660-L15C | 100.2 | 127.2 | 130.2 | 167.2 | 166 | 1.2 | 8 | 2 |
| | 20 | □ | MPS1-0660-L20C | 133.2 | 162.2 | 165.2 | 202.2 | 201 | 1.2 | 8 | 2 |
| | 25 | ● | MPS1-0660-L25C | 166.2 | 197.2 | 200.2 | 237.2 | 236 | 1.2 | 8 | 2 |
| | 30 | ● | MPS1-0660-L30C | 199.2 | 232.2 | 235.2 | 272.2 | 271 | 1.2 | 8 | 2 |
| | 35 | □ | MPS1-0660-L35C | 232.2 | 267.2 | 269.2 | 306.2 | 305 | 1.2 | 8 | 2 |
| | 40 | ● | MPS1-0660-L40C | 265.2 | 301.2 | 304.2 | 341.2 | 340 | 1.2 | 8 | 2 |
| 6.7 | 3 | □ | MPS1-0670S-DIN | 24.2 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 4 |
| | 3 | ● | MPS1-0670S-DIN-C | 24.2 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 2 |
| | 5 | □ | MPS1-0670L-DIN | 43.2 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 4 |
| | 5 | ● | MPS1-0670L-DIN-C | 43.2 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 2 |
| | 2 | ● | MPS1-0670-PC | 14.5 | 35.1 | 37.1 | 75.1 | 74 | 1.1 | 8 | 2 |
| | 8 | ● | MPS1-0670-L8C | 55.0 | 78.4 | 81.4 | 118.4 | 117 | 1.4 | 8 | 2 |
| | 10 | □ | MPS1-0670-L10C | 68.2 | 92.2 | 95.2 | 132.2 | 131 | 1.2 | 8 | 2 |
| | 12 | ● | MPS1-0670-L12C | 81.6 | 106.2 | 109.2 | 146.2 | 145 | 1.2 | 8 | 2 |
| | 15 | ● | MPS1-0670-L15C | 101.7 | 127.2 | 130.2 | 167.2 | 166 | 1.2 | 8 | 2 |
| | 20 | □ | MPS1-0670-L20C | 135.2 | 162.2 | 165.2 | 202.2 | 201 | 1.2 | 8 | 2 |
| | 25 | □ | MPS1-0670-L25C | 168.7 | 197.2 | 200.2 | 237.2 | 236 | 1.2 | 8 | 2 |
| | 30 | ● | MPS1-0670-L30C | 202.2 | 232.2 | 235.2 | 272.2 | 271 | 1.2 | 8 | 2 |
| | 35 | □ | MPS1-0670-L35C | 235.7 | 267.2 | 269.2 | 306.2 | 305 | 1.2 | 8 | 2 |
| | 40 | ● | MPS1-0670-L40C | 269.2 | 301.2 | 304.2 | 341.2 | 340 | 1.2 | 8 | 2 |
| 6.8 | 3 | □ | MPS1-0680S-DIN | 24.0 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 4 |
| | 3 | ● | MPS1-0680S-DIN-C | 24.0 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 2 |
| | 5 | □ | MPS1-0680L-DIN | 43.0 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 4 |
| | 5 | ● | MPS1-0680L-DIN-C | 43.0 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 2 |
| | 2 | ● | MPS1-0680-PC | 14.7 | 35.1 | 37.1 | 75.1 | 74 | 1.1 | 8 | 2 |
| | 8 | ● | MPS1-0680-L8C | 55.8 | 78.4 | 81.4 | 118.4 | 117 | 1.4 | 8 | 2 |
| | 10 | □ | MPS1-0680-L10C | 69.2 | 92.2 | 95.2 | 132.2 | 131 | 1.2 | 8 | 2 |
| | 12 | ● | MPS1-0680-L12C | 82.8 | 106.2 | 109.2 | 146.2 | 145 | 1.2 | 8 | 2 |
| | 15 | ● | MPS1-0680-L15C | 103.2 | 127.2 | 130.2 | 167.2 | 166 | 1.2 | 8 | 2 |
| | 20 | ● | MPS1-0680-L20C | 137.2 | 162.2 | 165.2 | 202.2 | 201 | 1.2 | 8 | 2 |
| | 25 | ● | MPS1-0680-L25C | 171.2 | 197.2 | 200.2 | 237.2 | 236 | 1.2 | 8 | 2 |
| | 30 | ● | MPS1-0680-L30C | 205.2 | 232.2 | 235.2 | 272.2 | 271 | 1.2 | 8 | 2 |
| | 35 | □ | MPS1-0680-L35C | 239.2 | 267.2 | 269.2 | 306.2 | 305 | 1.2 | 8 | 2 |
| | 40 | ● | MPS1-0680-L40C | 273.2 | 301.2 | 304.2 | 341.2 | 340 | 1.2 | 8 | 2 |

CONDITIONS DE COUPE ➤ M059
MÉTHODE D'UTILISATION ➤ M060
DONNÉES TECHNIQUES ➤ P001

# MPS1

Foret carbure à double listel

| DC (mm) | Rapport (L/D) | DP1021 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.9 | 3 | □ | MPS1-0690S-DIN | 23.9 | 34.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 4 |
| | 3 | ● | MPS1-0690S-DIN-C | 23.9 | 34.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 2 |
| | 5 | □ | MPS1-0690L-DIN | 42.9 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 4 |
| | 5 | ● | MPS1-0690L-DIN-C | 42.9 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 2 |
| | 2 | ● | MPS1-0690-PC | 14.9 | 35.1 | 37.1 | 75.1 | 74 | 1.1 | 8 | 2 |
| | 8 | ● | MPS1-0690-L8C | 56.6 | 78.4 | 81.4 | 118.4 | 117 | 1.4 | 8 | 2 |
| | 10 | □ | MPS1-0690-L10C | 70.3 | 92.3 | 95.3 | 132.3 | 131 | 1.3 | 8 | 2 |
| | 12 | ● | MPS1-0690-L12C | 84.1 | 106.3 | 109.3 | 146.3 | 145 | 1.3 | 8 | 2 |
| | 15 | ● | MPS1-0690-L15C | 104.8 | 127.3 | 130.3 | 167.3 | 166 | 1.3 | 8 | 2 |
| | 20 | ● | MPS1-0690-L20C | 139.3 | 162.3 | 165.3 | 202.3 | 201 | 1.3 | 8 | 2 |
| | 25 | ● | MPS1-0690-L25C | 173.8 | 197.3 | 200.3 | 237.3 | 236 | 1.3 | 8 | 2 |
| | 30 | ● | MPS1-0690-L30C | 208.3 | 232.3 | 235.3 | 272.3 | 271 | 1.3 | 8 | 2 |
| | 35 | □ | MPS1-0690-L35C | 242.8 | 267.3 | 269.3 | 306.3 | 305 | 1.3 | 8 | 2 |
| | 40 | ● | MPS1-0690-L40C | 277.3 | 301.3 | 304.3 | 341.3 | 340 | 1.3 | 8 | 2 |
| 7.0 | 3 | □ | MPS1-0700S-DIN | 23.8 | 34.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 4 |
| | 3 | ● | MPS1-0700S-DIN-C | 23.8 | 34.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 2 |
| | 5 | □ | MPS1-0700L-DIN | 42.8 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 4 |
| | 5 | ● | MPS1-0700L-DIN-C | 42.8 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 2 |
| | 2 | ● | MPS1-0700-PC | 15.1 | 35.1 | 37.1 | 75.1 | 74 | 1.1 | 8 | 2 |
| | 8 | ● | MPS1-0700-L8C | 57.4 | 78.4 | 81.4 | 118.4 | 117 | 1.4 | 8 | 2 |
| | 10 | ● | MPS1-0700-L10C | 71.3 | 92.3 | 95.3 | 132.3 | 131 | 1.3 | 8 | 2 |
| | 12 | ● | MPS1-0700-L12C | 85.3 | 106.3 | 109.3 | 146.3 | 145 | 1.3 | 8 | 2 |
| | 15 | ● | MPS1-0700-L15C | 106.3 | 127.3 | 130.3 | 167.3 | 166 | 1.3 | 8 | 2 |
| | 20 | ● | MPS1-0700-L20C | 141.3 | 162.3 | 165.3 | 202.3 | 201 | 1.3 | 8 | 2 |
| | 25 | ● | MPS1-0700-L25C | 176.3 | 197.3 | 200.3 | 237.3 | 236 | 1.3 | 8 | 2 |
| | 30 | ● | MPS1-0700-L30C | 211.3 | 232.3 | 235.3 | 272.3 | 271 | 1.3 | 8 | 2 |
| | 35 | □ | MPS1-0700-L35C | 246.3 | 267.3 | 269.3 | 306.3 | 305 | 1.3 | 8 | 2 |
| | 40 | ● | MPS1-0700-L40C | 281.3 | 301.3 | 304.3 | 341.3 | 340 | 1.3 | 8 | 2 |
| 7.1 | 3 | □ | MPS1-0710S-DIN | 30.6 | 41.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 4 |
| | 3 | ● | MPS1-0710S-DIN-C | 30.6 | 41.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 2 |
| | 5 | □ | MPS1-0710L-DIN | 42.6 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 4 |
| | 5 | ● | MPS1-0710L-DIN-C | 42.6 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 2 |
| | 2 | ● | MPS1-0710-PC | 15.3 | 35.1 | 38.1 | 80.1 | 79 | 1.1 | 8 | 2 |
| | 8 | ● | MPS1-0710-L8C | 58.3 | 84.5 | 87.5 | 124.5 | 123 | 1.5 | 8 | 2 |
| | 10 | □ | MPS1-0710-L10C | 72.3 | 99.3 | 102.3 | 139.3 | 138 | 1.3 | 8 | 2 |
| | 12 | ● | MPS1-0710-L12C | 86.5 | 114.3 | 117.3 | 154.3 | 153 | 1.3 | 8 | 2 |
| | 15 | ● | MPS1-0710-L15C | 107.8 | 136.3 | 139.3 | 176.3 | 175 | 1.3 | 8 | 2 |
| | 20 | ● | MPS1-0710-L20C | 143.3 | 174.3 | 177.3 | 214.3 | 213 | 1.3 | 8 | 2 |
| | 25 | ● | MPS1-0710-L25C | 178.8 | 211.3 | 214.3 | 251.3 | 250 | 1.3 | 8 | 2 |
| | 30 | ● | MPS1-0710-L30C | 214.3 | 249.3 | 252.3 | 289.3 | 288 | 1.3 | 8 | 2 |
| | 35 | □ | MPS1-0710-L35C | 249.8 | 286.3 | 288.3 | 325.3 | 324 | 1.3 | 8 | 2 |
| | 40 | ● | MPS1-0710-L40C | 285.3 | 321.3 | 323.3 | 360.3 | 359 | 1.3 | 8 | 2 |
| 7.2 | 3 | □ | MPS1-0720S-DIN | 30.5 | 41.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 4 |
| | 3 | ● | MPS1-0720S-DIN-C | 30.5 | 41.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 2 |
| | 5 | □ | MPS1-0720L-DIN | 42.5 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 4 |
| | 5 | ● | MPS1-0720L-DIN-C | 42.5 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 2 |
| | 2 | ● | MPS1-0720-PC | 15.5 | 35.1 | 38.1 | 80.1 | 79 | 1.1 | 8 | 2 |
| | 8 | ● | MPS1-0720-L8C | 59.1 | 84.5 | 87.5 | 124.5 | 123 | 1.5 | 8 | 2 |
| | 10 | □ | MPS1-0720-L10C | 73.3 | 99.3 | 102.3 | 139.3 | 138 | 1.3 | 8 | 2 |
| | 12 | ● | MPS1-0720-L12C | 87.7 | 114.3 | 117.3 | 154.3 | 153 | 1.3 | 8 | 2 |
| | 15 | □ | MPS1-0720-L15C | 109.3 | 136.3 | 139.3 | 176.3 | 175 | 1.3 | 8 | 2 |
| | 20 | □ | MPS1-0720-L20C | 145.3 | 174.3 | 177.3 | 214.3 | 213 | 1.3 | 8 | 2 |
| | 25 | □ | MPS1-0720-L25C | 181.3 | 211.3 | 214.3 | 251.3 | 250 | 1.3 | 8 | 2 |
| | 30 | □ | MPS1-0720-L30C | 217.3 | 249.3 | 252.3 | 289.3 | 288 | 1.3 | 8 | 2 |
| | 35 | □ | MPS1-0720-L35C | 253.3 | 286.3 | 288.3 | 325.3 | 324 | 1.3 | 8 | 2 |
| | 40 | ● | MPS1-0720-L40C | 289.3 | 321.3 | 323.3 | 360.3 | 359 | 1.3 | 8 | 2 |

| DC (mm) | Rapport (L/D) | DP1021 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.3 | 3 | □ | MPS1-0730S-DIN | 30.4 | 41.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 4 |
| | 3 | ● | MPS1-0730S-DIN-C | 30.4 | 41.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 2 |
| | 5 | □ | MPS1-0730L-DIN | 42.4 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 4 |
| | 5 | ● | MPS1-0730L-DIN-C | 42.4 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 2 |
| | 2 | ● | MPS1-0730-PC | 15.8 | 35.2 | 38.2 | 80.2 | 79 | 1.2 | 8 | 2 |
| | 8 | ● | MPS1-0730-L8C | 59.9 | 84.5 | 87.5 | 124.5 | 123 | 1.5 | 8 | 2 |
| | 10 | □ | MPS1-0730-L10C | 74.3 | 99.3 | 102.3 | 139.3 | 138 | 1.3 | 8 | 2 |
| | 12 | ● | MPS1-0730-L12C | 88.9 | 114.3 | 117.3 | 154.3 | 153 | 1.3 | 8 | 2 |
| | 15 | □ | MPS1-0730-L15C | 110.8 | 136.3 | 139.3 | 176.3 | 175 | 1.3 | 8 | 2 |
| | 20 | □ | MPS1-0730-L20C | 147.3 | 174.3 | 177.3 | 214.3 | 213 | 1.3 | 8 | 2 |
| | 25 | □ | MPS1-0730-L25C | 183.8 | 211.3 | 214.3 | 251.3 | 250 | 1.3 | 8 | 2 |
| | 30 | □ | MPS1-0730-L30C | 220.3 | 249.3 | 252.3 | 289.3 | 288 | 1.3 | 8 | 2 |
| | 35 | □ | MPS1-0730-L35C | 256.8 | 286.3 | 288.3 | 325.3 | 324 | 1.3 | 8 | 2 |
| | 40 | ● | MPS1-0730-L40C | 293.3 | 321.3 | 323.3 | 360.3 | 359 | 1.3 | 8 | 2 |
| 7.4 | 3 | □ | MPS1-0740S-DIN | 30.2 | 41.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 4 |
| | 3 | ● | MPS1-0740S-DIN-C | 30.2 | 41.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 2 |
| | 5 | □ | MPS1-0740L-DIN | 42.2 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 4 |
| | 5 | ● | MPS1-0740L-DIN-C | 42.2 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 2 |
| | 2 | ● | MPS1-0740-PC | 16.0 | 35.2 | 38.2 | 80.2 | 79 | 1.2 | 8 | 2 |
| | 8 | ● | MPS1-0740-L8C | 60.7 | 84.5 | 87.5 | 124.5 | 123 | 1.5 | 8 | 2 |
| | 10 | □ | MPS1-0740-L10C | 75.3 | 99.3 | 102.3 | 139.3 | 138 | 1.3 | 8 | 2 |
| | 12 | ● | MPS1-0740-L12C | 90.1 | 114.3 | 117.3 | 154.3 | 153 | 1.3 | 8 | 2 |
| | 15 | □ | MPS1-0740-L15C | 112.3 | 136.3 | 139.3 | 176.3 | 175 | 1.3 | 8 | 2 |
| | 20 | □ | MPS1-0740-L20C | 149.3 | 174.3 | 177.3 | 214.3 | 213 | 1.3 | 8 | 2 |
| | 25 | □ | MPS1-0740-L25C | 186.3 | 211.3 | 214.3 | 251.3 | 250 | 1.3 | 8 | 2 |
| | 30 | □ | MPS1-0740-L30C | 223.3 | 249.3 | 252.3 | 289.3 | 288 | 1.3 | 8 | 2 |
| | 35 | □ | MPS1-0740-L35C | 260.3 | 286.3 | 288.3 | 325.3 | 324 | 1.3 | 8 | 2 |
| | 40 | ● | MPS1-0740-L40C | 297.3 | 321.3 | 323.3 | 360.3 | 359 | 1.3 | 8 | 2 |
| 7.5 | 3 | □ | MPS1-0750S-DIN | 30.1 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 4 |
| | 3 | ● | MPS1-0750S-DIN-C | 30.1 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 2 |
| | 5 | □ | MPS1-0750L-DIN | 42.1 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 4 |
| | 5 | ● | MPS1-0750L-DIN-C | 42.1 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 2 |
| | 2 | ● | MPS1-0750-PC | 16.2 | 35.2 | 38.2 | 80.2 | 79 | 1.2 | 8 | 2 |
| | 8 | ● | MPS1-0750-L8C | 61.6 | 84.6 | 87.6 | 124.6 | 123 | 1.6 | 8 | 2 |
| | 10 | □ | MPS1-0750-L10C | 76.4 | 99.4 | 102.4 | 139.4 | 138 | 1.4 | 8 | 2 |
| | 12 | ● | MPS1-0750-L12C | 91.4 | 114.4 | 117.4 | 154.4 | 153 | 1.4 | 8 | 2 |
| | 15 | ● | MPS1-0750-L15C | 113.9 | 136.4 | 139.4 | 176.4 | 175 | 1.4 | 8 | 2 |
| | 20 | ● | MPS1-0750-L20C | 151.4 | 174.4 | 177.4 | 214.4 | 213 | 1.4 | 8 | 2 |
| | 25 | ● | MPS1-0750-L25C | 188.9 | 211.4 | 214.4 | 251.4 | 250 | 1.4 | 8 | 2 |
| | 30 | ● | MPS1-0750-L30C | 226.4 | 249.4 | 252.4 | 289.4 | 288 | 1.4 | 8 | 2 |
| | 35 | □ | MPS1-0750-L35C | 263.9 | 286.4 | 288.4 | 325.4 | 324 | 1.4 | 8 | 2 |
| | 40 | ● | MPS1-0750-L40C | 301.4 | 321.4 | 323.4 | 360.4 | 359 | 1.4 | 8 | 2 |
| 7.6 | 3 | □ | MPS1-0760S-DIN | 30.0 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 4 |
| | 3 | ● | MPS1-0760S-DIN-C | 30.0 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 2 |
| | 5 | □ | MPS1-0760L-DIN | 42.0 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 4 |
| | 5 | ● | MPS1-0760L-DIN-C | 42.0 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 2 |
| | 2 | ● | MPS1-0760-PC | 16.4 | 38.2 | 38.2 | 80.2 | 79 | 1.2 | 8 | 2 |
| | 8 | ● | MPS1-0760-L8C | 62.4 | 89.6 | 92.6 | 129.6 | 128 | 1.6 | 8 | 2 |
| | 10 | □ | MPS1-0760-L10C | 77.4 | 105.4 | 108.4 | 145.4 | 144 | 1.4 | 8 | 2 |
| | 12 | ● | MPS1-0760-L12C | 92.6 | 121.4 | 124.4 | 161.4 | 160 | 1.4 | 8 | 2 |
| | 15 | ● | MPS1-0760-L15C | 115.4 | 145.4 | 148.4 | 185.4 | 184 | 1.4 | 8 | 2 |
| | 20 | □ | MPS1-0760-L20C | 153.4 | 185.4 | 188.4 | 225.4 | 224 | 1.4 | 8 | 2 |
| | 25 | ● | MPS1-0760-L25C | 191.4 | 225.4 | 228.4 | 265.4 | 264 | 1.4 | 8 | 2 |
| | 30 | □ | MPS1-0760-L30C | 229.4 | 265.4 | 268.4 | 305.4 | 304 | 1.4 | 8 | 2 |
| | 35 | □ | MPS1-0760-L35C | 267.4 | 305.4 | 307.4 | 344.4 | 343 | 1.4 | 8 | 2 |
| | 40 | ● | MPS1-0760-L40C | 305.4 | 341.4 | 342.4 | 379.4 | 378 | 1.4 | 8 | 2 |

● : Article stocké.

□ : Article non stocké - Fabrication sur commande uniquement.

| DC (mm) | Rapport (L/D) | DP1021 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.7 | 3 | □ | MPS1-0770S-DIN | 29.9 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 4 |
| | 3 | ● | MPS1-0770S-DIN-C | 29.9 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 2 |
| | 5 | □ | MPS1-0770L-DIN | 41.9 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 4 |
| | 5 | ● | MPS1-0770L-DIN-C | 41.9 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 2 |
| | 2 | ● | MPS1-0770-PC | 16.6 | 38.2 | 38.2 | 80.2 | 79 | 1.2 | 8 | 2 |
| | 8 | ● | MPS1-0770-L8C | 63.2 | 89.6 | 92.6 | 129.6 | 128 | 1.6 | 8 | 2 |
| | 10 | □ | MPS1-0770-L10C | 78.4 | 105.4 | 108.4 | 145.4 | 144 | 1.4 | 8 | 2 |
| | 12 | ● | MPS1-0770-L12C | 93.8 | 121.4 | 124.4 | 161.4 | 160 | 1.4 | 8 | 2 |
| | 15 | ● | MPS1-0770-L15C | 116.9 | 145.4 | 148.4 | 185.4 | 184 | 1.4 | 8 | 2 |
| | 20 | □ | MPS1-0770-L20C | 155.4 | 185.4 | 188.4 | 225.4 | 224 | 1.4 | 8 | 2 |
| | 25 | ● | MPS1-0770-L25C | 193.9 | 225.4 | 228.4 | 265.4 | 264 | 1.4 | 8 | 2 |
| | 30 | □ | MPS1-0770-L30C | 232.4 | 265.4 | 268.4 | 305.4 | 304 | 1.4 | 8 | 2 |
| | 35 | □ | MPS1-0770-L35C | 270.9 | 305.4 | 307.4 | 344.4 | 343 | 1.4 | 8 | 2 |
| | 40 | ● | MPS1-0770-L40C | 309.4 | 341.4 | 342.4 | 379.4 | 378 | 1.4 | 8 | 2 |
| 7.8 | 3 | □ | MPS1-0780S-DIN | 29.7 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 4 |
| | 3 | ● | MPS1-0780S-DIN-C | 29.7 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 2 |
| | 5 | □ | MPS1-0780L-DIN | 41.7 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 4 |
| | 5 | ● | MPS1-0780L-DIN-C | 41.7 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 2 |
| | 2 | ● | MPS1-0780-PC | 16.8 | 38.2 | 38.2 | 80.2 | 79 | 1.2 | 8 | 2 |
| | 8 | ● | MPS1-0780-L8C | 64.0 | 89.6 | 92.6 | 129.6 | 128 | 1.6 | 8 | 2 |
| | 10 | □ | MPS1-0780-L10C | 79.4 | 105.4 | 108.4 | 145.4 | 144 | 1.4 | 8 | 2 |
| | 12 | ● | MPS1-0780-L12C | 95.0 | 121.4 | 124.4 | 161.4 | 160 | 1.4 | 8 | 2 |
| | 15 | ● | MPS1-0780-L15C | 118.4 | 145.4 | 148.4 | 185.4 | 184 | 1.4 | 8 | 2 |
| | 20 | □ | MPS1-0780-L20C | 157.4 | 185.4 | 188.4 | 225.4 | 224 | 1.4 | 8 | 2 |
| | 25 | □ | MPS1-0780-L25C | 196.4 | 225.4 | 228.4 | 265.4 | 264 | 1.4 | 8 | 2 |
| | 30 | ● | MPS1-0780-L30C | 235.4 | 265.4 | 268.4 | 305.4 | 304 | 1.4 | 8 | 2 |
| | 35 | □ | MPS1-0780-L35C | 274.4 | 305.4 | 307.4 | 344.4 | 343 | 1.4 | 8 | 2 |
| | 40 | ● | MPS1-0780-L40C | 313.4 | 341.4 | 342.4 | 379.4 | 378 | 1.4 | 8 | 2 |
| 7.9 | 3 | □ | MPS1-0790S-DIN | 29.6 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 4 |
| | 3 | ● | MPS1-0790S-DIN-C | 29.6 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 2 |
| | 5 | □ | MPS1-0790L-DIN | 41.6 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 4 |
| | 5 | ● | MPS1-0790L-DIN-C | 41.6 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 2 |
| | 2 | ● | MPS1-0790-PC | 17.0 | 38.2 | 38.2 | 80.2 | 79 | 1.2 | 8 | 2 |
| | 8 | ● | MPS1-0790-L8C | 64.8 | 89.6 | 92.6 | 129.6 | 128 | 1.6 | 8 | 2 |
| | 10 | □ | MPS1-0790-L10C | 80.4 | 105.4 | 108.4 | 145.4 | 144 | 1.4 | 8 | 2 |
| | 12 | ● | MPS1-0790-L12C | 96.2 | 121.4 | 124.4 | 161.4 | 160 | 1.4 | 8 | 2 |
| | 15 | □ | MPS1-0790-L15C | 119.9 | 145.4 | 148.4 | 185.4 | 184 | 1.4 | 8 | 2 |
| | 20 | □ | MPS1-0790-L20C | 159.4 | 185.4 | 188.4 | 225.4 | 224 | 1.4 | 8 | 2 |
| | 25 | ● | MPS1-0790-L25C | 198.9 | 225.4 | 228.4 | 265.4 | 264 | 1.4 | 8 | 2 |
| | 30 | ● | MPS1-0790-L30C | 238.4 | 265.4 | 268.4 | 305.4 | 304 | 1.4 | 8 | 2 |
| | 35 | □ | MPS1-0790-L35C | 277.9 | 305.4 | 307.4 | 344.4 | 343 | 1.4 | 8 | 2 |
| | 40 | ● | MPS1-0790-L40C | 317.4 | 341.4 | 342.4 | 379.4 | 378 | 1.4 | 8 | 2 |
| 8.0 | 3 | □ | MPS1-0800S-DIN | 29.5 | 41.5 | 42.5 | 79.5 | 78 | 1.5 | 8 | 4 |
| | 3 | ● | MPS1-0800S-DIN-C | 29.5 | 41.5 | 42.5 | 79.5 | 78 | 1.5 | 8 | 2 |
| | 5 | □ | MPS1-0800L-DIN | 41.5 | 53.5 | 54.5 | 91.5 | 90 | 1.5 | 8 | 4 |
| | 5 | ● | MPS1-0800L-DIN-C | 41.5 | 53.5 | 54.5 | 91.5 | 90 | 1.5 | 8 | 2 |
| | 2 | ● | MPS1-0800-PC | 17.3 | 38.3 | 38.3 | 80.3 | 79 | 1.3 | 8 | 2 |
| | 8 | ● | MPS1-0800-L8C | 65.7 | 89.7 | 92.7 | 129.7 | 128 | 1.7 | 8 | 2 |
| | 10 | ● | MPS1-0800-L10C | 81.5 | 105.5 | 108.5 | 145.5 | 144 | 1.5 | 8 | 2 |
| | 12 | ● | MPS1-0800-L12C | 97.5 | 121.5 | 124.5 | 161.5 | 160 | 1.5 | 8 | 2 |
| | 15 | ● | MPS1-0800-L15C | 121.5 | 145.5 | 148.5 | 185.5 | 184 | 1.5 | 8 | 2 |
| | 20 | ● | MPS1-0800-L20C | 161.5 | 185.5 | 188.5 | 225.5 | 224 | 1.5 | 8 | 2 |
| | 25 | ● | MPS1-0800-L25C | 201.5 | 225.5 | 228.5 | 265.5 | 264 | 1.5 | 8 | 2 |
| | 30 | ● | MPS1-0800-L30C | 241.5 | 265.5 | 268.5 | 305.5 | 304 | 1.5 | 8 | 2 |
| | 35 | □ | MPS1-0800-L35C | 281.5 | 305.5 | 307.5 | 344.5 | 343 | 1.5 | 8 | 2 |
| | 40 | ● | MPS1-0800-L40C | 321.5 | 341.5 | 342.5 | 379.5 | 378 | 1.5 | 8 | 2 |

| DC (mm) | Rapport (L/D) | DP1021 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.05 | 3 | □ | MPS1-0805S-DIN | 34.4 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 4 |
| | 3 | ● | MPS1-0805S-DIN-C | 34.4 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 2 |
| | 5 | □ | MPS1-0805L-DIN | 48.4 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 4 |
| | 5 | ● | MPS1-0805L-DIN-C | 48.4 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 2 |
| 8.1 | 3 | □ | MPS1-0810S-DIN | 34.3 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 4 |
| | 3 | ● | MPS1-0810S-DIN-C | 34.3 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 2 |
| | 5 | □ | MPS1-0810L-DIN | 48.3 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 4 |
| | 5 | ● | MPS1-0810L-DIN-C | 48.3 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 2 |
| | 2 | ● | MPS1-0810-PC | 17.5 | 38.3 | 41.3 | 85.3 | 84 | 1.3 | 10 | 2 |
| | 8 | ● | MPS1-0810-L8C | 66.5 | 95.7 | 98.7 | 139.7 | 138 | 1.7 | 10 | 2 |
| | 10 | □ | MPS1-0810-L10C | 82.5 | 112.5 | 115.5 | 156.5 | 155 | 1.5 | 10 | 2 |
| | 12 | ● | MPS1-0810-L12C | 98.7 | 129.5 | 132.5 | 173.5 | 172 | 1.5 | 10 | 2 |
| | 15 | ● | MPS1-0810-L15C | 123.0 | 154.5 | 157.5 | 198.5 | 197 | 1.5 | 10 | 2 |
| | 20 | ● | MPS1-0810-L20C | 163.5 | 197.5 | 200.5 | 241.5 | 240 | 1.5 | 10 | 2 |
| | 25 | □ | MPS1-0810-L25C | 204.0 | 239.5 | 242.5 | 283.5 | 282 | 1.5 | 10 | 2 |
| | 30 | □ | MPS1-0810-L30C | 244.5 | 282.5 | 284.5 | 325.5 | 324 | 1.5 | 10 | 2 |
| | 35 | □ | MPS1-0810-L35C | 285.0 | 324.5 | 326.5 | 367.5 | 366 | 1.5 | 10 | 2 |
| | 40 | ● | MPS1-0810-L40C | 325.5 | 366.5 | 370.5 | 411.5 | 410 | 1.5 | 10 | 2 |
| 8.2 | 3 | □ | MPS1-0820S-DIN | 34.2 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 4 |
| | 3 | ● | MPS1-0820S-DIN-C | 34.2 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 2 |
| | 5 | □ | MPS1-0820L-DIN | 48.2 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 4 |
| | 5 | ● | MPS1-0820L-DIN-C | 48.2 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 2 |
| | 2 | ● | MPS1-0820-PC | 17.7 | 38.3 | 41.3 | 85.3 | 84 | 1.3 | 10 | 2 |
| | 8 | ● | MPS1-0820-L8C | 67.3 | 95.7 | 98.7 | 139.7 | 138 | 1.7 | 10 | 2 |
| | 10 | □ | MPS1-0820-L10C | 83.5 | 112.5 | 115.5 | 156.5 | 155 | 1.5 | 10 | 2 |
| | 12 | ● | MPS1-0820-L12C | 99.9 | 129.5 | 132.5 | 173.5 | 172 | 1.5 | 10 | 2 |
| | 15 | ● | MPS1-0820-L15C | 124.5 | 154.5 | 157.5 | 198.5 | 197 | 1.5 | 10 | 2 |
| | 20 | ● | MPS1-0820-L20C | 165.5 | 197.5 | 200.5 | 241.5 | 240 | 1.5 | 10 | 2 |
| | 25 | □ | MPS1-0820-L25C | 206.5 | 239.5 | 242.5 | 283.5 | 282 | 1.5 | 10 | 2 |
| | 30 | □ | MPS1-0820-L30C | 247.5 | 282.5 | 284.5 | 325.5 | 324 | 1.5 | 10 | 2 |
| | 35 | □ | MPS1-0820-L35C | 288.5 | 324.5 | 326.5 | 367.5 | 366 | 1.5 | 10 | 2 |
| | 40 | ● | MPS1-0820-L40C | 329.5 | 366.5 | 370.5 | 411.5 | 410 | 1.5 | 10 | 2 |
| 8.3 | 3 | □ | MPS1-0830S-DIN | 34.1 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 4 |
| | 3 | ● | MPS1-0830S-DIN-C | 34.1 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 2 |
| | 5 | □ | MPS1-0830L-DIN | 48.1 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 4 |
| | 5 | ● | MPS1-0830L-DIN-C | 48.1 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 2 |
| | 2 | ● | MPS1-0830-PC | 17.9 | 38.3 | 41.3 | 85.3 | 84 | 1.3 | 10 | 2 |
| | 8 | ● | MPS1-0830-L8C | 68.1 | 95.7 | 98.7 | 139.7 | 138 | 1.7 | 10 | 2 |
| | 10 | □ | MPS1-0830-L10C | 84.5 | 112.5 | 115.5 | 156.5 | 155 | 1.5 | 10 | 2 |
| | 12 | ● | MPS1-0830-L12C | 101.1 | 129.5 | 132.5 | 173.5 | 172 | 1.5 | 10 | 2 |
| | 15 | □ | MPS1-0830-L15C | 126.0 | 154.5 | 157.5 | 198.5 | 197 | 1.5 | 10 | 2 |
| | 20 | □ | MPS1-0830-L20C | 167.5 | 197.5 | 200.5 | 241.5 | 240 | 1.5 | 10 | 2 |
| | 25 | □ | MPS1-0830-L25C | 209.0 | 239.5 | 242.5 | 283.5 | 282 | 1.5 | 10 | 2 |
| | 30 | □ | MPS1-0830-L30C | 250.5 | 282.5 | 284.5 | 325.5 | 324 | 1.5 | 10 | 2 |
| | 35 | □ | MPS1-0830-L35C | 292.0 | 324.5 | 326.5 | 367.5 | 366 | 1.5 | 10 | 2 |
| | 40 | ● | MPS1-0830-L40C | 333.5 | 366.5 | 370.5 | 411.5 | 410 | 1.5 | 10 | 2 |

CONDITIONS DE COUPE ➤ M059
MÉTHODE D'UTILISATION ➤ M060
DONNÉES TECHNIQUES ➤ P001

# MPS1

Foret carbure à double listel

| DC (mm) | Rapport (L/D) | DP1021 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.4 | 3 | □ | MPS1-0840S-DIN | 33.9 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 4 |
| | 3 | ● | MPS1-0840S-DIN-C | 33.9 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 2 |
| | 5 | □ | MPS1-0840L-DIN | 47.9 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 4 |
| | 5 | ● | MPS1-0840L-DIN-C | 47.9 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 2 |
| | 2 | ● | MPS1-0840-PC | 18.1 | 38.3 | 41.3 | 85.3 | 84 | 1.3 | 10 | 2 |
| | 8 | ● | MPS1-0840-L8C | 68.9 | 95.7 | 98.7 | 139.7 | 138 | 1.7 | 10 | 2 |
| | 10 | □ | MPS1-0840-L10C | 85.5 | 112.5 | 115.5 | 156.5 | 155 | 1.5 | 10 | 2 |
| | 12 | ● | MPS1-0840-L12C | 102.3 | 129.5 | 132.5 | 173.5 | 172 | 1.5 | 10 | 2 |
| | 15 | ● | MPS1-0840-L15C | 127.5 | 154.5 | 157.5 | 198.5 | 197 | 1.5 | 10 | 2 |
| | 20 | □ | MPS1-0840-L20C | 169.5 | 197.5 | 200.5 | 241.5 | 240 | 1.5 | 10 | 2 |
| | 25 | □ | MPS1-0840-L25C | 211.5 | 239.5 | 242.5 | 283.5 | 282 | 1.5 | 10 | 2 |
| | 30 | □ | MPS1-0840-L30C | 253.5 | 282.5 | 284.5 | 325.5 | 324 | 1.5 | 10 | 2 |
| | 35 | □ | MPS1-0840-L35C | 295.5 | 324.5 | 326.5 | 367.5 | 366 | 1.5 | 10 | 2 |
| | 40 | ● | MPS1-0840-L40C | 337.5 | 366.5 | 370.5 | 411.5 | 410 | 1.5 | 10 | 2 |
| 8.5 | 3 | □ | MPS1-0850S-DIN | 33.8 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 4 |
| | 3 | ● | MPS1-0850S-DIN-C | 33.8 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 2 |
| | 5 | □ | MPS1-0850L-DIN | 47.8 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 4 |
| | 5 | ● | MPS1-0850L-DIN-C | 47.8 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 2 |
| | 2 | ● | MPS1-0850-PC | 18.3 | 38.3 | 41.3 | 85.3 | 84 | 1.3 | 10 | 2 |
| | 8 | ● | MPS1-0850-L8C | 69.8 | 95.8 | 98.8 | 139.8 | 138 | 1.8 | 10 | 2 |
| | 10 | □ | MPS1-0850-L10C | 86.5 | 112.5 | 115.5 | 156.5 | 155 | 1.5 | 10 | 2 |
| | 12 | ● | MPS1-0850-L12C | 103.5 | 129.5 | 132.5 | 173.5 | 172 | 1.5 | 10 | 2 |
| | 15 | ● | MPS1-0850-L15C | 129.0 | 154.5 | 157.5 | 198.5 | 197 | 1.5 | 10 | 2 |
| | 20 | ● | MPS1-0850-L20C | 171.5 | 197.5 | 200.5 | 241.5 | 240 | 1.5 | 10 | 2 |
| | 25 | ● | MPS1-0850-L25C | 214.0 | 239.5 | 242.5 | 283.5 | 282 | 1.5 | 10 | 2 |
| | 30 | ● | MPS1-0850-L30C | 256.5 | 282.5 | 284.5 | 325.5 | 324 | 1.5 | 10 | 2 |
| | 35 | □ | MPS1-0850-L35C | 299.0 | 324.5 | 326.5 | 367.5 | 366 | 1.5 | 10 | 2 |
| | 40 | ● | MPS1-0850-L40C | 341.5 | 366.5 | 370.5 | 411.5 | 410 | 1.5 | 10 | 2 |
| 8.6 | 3 | □ | MPS1-0860S-DIN | 33.7 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 4 |
| | 3 | ● | MPS1-0860S-DIN-C | 33.7 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 2 |
| | 5 | □ | MPS1-0860L-DIN | 47.7 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 4 |
| | 5 | ● | MPS1-0860L-DIN-C | 47.7 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 2 |
| | 2 | ● | MPS1-0860-PC | 18.6 | 41.4 | 43.4 | 85.4 | 84 | 1.4 | 10 | 2 |
| | 8 | ● | MPS1-0860-L8C | 70.6 | 100.8 | 103.8 | 144.8 | 143 | 1.8 | 10 | 2 |
| | 10 | □ | MPS1-0860-L10C | 87.6 | 118.6 | 121.6 | 162.6 | 161 | 1.6 | 10 | 2 |
| | 12 | ● | MPS1-0860-L12C | 104.8 | 136.6 | 139.6 | 180.6 | 179 | 1.6 | 10 | 2 |
| | 15 | ● | MPS1-0860-L15C | 130.6 | 163.6 | 166.6 | 207.6 | 206 | 1.6 | 10 | 2 |
| | 20 | □ | MPS1-0860-L20C | 173.6 | 208.6 | 211.6 | 252.6 | 251 | 1.6 | 10 | 2 |
| | 25 | ● | MPS1-0860-L25C | 216.6 | 253.6 | 256.6 | 297.6 | 296 | 1.6 | 10 | 2 |
| | 30 | ● | MPS1-0860-L30C | 259.6 | 298.6 | 300.6 | 341.6 | 340 | 1.6 | 10 | 2 |
| | 35 | □ | MPS1-0860-L35C | 302.6 | 343.6 | 345.6 | 386.6 | 385 | 1.6 | 10 | 2 |
| | 40 | ● | MPS1-0860-L40C | 345.6 | 391.6 | 394.6 | 435.6 | 434 | 1.6 | 10 | 2 |
| 8.7 | 3 | □ | MPS1-0870S-DIN | 33.5 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 4 |
| | 3 | ● | MPS1-0870S-DIN-C | 33.5 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 2 |
| | 5 | □ | MPS1-0870L-DIN | 47.5 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 4 |
| | 5 | ● | MPS1-0870L-DIN-C | 47.5 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 2 |
| | 2 | ● | MPS1-0870-PC | 18.8 | 41.4 | 43.4 | 85.4 | 84 | 1.4 | 10 | 2 |
| | 8 | ● | MPS1-0870-L8C | 71.4 | 100.8 | 103.8 | 144.8 | 143 | 1.8 | 10 | 2 |
| | 10 | □ | MPS1-0870-L10C | 88.6 | 118.6 | 121.6 | 162.6 | 161 | 1.6 | 10 | 2 |
| | 12 | ● | MPS1-0870-L12C | 106.0 | 136.6 | 139.6 | 180.6 | 179 | 1.6 | 10 | 2 |
| | 15 | ● | MPS1-0870-L15C | 132.1 | 163.6 | 166.6 | 207.6 | 206 | 1.6 | 10 | 2 |
| | 20 | □ | MPS1-0870-L20C | 175.6 | 208.6 | 211.6 | 252.6 | 251 | 1.6 | 10 | 2 |
| | 25 | ● | MPS1-0870-L25C | 219.1 | 253.6 | 256.6 | 297.6 | 296 | 1.6 | 10 | 2 |
| | 30 | □ | MPS1-0870-L30C | 262.6 | 298.6 | 300.6 | 341.6 | 340 | 1.6 | 10 | 2 |
| | 35 | □ | MPS1-0870-L35C | 306.1 | 343.6 | 345.6 | 386.6 | 385 | 1.6 | 10 | 2 |
| | 40 | ● | MPS1-0870-L40C | 349.6 | 391.6 | 394.6 | 435.6 | 434 | 1.6 | 10 | 2 |

| DC (mm) | Rapport (L/D) | DP1021 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.8 | 3 | □ | MPS1-0880S-DIN | 33.4 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 4 |
| | 3 | ● | MPS1-0880S-DIN-C | 33.4 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 2 |
| | 5 | □ | MPS1-0880L-DIN | 47.4 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 4 |
| | 5 | ● | MPS1-0880L-DIN-C | 47.4 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 2 |
| | 2 | ● | MPS1-0880-PC | 19.0 | 41.4 | 43.4 | 85.4 | 84 | 1.4 | 10 | 2 |
| | 8 | ● | MPS1-0880-L8C | 72.2 | 100.8 | 103.8 | 144.8 | 143 | 1.8 | 10 | 2 |
| | 10 | □ | MPS1-0880-L10C | 89.6 | 118.6 | 121.6 | 162.6 | 161 | 1.6 | 10 | 2 |
| | 12 | ● | MPS1-0880-L12C | 107.2 | 136.6 | 139.6 | 180.6 | 179 | 1.6 | 10 | 2 |
| | 15 | ● | MPS1-0880-L15C | 133.6 | 163.6 | 166.6 | 207.6 | 206 | 1.6 | 10 | 2 |
| | 20 | ● | MPS1-0880-L20C | 177.6 | 208.6 | 211.6 | 252.6 | 251 | 1.6 | 10 | 2 |
| | 25 | ● | MPS1-0880-L25C | 221.6 | 253.6 | 256.6 | 297.6 | 296 | 1.6 | 10 | 2 |
| | 30 | ● | MPS1-0880-L30C | 265.6 | 298.6 | 300.6 | 341.6 | 340 | 1.6 | 10 | 2 |
| | 35 | □ | MPS1-0880-L35C | 309.6 | 343.6 | 345.6 | 386.6 | 385 | 1.6 | 10 | 2 |
| | 40 | ● | MPS1-0880-L40C | 353.6 | 391.6 | 394.6 | 435.6 | 434 | 1.6 | 10 | 2 |
| 8.9 | 3 | □ | MPS1-0890S-DIN | 33.3 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 4 |
| | 3 | ● | MPS1-0890S-DIN-C | 33.3 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 2 |
| | 5 | □ | MPS1-0890L-DIN | 47.3 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 4 |
| | 5 | ● | MPS1-0890L-DIN-C | 47.3 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 2 |
| | 2 | ● | MPS1-0890-PC | 19.2 | 41.4 | 43.4 | 85.4 | 84 | 1.4 | 10 | 2 |
| | 8 | ● | MPS1-0890-L8C | 73.0 | 100.8 | 103.8 | 144.8 | 143 | 1.8 | 10 | 2 |
| | 10 | □ | MPS1-0890-L10C | 90.6 | 118.6 | 121.6 | 162.6 | 161 | 1.6 | 10 | 2 |
| | 12 | ● | MPS1-0890-L12C | 108.4 | 136.6 | 139.6 | 180.6 | 179 | 1.6 | 10 | 2 |
| | 15 | □ | MPS1-0890-L15C | 135.1 | 163.6 | 166.6 | 207.6 | 206 | 1.6 | 10 | 2 |
| | 20 | □ | MPS1-0890-L20C | 179.6 | 208.6 | 211.6 | 252.6 | 251 | 1.6 | 10 | 2 |
| | 25 | □ | MPS1-0890-L25C | 224.1 | 253.6 | 256.6 | 297.6 | 296 | 1.6 | 10 | 2 |
| | 30 | □ | MPS1-0890-L30C | 268.6 | 298.6 | 300.6 | 341.6 | 340 | 1.6 | 10 | 2 |
| | 35 | □ | MPS1-0890-L35C | 313.1 | 343.6 | 345.6 | 386.6 | 385 | 1.6 | 10 | 2 |
| | 40 | ● | MPS1-0890-L40C | 357.6 | 391.6 | 394.6 | 435.6 | 434 | 1.6 | 10 | 2 |
| 9.0 | 3 | □ | MPS1-0900S-DIN | 33.1 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 4 |
| | 3 | ● | MPS1-0900S-DIN-C | 33.1 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 2 |
| | 5 | □ | MPS1-0900L-DIN | 47.1 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 4 |
| | 5 | ● | MPS1-0900L-DIN-C | 47.1 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 2 |
| | 2 | ● | MPS1-0900-PC | 19.4 | 41.4 | 43.4 | 85.4 | 84 | 1.4 | 10 | 2 |
| | 8 | ● | MPS1-0900-L8C | 73.9 | 100.9 | 103.9 | 144.9 | 143 | 1.9 | 10 | 2 |
| | 10 | ● | MPS1-0900-L10C | 91.6 | 118.6 | 121.6 | 162.6 | 161 | 1.6 | 10 | 2 |
| | 12 | ● | MPS1-0900-L12C | 109.6 | 136.6 | 139.6 | 180.6 | 179 | 1.6 | 10 | 2 |
| | 15 | ● | MPS1-0900-L15C | 136.6 | 163.6 | 166.6 | 207.6 | 206 | 1.6 | 10 | 2 |
| | 20 | ● | MPS1-0900-L20C | 181.6 | 208.6 | 211.6 | 252.6 | 251 | 1.6 | 10 | 2 |
| | 25 | ● | MPS1-0900-L25C | 226.6 | 253.6 | 256.6 | 297.6 | 296 | 1.6 | 10 | 2 |
| | 30 | ● | MPS1-0900-L30C | 271.6 | 298.6 | 300.6 | 341.6 | 340 | 1.6 | 10 | 2 |
| | 35 | □ | MPS1-0900-L35C | 316.6 | 343.6 | 345.6 | 386.6 | 385 | 1.6 | 10 | 2 |
| | 40 | ● | MPS1-0900-L40C | 361.6 | 391.6 | 394.6 | 435.6 | 434 | 1.6 | 10 | 2 |
| 9.1 | 3 | □ | MPS1-0910S-DIN | 33.0 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 4 |
| | 3 | ● | MPS1-0910S-DIN-C | 33.0 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 2 |
| | 5 | □ | MPS1-0910L-DIN | 47.0 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 4 |
| | 5 | ● | MPS1-0910L-DIN-C | 47.0 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 2 |
| | 2 | ● | MPS1-0910-PC | 19.6 | 41.4 | 44.4 | 90.4 | 89 | 1.4 | 10 | 2 |
| | 8 | ● | MPS1-0910-L8C | 74.7 | 106.9 | 109.9 | 150.9 | 149 | 1.9 | 10 | 2 |
| | 10 | □ | MPS1-0910-L10C | 92.7 | 125.7 | 128.7 | 169.7 | 168 | 1.7 | 10 | 2 |
| | 12 | ● | MPS1-0910-L12C | 110.9 | 144.7 | 147.7 | 188.7 | 187 | 1.7 | 10 | 2 |
| | 15 | ● | MPS1-0910-L15C | 138.2 | 172.7 | 175.7 | 216.7 | 215 | 1.7 | 10 | 2 |
| | 20 | □ | MPS1-0910-L20C | 183.7 | 220.7 | 223.7 | 264.7 | 263 | 1.7 | 10 | 2 |
| | 25 | □ | MPS1-0910-L25C | 229.2 | 267.7 | 270.7 | 311.7 | 310 | 1.7 | 10 | 2 |
| | 30 | ● | MPS1-0910-L30C | 274.7 | 315.7 | 318.7 | 359.7 | 358 | 1.7 | 10 | 2 |
| | 35 | □ | MPS1-0910-L35C | 320.2 | 362.7 | 364.7 | 405.7 | 404 | 1.7 | 10 | 2 |

● : Article stocké.

□ : Article non stocké - Fabrication sur commande uniquement.

| DC (mm) | Rapport (L/D) | DP1021 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.2 | 3 | □ | MPS1-0920S-DIN | 32.9 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 4 |
| | 3 | ● | MPS1-0920S-DIN-C | 32.9 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 2 |
| | 5 | □ | MPS1-0920L-DIN | 46.9 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 4 |
| | 5 | ● | MPS1-0920L-DIN-C | 46.9 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 2 |
| | 2 | ● | MPS1-0920-PC | 19.9 | 41.5 | 44.5 | 90.5 | 89 | 1.5 | 10 | 2 |
| | 8 | ● | MPS1-0920-L8C | 75.5 | 106.9 | 109.9 | 150.9 | 149 | 1.9 | 10 | 2 |
| | 10 | □ | MPS1-0920-L10C | 93.7 | 125.7 | 128.7 | 169.7 | 168 | 1.7 | 10 | 2 |
| | 12 | ● | MPS1-0920-L12C | 112.1 | 144.7 | 147.7 | 188.7 | 187 | 1.7 | 10 | 2 |
| | 15 | ● | MPS1-0920-L15C | 139.7 | 172.7 | 175.7 | 216.7 | 215 | 1.7 | 10 | 2 |
| | 20 | □ | MPS1-0920-L20C | 185.7 | 220.7 | 223.7 | 264.7 | 263 | 1.7 | 10 | 2 |
| | 25 | □ | MPS1-0920-L25C | 231.7 | 267.7 | 270.7 | 311.7 | 310 | 1.7 | 10 | 2 |
| | 30 | □ | MPS1-0920-L30C | 277.7 | 315.7 | 318.7 | 359.7 | 358 | 1.7 | 10 | 2 |
| | 35 | □ | MPS1-0920-L35C | 323.7 | 362.7 | 364.7 | 405.7 | 404 | 1.7 | 10 | 2 |
| 9.3 | 3 | □ | MPS1-0930S-DIN | 32.7 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 4 |
| | 3 | ● | MPS1-0930S-DIN-C | 32.7 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 2 |
| | 5 | □ | MPS1-0930L-DIN | 46.7 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 4 |
| | 5 | ● | MPS1-0930L-DIN-C | 46.7 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 2 |
| | 2 | ● | MPS1-0930-PC | 20.1 | 41.5 | 44.5 | 90.5 | 89 | 1.5 | 10 | 2 |
| | 8 | ● | MPS1-0930-L8C | 76.3 | 106.9 | 109.9 | 150.9 | 149 | 1.9 | 10 | 2 |
| | 10 | □ | MPS1-0930-L10C | 94.7 | 125.7 | 128.7 | 169.7 | 168 | 1.7 | 10 | 2 |
| | 12 | ● | MPS1-0930-L12C | 113.3 | 144.7 | 147.7 | 188.7 | 187 | 1.7 | 10 | 2 |
| | 15 | □ | MPS1-0930-L15C | 141.2 | 172.7 | 175.7 | 216.7 | 215 | 1.7 | 10 | 2 |
| | 20 | □ | MPS1-0930-L20C | 187.7 | 220.7 | 223.7 | 264.7 | 263 | 1.7 | 10 | 2 |
| | 25 | □ | MPS1-0930-L25C | 234.2 | 267.7 | 270.7 | 311.7 | 310 | 1.7 | 10 | 2 |
| | 30 | □ | MPS1-0930-L30C | 280.7 | 315.7 | 318.7 | 359.7 | 358 | 1.7 | 10 | 2 |
| | 35 | □ | MPS1-0930-L35C | 327.2 | 362.7 | 364.7 | 405.7 | 404 | 1.7 | 10 | 2 |
| 9.4 | 3 | □ | MPS1-0940S-DIN | 32.6 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 4 |
| | 3 | ● | MPS1-0940S-DIN-C | 32.6 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 2 |
| | 5 | □ | MPS1-0940L-DIN | 46.6 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 4 |
| | 5 | ● | MPS1-0940L-DIN-C | 46.6 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 2 |
| | 2 | ● | MPS1-0940-PC | 20.3 | 41.5 | 44.5 | 90.5 | 89 | 1.5 | 10 | 2 |
| | 8 | ● | MPS1-0940-L8C | 77.1 | 106.9 | 109.9 | 150.9 | 149 | 1.9 | 10 | 2 |
| | 10 | □ | MPS1-0940-L10C | 95.7 | 125.7 | 128.7 | 169.7 | 168 | 1.7 | 10 | 2 |
| | 12 | ● | MPS1-0940-L12C | 114.5 | 144.7 | 147.7 | 188.7 | 187 | 1.7 | 10 | 2 |
| | 15 | □ | MPS1-0940-L15C | 142.7 | 172.7 | 175.7 | 216.7 | 215 | 1.7 | 10 | 2 |
| | 20 | □ | MPS1-0940-L20C | 189.7 | 220.7 | 223.7 | 264.7 | 263 | 1.7 | 10 | 2 |
| | 25 | □ | MPS1-0940-L25C | 236.7 | 267.7 | 270.7 | 311.7 | 310 | 1.7 | 10 | 2 |
| | 30 | □ | MPS1-0940-L30C | 283.7 | 315.7 | 318.7 | 359.7 | 358 | 1.7 | 10 | 2 |
| | 35 | □ | MPS1-0940-L35C | 330.7 | 362.7 | 364.7 | 405.7 | 404 | 1.7 | 10 | 2 |
| 9.5 | 3 | □ | MPS1-0950S-DIN | 32.5 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 4 |
| | 3 | ● | MPS1-0950S-DIN-C | 32.5 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 2 |
| | 5 | □ | MPS1-0950L-DIN | 46.5 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 4 |
| | 5 | ● | MPS1-0950L-DIN-C | 46.5 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 2 |
| | 2 | ● | MPS1-0950-PC | 20.5 | 41.5 | 44.5 | 90.5 | 89 | 1.5 | 10 | 2 |
| | 8 | ● | MPS1-0950-L8C | 78.0 | 107.0 | 110.0 | 151.0 | 149 | 2.0 | 10 | 2 |
| | 10 | □ | MPS1-0950-L10C | 96.7 | 125.7 | 128.7 | 169.7 | 168 | 1.7 | 10 | 2 |
| | 12 | ● | MPS1-0950-L12C | 115.7 | 144.7 | 147.7 | 188.7 | 187 | 1.7 | 10 | 2 |
| | 15 | ● | MPS1-0950-L15C | 144.2 | 172.7 | 175.7 | 216.7 | 215 | 1.7 | 10 | 2 |
| | 20 | ● | MPS1-0950-L20C | 191.7 | 220.7 | 223.7 | 264.7 | 263 | 1.7 | 10 | 2 |
| | 25 | ● | MPS1-0950-L25C | 239.2 | 267.7 | 270.7 | 311.7 | 310 | 1.7 | 10 | 2 |
| | 30 | ● | MPS1-0950-L30C | 286.7 | 315.7 | 318.7 | 359.7 | 358 | 1.7 | 10 | 2 |
| | 35 | □ | MPS1-0950-L35C | 334.2 | 362.7 | 364.7 | 405.7 | 404 | 1.7 | 10 | 2 |

| DC (mm) | Rapport (L/D) | DP1021 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.6 | 3 | □ | MPS1-0960S-DIN | 32.3 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 4 |
| | 3 | ● | MPS1-0960S-DIN-C | 32.3 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 2 |
| | 5 | □ | MPS1-0960L-DIN | 46.3 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 4 |
| | 5 | ● | MPS1-0960L-DIN-C | 46.3 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 2 |
| | 2 | ● | MPS1-0960-PC | 20.7 | 44.5 | 44.5 | 90.5 | 89 | 1.5 | 10 | 2 |
| | 8 | ● | MPS1-0960-L8C | 78.8 | 112.0 | 115.0 | 156.0 | 154 | 2.0 | 10 | 2 |
| | 10 | □ | MPS1-0960-L10C | 97.7 | 131.7 | 134.7 | 175.7 | 174 | 1.7 | 10 | 2 |
| | 12 | ● | MPS1-0960-L12C | 116.9 | 151.7 | 154.7 | 195.7 | 194 | 1.7 | 10 | 2 |
| | 15 | ● | MPS1-0960-L15C | 145.7 | 181.7 | 184.7 | 225.7 | 224 | 1.7 | 10 | 2 |
| | 20 | □ | MPS1-0960-L20C | 193.7 | 231.7 | 234.7 | 275.7 | 274 | 1.7 | 10 | 2 |
| | 25 | □ | MPS1-0960-L25C | 241.7 | 281.7 | 284.7 | 325.7 | 324 | 1.7 | 10 | 2 |
| | 30 | □ | MPS1-0960-L30C | 289.7 | 331.7 | 334.7 | 375.7 | 374 | 1.7 | 10 | 2 |
| | 35 | □ | MPS1-0960-L35C | 337.7 | 381.7 | 383.7 | 424.7 | 423 | 1.7 | 10 | 2 |
| 9.7 | 3 | □ | MPS1-0970S-DIN | 32.2 | 46.8 | 47.8 | 88.8 | 87 | 1.8 | 10 | 4 |
| | 3 | ● | MPS1-0970S-DIN-C | 32.2 | 46.8 | 47.8 | 88.8 | 87 | 1.8 | 10 | 2 |
| | 5 | □ | MPS1-0970L-DIN | 46.2 | 60.8 | 61.8 | 102.8 | 101 | 1.8 | 10 | 4 |
| | 5 | ● | MPS1-0970L-DIN-C | 46.2 | 60.8 | 61.8 | 102.8 | 101 | 1.8 | 10 | 2 |
| | 2 | ● | MPS1-0970-PC | 20.9 | 44.5 | 44.5 | 90.5 | 89 | 1.5 | 10 | 2 |
| | 8 | ● | MPS1-0970-L8C | 79.6 | 112.0 | 115.0 | 156.0 | 154 | 2.0 | 10 | 2 |
| | 10 | □ | MPS1-0970-L10C | 98.8 | 131.8 | 134.8 | 175.8 | 174 | 1.8 | 10 | 2 |
| | 12 | ● | MPS1-0970-L12C | 118.2 | 151.8 | 154.8 | 195.8 | 194 | 1.8 | 10 | 2 |
| | 15 | ● | MPS1-0970-L15C | 147.3 | 181.8 | 184.8 | 225.8 | 224 | 1.8 | 10 | 2 |
| | 20 | □ | MPS1-0970-L20C | 195.8 | 231.8 | 234.8 | 275.8 | 274 | 1.8 | 10 | 2 |
| | 25 | □ | MPS1-0970-L25C | 244.3 | 281.8 | 284.8 | 325.8 | 324 | 1.8 | 10 | 2 |
| | 30 | □ | MPS1-0970-L30C | 292.8 | 331.8 | 334.8 | 375.8 | 374 | 1.8 | 10 | 2 |
| | 35 | □ | MPS1-0970-L35C | 341.3 | 381.8 | 383.8 | 424.8 | 423 | 1.8 | 10 | 2 |
| 9.8 | 3 | □ | MPS1-0980S-DIN | 32.1 | 46.8 | 47.8 | 88.8 | 87 | 1.8 | 10 | 4 |
| | 3 | ● | MPS1-0980S-DIN-C | 32.1 | 46.8 | 47.8 | 88.8 | 87 | 1.8 | 10 | 2 |
| | 5 | □ | MPS1-0980L-DIN | 46.1 | 60.8 | 61.8 | 102.8 | 101 | 1.8 | 10 | 4 |
| | 5 | ● | MPS1-0980L-DIN-C | 46.1 | 60.8 | 61.8 | 102.8 | 101 | 1.8 | 10 | 2 |
| | 2 | ● | MPS1-0980-PC | 21.1 | 44.5 | 44.5 | 90.5 | 89 | 1.5 | 10 | 2 |
| | 8 | ● | MPS1-0980-L8C | 80.4 | 112.0 | 115.0 | 156.0 | 154 | 2.0 | 10 | 2 |
| | 10 | □ | MPS1-0980-L10C | 99.8 | 131.8 | 134.8 | 175.8 | 174 | 1.8 | 10 | 2 |
| | 12 | ● | MPS1-0980-L12C | 119.4 | 151.8 | 154.8 | 195.8 | 194 | 1.8 | 10 | 2 |
| | 15 | ● | MPS1-0980-L15C | 148.8 | 181.8 | 184.8 | 225.8 | 224 | 1.8 | 10 | 2 |
| | 20 | ● | MPS1-0980-L20C | 197.8 | 231.8 | 234.8 | 275.8 | 274 | 1.8 | 10 | 2 |
| | 25 | □ | MPS1-0980-L25C | 246.8 | 281.8 | 284.8 | 325.8 | 324 | 1.8 | 10 | 2 |
| | 30 | ● | MPS1-0980-L30C | 295.8 | 331.8 | 334.8 | 375.8 | 374 | 1.8 | 10 | 2 |
| | 35 | □ | MPS1-0980-L35C | 344.8 | 381.8 | 383.8 | 424.8 | 423 | 1.8 | 10 | 2 |
| 9.9 | 3 | □ | MPS1-0990S-DIN | 32.0 | 46.8 | 47.8 | 88.8 | 87 | 1.8 | 10 | 4 |
| | 3 | ● | MPS1-0990S-DIN-C | 32.0 | 46.8 | 47.8 | 88.8 | 87 | 1.8 | 10 | 2 |
| | 5 | □ | MPS1-0990L-DIN | 46.0 | 60.8 | 61.8 | 102.8 | 101 | 1.8 | 10 | 4 |
| | 5 | ● | MPS1-0990L-DIN-C | 46.0 | 60.8 | 61.8 | 102.8 | 101 | 1.8 | 10 | 2 |
| | 2 | ● | MPS1-0990-PC | 21.4 | 44.6 | 44.6 | 90.6 | 89 | 1.6 | 10 | 2 |
| | 8 | ● | MPS1-0990-L8C | 81.3 | 112.1 | 115.1 | 156.1 | 154 | 2.1 | 10 | 2 |
| | 10 | □ | MPS1-0990-L10C | 100.8 | 131.8 | 134.8 | 175.8 | 174 | 1.8 | 10 | 2 |
| | 12 | ● | MPS1-0990-L12C | 120.6 | 151.8 | 154.8 | 195.8 | 194 | 1.8 | 10 | 2 |
| | 15 | ● | MPS1-0990-L15C | 150.3 | 181.8 | 184.8 | 225.8 | 224 | 1.8 | 10 | 2 |
| | 20 | □ | MPS1-0990-L20C | 199.8 | 231.8 | 234.8 | 275.8 | 274 | 1.8 | 10 | 2 |
| | 25 | □ | MPS1-0990-L25C | 249.3 | 281.8 | 284.8 | 325.8 | 324 | 1.8 | 10 | 2 |
| | 30 | □ | MPS1-0990-L30C | 298.8 | 331.8 | 334.8 | 375.8 | 374 | 1.8 | 10 | 2 |
| | 35 | □ | MPS1-0990-L35C | 348.3 | 381.8 | 383.8 | 424.8 | 423 | 1.8 | 10 | 2 |

CONDITIONS DE COUPE ➤ M059
MÉTHODE D'UTILISATION ➤ M060
DONNÉES TECHNIQUES ➤ P001

# MPS1

Foret carbure à double listel

| DC (mm) | Rapport (L/D) | DP1021 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | □ | MPS1-1000S-DIN | 31.8 | 46.8 | 47.8 | 88.8 | 87 | 1.8 | 10 | 4 |
| | 3 | ● | MPS1-1000S-DIN-C | 31.8 | 46.8 | 47.8 | 88.8 | 87 | 1.8 | 10 | 2 |
| | 5 | □ | MPS1-1000L-DIN | 45.8 | 60.8 | 61.8 | 102.8 | 101 | 1.8 | 10 | 4 |
| | 5 | ● | MPS1-1000L-DIN-C | 45.8 | 60.8 | 61.8 | 102.8 | 101 | 1.8 | 10 | 2 |
| | 2 | ● | MPS1-1000-PC | 21.6 | 44.6 | 44.6 | 90.6 | 89 | 1.6 | 10 | 2 |
| | 8 | ● | MPS1-1000-L8C | 82.1 | 112.1 | 115.1 | 156.1 | 154 | 2.1 | 10 | 2 |
| 10.0 | 10 | ● | MPS1-1000-L10C | 101.8 | 131.8 | 134.8 | 175.8 | 174 | 1.8 | 10 | 2 |
| | 12 | ● | MPS1-1000-L12C | 121.8 | 151.8 | 154.8 | 195.8 | 194 | 1.8 | 10 | 2 |
| | 15 | ● | MPS1-1000-L15C | 151.8 | 181.8 | 184.8 | 225.8 | 224 | 1.8 | 10 | 2 |
| | 20 | ● | MPS1-1000-L20C | 201.8 | 231.8 | 234.8 | 275.8 | 274 | 1.8 | 10 | 2 |
| | 25 | ● | MPS1-1000-L25C | 251.8 | 281.8 | 284.8 | 325.8 | 324 | 1.8 | 10 | 2 |
| | 30 | ● | MPS1-1000-L30C | 301.8 | 331.8 | 334.8 | 375.8 | 374 | 1.8 | 10 | 2 |
| | 35 | □ | MPS1-1000-L35C | 351.8 | 381.8 | 383.8 | 424.8 | 423 | 1.8 | 10 | 2 |
| | 3 | □ | MPS1-1005S-DIN | 39.8 | 54.8 | 55.8 | 101.8 | 100 | 1.8 | 12 | 4 |
| 10.05 | 3 | ● | MPS1-1005S-DIN-C | 39.8 | 54.8 | 55.8 | 101.8 | 100 | 1.8 | 12 | 2 |
| | 5 | □ | MPS1-1005L-DIN | 55.8 | 70.8 | 71.8 | 117.8 | 116 | 1.8 | 12 | 4 |
| | 5 | ● | MPS1-1005L-DIN-C | 55.8 | 70.8 | 71.8 | 117.8 | 116 | 1.8 | 12 | 2 |
| | 3 | □ | MPS1-1010S-DIN | 39.7 | 54.8 | 55.8 | 101.8 | 100 | 1.8 | 12 | 4 |
| | 3 | ● | MPS1-1010S-DIN-C | 39.7 | 54.8 | 55.8 | 101.8 | 100 | 1.8 | 12 | 2 |
| | 5 | □ | MPS1-1010L-DIN | 55.7 | 70.8 | 71.8 | 117.8 | 116 | 1.8 | 12 | 4 |
| | 5 | ● | MPS1-1010L-DIN-C | 55.7 | 70.8 | 71.8 | 117.8 | 116 | 1.8 | 12 | 2 |
| | 2 | ● | MPS1-1010-PC | 21.8 | 44.6 | 47.6 | 96.6 | 95 | 1.6 | 12 | 2 |
| 10.1 | 8 | ● | MPS1-1010-L8C | 82.9 | 118.1 | 121.1 | 167.1 | 165 | 2.1 | 12 | 2 |
| | 10 | □ | MPS1-1010-L10C | 102.8 | 138.8 | 141.8 | 187.8 | 186 | 1.8 | 12 | 2 |
| | 12 | ● | MPS1-1010-L12C | 123.0 | 159.8 | 162.8 | 208.8 | 207 | 1.8 | 12 | 2 |
| | 15 | ● | MPS1-1010-L15C | 153.3 | 190.8 | 193.8 | 239.8 | 238 | 1.8 | 12 | 2 |
| | 20 | ● | MPS1-1010-L20C | 203.8 | 243.8 | 246.8 | 292.8 | 291 | 1.8 | 12 | 2 |
| | 25 | □ | MPS1-1010-L25C | 254.3 | 295.8 | 298.8 | 344.8 | 343 | 1.8 | 12 | 2 |
| | 3 | □ | MPS1-1020S-DIN | 39.6 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 4 |
| | 3 | ● | MPS1-1020S-DIN-C | 39.6 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 2 |
| | 5 | □ | MPS1-1020L-DIN | 55.6 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 4 |
| | 5 | ● | MPS1-1020L-DIN-C | 55.6 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 2 |
| | 2 | ● | MPS1-1020-PC | 22.0 | 44.6 | 47.6 | 96.6 | 95 | 1.6 | 12 | 2 |
| 10.2 | 8 | ● | MPS1-1020-L8C | 83.7 | 118.1 | 121.1 | 167.1 | 165 | 2.1 | 12 | 2 |
| | 10 | □ | MPS1-1020-L10C | 103.9 | 138.9 | 141.9 | 187.9 | 186 | 1.9 | 12 | 2 |
| | 12 | ● | MPS1-1020-L12C | 124.3 | 159.9 | 162.9 | 208.9 | 207 | 1.9 | 12 | 2 |
| | 15 | ● | MPS1-1020-L15C | 154.9 | 190.9 | 193.9 | 239.9 | 238 | 1.9 | 12 | 2 |
| | 20 | ● | MPS1-1020-L20C | 205.9 | 243.9 | 246.9 | 292.9 | 291 | 1.9 | 12 | 2 |
| | 25 | □ | MPS1-1020-L25C | 256.9 | 295.9 | 298.9 | 344.9 | 343 | 1.9 | 12 | 2 |
| | 3 | □ | MPS1-1030S-DIN | 39.4 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 4 |
| | 3 | ● | MPS1-1030S-DIN-C | 39.4 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 2 |
| | 5 | □ | MPS1-1030L-DIN | 55.4 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 4 |
| | 5 | ● | MPS1-1030L-DIN-C | 55.4 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 2 |
| | 2 | ● | MPS1-1030-PC | 22.2 | 44.6 | 47.6 | 96.6 | 95 | 1.6 | 12 | 2 |
| 10.3 | 8 | ● | MPS1-1030-L8C | 84.5 | 118.1 | 121.1 | 167.1 | 165 | 2.1 | 12 | 2 |
| | 10 | □ | MPS1-1030-L10C | 104.9 | 138.9 | 141.9 | 187.9 | 186 | 1.9 | 12 | 2 |
| | 12 | ● | MPS1-1030-L12C | 125.5 | 159.9 | 162.9 | 208.9 | 207 | 1.9 | 12 | 2 |
| | 15 | □ | MPS1-1030-L15C | 156.4 | 190.9 | 193.9 | 239.9 | 238 | 1.9 | 12 | 2 |
| | 20 | □ | MPS1-1030-L20C | 207.9 | 243.9 | 246.9 | 292.9 | 291 | 1.9 | 12 | 2 |
| | 25 | □ | MPS1-1030-L25C | 259.4 | 295.9 | 298.9 | 344.9 | 343 | 1.9 | 12 | 2 |

| DC (mm) | Rapport (L/D) | DP1021 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | □ | MPS1-1040S-DIN | 39.3 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 4 |
| | 3 | ● | MPS1-1040S-DIN-C | 39.3 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 2 |
| | 5 | □ | MPS1-1040L-DIN | 55.3 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 4 |
| | 5 | ● | MPS1-1040L-DIN-C | 55.3 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 2 |
| | 2 | ● | MPS1-1040-PC | 22.4 | 44.6 | 47.6 | 96.6 | 95 | 1.6 | 12 | 2 |
| 10.4 | 8 | ● | MPS1-1040-L8C | 85.4 | 118.2 | 121.2 | 167.2 | 165 | 2.2 | 12 | 2 |
| | 10 | □ | MPS1-1040-L10C | 105.9 | 138.9 | 141.9 | 187.9 | 186 | 1.9 | 12 | 2 |
| | 12 | ● | MPS1-1040-L12C | 126.7 | 159.9 | 162.9 | 208.9 | 207 | 1.9 | 12 | 2 |
| | 15 | □ | MPS1-1040-L15C | 157.9 | 190.9 | 193.9 | 239.9 | 238 | 1.9 | 12 | 2 |
| | 20 | □ | MPS1-1040-L20C | 209.9 | 243.9 | 246.9 | 292.9 | 291 | 1.9 | 12 | 2 |
| | 25 | □ | MPS1-1040-L25C | 261.9 | 295.9 | 298.9 | 344.9 | 343 | 1.9 | 12 | 2 |
| | 3 | □ | MPS1-1050S-DIN | 39.2 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 4 |
| | 3 | ● | MPS1-1050S-DIN-C | 39.2 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 2 |
| | 5 | □ | MPS1-1050L-DIN | 55.2 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 4 |
| | 5 | ● | MPS1-1050L-DIN-C | 55.2 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 2 |
| | 2 | ● | MPS1-1050-PC | 22.7 | 44.7 | 47.7 | 96.7 | 95 | 1.7 | 12 | 2 |
| 10.5 | 8 | ● | MPS1-1050-L8C | 86.2 | 118.2 | 121.2 | 167.2 | 165 | 2.2 | 12 | 2 |
| | 10 | □ | MPS1-1050-L10C | 106.9 | 138.9 | 141.9 | 187.9 | 186 | 1.9 | 12 | 2 |
| | 12 | ● | MPS1-1050-L12C | 127.9 | 159.9 | 162.9 | 208.9 | 207 | 1.9 | 12 | 2 |
| | 15 | ● | MPS1-1050-L15C | 159.4 | 190.9 | 193.9 | 239.9 | 238 | 1.9 | 12 | 2 |
| | 20 | ● | MPS1-1050-L20C | 211.9 | 243.9 | 246.9 | 292.9 | 291 | 1.9 | 12 | 2 |
| | 25 | ● | MPS1-1050-L25C | 264.4 | 295.9 | 298.9 | 344.9 | 343 | 1.9 | 12 | 2 |
| | 3 | □ | MPS1-1060S-DIN | 39.0 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 4 |
| | 3 | ● | MPS1-1060S-DIN-C | 39.0 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 2 |
| | 5 | □ | MPS1-1060L-DIN | 55.0 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 4 |
| | 5 | ● | MPS1-1060L-DIN-C | 55.0 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 2 |
| | 2 | □ | MPS1-1060-PC | 22.9 | 48.7 | 49.7 | 96.7 | 95 | 1.7 | 12 | 2 |
| 10.6 | 8 | ● | MPS1-1060-L8C | 87.0 | 123.2 | 126.2 | 172.2 | 170 | 2.2 | 12 | 2 |
| | 10 | □ | MPS1-1060-L10C | 107.9 | 144.9 | 147.9 | 193.9 | 192 | 1.9 | 12 | 2 |
| | 12 | □ | MPS1-1060-L12C | 129.1 | 166.9 | 169.9 | 215.9 | 214 | 1.9 | 12 | 2 |
| | 15 | □ | MPS1-1060-L15C | 160.9 | 199.9 | 202.9 | 248.9 | 247 | 1.9 | 12 | 2 |
| | 20 | □ | MPS1-1060-L20C | 213.9 | 254.9 | 257.9 | 303.9 | 302 | 1.9 | 12 | 2 |
| | 25 | □ | MPS1-1060-L25C | 266.9 | 309.9 | 312.9 | 358.9 | 357 | 1.9 | 12 | 2 |
| | 3 | □ | MPS1-1070S-DIN | 38.9 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 4 |
| | 3 | ● | MPS1-1070S-DIN-C | 38.9 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 2 |
| | 5 | □ | MPS1-1070L-DIN | 54.9 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 4 |
| | 5 | ● | MPS1-1070L-DIN-C | 54.9 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 2 |
| | 2 | ● | MPS1-1070-PC | 23.1 | 48.7 | 49.7 | 96.7 | 95 | 1.7 | 12 | 2 |
| 10.7 | 8 | ● | MPS1-1070-L8C | 87.8 | 123.2 | 126.2 | 172.2 | 170 | 2.2 | 12 | 2 |
| | 10 | □ | MPS1-1070-L10C | 108.9 | 144.9 | 147.9 | 193.9 | 192 | 1.9 | 12 | 2 |
| | 12 | ● | MPS1-1070-L12C | 130.3 | 166.9 | 169.9 | 215.9 | 214 | 1.9 | 12 | 2 |
| | 15 | □ | MPS1-1070-L15C | 162.4 | 199.9 | 202.9 | 248.9 | 247 | 1.9 | 12 | 2 |
| | 20 | □ | MPS1-1070-L20C | 215.9 | 254.9 | 257.9 | 303.9 | 302 | 1.9 | 12 | 2 |
| | 25 | □ | MPS1-1070-L25C | 269.4 | 309.9 | 312.9 | 358.9 | 357 | 1.9 | 12 | 2 |
| | 3 | □ | MPS1-1080S-DIN | 38.8 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 4 |
| | 3 | ● | MPS1-1080S-DIN-C | 38.8 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 2 |
| | 5 | □ | MPS1-1080L-DIN | 54.8 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 4 |
| | 5 | ● | MPS1-1080L-DIN-C | 54.8 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 2 |
| | 2 | ● | MPS1-1080-PC | 23.3 | 48.7 | 49.7 | 96.7 | 95 | 1.7 | 12 | 2 |
| 10.8 | 8 | ● | MPS1-1080-L8C | 88.6 | 123.2 | 126.2 | 172.2 | 170 | 2.2 | 12 | 2 |
| | 10 | □ | MPS1-1080-L10C | 110.0 | 145.0 | 148.0 | 194.0 | 192 | 2.0 | 12 | 2 |
| | 12 | ● | MPS1-1080-L12C | 131.6 | 167.0 | 170.0 | 216.0 | 214 | 2.0 | 12 | 2 |
| | 15 | □ | MPS1-1080-L15C | 164.0 | 200.0 | 203.0 | 249.0 | 247 | 2.0 | 12 | 2 |
| | 20 | □ | MPS1-1080-L20C | 218.0 | 255.0 | 258.0 | 304.0 | 302 | 2.0 | 12 | 2 |
| | 25 | □ | MPS1-1080-L25C | 272.0 | 310.0 | 313.0 | 359.0 | 357 | 2.0 | 12 | 2 |

● : Article stocké.

□ : Article non stocké - Fabrication sur commande uniquement.

| DC (mm) | Rapport (L/D) | DP1021 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | □ | MPS1-1090S-DIN | 38.6 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 4 |
| | 3 | ● | MPS1-1090S-DIN-C | 38.6 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 2 |
| | 5 | □ | MPS1-1090L-DIN | 54.6 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 4 |
| | 5 | ● | MPS1-1090L-DIN-C | 54.6 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 2 |
| | 2 | □ | MPS1-1090-PC | 23.5 | 48.7 | 49.7 | 96.7 | 95 | 1.7 | 12 | 2 |
| 10.9 | 8 | ● | MPS1-1090-L8C | 89.5 | 123.3 | 126.3 | 172.3 | 170 | 2.3 | 12 | 2 |
| | 10 | □ | MPS1-1090-L10C | 111.0 | 145.0 | 148.0 | 194.0 | 192 | 2.0 | 12 | 2 |
| | 12 | □ | MPS1-1090-L12C | 132.8 | 167.0 | 170.0 | 216.0 | 214 | 2.0 | 12 | 2 |
| | 15 | □ | MPS1-1090-L15C | 165.5 | 200.0 | 203.0 | 249.0 | 247 | 2.0 | 12 | 2 |
| | 20 | □ | MPS1-1090-L20C | 220.0 | 255.0 | 258.0 | 304.0 | 302 | 2.0 | 12 | 2 |
| | 25 | □ | MPS1-1090-L25C | 274.5 | 310.0 | 313.0 | 359.0 | 357 | 2.0 | 12 | 2 |
| | 3 | □ | MPS1-1100S-DIN | 38.5 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 4 |
| | 3 | ● | MPS1-1100S-DIN-C | 38.5 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 2 |
| | 5 | □ | MPS1-1100L-DIN | 54.5 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 4 |
| | 5 | ● | MPS1-1100L-DIN-C | 54.5 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 2 |
| | 2 | ● | MPS1-1100-PC | 23.7 | 48.7 | 49.7 | 96.7 | 95 | 1.7 | 12 | 2 |
| 11.0 | 8 | ● | MPS1-1100-L8C | 90.3 | 123.3 | 126.3 | 172.3 | 170 | 2.3 | 12 | 2 |
| | 10 | □ | MPS1-1100-L10C | 112.0 | 145.0 | 148.0 | 194.0 | 192 | 2.0 | 12 | 2 |
| | 12 | ● | MPS1-1100-L12C | 134.0 | 167.0 | 170.0 | 216.0 | 214 | 2.0 | 12 | 2 |
| | 15 | ● | MPS1-1100-L15C | 167.0 | 200.0 | 203.0 | 249.0 | 247 | 2.0 | 12 | 2 |
| | 20 | ● | MPS1-1100-L20C | 222.0 | 255.0 | 258.0 | 304.0 | 302 | 2.0 | 12 | 2 |
| | 25 | ● | MPS1-1100-L25C | 277.0 | 310.0 | 313.0 | 359.0 | 357 | 2.0 | 12 | 2 |
| | 3 | □ | MPS1-1110S-DIN | 38.4 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 4 |
| | 3 | ● | MPS1-1110S-DIN-C | 38.4 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 2 |
| | 5 | □ | MPS1-1110L-DIN | 54.4 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 4 |
| | 5 | ● | MPS1-1110L-DIN-C | 54.4 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 2 |
| | 2 | ● | MPS1-1110-PC | 23.9 | 48.7 | 51.7 | 96.7 | 95 | 1.7 | 12 | 2 |
| 11.1 | 8 | ● | MPS1-1110-L8C | 91.1 | 129.3 | 132.3 | 178.3 | 176 | 2.3 | 12 | 2 |
| | 10 | □ | MPS1-1110-L10C | 113.0 | 152.0 | 155.0 | 201.0 | 199 | 2.0 | 12 | 2 |
| | 12 | ● | MPS1-1110-L12C | 135.2 | 175.0 | 178.0 | 224.0 | 222 | 2.0 | 12 | 2 |
| | 15 | ● | MPS1-1110-L15C | 168.5 | 209.0 | 212.0 | 258.0 | 256 | 2.0 | 12 | 2 |
| | 20 | □ | MPS1-1110-L20C | 224.0 | 267.0 | 270.0 | 316.0 | 314 | 2.0 | 12 | 2 |
| | 25 | ● | MPS1-1110-L25C | 279.5 | 324.0 | 327.0 | 373.0 | 371 | 2.0 | 12 | 2 |
| | 3 | □ | MPS1-1120S-DIN | 38.2 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 4 |
| | 3 | ● | MPS1-1120S-DIN-C | 38.2 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 2 |
| | 5 | □ | MPS1-1120L-DIN | 54.2 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 4 |
| | 5 | ● | MPS1-1120L-DIN-C | 54.2 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 2 |
| | 2 | ● | MPS1-1120-PC | 24.2 | 48.8 | 51.8 | 96.8 | 95 | 1.8 | 12 | 2 |
| 11.2 | 8 | ● | MPS1-1120-L8C | 91.9 | 129.3 | 132.3 | 178.3 | 176 | 2.3 | 12 | 2 |
| | 10 | □ | MPS1-1120-L10C | 114.0 | 152.0 | 155.0 | 201.0 | 199 | 2.0 | 12 | 2 |
| | 12 | □ | MPS1-1120-L12C | 136.4 | 175.0 | 178.0 | 224.0 | 222 | 2.0 | 12 | 2 |
| | 15 | ● | MPS1-1120-L15C | 170.0 | 209.0 | 212.0 | 258.0 | 256 | 2.0 | 12 | 2 |
| | 20 | □ | MPS1-1120-L20C | 226.0 | 267.0 | 270.0 | 316.0 | 314 | 2.0 | 12 | 2 |
| | 25 | □ | MPS1-1120-L25C | 282.0 | 324.0 | 327.0 | 373.0 | 371 | 2.0 | 12 | 2 |
| | 3 | □ | MPS1-1130S-DIN | 38.1 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 4 |
| | 3 | ● | MPS1-1130S-DIN-C | 38.1 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 2 |
| | 5 | □ | MPS1-1130L-DIN | 54.1 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 4 |
| | 5 | ● | MPS1-1130L-DIN-C | 54.1 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 2 |
| | 2 | □ | MPS1-1130-PC | 24.4 | 48.8 | 51.8 | 96.8 | 95 | 1.8 | 12 | 2 |
| 11.3 | 8 | ● | MPS1-1130-L8C | 92.7 | 129.3 | 132.3 | 178.3 | 176 | 2.3 | 12 | 2 |
| | 10 | □ | MPS1-1130-L10C | 115.1 | 152.1 | 155.1 | 201.1 | 199 | 2.1 | 12 | 2 |
| | 12 | □ | MPS1-1130-L12C | 137.7 | 175.1 | 178.1 | 224.1 | 222 | 2.1 | 12 | 2 |
| | 15 | □ | MPS1-1130-L15C | 171.6 | 209.1 | 212.1 | 258.1 | 256 | 2.1 | 12 | 2 |
| | 20 | □ | MPS1-1130-L20C | 228.1 | 267.1 | 270.1 | 316.1 | 314 | 2.1 | 12 | 2 |
| | 25 | □ | MPS1-1130-L25C | 284.6 | 324.1 | 327.1 | 373.1 | 371 | 2.1 | 12 | 2 |

| DC (mm) | Rapport (L/D) | DP1021 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | □ | MPS1-1140S-DIN | 38.0 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 4 |
| | 3 | ● | MPS1-1140S-DIN-C | 38.0 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 2 |
| | 5 | □ | MPS1-1140L-DIN | 54.0 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 4 |
| | 5 | ● | MPS1-1140L-DIN-C | 54.0 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 2 |
| | 2 | □ | MPS1-1140-PC | 24.6 | 48.8 | 51.8 | 96.8 | 95 | 1.8 | 12 | 2 |
| 11.4 | 8 | ● | MPS1-1140-L8C | 93.6 | 129.4 | 132.4 | 178.4 | 176 | 2.4 | 12 | 2 |
| | 10 | □ | MPS1-1140-L10C | 116.1 | 152.1 | 155.1 | 201.1 | 199 | 2.1 | 12 | 2 |
| | 12 | □ | MPS1-1140-L12C | 138.9 | 175.1 | 178.1 | 224.1 | 222 | 2.1 | 12 | 2 |
| | 15 | □ | MPS1-1140-L15C | 173.1 | 209.1 | 212.1 | 258.1 | 256 | 2.1 | 12 | 2 |
| | 20 | □ | MPS1-1140-L20C | 230.1 | 267.1 | 270.1 | 316.1 | 314 | 2.1 | 12 | 2 |
| | 25 | □ | MPS1-1140-L25C | 287.1 | 324.1 | 327.1 | 373.1 | 371 | 2.1 | 12 | 2 |
| | 3 | □ | MPS1-1150S-DIN | 37.8 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 4 |
| | 3 | ● | MPS1-1150S-DIN-C | 37.8 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 2 |
| | 5 | □ | MPS1-1150L-DIN | 53.8 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 4 |
| | 5 | ● | MPS1-1150L-DIN-C | 53.8 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 2 |
| | 2 | ● | MPS1-1150-PC | 24.8 | 48.8 | 51.8 | 96.8 | 95 | 1.8 | 12 | 2 |
| 11.5 | 8 | ● | MPS1-1150-L8C | 94.4 | 129.4 | 132.4 | 178.4 | 176 | 2.4 | 12 | 2 |
| | 10 | □ | MPS1-1150-L10C | 117.1 | 152.1 | 155.1 | 201.1 | 199 | 2.1 | 12 | 2 |
| | 12 | ● | MPS1-1150-L12C | 140.1 | 175.1 | 178.1 | 224.1 | 222 | 2.1 | 12 | 2 |
| | 15 | ● | MPS1-1150-L15C | 174.6 | 209.1 | 212.1 | 258.1 | 256 | 2.1 | 12 | 2 |
| | 20 | ● | MPS1-1150-L20C | 232.1 | 267.1 | 270.1 | 316.1 | 314 | 2.1 | 12 | 2 |
| | 25 | ● | MPS1-1150-L25C | 289.6 | 324.1 | 327.1 | 373.1 | 371 | 2.1 | 12 | 2 |
| | 3 | □ | MPS1-1160S-DIN | 37.7 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 4 |
| | 3 | ● | MPS1-1160S-DIN-C | 37.7 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 2 |
| | 5 | □ | MPS1-1160L-DIN | 53.7 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 4 |
| | 5 | ● | MPS1-1160L-DIN-C | 53.7 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 2 |
| | 2 | □ | MPS1-1160-PC | 25.0 | 48.8 | 48.8 | 96.8 | 95 | 1.8 | 12 | 2 |
| 11.6 | 8 | ● | MPS1-1160-L8C | 95.2 | 134.4 | 137.4 | 183.4 | 181 | 2.4 | 12 | 2 |
| | 10 | □ | MPS1-1160-L10C | 118.1 | 158.1 | 161.1 | 207.1 | 205 | 2.1 | 12 | 2 |
| | 12 | □ | MPS1-1160-L12C | 141.3 | 182.1 | 185.1 | 231.1 | 229 | 2.1 | 12 | 2 |
| | 15 | □ | MPS1-1160-L15C | 176.1 | 218.1 | 221.1 | 267.1 | 265 | 2.1 | 12 | 2 |
| | 20 | □ | MPS1-1160-L20C | 234.1 | 278.1 | 281.1 | 327.1 | 325 | 2.1 | 12 | 2 |
| | 25 | □ | MPS1-1160-L25C | 292.1 | 338.1 | 341.1 | 387.1 | 385 | 2.1 | 12 | 2 |
| | 3 | □ | MPS1-1170S-DIN | 37.6 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 4 |
| | 3 | ● | MPS1-1170S-DIN-C | 37.6 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 2 |
| | 5 | □ | MPS1-1170L-DIN | 53.6 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 4 |
| | 5 | ● | MPS1-1170L-DIN-C | 53.6 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 2 |
| | 2 | ● | MPS1-1170-PC | 25.2 | 48.8 | 48.8 | 96.8 | 95 | 1.8 | 12 | 2 |
| 11.7 | 8 | ● | MPS1-1170-L8C | 96.0 | 134.4 | 137.4 | 183.4 | 181 | 2.4 | 12 | 2 |
| | 10 | □ | MPS1-1170-L10C | 119.1 | 158.1 | 161.1 | 207.1 | 205 | 2.1 | 12 | 2 |
| | 12 | ● | MPS1-1170-L12C | 142.5 | 182.1 | 185.1 | 231.1 | 229 | 2.1 | 12 | 2 |
| | 15 | ● | MPS1-1170-L15C | 177.6 | 218.1 | 221.1 | 267.1 | 265 | 2.1 | 12 | 2 |
| | 20 | □ | MPS1-1170-L20C | 236.1 | 278.1 | 281.1 | 327.1 | 325 | 2.1 | 12 | 2 |
| | 25 | □ | MPS1-1170-L25C | 294.6 | 338.1 | 341.1 | 387.1 | 385 | 2.1 | 12 | 2 |
| | 3 | □ | MPS1-1180S-DIN | 37.4 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 4 |
| | 3 | ● | MPS1-1180S-DIN-C | 37.4 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 2 |
| | 5 | □ | MPS1-1180L-DIN | 53.4 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 4 |
| | 5 | ● | MPS1-1180L-DIN-C | 53.4 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 2 |
| | 2 | ● | MPS1-1180-PC | 25.5 | 48.9 | 48.9 | 96.9 | 95 | 1.9 | 12 | 2 |
| 11.8 | 8 | ● | MPS1-1180-L8C | 96.8 | 134.4 | 137.4 | 183.4 | 181 | 2.4 | 12 | 2 |
| | 10 | □ | MPS1-1180-L10C | 120.1 | 158.1 | 161.1 | 207.1 | 205 | 2.1 | 12 | 2 |
| | 12 | ● | MPS1-1180-L12C | 143.7 | 182.1 | 185.1 | 231.1 | 229 | 2.1 | 12 | 2 |
| | 15 | ● | MPS1-1180-L15C | 179.1 | 218.1 | 221.1 | 267.1 | 265 | 2.1 | 12 | 2 |
| | 20 | □ | MPS1-1180-L20C | 238.1 | 278.1 | 281.1 | 327.1 | 325 | 2.1 | 12 | 2 |
| | 25 | □ | MPS1-1180-L25C | 297.1 | 338.1 | 341.1 | 387.1 | 385 | 2.1 | 12 | 2 |

CONDITIONS DE COUPE ➤ M059
MÉTHODE D'UTILISATION ➤ M060
DONNÉES TECHNIQUES ➤ P001

# PERÇAGE (CARBURE MONOBLOC)

# MPS1

Foret carbure à double listel

| DC (mm) | Rapport (L/D) | DP1021 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.9 | 3 | □ | MPS1-1190S-DIN | 37.3 | 55.2 | 56.2 | 102.2 | 100 | 2.2 | 12 | 4 |
| | 3 | ● | MPS1-1190S-DIN-C | 37.3 | 55.2 | 56.2 | 102.2 | 100 | 2.2 | 12 | 2 |
| | 5 | □ | MPS1-1190L-DIN | 53.3 | 71.2 | 72.2 | 118.2 | 116 | 2.2 | 12 | 4 |
| | 5 | ● | MPS1-1190L-DIN-C | 53.3 | 71.2 | 72.2 | 118.2 | 116 | 2.2 | 12 | 2 |
| | 2 | □ | MPS1-1190-PC | 25.7 | 48.9 | 48.9 | 96.9 | 95 | 1.9 | 12 | 2 |
| | 8 | ● | MPS1-1190-L8C | 97.7 | 134.5 | 137.5 | 183.5 | 181 | 2.5 | 12 | 2 |
| | 10 | □ | MPS1-1190-L10C | 121.2 | 158.2 | 161.2 | 207.2 | 205 | 2.2 | 12 | 2 |
| | 12 | □ | MPS1-1190-L12C | 145.0 | 182.2 | 185.2 | 231.2 | 229 | 2.2 | 12 | 2 |
| | 15 | □ | MPS1-1190-L15C | 180.7 | 218.2 | 221.2 | 267.2 | 265 | 2.2 | 12 | 2 |
| | 20 | □ | MPS1-1190-L20C | 240.2 | 278.2 | 281.2 | 327.2 | 325 | 2.2 | 12 | 2 |
| | 25 | □ | MPS1-1190-L25C | 299.7 | 338.2 | 341.2 | 387.2 | 385 | 2.2 | 12 | 2 |
| 12.0 | 3 | □ | MPS1-1200S-DIN | 37.2 | 55.2 | 56.2 | 102.2 | 100 | 2.2 | 12 | 4 |
| | 3 | ● | MPS1-1200S-DIN-C | 37.2 | 55.2 | 56.2 | 102.2 | 100 | 2.2 | 12 | 2 |
| | 5 | □ | MPS1-1200L-DIN | 53.2 | 71.2 | 72.2 | 118.2 | 116 | 2.2 | 12 | 4 |
| | 5 | ● | MPS1-1200L-DIN-C | 53.2 | 71.2 | 72.2 | 118.2 | 116 | 2.2 | 12 | 2 |
| | 2 | ● | MPS1-1200-PC | 25.9 | 48.9 | 48.9 | 96.9 | 95 | 1.9 | 12 | 2 |
| | 8 | ● | MPS1-1200-L8C | 98.5 | 134.5 | 137.5 | 183.5 | 181 | 2.5 | 12 | 2 |
| | 10 | □ | MPS1-1200-L10C | 122.2 | 158.2 | 161.2 | 207.2 | 205 | 2.2 | 12 | 2 |
| | 12 | ● | MPS1-1200-L12C | 146.2 | 182.2 | 185.2 | 231.2 | 229 | 2.2 | 12 | 2 |
| | 15 | ● | MPS1-1200-L15C | 182.2 | 218.2 | 221.2 | 267.2 | 265 | 2.2 | 12 | 2 |
| | 20 | ● | MPS1-1200-L20C | 242.2 | 278.2 | 281.2 | 327.2 | 325 | 2.2 | 12 | 2 |
| | 25 | ● | MPS1-1200-L25C | 302.2 | 338.2 | 341.2 | 387.2 | 385 | 2.2 | 12 | 2 |
| 12.05 | 3 | □ | MPS1-1205S-DIN | 42.1 | 60.2 | 61.2 | 107.2 | 105 | 2.2 | 14 | 4 |
| | 3 | ● | MPS1-1205S-DIN-C | 42.1 | 60.2 | 61.2 | 107.2 | 105 | 2.2 | 14 | 2 |
| | 5 | □ | MPS1-1205L-DIN | 59.1 | 77.2 | 78.2 | 124.2 | 122 | 2.2 | 14 | 4 |
| | 5 | ● | MPS1-1205L-DIN-C | 59.1 | 77.2 | 78.2 | 124.2 | 122 | 2.2 | 14 | 2 |
| 12.1 | 3 | □ | MPS1-1210S-DIN | 42.1 | 60.2 | 61.2 | 107.2 | 105 | 2.2 | 14 | 4 |
| | 3 | ● | MPS1-1210S-DIN-C | 42.1 | 60.2 | 61.2 | 107.2 | 105 | 2.2 | 14 | 2 |
| | 5 | □ | MPS1-1210L-DIN | 59.1 | 77.2 | 78.2 | 124.2 | 122 | 2.2 | 14 | 4 |
| | 5 | ● | MPS1-1210L-DIN-C | 59.1 | 77.2 | 78.2 | 124.2 | 122 | 2.2 | 14 | 2 |
| | 2 | ● | MPS1-1210-PC | 26.1 | 52.9 | 55.9 | 103.9 | 102 | 1.9 | 14 | 2 |
| | 8 | ● | MPS1-1210-L8C | 99.3 | 140.5 | 143.5 | 189.5 | 187 | 2.5 | 14 | 2 |
| | 10 | □ | MPS1-1210-L10C | 123.2 | 165.2 | 168.2 | 214.2 | 212 | 2.2 | 14 | 2 |
| | 12 | ● | MPS1-1210-L12C | 147.4 | 190.2 | 193.2 | 239.2 | 237 | 2.2 | 14 | 2 |
| | 15 | ● | MPS1-1210-L15C | 183.7 | 227.2 | 230.2 | 276.2 | 274 | 2.2 | 14 | 2 |
| | 20 | □ | MPS1-1210-L20C | 244.2 | 290.2 | 293.2 | 339.2 | 337 | 2.2 | 14 | 2 |
| 12.2 | 3 | □ | MPS1-1220S-DIN | 41.9 | 60.2 | 61.2 | 107.2 | 105 | 2.2 | 14 | 4 |
| | 3 | ● | MPS1-1220S-DIN-C | 41.9 | 60.2 | 61.2 | 107.2 | 105 | 2.2 | 14 | 2 |
| | 5 | □ | MPS1-1220L-DIN | 58.9 | 77.2 | 78.2 | 124.2 | 122 | 2.2 | 14 | 4 |
| | 5 | ● | MPS1-1220L-DIN-C | 58.9 | 77.2 | 78.2 | 124.2 | 122 | 2.2 | 14 | 2 |
| | 2 | ● | MPS1-1220-PC | 26.3 | 52.9 | 55.9 | 103.9 | 102 | 1.9 | 14 | 2 |
| | 8 | ● | MPS1-1220-L8C | 100.1 | 140.5 | 143.5 | 189.5 | 187 | 2.5 | 14 | 2 |
| | 10 | □ | MPS1-1220-L10C | 124.2 | 165.2 | 168.2 | 214.2 | 212 | 2.2 | 14 | 2 |
| | 12 | ● | MPS1-1220-L12C | 148.6 | 190.2 | 193.2 | 239.2 | 237 | 2.2 | 14 | 2 |
| | 15 | ● | MPS1-1220-L15C | 185.2 | 227.2 | 230.2 | 276.2 | 274 | 2.2 | 14 | 2 |
| | 20 | □ | MPS1-1220-L20C | 246.2 | 290.2 | 293.2 | 339.2 | 337 | 2.2 | 14 | 2 |
| 12.3 | 3 | □ | MPS1-1230S-DIN | 41.8 | 60.2 | 61.2 | 107.2 | 105 | 2.2 | 14 | 4 |
| | 3 | ● | MPS1-1230S-DIN-C | 41.8 | 60.2 | 61.2 | 107.2 | 105 | 2.2 | 14 | 2 |
| | 5 | □ | MPS1-1230L-DIN | 58.8 | 77.2 | 78.2 | 124.2 | 122 | 2.2 | 14 | 4 |
| | 5 | ● | MPS1-1230L-DIN-C | 58.8 | 77.2 | 78.2 | 124.2 | 122 | 2.2 | 14 | 2 |
| | 2 | □ | MPS1-1230-PC | 26.5 | 52.9 | 55.9 | 103.9 | 102 | 1.9 | 14 | 2 |
| | 8 | ● | MPS1-1230-L8C | 100.9 | 140.5 | 143.5 | 189.5 | 187 | 2.5 | 14 | 2 |
| | 10 | □ | MPS1-1230-L10C | 125.2 | 165.2 | 168.2 | 214.2 | 212 | 2.2 | 14 | 2 |
| | 12 | □ | MPS1-1230-L12C | 149.8 | 190.2 | 193.2 | 239.2 | 237 | 2.2 | 14 | 2 |
| | 15 | □ | MPS1-1230-L15C | 186.7 | 227.2 | 230.2 | 276.2 | 274 | 2.2 | 14 | 2 |
| | 20 | □ | MPS1-1230-L20C | 248.2 | 290.2 | 293.2 | 339.2 | 337 | 2.2 | 14 | 2 |

| DC (mm) | Rapport (L/D) | DP1021 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.4 | 3 | □ | MPS1-1240S-DIN | 41.7 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 4 |
| | 3 | ● | MPS1-1240S-DIN-C | 41.7 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 2 |
| | 5 | □ | MPS1-1240L-DIN | 58.7 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 4 |
| | 5 | ● | MPS1-1240L-DIN-C | 58.7 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 2 |
| | 2 | □ | MPS1-1240-PC | 26.8 | 53.0 | 56.0 | 104.0 | 102 | 2.0 | 14 | 2 |
| | 8 | ● | MPS1-1240-L8C | 101.8 | 140.6 | 143.6 | 189.6 | 187 | 2.6 | 14 | 2 |
| | 10 | □ | MPS1-1240-L10C | 126.3 | 165.3 | 168.3 | 214.3 | 212 | 2.3 | 14 | 2 |
| | 12 | □ | MPS1-1240-L12C | 151.1 | 190.3 | 193.3 | 239.3 | 237 | 2.3 | 14 | 2 |
| | 15 | □ | MPS1-1240-L15C | 188.3 | 227.3 | 230.3 | 276.3 | 274 | 2.3 | 14 | 2 |
| | 20 | □ | MPS1-1240-L20C | 250.3 | 290.3 | 293.3 | 339.3 | 337 | 2.3 | 14 | 2 |
| 12.5 | 3 | □ | MPS1-1250S-DIN | 41.5 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 4 |
| | 3 | ● | MPS1-1250S-DIN-C | 41.5 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 2 |
| | 5 | □ | MPS1-1250L-DIN | 58.5 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 4 |
| | 5 | ● | MPS1-1250L-DIN-C | 58.5 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 2 |
| | 2 | ● | MPS1-1250-PC | 27.0 | 53.0 | 56.0 | 104.0 | 102 | 2.0 | 14 | 2 |
| | 8 | ● | MPS1-1250-L8C | 102.6 | 140.6 | 143.6 | 189.6 | 187 | 2.6 | 14 | 2 |
| | 10 | □ | MPS1-1250-L10C | 127.3 | 165.3 | 168.3 | 214.3 | 212 | 2.3 | 14 | 2 |
| | 12 | ● | MPS1-1250-L12C | 152.3 | 190.3 | 193.3 | 239.3 | 237 | 2.3 | 14 | 2 |
| | 15 | ● | MPS1-1250-L15C | 189.8 | 227.3 | 230.3 | 276.3 | 274 | 2.3 | 14 | 2 |
| | 20 | □ | MPS1-1250-L20C | 252.3 | 290.3 | 293.3 | 339.3 | 337 | 2.3 | 14 | 2 |
| 12.6 | 3 | □ | MPS1-1260S-DIN | 41.4 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 4 |
| | 3 | ● | MPS1-1260S-DIN-C | 41.4 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 2 |
| | 5 | □ | MPS1-1260L-DIN | 58.4 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 4 |
| | 5 | ● | MPS1-1260L-DIN-C | 58.4 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 2 |
| | 2 | □ | MPS1-1260-PC | 27.2 | 53.0 | 55.0 | 104.0 | 102 | 2.0 | 14 | 2 |
| | 8 | ● | MPS1-1260-L8C | 103.4 | 145.6 | 148.6 | 194.6 | 192 | 2.6 | 14 | 2 |
| | 10 | □ | MPS1-1260-L10C | 128.3 | 171.3 | 174.3 | 220.3 | 218 | 2.3 | 14 | 2 |
| | 12 | □ | MPS1-1260-L12C | 153.5 | 197.3 | 200.3 | 246.3 | 244 | 2.3 | 14 | 2 |
| | 15 | □ | MPS1-1260-L15C | 191.3 | 236.3 | 239.3 | 285.3 | 283 | 2.3 | 14 | 2 |
| | 20 | □ | MPS1-1260-L20C | 254.3 | 301.3 | 304.3 | 350.3 | 348 | 2.3 | 14 | 2 |
| 12.7 | 3 | □ | MPS1-1270S-DIN | 41.3 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 4 |
| | 3 | ● | MPS1-1270S-DIN-C | 41.3 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 2 |
| | 5 | □ | MPS1-1270L-DIN | 58.3 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 4 |
| | 5 | ● | MPS1-1270L-DIN-C | 58.3 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 2 |
| | 2 | ● | MPS1-1270-PC | 27.4 | 53.0 | 55.0 | 104.0 | 102 | 2.0 | 14 | 2 |
| | 8 | ● | MPS1-1270-L8C | 104.2 | 145.6 | 148.6 | 194.6 | 192 | 2.6 | 14 | 2 |
| | 10 | □ | MPS1-1270-L10C | 129.3 | 171.3 | 174.3 | 220.3 | 218 | 2.3 | 14 | 2 |
| | 12 | ● | MPS1-1270-L12C | 154.7 | 197.3 | 200.3 | 246.3 | 244 | 2.3 | 14 | 2 |
| | 15 | □ | MPS1-1270-L15C | 192.8 | 236.3 | 239.3 | 285.3 | 283 | 2.3 | 14 | 2 |
| | 20 | □ | MPS1-1270-L20C | 256.3 | 301.3 | 304.3 | 350.3 | 348 | 2.3 | 14 | 2 |
| 12.8 | 3 | □ | MPS1-1280S-DIN | 41.1 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 4 |
| | 3 | ● | MPS1-1280S-DIN-C | 41.1 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 2 |
| | 5 | □ | MPS1-1280L-DIN | 58.1 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 4 |
| | 5 | ● | MPS1-1280L-DIN-C | 58.1 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 2 |
| | 2 | ● | MPS1-1280-PC | 27.6 | 53.0 | 55.0 | 104.0 | 102 | 2.0 | 14 | 2 |
| | 8 | ● | MPS1-1280-L8C | 105.1 | 145.7 | 148.7 | 194.7 | 192 | 2.7 | 14 | 2 |
| | 10 | □ | MPS1-1280-L10C | 130.3 | 171.3 | 174.3 | 220.3 | 218 | 2.3 | 14 | 2 |
| | 12 | ● | MPS1-1280-L12C | 155.9 | 197.3 | 200.3 | 246.3 | 244 | 2.3 | 14 | 2 |
| | 15 | □ | MPS1-1280-L15C | 194.3 | 236.3 | 239.3 | 285.3 | 283 | 2.3 | 14 | 2 |
| | 20 | □ | MPS1-1280-L20C | 258.3 | 301.3 | 304.3 | 350.3 | 348 | 2.3 | 14 | 2 |

● : Article stocké.

□ : Article non stocké - Fabrication sur commande uniquement.

| DC (mm) | Rapport (L/D) | DP1021 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.9 | 3 | □ | MPS1-1290S-DIN | 41.0 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 4 |
| | 3 | ● | MPS1-1290S-DIN-C | 41.0 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 2 |
| | 5 | □ | MPS1-1290L-DIN | 58.0 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 4 |
| | 5 | ● | MPS1-1290L-DIN-C | 58.0 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 2 |
| | 2 | □ | MPS1-1290-PC | 27.8 | 53.0 | 55.0 | 104.0 | 102 | 2.0 | 14 | 2 |
| | 8 | ● | MPS1-1290-L8C | 105.9 | 145.7 | 148.7 | 194.7 | 192 | 2.7 | 14 | 2 |
| | 10 | □ | MPS1-1290-L10C | 131.3 | 171.3 | 174.3 | 220.3 | 218 | 2.3 | 14 | 2 |
| | 12 | □ | MPS1-1290-L12C | 157.1 | 197.3 | 200.3 | 246.3 | 244 | 2.3 | 14 | 2 |
| | 15 | □ | MPS1-1290-L15C | 195.8 | 236.3 | 239.3 | 285.3 | 283 | 2.3 | 14 | 2 |
| | 20 | □ | MPS1-1290-L20C | 260.3 | 301.3 | 304.3 | 350.3 | 348 | 2.3 | 14 | 2 |
| 13.0 | 3 | □ | MPS1-1300S-DIN | 40.9 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 4 |
| | 3 | ● | MPS1-1300S-DIN-C | 40.9 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 2 |
| | 5 | □ | MPS1-1300L-DIN | 57.9 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 4 |
| | 5 | ● | MPS1-1300L-DIN-C | 57.9 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 2 |
| | 2 | ● | MPS1-1300-PC | 28.0 | 53.0 | 55.0 | 104.0 | 102 | 2.0 | 14 | 2 |
| | 8 | ● | MPS1-1300-L8C | 106.7 | 145.7 | 148.7 | 194.7 | 192 | 2.7 | 14 | 2 |
| | 10 | □ | MPS1-1300-L10C | 132.4 | 171.4 | 174.4 | 220.4 | 218 | 2.4 | 14 | 2 |
| | 12 | ● | MPS1-1300-L12C | 158.4 | 197.4 | 200.4 | 246.4 | 244 | 2.4 | 14 | 2 |
| | 15 | ● | MPS1-1300-L15C | 197.4 | 236.4 | 239.4 | 285.4 | 283 | 2.4 | 14 | 2 |
| | 20 | ● | MPS1-1300-L20C | 262.4 | 301.4 | 304.4 | 350.4 | 348 | 2.4 | 14 | 2 |
| 13.1 | 3 | □ | MPS1-1310S-DIN | 40.7 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 4 |
| | 3 | ● | MPS1-1310S-DIN-C | 40.7 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 2 |
| | 5 | □ | MPS1-1310L-DIN | 57.7 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 4 |
| | 5 | ● | MPS1-1310L-DIN-C | 57.7 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 2 |
| | 2 | □ | MPS1-1310-PC | 28.3 | 56.1 | 59.1 | 109.1 | 107 | 2.1 | 14 | 2 |
| | 8 | ● | MPS1-1310-L8C | 107.5 | 151.7 | 154.7 | 200.7 | 198 | 2.7 | 14 | 2 |
| | 10 | □ | MPS1-1310-L10C | 133.4 | 178.4 | 181.4 | 227.4 | 225 | 2.4 | 14 | 2 |
| | 12 | □ | MPS1-1310-L12C | 159.6 | 205.4 | 208.4 | 254.4 | 252 | 2.4 | 14 | 2 |
| | 15 | □ | MPS1-1310-L15C | 198.9 | 245.4 | 248.4 | 294.4 | 292 | 2.4 | 14 | 2 |
| | 20 | □ | MPS1-1310-L20C | 264.4 | 313.4 | 316.4 | 362.4 | 360 | 2.4 | 14 | 2 |
| 13.2 | 3 | □ | MPS1-1320S-DIN | 40.6 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 4 |
| | 3 | ● | MPS1-1320S-DIN-C | 40.6 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 2 |
| | 5 | □ | MPS1-1320L-DIN | 57.6 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 4 |
| | 5 | ● | MPS1-1320L-DIN-C | 57.6 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 2 |
| | 2 | ● | MPS1-1320-PC | 28.5 | 56.1 | 59.1 | 109.1 | 107 | 2.1 | 14 | 2 |
| | 8 | ● | MPS1-1320-L8C | 108.3 | 151.7 | 154.7 | 200.7 | 198 | 2.7 | 14 | 2 |
| | 10 | □ | MPS1-1320-L10C | 134.4 | 178.4 | 181.4 | 227.4 | 225 | 2.4 | 14 | 2 |
| | 12 | ● | MPS1-1320-L12C | 160.8 | 205.4 | 208.4 | 254.4 | 252 | 2.4 | 14 | 2 |
| | 15 | □ | MPS1-1320-L15C | 200.4 | 245.4 | 248.4 | 294.4 | 292 | 2.4 | 14 | 2 |
| | 20 | □ | MPS1-1320-L20C | 266.4 | 313.4 | 316.4 | 362.4 | 360 | 2.4 | 14 | 2 |
| 13.3 | 3 | □ | MPS1-1330S-DIN | 40.5 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 4 |
| | 3 | ● | MPS1-1330S-DIN-C | 40.5 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 2 |
| | 5 | □ | MPS1-1330L-DIN | 57.5 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 4 |
| | 5 | ● | MPS1-1330L-DIN-C | 57.5 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 2 |
| | 2 | □ | MPS1-1330-PC | 28.7 | 56.1 | 59.1 | 109.1 | 107 | 2.1 | 14 | 2 |
| | 8 | ● | MPS1-1330-L8C | 109.2 | 151.8 | 154.8 | 200.8 | 198 | 2.8 | 14 | 2 |
| | 10 | □ | MPS1-1330-L10C | 135.4 | 178.4 | 181.4 | 227.4 | 225 | 2.4 | 14 | 2 |
| | 12 | □ | MPS1-1330-L12C | 162.0 | 205.4 | 208.4 | 254.4 | 252 | 2.4 | 14 | 2 |
| | 15 | □ | MPS1-1330-L15C | 201.9 | 245.4 | 248.4 | 294.4 | 292 | 2.4 | 14 | 2 |
| | 20 | □ | MPS1-1330-L20C | 268.4 | 313.4 | 316.4 | 362.4 | 360 | 2.4 | 14 | 2 |

| DC (mm) | Rapport (L/D) | DP1021 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.4 | 3 | □ | MPS1-1340S-DIN | 40.3 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 4 |
| | 3 | ● | MPS1-1340S-DIN-C | 40.3 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 2 |
| | 5 | □ | MPS1-1340L-DIN | 57.3 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 4 |
| | 5 | ● | MPS1-1340L-DIN-C | 57.3 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 2 |
| | 2 | □ | MPS1-1340-PC | 28.9 | 56.1 | 59.1 | 109.1 | 107 | 2.1 | 14 | 2 |
| | 8 | ● | MPS1-1340-L8C | 110.0 | 151.8 | 154.8 | 200.8 | 198 | 2.8 | 14 | 2 |
| | 10 | □ | MPS1-1340-L10C | 136.4 | 178.4 | 181.4 | 227.4 | 225 | 2.4 | 14 | 2 |
| | 12 | □ | MPS1-1340-L12C | 163.2 | 205.4 | 208.4 | 254.4 | 252 | 2.4 | 14 | 2 |
| | 15 | □ | MPS1-1340-L15C | 203.4 | 245.4 | 248.4 | 294.4 | 292 | 2.4 | 14 | 2 |
| | 20 | □ | MPS1-1340-L20C | 270.4 | 313.4 | 316.4 | 362.4 | 360 | 2.4 | 14 | 2 |
| 13.5 | 3 | □ | MPS1-1350S-DIN | 40.2 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 4 |
| | 3 | ● | MPS1-1350S-DIN-C | 40.2 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 2 |
| | 5 | □ | MPS1-1350L-DIN | 57.2 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 4 |
| | 5 | ● | MPS1-1350L-DIN-C | 57.2 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 2 |
| | 2 | ● | MPS1-1350-PC | 29.1 | 56.1 | 59.1 | 109.1 | 107 | 2.1 | 14 | 2 |
| | 8 | ● | MPS1-1350-L8C | 110.8 | 151.8 | 154.8 | 200.8 | 198 | 2.8 | 14 | 2 |
| | 10 | □ | MPS1-1350-L10C | 137.5 | 178.5 | 181.5 | 227.5 | 225 | 2.5 | 14 | 2 |
| | 12 | ● | MPS1-1350-L12C | 164.5 | 205.5 | 208.5 | 254.5 | 252 | 2.5 | 14 | 2 |
| | 15 | □ | MPS1-1350-L15C | 205.0 | 245.5 | 248.5 | 294.5 | 292 | 2.5 | 14 | 2 |
| | 20 | □ | MPS1-1350-L20C | 272.5 | 313.5 | 316.5 | 362.5 | 360 | 2.5 | 14 | 2 |
| 13.6 | 3 | □ | MPS1-1360S-DIN | 40.1 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 4 |
| | 3 | ● | MPS1-1360S-DIN-C | 40.1 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 2 |
| | 5 | □ | MPS1-1360L-DIN | 57.1 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 4 |
| | 5 | ● | MPS1-1360L-DIN-C | 57.1 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 2 |
| | 2 | □ | MPS1-1360-PC | 29.3 | 56.1 | 56.1 | 109.1 | 107 | 2.1 | 14 | 2 |
| | 8 | ● | MPS1-1360-L8C | 111.6 | 156.8 | 159.8 | 205.8 | 203 | 2.8 | 14 | 2 |
| | 10 | □ | MPS1-1360-L10C | 138.5 | 184.5 | 187.5 | 233.5 | 231 | 2.5 | 14 | 2 |
| | 12 | □ | MPS1-1360-L12C | 165.7 | 212.5 | 215.5 | 261.5 | 259 | 2.5 | 14 | 2 |
| | 15 | □ | MPS1-1360-L15C | 206.5 | 254.5 | 257.5 | 303.5 | 301 | 2.5 | 14 | 2 |
| | 20 | □ | MPS1-1360-L20C | 274.5 | 324.5 | 327.5 | 373.5 | 371 | 2.5 | 14 | 2 |
| 13.7 | 3 | □ | MPS1-1370S-DIN | 39.9 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 4 |
| | 3 | ● | MPS1-1370S-DIN-C | 39.9 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 2 |
| | 5 | □ | MPS1-1370L-DIN | 56.9 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 4 |
| | 5 | ● | MPS1-1370L-DIN-C | 56.9 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 2 |
| | 2 | □ | MPS1-1370-PC | 29.6 | 56.2 | 56.2 | 109.2 | 107 | 2.2 | 14 | 2 |
| | 8 | ● | MPS1-1370-L8C | 112.4 | 156.8 | 159.8 | 205.8 | 203 | 2.8 | 14 | 2 |
| | 10 | □ | MPS1-1370-L10C | 139.5 | 184.5 | 187.5 | 233.5 | 231 | 2.5 | 14 | 2 |
| | 12 | □ | MPS1-1370-L12C | 166.9 | 212.5 | 215.5 | 261.5 | 259 | 2.5 | 14 | 2 |
| | 15 | □ | MPS1-1370-L15C | 208.0 | 254.5 | 257.5 | 303.5 | 301 | 2.5 | 14 | 2 |
| | 20 | □ | MPS1-1370-L20C | 276.5 | 324.5 | 327.5 | 373.5 | 371 | 2.5 | 14 | 2 |
| 13.8 | 3 | □ | MPS1-1380S-DIN | 39.8 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 4 |
| | 3 | ● | MPS1-1380S-DIN-C | 39.8 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 2 |
| | 5 | □ | MPS1-1380L-DIN | 56.8 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 4 |
| | 5 | ● | MPS1-1380L-DIN-C | 56.8 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 2 |
| | 2 | □ | MPS1-1380-PC | 29.8 | 56.2 | 56.2 | 109.2 | 107 | 2.2 | 14 | 2 |
| | 8 | ● | MPS1-1380-L8C | 113.3 | 156.9 | 159.9 | 205.9 | 203 | 2.9 | 14 | 2 |
| | 10 | □ | MPS1-1380-L10C | 140.5 | 184.5 | 187.5 | 233.5 | 231 | 2.5 | 14 | 2 |
| | 12 | □ | MPS1-1380-L12C | 168.1 | 212.5 | 215.5 | 261.5 | 259 | 2.5 | 14 | 2 |
| | 15 | □ | MPS1-1380-L15C | 209.5 | 254.5 | 257.5 | 303.5 | 301 | 2.5 | 14 | 2 |
| | 20 | □ | MPS1-1380-L20C | 278.5 | 324.5 | 327.5 | 373.5 | 371 | 2.5 | 14 | 2 |

CONDITIONS DE COUPE ➤ M059
MÉTHODE D'UTILISATION ➤ M060
DONNÉES TECHNIQUES ➤ P001

# MPS1

Foret carbure à double listel

| DC (mm) | Rapport (L/D) | DP1021 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.9 | 3 | □ | MPS1-1390S-DIN | 39.7 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 4 |
| | 3 | ● | MPS1-1390S-DIN-C | 39.7 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 2 |
| | 5 | □ | MPS1-1390L-DIN | 56.7 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 4 |
| | 5 | ● | MPS1-1390L-DIN-C | 56.7 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 2 |
| | 2 | □ | MPS1-1390-PC | 30.0 | 56.2 | 56.2 | 109.2 | 107 | 2.2 | 14 | 2 |
| | 8 | ● | MPS1-1390-L8C | 114.1 | 156.9 | 159.9 | 205.9 | 203 | 2.9 | 14 | 2 |
| | 10 | □ | MPS1-1390-L10C | 141.5 | 184.5 | 187.5 | 233.5 | 231 | 2.5 | 14 | 2 |
| | 12 | □ | MPS1-1390-L12C | 169.3 | 212.5 | 215.5 | 261.5 | 259 | 2.5 | 14 | 2 |
| | 15 | □ | MPS1-1390-L15C | 211.0 | 254.5 | 257.5 | 303.5 | 301 | 2.5 | 14 | 2 |
| | 20 | □ | MPS1-1390-L20C | 280.5 | 324.5 | 327.5 | 373.5 | 371 | 2.5 | 14 | 2 |
| 14.0 | 3 | □ | MPS1-1400S-DIN | 39.5 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 4 |
| | 3 | ● | MPS1-1400S-DIN-C | 39.5 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 2 |
| | 5 | □ | MPS1-1400L-DIN | 56.5 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 4 |
| | 5 | ● | MPS1-1400L-DIN-C | 56.5 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 2 |
| | 2 | ● | MPS1-1400-PC | 30.2 | 56.2 | 56.2 | 109.2 | 107 | 2.2 | 14 | 2 |
| | 8 | ● | MPS1-1400-L8C | 114.9 | 156.9 | 159.9 | 205.9 | 203 | 2.9 | 14 | 2 |
| | 10 | □ | MPS1-1400-L10C | 142.5 | 184.5 | 187.5 | 233.5 | 231 | 2.5 | 14 | 2 |
| | 12 | ● | MPS1-1400-L12C | 170.5 | 212.5 | 215.5 | 261.5 | 259 | 2.5 | 14 | 2 |
| | 15 | ● | MPS1-1400-L15C | 212.5 | 254.5 | 257.5 | 303.5 | 301 | 2.5 | 14 | 2 |
| | 20 | ● | MPS1-1400-L20C | 282.5 | 324.5 | 327.5 | 373.5 | 371 | 2.5 | 14 | 2 |
| 14.2 | 3 | □ | MPS1-1420S-DIN | 43.3 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 4 |
| | 3 | ● | MPS1-1420S-DIN-C | 43.3 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 2 |
| | 5 | □ | MPS1-1420L-DIN | 61.3 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 4 |
| | 5 | ● | MPS1-1420L-DIN-C | 61.3 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 2 |
| 14.5 | 3 | □ | MPS1-1450S-DIN | 42.9 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 4 |
| | 3 | ● | MPS1-1450S-DIN-C | 42.9 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 2 |
| | 5 | □ | MPS1-1450L-DIN | 60.9 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 4 |
| | 5 | ● | MPS1-1450L-DIN-C | 60.9 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 2 |
| 15.0 | 3 | □ | MPS1-1500S-DIN | 42.2 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 4 |
| | 3 | ● | MPS1-1500S-DIN-C | 42.2 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 2 |
| | 5 | □ | MPS1-1500L-DIN | 60.2 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 4 |
| | 5 | ● | MPS1-1500L-DIN-C | 60.2 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 2 |
| 15.5 | 3 | □ | MPS1-1550S-DIN | 41.6 | 64.8 | 65.8 | 114.8 | 112 | 2.8 | 16 | 4 |
| | 3 | ● | MPS1-1550S-DIN-C | 41.6 | 64.8 | 65.8 | 114.8 | 112 | 2.8 | 16 | 2 |
| | 5 | □ | MPS1-1550L-DIN | 59.6 | 82.8 | 83.8 | 132.8 | 130 | 2.8 | 16 | 4 |
| | 5 | ● | MPS1-1550L-DIN-C | 59.6 | 82.8 | 83.8 | 132.8 | 130 | 2.8 | 16 | 2 |
| 16.0 | 3 | □ | MPS1-1600S-DIN | 40.9 | 64.9 | 65.9 | 114.9 | 112 | 2.9 | 16 | 4 |
| | 3 | ● | MPS1-1600S-DIN-C | 40.9 | 64.9 | 65.9 | 114.9 | 112 | 2.9 | 16 | 2 |
| | 5 | □ | MPS1-1600L-DIN | 58.9 | 82.9 | 83.9 | 132.9 | 130 | 2.9 | 16 | 4 |
| | 5 | ● | MPS1-1600L-DIN-C | 58.9 | 82.9 | 83.9 | 132.9 | 130 | 2.9 | 16 | 2 |
| 16.5 | 3 | □ | MPS1-1650S-DIN | 48.3 | 73.0 | 74.0 | 123.0 | 120 | 3.0 | 18 | 4 |
| | 3 | ● | MPS1-1650S-DIN-C | 48.3 | 73.0 | 74.0 | 123.0 | 120 | 3.0 | 18 | 2 |
| | 5 | □ | MPS1-1650L-DIN | 68.3 | 93.0 | 94.0 | 143.0 | 140 | 3.0 | 18 | 4 |
| | 5 | ● | MPS1-1650L-DIN-C | 68.3 | 93.0 | 94.0 | 143.0 | 140 | 3.0 | 18 | 2 |
| 17.0 | 3 | □ | MPS1-1700S-DIN | 47.6 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 4 |
| | 3 | ● | MPS1-1700S-DIN-C | 47.6 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 2 |
| | 5 | □ | MPS1-1700L-DIN | 67.6 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 4 |
| | 5 | ● | MPS1-1700L-DIN-C | 67.6 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 2 |
| 17.5 | 3 | □ | MPS1-1750S-DIN | 46.9 | 73.2 | 74.2 | 123.2 | 120 | 3.2 | 18 | 4 |
| | 3 | ● | MPS1-1750S-DIN-C | 46.9 | 73.2 | 74.2 | 123.2 | 120 | 3.2 | 18 | 2 |
| | 5 | □ | MPS1-1750L-DIN | 66.9 | 93.2 | 94.2 | 143.2 | 140 | 3.2 | 18 | 4 |
| | 5 | ● | MPS1-1750L-DIN-C | 66.9 | 93.2 | 94.2 | 143.2 | 140 | 3.2 | 18 | 2 |
| 18.0 | 3 | □ | MPS1-1800S-DIN | 46.3 | 73.3 | 74.3 | 123.3 | 120 | 3.3 | 18 | 4 |
| | 3 | ● | MPS1-1800S-DIN-C | 46.3 | 73.3 | 74.3 | 123.3 | 120 | 3.3 | 18 | 2 |
| | 5 | □ | MPS1-1800L-DIN | 66.3 | 93.3 | 94.3 | 143.3 | 140 | 3.3 | 18 | 4 |
| | 5 | ● | MPS1-1800L-DIN-C | 66.3 | 93.3 | 94.3 | 143.3 | 140 | 3.3 | 18 | 2 |

| DC (mm) | Rapport (L/D) | DP1021 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.5 | 3 | □ | MPS1-1850S-DIN | 51.6 | 79.4 | 80.4 | 131.4 | 128 | 3.4 | 20 | 4 |
| | 3 | ● | MPS1-1850S-DIN-C | 51.6 | 79.4 | 80.4 | 131.4 | 128 | 3.4 | 20 | 2 |
| | 5 | □ | MPS1-1850L-DIN | 73.6 | 101.4 | 102.4 | 153.4 | 150 | 3.4 | 20 | 4 |
| | 5 | ● | MPS1-1850L-DIN-C | 73.6 | 101.4 | 102.4 | 153.4 | 150 | 3.4 | 20 | 2 |
| 19.0 | 3 | □ | MPS1-1900S-DIN | 51.0 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 4 |
| | 3 | ● | MPS1-1900S-DIN-C | 51.0 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 2 |
| | 5 | □ | MPS1-1900L-DIN | 73.0 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 4 |
| | 5 | ● | MPS1-1900L-DIN-C | 73.0 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 2 |
| 19.5 | 3 | □ | MPS1-1950S-DIN | 50.3 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 4 |
| | 3 | ● | MPS1-1950S-DIN-C | 50.3 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 2 |
| | 5 | □ | MPS1-1950L-DIN | 72.3 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 4 |
| | 5 | ● | MPS1-1950L-DIN-C | 72.3 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 2 |
| 20.0 | 3 | □ | MPS1-2000S-DIN | 49.6 | 79.6 | 80.6 | 131.6 | 128 | 3.6 | 20 | 4 |
| | 3 | ● | MPS1-2000S-DIN-C | 49.6 | 79.6 | 80.6 | 131.6 | 128 | 3.6 | 20 | 2 |
| | 5 | □ | MPS1-2000L-DIN | 71.6 | 101.6 | 102.6 | 153.6 | 150 | 3.6 | 20 | 4 |
| | 5 | ● | MPS1-2000L-DIN-C | 71.6 | 101.6 | 102.6 | 153.6 | 150 | 3.6 | 20 | 2 |

● : Article stocké.

□ : Article non stocké - Fabrication sur commande uniquement.

# CONDITIONS DE COUPE RECOMMANDÉES

## ● FORETS MPS1 (3xDC – 40xDC)

| DC | L x DC | | P | | | M | K | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Acier doux, Acier carbone, Acier allié | | | Acier inoxydable | Fonte | | |
| | | | ≤ 180 HB | 180–250 HB | 280–350 HB | | ≤ 350 MPa | ≤ 450 MPa | ≤ 800 MPa |
| 3 | 3–8 | Vc m/min | 100 (60–150) | 90 (60–140) | 80 (50–110) | 40 (20–50) | 90 (60–100) | 80 (50–90) | 60 (40–80) |
| | | f mm/tour | 0.15 (0.1–0.2) | 0.15 (0.1–0.19) | 0.12 (0.1–0.14) | 0.08 (0.06–0.12) | 0.15 (0.1–0.2) | 0.12 (0.08–0.16) | 0.09 (0.06–0.12) |
| | 10–25 | Vc m/min | 90 (40–110) | 90 (40–110) | 80 (40–90) | 40 (20–60) | 90 (40–110) | 90 (40–110) | — |
| | | f mm/tour | 0.17 (0.1–0.24) | 0.17 (0.1–0.24) | 0.15 (0.09–0.22) | 0.07 (0.05–0.09) | 0.19 (0.11–0.26) | 0.17 (0.1–0.24) | — |
| | 30–40 | Vc m/min | 75 (40–95) | 75 (40–85) | 65 (40–75) | 30 (20–50) | 75 (45–95) | 30 (20–50) | — |
| | | f mm/tour | 0.14 (0.08–0.19) | 0.14 (0.08–0.19) | 0.15 (0.07–0.18) | 0.06 (0.04–0.07) | 0.15 (0.09–0.21) | 0.14 (0.08–0.19) | — |
| 4 | 3–8 | Vc m/min | 120 (70–170) | 100 (70–160) | 90 (60–120) | 40 (30–50) | 100 (70–110) | 90 (60–100) | 70 (50–90) |
| | | f mm/tour | 0.19 (0.12–0.25) | 0.18 (0.12–0.24) | 0.15 (0.12–0.18) | 0.09 (0.07–0.13) | 0.21 (0.12–0.3) | 0.17 (0.1–0.24) | 0.13 (0.08–0.18) |
| | 10–25 | Vc m/min | 90 (40–110) | 90 (40–110) | 80 (40–90) | 40 (20–60) | 90 (40–110) | 90 (40–110) | — |
| | | f mm/tour | 0.2 (0.12–0.3) | 0.2 (0.12–0.3) | 0.18 (0.11–0.27) | 0.08 (0.06–0.1) | 0.22(0.13–0.33) | 0.2 (0.12–0.3) | — |
| | 30–40 | Vc m/min | 75 (40–95) | 75 (40–85) | 65 (40–75) | 30 (20–50) | 75 (45–95) | 30 (20–50) | — |
| | | f mm/tour | 0.16 (0.1–0.24) | 0.16 (0.1–0.24) | 0.18 (0.09–0.22) | 0.06 (0.05–0.08) | 0.18 (0.1–0.26) | 0.16 (0.1–0.24) | — |
| 5 | 3–8 | Vc m/min | 130 (80–190) | 110 (80–180) | 90 (70–140) | 40 (30–50) | 110 (80–130) | 90 (70–120) | 70 (60–100) |
| | | f mm/tour | 0.23 (0.15–0.3) | 0.22 (0.15–0.29) | 0.19 (0.15–0.22) | 0.11 (0.08–0.16) | 0.25 (0.15–0.35) | 0.21 (0.14–0.28) | 0.17 (0.12–0.22) |
| | 10–25 | Vc m/min | 90 (40–110) | 90 (40–110) | 80 (40–90) | 40 (20–60) | 90 (40–110) | 90 (40–110) | — |
| | | f mm/tour | 0.25 (0.15–0.35) | 0.25 (0.15–0.35) | 0.22 (0.14–0.32) | 0.1 (0.07–0.12) | 0.28 (0.17–0.39) | 0.25 (0.15–0.35) | — |
| | 30–40 | Vc m/min | 75 (40–95) | 75 (40–85) | 65 (40–75) | 30 (20–50) | 75 (45–95) | 30 (20–50) | — |
| | | f mm/tour | 0.2 (0.12–0.28) | 0.2 (0.12–0.28) | 0.22 (0.11–0.26) | 0.08 (0.06–0.1) | 0.22 (0.13–0.31) | 0.2 (0.12–0.28) | — |
| 6 | 3–8 | Vc m/min | 140 (90–210) | 120 (90–190) | 100 (80–150) | 50 (40–70) | 120 (90–140) | 100 (80–130) | 80 (70–110) |
| | | f mm/tour | 0.27 (0.18–0.35) | 0.26 (0.18–0.33) | 0.22 (0.18–0.25) | 0.14 (0.11–0.18) | 0.29 (0.18–0.4) | 0.25 (0.16–0.34) | 0.2 (014–0.26) |
| | 10–25 | Vc m/min | 110 (70–120) | 100 (60–110) | 90 (40–110) | 50 (20–60) | 100 (60–110) | 100 (60–110) | — |
| | | f mm/tour | 0.27 (0.17–0.37) | 0.24 (0.15–0.33) | 0.24 (0.15–0.33) | 0.12 (0.08–0.16) | 0.3 (0.19–0.41) | 0.27 (0.17–0.37) | — |
| | 30–40 | Vc m/min | 90 (40–110) | 80 (40–90) | 75 (40–85) | 40 (20–60) | 90 (60–110) | 40 (30–60) | — |
| | | f mm/tour | 0.22 (0.14–0.3) | 0.22 (0.14–0.3) | 0.24 (0.12–0.26) | 0.1 (0.06–0.13) | 0.24 (0.15–0.33) | 0.22 (0.14–0.3) | — |
| 8 | 3–8 | Vc m/min | 160 (100–240) | 140 (100–220) | 120 (90–170) | 50 (40–70) | 140 (100–160) | 120 (90–150) | 100 (80–130) |
| | | f mm/tour | 0.3 (0.2–0.4) | 0.29 (0.2–0.38) | 0.24 (0.2–0.27) | 0.15 (0.12–0.2) | 0.33 (0.2–0.45) | 0.28 (0.18–0.38) | 0.23 (0.16–0.3) |
| | 10–25 | Vc m/min | 110 (70–120) | 100 (60–110) | 90 (40–110) | 50 (20–60) | 100 (60–110) | 100 (60–110) | — |
| | | f mm/tour | 0.3 (0.2–0.4) | 0.3 (0.2–0.4) | 0.27 (0.18–0.36) | 0.14 (0.1–0.17) | 0.33 (0.22–0.44) | 0.3 (0.2–0.4) | — |
| | 30–40 | Vc m/min | 90 (40–110) | 80 (40–90) | 75 (40–85) | 40 (20–50) | 90 (60–100) | 40 (30–60) | — |
| | | f mm/tour | 0.24 (0.16–0.32) | 0.24 (0.16–0.32) | 0.27 (0.14–0.29) | 0.11 (0.08–0.14) | 0.26 (0.18–0.35) | 0.24 (0.16–0.32) | — |
| 10 | 3–8 | Vc m/min | 170 (100–250) | 150 (100–230) | 130 (90–180) | 50 (40–70) | 150 (100–170) | 130 (90–160) | 110 (80–140) |
| | | f mm/tour | 0.33 (0.2–0.45) | 0.32 (0.2–0.43) | 0.25 (0.2–0.3) | 0.16 (0.12–0.22) | 0.35 (0.2–0.5) | 0.29 (0.18–0.4) | 0.24 (0.16–0.32) |
| | 10–25 | Vc m/min | 110 (70–120) | 100 (60–110) | 90 (40–110) | 50 (20–60) | 100 (60–110) | 100 (60–110) | — |
| | | f mm/tour | 0.32 (0.22–0.42) | 0.32 (0.22–0.42) | 0.29 (0.2–0.38) | 0.15 (0.12–0.18) | 0.35 (0.24–0.46) | 0.32 (0.22–0.42) | — |
| | 30–40 | Vc m/min | 90 (40–110) | 80 (40–90) | 75 (40–95) | 40 (20–50) | 90 (60–100) | 40 (30–60) | — |
| | | f mm/tour | 0.26 (0.18–0.34) | 0.26 (0.18–0.34) | 0.29 (0.16–0.3) | 0.12 (0.1–0.14) | 0.28 (0.19–0.37) | 0.26 (0.18–0.34) | — |
| 12 | 3–8 | Vc m/min | 180 (100–250) | 160 (100–230) | 140 (90–180) | 50 (40–70) | 160 (100–170) | 140 (90–160) | 110 (80–140) |
| | | f mm/tour | 0.35 (0.2–0.5) | 0.34 (0.2–0.48) | 0.27 (0.2–0.34) | 0.18 (0.14–0.24) | 0.4 (0.2–0.6) | 0.31 (0.18–0.44) | 0.25 (0.16–0.34) |
| | 10–25 | Vc m/min | 130 (90–150) | 120 (80–140) | 100 (60–110) | 60 (25–65) | 120 (90–140) | 120 (90–140) | — |
| | | f mm/tour | 0.34 (0.24–0.44) | 0.34 (0.24–0.44) | 0.3 (0.22–0.4) | 0.17 (0.14–0.19) | 0.37 (0.26–0.48) | 0.34 (0.24–0.44) | — |
| | 30–40 | Vc m/min | 105 (55–125) | 95 (55–105) | 80 (40–100) | 50 (20–60) | 105 (65–115) | 50 (40–70) | — |
| | | f mm/tour | 0.27 (0.19–0.35) | 0.27 (0.19–0.35) | 0.3 (0.18–0.32) | 0.14 (0.11–0.15) | 0.3 (0.21–0.38) | 0.27 (0.19–0.35) | — |
| 16 | 3–8 | Vc m/min | 180 (100–250) | 160 (100–230) | 140 (90–180) | 50 (40–70) | 160 (100–170) | 140 (90–160) | 110 (80–140) |
| | | f mm/tour | 0.38 (0.2–0.55) | 0.36 (0.2–0.52) | 0.28 (0.2–0.36) | 0.19 (0.15–0.26) | 0.43 (0.2–0..65) | 0.33 (0.18–0.48) | 0.27 (0.16–0.38) |
| | 10–25 | Vc m/min | 130 (90–150) | 120 (80–140) | 100 (60–110) | 60 (25–65) | 120 (90–140) | 120 (90–140) | — |
| | | f mm/tour | 0.36 (0.26–0.46) | 0.36 (0.26–0.46) | 0.32 (0.23–0.41) | 0.17 (0.14–0.19) | 0.4 (0.29–0.48) | 0.36 (0.26–0.46) | — |
| 20 | 3–8 | Vc m/min | 180 (100–250) | 160 (100–230) | 140 (90–180) | 50 (40–70) | 160 (100–170) | 140 (90–160) | 110 (80–140) |
| | | f mm/tour | 0.4 (0.2–0.6) | 0.39 (0.2–0.57) | 0.3 (0.2–0.4) | 0.21 (0.16–0.28) | 0.45 (0.2–0.7) | 0.35 (0.18–0.52) | 0.28 (0.16–0.4) |

MÉTHODE D'UTILISATION ➤ M060
DONNÉES TECHNIQUES ➤ P001

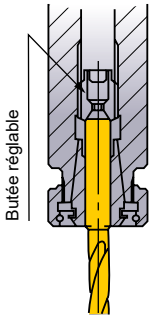
# PERÇAGE (CARBURE MONOBLOC)

# MPS1

Foret carbure à double listel

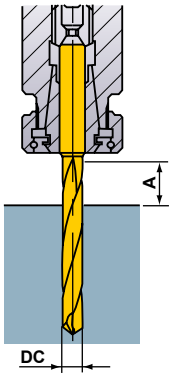
## ■ GUIDE OPÉRATIONNEL POUR LE FORET LONG TYPE MPS1

### Fixation du foret



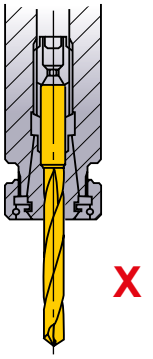

Les attachements de type à pince serrent le foret solidement.

### Longueur du foret



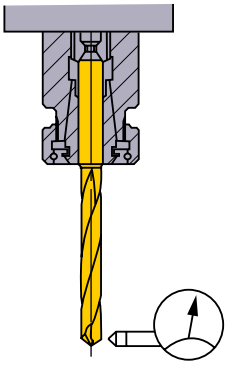

A ≥ DC x 1.5

### Installation du foret



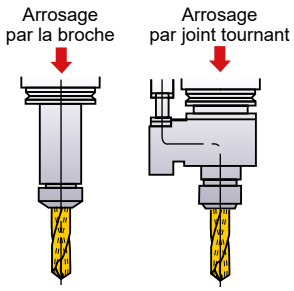

Ne pas serrer sur les goujures.

### Tolérance d'installation



Concentricité ≤ 0.03mm

### Type d'arrosage



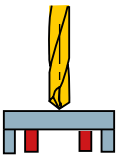

La pression d'arrosage est approximativement.
5—10 bar (<φ5:2—30 bar).

### Liquide réfrigérant : manipulation

1) De fines particules de copeaux viennent obstruer les trous d'huile des forets de petits diamètres. Utiliser toujours un filtre à mailles fines par mesure de prévention.

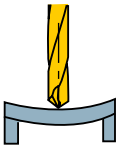
2) Les particules de saletés et poussières adhèrent au liquide de refroidissement et empêchent un bon écoulement. Le remplacement régulier du liquide de coupe est recommandé.

### Pièce mince



**OK**

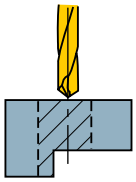
Rigidifier le montage



**X**

En cas d'effort et de déformation

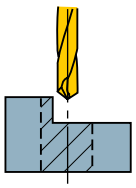
### Coupe interrompue



Un procédé

**OK**

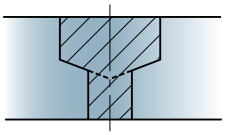
①Diminuer l'avance pour percer une surface interrompue.



Usinage requis au préalable

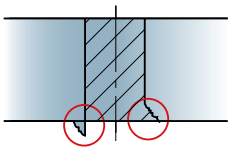
①Utiliser une fraise 2 tailles sur une surface irrégulière avant de percer avec le foret.

### Trous étagés



①Diviser en deux opérations.
②Percer le plus grand trou en premier.
*Un outil pour l'usinage du chanfrein et de la surface irrégulière peut être fabriqué sur commande.

### Bavures et écaillages sur pièces

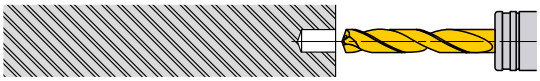


①Diminuer l'avance de 50% à la sortie du trou débouchant.
②Ajouter un chanfrein à 45°.
③Changer l'angle de pointe.

# UTILISATION DE FORETS SUPER LONGS

## TROUS BORGNES

### ■ 1. Perçage du trou pilote

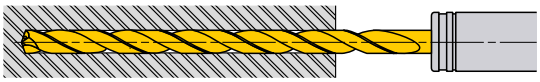


①Utilisez un foret avec une extrémité plus large (plus plate) que celle du foret super-long. Utiliser la goujure la plus courte possible.
②Veillez à percer un avant-trou très précis.
③Profondeur de perçage : environ 1DC ou plus.
(Ajustez la profondeur de l'avant-trou selon la longueur du foret super-long.)

### ■ 2. Introduction du foret long

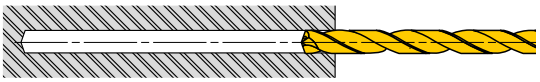
①Insérez le foret dans l'avant-trou à faible vitesse. (Vitesse de rotation 1000min$^{-1}$, avance 0.2mm－0.3mm/tour)
②Arrêtez le foret long à 0.5mm－1mm du fond de l'avant-trou.

### ■ 3. Perçage profond



①Commencez à percer avec la vitesse et l'avance recommandées, avec un cycle sans débourrage (avance continue).

### ■ 4. Retrait du foret

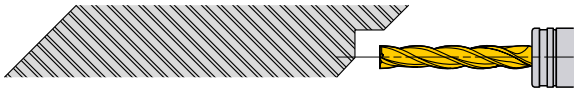


①Après le perçage, diminuez la vitesse de rotation à environ 0.5mm-1mm de l'extrémité du trou. (Vitesse de rotation d'env. 1 000 min$^{-1}$)
②Retirez le foret jusqu'à l'entrée de l'avant-trou, avec une vitesse d'avance de 3000mm/min.
③Enfin, sortez l'outil du trou avec une vitesse de coupe de 20m-30m/min et une vitesse d'avance de 0.2mm-0.3mm/tour.

## ATTAQUE OBLIQUE ET TROUS DÉBOUCHANTS

● Perçage et trous débouchants sur des faces ou des angles irréguliers

### ■ 1. Lamage

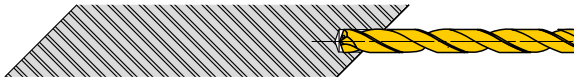


①Usinez à plat sur la face irrégulière à l'aide d'une fraise capable de lamage. Utilisez un diamètre de lamage identique au diamètre du trou profond à percer.

### ■ 2. Perçage du trou pilote

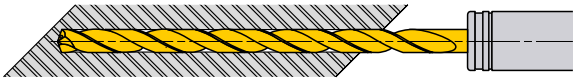
①Utilisez un foret avec une extrémité plus large (plus plate) que celle du foret super-long. Utiliser la goujure la plus courte possible.
②Veillez à percer un avant-trou très précis.
③Profondeur de perçage : environ 1DC ou plus.
(Ajustez la profondeur de l'avant-trou selon la longueur du foret super-long.)

### ■ 3. Introduction du foret long



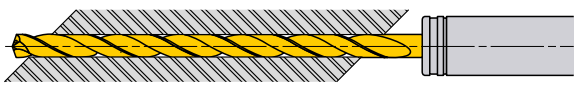
①Insérez le foret dans l'avant-trou à faible vitesse. (Vitesse de rotation 1000min$^{-1}$, avance 0.2mm－0.3mm/tour)
②Arrêtez le foret long à 0.5mm－1mm du fond de l'avant-trou.

### ■ 4. Perçage profond



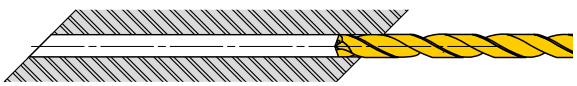
①Commencez à percer avec la vitesse et l'avance recommandées, avec un cycle sans débourrage (avance continue).

### ■ 5. Déboucher



①Lors de la traversée, l'arête de coupe peut être endommagée.
②Diminuez la vitesse d'avance au moment de l'introduction.

### ■ 6. Retrait du foret



①Enfin, sortez l'outil du trou avec une vitesse de coupe de 20m-30m/min et une vitesse d'avance de 0.2mm-0.3mm/tour.
②Retirez le foret jusqu'à l'entrée de l'avant-trou, avec une vitesse d'avance de 3000mm/min.

# PERÇAGE (CARBURE MONOBLOC)

## MPS

Foret carbure à double listel

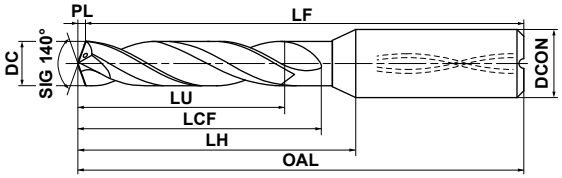
- De 3 à 40 L/D diamètre/longueur.
- MPS : Double listel pour précision et fiabilité de perçage.

P M K N S H

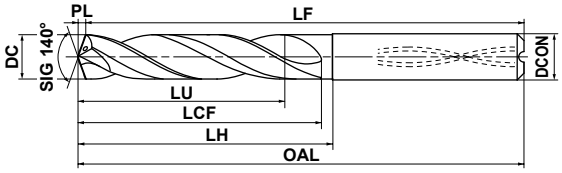
Arrosage intérieur

| | 3≤D1≤6 | 6<D1≤10 | 10<D1≤18 | 18<D1≤20 |
|---|---|---|---|---|
| DIN | +0.010 −0.002 | +0.010 −0.005 | +0.005 −0.013 | +0.005 −0.016 |
| Autres | 0 −0.012 | 0 −0.015 | 0 −0.018 | 0 −0.021 |
| | 0 −0.008 | 0 −0.009 | 0 −0.011 | 0 −0.013 |

**Type 1** Attachement cylindrique avec dégagement conique




**Type 2** Attachement cylindrique




| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | ☐ | MPS0300S-DIN-C | 15.0 | 19.5 | 24.5 | 61.5 | 61 | 0.5 | 6 | 1 |
| | 5 | ☐ | MPS0300L-DIN-C | 23.0 | 27.5 | 28.5 | 65.5 | 65 | 0.5 | 6 | 1 |
| | 8 | ☐ | MPS0300-L8C | 24.5 | 33.5 | 36.5 | 73.5 | 73 | 0.5 | 6 | 1 |
| | 10 | ☐ | MPS0300-L10C | 30.5 | 39.5 | 42.5 | 79.5 | 79 | 0.5 | 6 | 1 |
| | 12 | ☐ | MPS0300-L12C | 36.5 | 45.5 | 48.5 | 85.5 | 85 | 0.5 | 6 | 1 |
| 3.0 | 15 | ☐ | MPS0300-L15C | 45.5 | 54.5 | 57.5 | 94.5 | 94 | 0.5 | 6 | 1 |
| | 20 | ☐ | MPS0300-L20C | 60.5 | 69.5 | 72.5 | 109.5 | 109 | 0.5 | 6 | 1 |
| | 25 | ☐ | MPS0300-L25C | 75.5 | 84.5 | 87.5 | 124.5 | 124 | 0.5 | 6 | 1 |
| | 30 | ☐ | MPS0300-L30C | 90.5 | 99.5 | 102.5 | 139.5 | 139 | 0.5 | 6 | 1 |
| | 35 | ☐ | MPS0300-L35C | 105.5 | 115.5 | 121.5 | 158.5 | 158 | 0.5 | 6 | 1 |
| | 40 | ☐ | MPS0300-L40C | 120.5 | 130.5 | 136.5 | 173.5 | 173 | 0.5 | 6 | 1 |
| 3.05 | 3 | ☐ | MPS0305S-DIN-C | 15.0 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 1 |
| | 5 | ☐ | MPS0305L-DIN-C | 23.0 | 27.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 1 |
| | 3 | ☐ | MPS0310S-DIN-C | 14.9 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 1 |
| | 5 | ☐ | MPS0310L-DIN-C | 22.9 | 27.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 1 |
| | 8 | ☐ | MPS0310-L8C | 25.4 | 39.6 | 42.6 | 79.6 | 79 | 0.6 | 6 | 1 |
| | 10 | ☐ | MPS0310-L10C | 31.6 | 46.6 | 49.6 | 86.6 | 86 | 0.6 | 6 | 1 |
| | 12 | ☐ | MPS0310-L12C | 37.8 | 53.6 | 56.6 | 93.6 | 93 | 0.6 | 6 | 1 |
| 3.1 | 15 | ☐ | MPS0310-L15C | 47.1 | 63.6 | 66.6 | 103.6 | 103 | 0.6 | 6 | 1 |
| | 20 | ☐ | MPS0310-L20C | 62.6 | 81.6 | 84.6 | 121.6 | 121 | 0.6 | 6 | 1 |
| | 25 | ☐ | MPS0310-L25C | 78.1 | 98.6 | 101.6 | 138.6 | 138 | 0.6 | 6 | 1 |
| | 30 | ☐ | MPS0310-L30C | 93.6 | 116.6 | 119.6 | 156.6 | 156 | 0.6 | 6 | 1 |
| | 35 | ☐ | MPS0310-L35C | 109.1 | 125.6 | 138.6 | 175.6 | 175 | 0.6 | 6 | 1 |
| | 40 | ☐ | MPS0310-L40C | 124.6 | 140.6 | 153.6 | 190.6 | 190 | 0.6 | 6 | 1 |
| | 3 | ☐ | MPS0320S-DIN-C | 14.8 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 1 |
| | 5 | ☐ | MPS0320L-DIN-C | 22.8 | 27.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 1 |
| | 8 | ☐ | MPS0320-L8C | 26.2 | 39.6 | 42.6 | 79.6 | 79 | 0.6 | 6 | 1 |
| | 10 | ☐ | MPS0320-L10C | 32.6 | 46.6 | 49.6 | 86.6 | 86 | 0.6 | 6 | 1 |
| | 12 | ☐ | MPS0320-L12C | 39.0 | 53.6 | 56.6 | 93.6 | 93 | 0.6 | 6 | 1 |
| 3.2 | 15 | ☐ | MPS0320-L15C | 48.6 | 63.6 | 66.6 | 103.6 | 103 | 0.6 | 6 | 1 |
| | 20 | ☐ | MPS0320-L20C | 64.6 | 81.6 | 84.6 | 121.6 | 121 | 0.6 | 6 | 1 |
| | 25 | ☐ | MPS0320-L25C | 80.6 | 98.6 | 101.6 | 138.6 | 138 | 0.6 | 6 | 1 |
| | 30 | ☐ | MPS0320-L30C | 96.6 | 116.6 | 119.6 | 156.6 | 156 | 0.6 | 6 | 1 |
| | 35 | ☐ | MPS0320-L35C | 112.6 | 125.6 | 138.6 | 175.6 | 175 | 0.6 | 6 | 1 |
| | 40 | ☐ | MPS0320-L40C | 128.6 | 140.6 | 153.6 | 190.6 | 190 | 0.6 | 6 | 1 |

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | ☐ | MPS0330S-DIN-C | 14.7 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 1 |
| | 5 | ☐ | MPS0330L-DIN-C | 22.7 | 27.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 1 |
| | 8 | ☐ | MPS0330-L8C | 27.0 | 39.6 | 42.6 | 79.6 | 79 | 0.6 | 6 | 1 |
| | 10 | ☐ | MPS0330-L10C | 33.6 | 46.6 | 49.6 | 86.6 | 86 | 0.6 | 6 | 1 |
| | 12 | ☐ | MPS0330-L12C | 40.2 | 53.6 | 56.6 | 93.6 | 93 | 0.6 | 6 | 1 |
| 3.3 | 15 | ☐ | MPS0330-L15C | 50.1 | 63.6 | 66.6 | 103.6 | 103 | 0.6 | 6 | 1 |
| | 20 | ☐ | MPS0330-L20C | 66.6 | 81.6 | 84.6 | 121.6 | 121 | 0.6 | 6 | 1 |
| | 25 | ☐ | MPS0330-L25C | 83.1 | 98.6 | 101.6 | 138.6 | 138 | 0.6 | 6 | 1 |
| | 30 | ☐ | MPS0330-L30C | 99.6 | 116.6 | 119.6 | 156.6 | 156 | 0.6 | 6 | 1 |
| | 35 | ☐ | MPS0330-L35C | 116.1 | 134.6 | 138.6 | 175.6 | 175 | 0.6 | 6 | 1 |
| | 40 | ☐ | MPS0330-L40C | 132.6 | 150.6 | 153.6 | 190.6 | 190 | 0.6 | 6 | 1 |
| | 3 | ☐ | MPS0340S-DIN-C | 14.5 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 1 |
| | 5 | ☐ | MPS0340L-DIN-C | 22.5 | 27.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 1 |
| | 8 | ☐ | MPS0340-L8C | 27.8 | 39.6 | 42.6 | 79.6 | 79 | 0.6 | 6 | 1 |
| | 10 | ☐ | MPS0340-L10C | 34.6 | 46.6 | 49.6 | 86.6 | 86 | 0.6 | 6 | 1 |
| | 12 | ☐ | MPS0340-L12C | 41.4 | 53.6 | 56.6 | 93.6 | 93 | 0.6 | 6 | 1 |
| 3.4 | 15 | ☐ | MPS0340-L15C | 51.6 | 63.6 | 66.6 | 103.6 | 103 | 0.6 | 6 | 1 |
| | 20 | ☐ | MPS0340-L20C | 68.6 | 81.6 | 84.6 | 121.6 | 121 | 0.6 | 6 | 1 |
| | 25 | ☐ | MPS0340-L25C | 85.6 | 98.6 | 101.6 | 138.6 | 138 | 0.6 | 6 | 1 |
| | 30 | ☐ | MPS0340-L30C | 102.6 | 116.6 | 119.6 | 156.6 | 156 | 0.6 | 6 | 1 |
| | 35 | ☐ | MPS0340-L35C | 119.6 | 134.6 | 138.6 | 175.6 | 175 | 0.6 | 6 | 1 |
| | 40 | ☐ | MPS0340-L40C | 136.6 | 150.6 | 153.6 | 190.6 | 190 | 0.6 | 6 | 1 |
| | 3 | ☐ | MPS0350S-DIN-C | 14.4 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 1 |
| | 5 | ☐ | MPS0350L-DIN-C | 22.4 | 27.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 1 |
| | 8 | ☐ | MPS0350-L8C | 28.6 | 39.6 | 42.6 | 79.6 | 79 | 0.6 | 6 | 1 |
| | 10 | ☐ | MPS0350-L10C | 35.6 | 46.6 | 49.6 | 86.6 | 86 | 0.6 | 6 | 1 |
| | 12 | ☐ | MPS0350-L12C | 42.6 | 53.6 | 56.6 | 93.6 | 93 | 0.6 | 6 | 1 |
| 3.5 | 15 | ☐ | MPS0350-L15C | 53.1 | 63.6 | 66.6 | 103.6 | 103 | 0.6 | 6 | 1 |
| | 20 | ☐ | MPS0350-L20C | 70.6 | 81.6 | 84.6 | 121.6 | 121 | 0.6 | 6 | 1 |
| | 25 | ☐ | MPS0350-L25C | 88.1 | 98.6 | 101.6 | 138.6 | 138 | 0.6 | 6 | 1 |
| | 30 | ☐ | MPS0350-L30C | 105.6 | 116.6 | 119.6 | 156.6 | 156 | 0.6 | 6 | 1 |
| | 35 | ☐ | MPS0350-L35C | 123.1 | 134.6 | 138.6 | 175.6 | 175 | 0.6 | 6 | 1 |
| | 40 | ☐ | MPS0350-L40C | 140.6 | 150.6 | 153.6 | 190.6 | 190 | 0.6 | 6 | 1 |

Dès maintenant, veuillez remplacer tous les forets aux références en caractères gris (MPS, MSL) par des produits équivalents de la série MPS1. La production de ces produits est progressivement réduite et prendra fin en mars 2023.

☐ : **Article non stocké - Fabrication sur commande uniquement.**

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | ☐ | MPS0360S-DIN-C | 14.3 | 19.7 | 24.7 | 61.7 | 61 | 0.7 | 6 | 1 |
| | 5 | ☐ | MPS0360L-DIN-C | 22.3 | 27.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 1 |
| | 8 | ☐ | MPS0360-L8C | 29.5 | 44.7 | 47.7 | 84.7 | 84 | 0.7 | 6 | 1 |
| | 10 | ☐ | MPS0360-L10C | 36.7 | 52.7 | 55.7 | 92.7 | 92 | 0.7 | 6 | 1 |
| | 12 | ☐ | MPS0360-L12C | 43.9 | 60.7 | 63.7 | 100.7 | 100 | 0.7 | 6 | 1 |
| **3.6** | 15 | ☐ | MPS0360-L15C | 54.7 | 72.7 | 75.7 | 112.7 | 112 | 0.7 | 6 | 1 |
| | 20 | ☐ | MPS0360-L20C | 72.7 | 92.7 | 95.7 | 132.7 | 132 | 0.7 | 6 | 1 |
| | 25 | ☐ | MPS0360-L25C | 90.7 | 112.7 | 115.7 | 152.7 | 152 | 0.7 | 6 | 1 |
| | 30 | ☐ | MPS0360-L30C | 108.7 | 132.7 | 135.7 | 172.7 | 172 | 0.7 | 6 | 1 |
| | 35 | ☐ | MPS0360-L35C | 126.7 | 145.7 | 155.7 | 192.7 | 192 | 0.7 | 6 | 1 |
| | 40 | ☐ | MPS0360-L40C | 144.7 | 162.7 | 175.7 | 212.7 | 212 | 0.7 | 6 | 1 |
| | 3 | ☐ | MPS0370S-DIN-C | 14.1 | 19.7 | 24.7 | 61.7 | 61 | 0.7 | 6 | 1 |
| | 5 | ☐ | MPS0370L-DIN-C | 22.1 | 27.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 1 |
| | 8 | ☐ | MPS0370-L8C | 30.3 | 44.7 | 47.7 | 84.7 | 84 | 0.7 | 6 | 1 |
| | 10 | ☐ | MPS0370-L10C | 37.7 | 52.7 | 55.7 | 92.7 | 92 | 0.7 | 6 | 1 |
| | 12 | ☐ | MPS0370-L12C | 45.1 | 60.7 | 63.7 | 100.7 | 100 | 0.7 | 6 | 1 |
| **3.7** | 15 | ☐ | MPS0370-L15C | 56.2 | 72.7 | 75.7 | 112.7 | 112 | 0.7 | 6 | 1 |
| | 20 | ☐ | MPS0370-L20C | 74.7 | 92.7 | 95.7 | 132.7 | 132 | 0.7 | 6 | 1 |
| | 25 | ☐ | MPS0370-L25C | 93.2 | 112.7 | 115.7 | 152.7 | 152 | 0.7 | 6 | 1 |
| | 30 | ☐ | MPS0370-L30C | 111.7 | 132.7 | 135.7 | 172.7 | 172 | 0.7 | 6 | 1 |
| | 35 | ☐ | MPS0370-L35C | 130.2 | 145.7 | 155.7 | 192.7 | 192 | 0.7 | 6 | 1 |
| | 40 | ☐ | MPS0370-L40C | 148.7 | 162.7 | 175.7 | 212.7 | 212 | 0.7 | 6 | 1 |
| | 3 | ☐ | MPS0380S-DIN-C | 18.0 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 1 |
| | 5 | ☐ | MPS0380L-DIN-C | 30.0 | 35.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 1 |
| | 8 | ☐ | MPS0380-L8C | 31.1 | 44.7 | 47.7 | 84.7 | 84 | 0.7 | 6 | 1 |
| | 10 | ☐ | MPS0380-L10C | 38.7 | 52.7 | 55.7 | 92.7 | 92 | 0.7 | 6 | 1 |
| | 12 | ☐ | MPS0380-L12C | 46.3 | 60.7 | 63.7 | 100.7 | 100 | 0.7 | 6 | 1 |
| **3.8** | 15 | ☐ | MPS0380-L15C | 57.7 | 72.7 | 75.7 | 112.7 | 112 | 0.7 | 6 | 1 |
| | 20 | ☐ | MPS0380-L20C | 76.7 | 92.7 | 95.7 | 132.7 | 132 | 0.7 | 6 | 1 |
| | 25 | ☐ | MPS0380-L25C | 95.7 | 112.7 | 115.7 | 152.7 | 152 | 0.7 | 6 | 1 |
| | 30 | ☐ | MPS0380-L30C | 114.7 | 132.7 | 135.7 | 172.7 | 172 | 0.7 | 6 | 1 |
| | 35 | ☐ | MPS0380-L35C | 133.7 | 152.7 | 155.7 | 192.7 | 192 | 0.7 | 6 | 1 |
| | 40 | ☐ | MPS0380-L40C | 152.7 | 172.7 | 175.7 | 212.7 | 212 | 0.7 | 6 | 1 |
| | 3 | ☐ | MPS0390S-DIN-C | 17.9 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 1 |
| | 5 | ☐ | MPS0390L-DIN-C | 29.9 | 35.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 1 |
| | 8 | ☐ | MPS0390-L8C | 31.9 | 44.7 | 47.7 | 84.7 | 84 | 0.7 | 6 | 1 |
| | 10 | ☐ | MPS0390-L10C | 39.7 | 52.7 | 55.7 | 92.7 | 92 | 0.7 | 6 | 1 |
| | 12 | ☐ | MPS0390-L12C | 47.5 | 60.7 | 63.7 | 100.7 | 100 | 0.7 | 6 | 1 |
| **3.9** | 15 | ☐ | MPS0390-L15C | 59.2 | 72.7 | 75.7 | 112.7 | 112 | 0.7 | 6 | 1 |
| | 20 | ☐ | MPS0390-L20C | 78.7 | 92.7 | 95.7 | 132.7 | 132 | 0.7 | 6 | 1 |
| | 25 | ☐ | MPS0390-L25C | 98.2 | 112.7 | 115.7 | 152.7 | 152 | 0.7 | 6 | 1 |
| | 30 | ☐ | MPS0390-L30C | 117.7 | 132.7 | 135.7 | 172.7 | 172 | 0.7 | 6 | 1 |
| | 35 | ☐ | MPS0390-L35C | 137.2 | 152.7 | 155.7 | 192.7 | 192 | 0.7 | 6 | 1 |
| | 40 | ☐ | MPS0390-L40C | 156.7 | 172.7 | 175.7 | 212.7 | 212 | 0.7 | 6 | 1 |
| | 3 | ☐ | MPS0400S-DIN-C | 17.7 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 1 |
| | 5 | ☐ | MPS0400L-DIN-C | 29.7 | 35.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 1 |
| | 8 | ☐ | MPS0400-L8C | 32.7 | 44.7 | 47.7 | 84.7 | 84 | 0.7 | 6 | 1 |
| | 10 | ☐ | MPS0400-L10C | 40.7 | 52.7 | 55.7 | 92.7 | 92 | 0.7 | 6 | 1 |
| | 12 | ☐ | MPS0400-L12C | 48.7 | 60.7 | 63.7 | 100.7 | 100 | 0.7 | 6 | 1 |
| **4.0** | 15 | ☐ | MPS0400-L15C | 60.7 | 72.7 | 75.7 | 112.7 | 112 | 0.7 | 6 | 1 |
| | 20 | ☐ | MPS0400-L20C | 80.7 | 92.7 | 95.7 | 132.7 | 132 | 0.7 | 6 | 1 |
| | 25 | ☐ | MPS0400-L25C | 100.7 | 112.7 | 115.7 | 152.7 | 152 | 0.7 | 6 | 1 |
| | 30 | ☐ | MPS0400-L30C | 120.7 | 132.7 | 135.7 | 172.7 | 172 | 0.7 | 6 | 1 |
| | 35 | ☐ | MPS0400-L35C | 140.7 | 152.7 | 155.7 | 192.7 | 192 | 0.7 | 6 | 1 |
| | 40 | ☐ | MPS0400-L40C | 160.7 | 172.7 | 175.7 | 212.7 | 212 | 0.7 | 6 | 1 |

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **4.05** | 3 | ☐ | MPS0405S-DIN-C | 17.7 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 1 |
| | 5 | ☐ | MPS0405L-DIN-C | 29.7 | 35.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 1 |
| | 3 | ☐ | MPS0410S-DIN-C | 17.6 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 1 |
| | 5 | ☐ | MPS0410L-DIN-C | 29.6 | 35.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 1 |
| | 8 | ☐ | MPS0410-L8C | 33.5 | 50.7 | 53.7 | 90.7 | 90 | 0.7 | 6 | 1 |
| | 10 | ☐ | MPS0410-L10C | 41.7 | 59.7 | 62.7 | 99.7 | 99 | 0.7 | 6 | 1 |
| | 12 | ☐ | MPS0410-L12C | 49.9 | 68.7 | 71.7 | 108.7 | 108 | 0.7 | 6 | 1 |
| **4.1** | 15 | ☐ | MPS0410-L15C | 62.2 | 81.7 | 84.7 | 121.7 | 121 | 0.7 | 6 | 1 |
| | 20 | ☐ | MPS0410-L20C | 82.7 | 104.7 | 107.7 | 144.7 | 144 | 0.7 | 6 | 1 |
| | 25 | ☐ | MPS0410-L25C | 103.2 | 126.7 | 129.7 | 166.7 | 166 | 0.7 | 6 | 1 |
| | 30 | ☐ | MPS0410-L30C | 123.7 | 149.7 | 152.7 | 189.7 | 189 | 0.7 | 6 | 1 |
| | 35 | ☐ | MPS0410-L35C | 144.2 | 165.7 | 174.7 | 211.7 | 211 | 0.7 | 6 | 1 |
| | 40 | ☐ | MPS0410-L40C | 164.7 | 185.7 | 198.7 | 235.7 | 235 | 0.7 | 6 | 1 |
| | 3 | ☐ | MPS0420S-DIN-C | 17.5 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 1 |
| | 5 | ☐ | MPS0420L-DIN-C | 29.5 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 1 |
| | 8 | ☐ | MPS0420-L8C | 34.4 | 50.8 | 53.8 | 90.8 | 90 | 0.8 | 6 | 1 |
| | 10 | ☐ | MPS0420-L10C | 42.8 | 59.8 | 62.8 | 99.8 | 99 | 0.8 | 6 | 1 |
| | 12 | ☐ | MPS0420-L12C | 51.2 | 68.8 | 71.8 | 108.8 | 108 | 0.8 | 6 | 1 |
| **4.2** | 15 | ☐ | MPS0420-L15C | 63.8 | 81.8 | 84.8 | 121.8 | 121 | 0.8 | 6 | 1 |
| | 20 | ☐ | MPS0420-L20C | 84.8 | 104.8 | 107.8 | 144.8 | 144 | 0.8 | 6 | 1 |
| | 25 | ☐ | MPS0420-L25C | 105.8 | 126.8 | 129.8 | 166.8 | 166 | 0.8 | 6 | 1 |
| | 30 | ☐ | MPS0420-L30C | 126.8 | 149.8 | 152.8 | 189.8 | 189 | 0.8 | 6 | 1 |
| | 35 | ☐ | MPS0420-L35C | 147.8 | 165.8 | 174.8 | 211.8 | 211 | 0.8 | 6 | 1 |
| | 40 | ☐ | MPS0420-L40C | 168.8 | 185.8 | 198.8 | 235.8 | 235 | 0.8 | 6 | 1 |
| | 3 | ☐ | MPS0430S-DIN-C | 17.3 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 1 |
| | 5 | ☐ | MPS0430L-DIN-C | 29.3 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 1 |
| | 8 | ☐ | MPS0430-L8C | 35.2 | 50.8 | 53.8 | 90.8 | 90 | 0.8 | 6 | 1 |
| | 10 | ☐ | MPS0430-L10C | 43.8 | 59.8 | 62.8 | 99.8 | 99 | 0.8 | 6 | 1 |
| | 12 | ☐ | MPS0430-L12C | 52.4 | 68.8 | 71.8 | 108.8 | 108 | 0.8 | 6 | 1 |
| **4.3** | 15 | ☐ | MPS0430-L15C | 65.3 | 81.8 | 84.8 | 121.8 | 121 | 0.8 | 6 | 1 |
| | 20 | ☐ | MPS0430-L20C | 86.8 | 104.8 | 107.8 | 144.8 | 144 | 0.8 | 6 | 1 |
| | 25 | ☐ | MPS0430-L25C | 108.3 | 126.8 | 129.8 | 166.8 | 166 | 0.8 | 6 | 1 |
| | 30 | ☐ | MPS0430-L30C | 129.8 | 149.8 | 152.8 | 189.8 | 189 | 0.8 | 6 | 1 |
| | 35 | ☐ | MPS0430-L35C | 151.3 | 171.8 | 174.8 | 211.8 | 211 | 0.8 | 6 | 1 |
| | 40 | ☐ | MPS0430-L40C | 172.8 | 195.8 | 198.8 | 235.8 | 235 | 0.8 | 6 | 1 |
| | 3 | ☐ | MPS0440S-DIN-C | 17.2 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 1 |
| | 5 | ☐ | MPS0440L-DIN-C | 29.2 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 1 |
| | 8 | ☐ | MPS0440-L8C | 36.0 | 50.8 | 53.8 | 90.8 | 90 | 0.8 | 6 | 1 |
| | 10 | ☐ | MPS0440-L10C | 44.8 | 59.8 | 62.8 | 99.8 | 99 | 0.8 | 6 | 1 |
| | 12 | ☐ | MPS0440-L12C | 53.6 | 68.8 | 71.8 | 108.8 | 108 | 0.8 | 6 | 1 |
| **4.4** | 15 | ☐ | MPS0440-L15C | 66.8 | 81.8 | 84.8 | 121.8 | 121 | 0.8 | 6 | 1 |
| | 20 | ☐ | MPS0440-L20C | 88.8 | 104.8 | 107.8 | 144.8 | 144 | 0.8 | 6 | 1 |
| | 25 | ☐ | MPS0440-L25C | 110.8 | 126.8 | 129.8 | 166.8 | 166 | 0.8 | 6 | 1 |
| | 30 | ☐ | MPS0440-L30C | 132.8 | 149.8 | 152.8 | 189.8 | 189 | 0.8 | 6 | 1 |
| | 35 | ☐ | MPS0440-L35C | 154.8 | 171.8 | 174.8 | 211.8 | 211 | 0.8 | 6 | 1 |
| | 40 | ☐ | MPS0440-L40C | 176.8 | 195.8 | 198.8 | 235.8 | 235 | 0.8 | 6 | 1 |
| | 3 | ☐ | MPS0450S-DIN-C | 17.1 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 1 |
| | 5 | ☐ | MPS0450L-DIN-C | 29.1 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 1 |
| | 8 | ☐ | MPS0450-L8C | 36.8 | 50.8 | 53.8 | 90.8 | 90 | 0.8 | 6 | 1 |
| | 10 | ☐ | MPS0450-L10C | 45.8 | 59.8 | 62.8 | 99.8 | 99 | 0.8 | 6 | 1 |
| | 12 | ☐ | MPS0450-L12C | 54.8 | 68.8 | 71.8 | 108.8 | 108 | 0.8 | 6 | 1 |
| **4.5** | 15 | ☐ | MPS0450-L15C | 68.3 | 81.8 | 84.8 | 121.8 | 121 | 0.8 | 6 | 1 |
| | 20 | ☐ | MPS0450-L20C | 90.8 | 104.8 | 107.8 | 144.8 | 144 | 0.8 | 6 | 1 |
| | 25 | ☐ | MPS0450-L25C | 113.3 | 126.8 | 129.8 | 166.8 | 166 | 0.8 | 6 | 1 |
| | 30 | ☐ | MPS0450-L30C | 135.8 | 149.8 | 152.8 | 189.8 | 189 | 0.8 | 6 | 1 |
| | 35 | ☐ | MPS0450-L35C | 158.3 | 171.8 | 174.8 | 211.8 | 211 | 0.8 | 6 | 1 |
| | 40 | ☐ | MPS0450-L40C | 180.8 | 195.8 | 198.8 | 235.8 | 235 | 0.8 | 6 | 1 |

CONDITIONS DE COUPE ➤ M077
DONNÉES TECHNIQUES ➤ P001

# PERÇAGE (CARBURE MONOBLOC)

## MPS

Foret carbure à double listel

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | ☐ | MPS0460S-DIN-C | 16.9 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 1 |
| | 5 | ☐ | MPS0460L-DIN-C | 28.9 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 1 |
| | 8 | ☐ | MPS0460-L8C | 37.6 | 55.8 | 58.8 | 95.8 | 95 | 0.8 | 6 | 1 |
| | 10 | ☐ | MPS0460-L10C | 46.8 | 65.8 | 68.8 | 105.8 | 105 | 0.8 | 6 | 1 |
| | 12 | ☐ | MPS0460-L12C | 56.0 | 75.8 | 78.8 | 115.8 | 115 | 0.8 | 6 | 1 |
| 4.6 | 15 | ☐ | MPS0460-L15C | 69.8 | 90.8 | 93.8 | 130.8 | 130 | 0.8 | 6 | 1 |
| | 20 | ☐ | MPS0460-L20C | 92.8 | 115.8 | 118.8 | 155.8 | 155 | 0.8 | 6 | 1 |
| | 25 | ☐ | MPS0460-L25C | 115.8 | 140.8 | 143.8 | 180.8 | 180 | 0.8 | 6 | 1 |
| | 30 | ☐ | MPS0460-L30C | 138.8 | 165.8 | 168.8 | 205.8 | 205 | 0.8 | 6 | 1 |
| | 35 | ☐ | MPS0460-L35C | 161.8 | 184.8 | 192.8 | 229.8 | 229 | 0.8 | 6 | 1 |
| | 40 | ☐ | MPS0460-L40C | 184.8 | 204.8 | 217.8 | 254.8 | 254 | 0.8 | 6 | 1 |
| 4.65 | 3 | ☐ | MPS0465S-DIN-C | 16.9 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 1 |
| | 5 | ☐ | MPS0465L-DIN-C | 28.9 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 1 |
| | 3 | ☐ | MPS0470S-DIN-C | 16.8 | 23.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 1 |
| | 5 | ☐ | MPS0470L-DIN-C | 28.8 | 35.9 | 36.9 | 73.9 | 73 | 0.9 | 6 | 1 |
| | 8 | ☐ | MPS0470-L8C | 38.5 | 55.9 | 58.9 | 95.9 | 95 | 0.9 | 6 | 1 |
| | 10 | ☐ | MPS0470-L10C | 47.9 | 65.9 | 68.9 | 105.9 | 105 | 0.9 | 6 | 1 |
| | 12 | ☐ | MPS0470-L12C | 57.3 | 75.9 | 78.9 | 115.9 | 115 | 0.9 | 6 | 1 |
| 4.7 | 15 | ☐ | MPS0470-L15C | 71.4 | 90.9 | 93.9 | 130.9 | 130 | 0.9 | 6 | 1 |
| | 20 | ☐ | MPS0470-L20C | 94.9 | 115.9 | 118.9 | 155.9 | 155 | 0.9 | 6 | 1 |
| | 25 | ☐ | MPS0470-L25C | 118.4 | 140.9 | 143.9 | 180.9 | 180 | 0.9 | 6 | 1 |
| | 30 | ☐ | MPS0470-L30C | 141.9 | 165.9 | 168.9 | 205.9 | 205 | 0.9 | 6 | 1 |
| | 35 | ☐ | MPS0470-L35C | 165.4 | 184.9 | 192.9 | 229.9 | 229 | 0.9 | 6 | 1 |
| | 40 | ☐ | MPS0470-L40C | 188.9 | 204.9 | 217.9 | 254.9 | 254 | 0.9 | 6 | 1 |
| | 3 | ☐ | MPS0480S-DIN-C | 20.7 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 1 |
| | 5 | ☐ | MPS0480L-DIN-C | 36.7 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 1 |
| | 8 | ☐ | MPS0480-L8C | 39.3 | 55.9 | 58.9 | 95.9 | 95 | 0.9 | 6 | 1 |
| | 10 | ☐ | MPS0480-L10C | 48.9 | 65.9 | 68.9 | 105.9 | 105 | 0.9 | 6 | 1 |
| | 12 | ☐ | MPS0480-L12C | 58.5 | 75.9 | 78.9 | 115.9 | 115 | 0.9 | 6 | 1 |
| 4.8 | 15 | ☐ | MPS0480-L15C | 72.9 | 90.9 | 93.9 | 130.9 | 130 | 0.9 | 6 | 1 |
| | 20 | ☐ | MPS0480-L20C | 96.9 | 115.9 | 118.9 | 155.9 | 155 | 0.9 | 6 | 1 |
| | 25 | ☐ | MPS0480-L25C | 120.9 | 140.9 | 143.9 | 180.9 | 180 | 0.9 | 6 | 1 |
| | 30 | ☐ | MPS0480-L30C | 144.9 | 165.9 | 168.9 | 205.9 | 205 | 0.9 | 6 | 1 |
| | 35 | ☐ | MPS0480-L35C | 168.9 | 190.9 | 192.9 | 229.9 | 229 | 0.9 | 6 | 1 |
| | 40 | ☐ | MPS0480-L40C | 192.9 | 215.9 | 217.9 | 254.9 | 254 | 0.9 | 6 | 1 |
| | 3 | ☐ | MPS0490S-DIN-C | 20.5 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 1 |
| | 5 | ☐ | MPS0490L-DIN-C | 36.5 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 1 |
| | 8 | ☐ | MPS0490-L8C | 40.1 | 55.9 | 58.9 | 95.9 | 95 | 0.9 | 6 | 1 |
| | 10 | ☐ | MPS0490-L10C | 49.9 | 65.9 | 68.9 | 105.9 | 105 | 0.9 | 6 | 1 |
| | 12 | ☐ | MPS0490-L12C | 59.7 | 75.9 | 78.9 | 115.9 | 115 | 0.9 | 6 | 1 |
| 4.9 | 15 | ☐ | MPS0490-L15C | 74.4 | 90.9 | 93.9 | 130.9 | 130 | 0.9 | 6 | 1 |
| | 20 | ☐ | MPS0490-L20C | 98.9 | 115.9 | 118.9 | 155.9 | 155 | 0.9 | 6 | 1 |
| | 25 | ☐ | MPS0490-L25C | 123.4 | 140.9 | 143.9 | 180.9 | 180 | 0.9 | 6 | 1 |
| | 30 | ☐ | MPS0490-L30C | 147.9 | 165.9 | 168.9 | 205.9 | 205 | 0.9 | 6 | 1 |
| | 35 | ☐ | MPS0490-L35C | 172.4 | 190.9 | 192.9 | 229.9 | 229 | 0.9 | 6 | 1 |
| | 40 | ☐ | MPS0490-L40C | 196.9 | 215.9 | 217.9 | 254.9 | 254 | 0.9 | 6 | 1 |
| | 3 | ☐ | MPS0500S-DIN-C | 20.4 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 1 |
| | 5 | ☐ | MPS0500L-DIN-C | 36.4 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 1 |
| | 8 | ☐ | MPS0500-L8C | 40.9 | 55.9 | 58.9 | 95.9 | 95 | 0.9 | 6 | 1 |
| | 10 | ☐ | MPS0500-L10C | 50.9 | 65.9 | 68.9 | 105.9 | 105 | 0.9 | 6 | 1 |
| | 12 | ☐ | MPS0500-L12C | 60.9 | 75.9 | 78.9 | 115.9 | 115 | 0.9 | 6 | 1 |
| 5.0 | 15 | ☐ | MPS0500-L15C | 75.9 | 90.9 | 93.9 | 130.9 | 130 | 0.9 | 6 | 1 |
| | 20 | ☐ | MPS0500-L20C | 100.9 | 115.9 | 118.9 | 155.9 | 155 | 0.9 | 6 | 1 |
| | 25 | ☐ | MPS0500-L25C | 125.9 | 140.9 | 143.9 | 180.9 | 180 | 0.9 | 6 | 1 |
| | 30 | ☐ | MPS0500-L30C | 150.9 | 165.9 | 168.9 | 205.9 | 205 | 0.9 | 6 | 1 |
| | 35 | ☐ | MPS0500-L35C | 175.9 | 190.9 | 192.9 | 229.9 | 229 | 0.9 | 6 | 1 |
| | 40 | ☐ | MPS0500-L40C | 200.9 | 215.9 | 217.9 | 254.9 | 254 | 0.9 | 6 | 1 |

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.05 | 3 | ☐ | MPS0505S-DIN-C | 20.3 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 1 |
| | 5 | ☐ | MPS0505L-DIN-C | 36.3 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 1 |
| | 3 | ☐ | MPS0510S-DIN-C | 20.3 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 1 |
| | 5 | ☐ | MPS0510L-DIN-C | 36.3 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 1 |
| | 8 | ☐ | MPS0510-L8C | 41.7 | 61.9 | 64.9 | 101.9 | 101 | 0.9 | 6 | 1 |
| | 10 | ☐ | MPS0510-L10C | 51.9 | 72.9 | 75.9 | 112.9 | 112 | 0.9 | 6 | 1 |
| | 12 | ☐ | MPS0510-L12C | 62.1 | 83.9 | 86.9 | 123.9 | 123 | 0.9 | 6 | 1 |
| 5.1 | 15 | ☐ | MPS0510-L15C | 77.4 | 99.9 | 102.9 | 139.9 | 139 | 0.9 | 6 | 1 |
| | 20 | ☐ | MPS0510-L20C | 102.9 | 127.9 | 130.9 | 167.9 | 167 | 0.9 | 6 | 1 |
| | 25 | ☐ | MPS0510-L25C | 128.4 | 154.9 | 157.9 | 194.9 | 194 | 0.9 | 6 | 1 |
| | 30 | ☐ | MPS0510-L30C | 153.9 | 182.9 | 185.9 | 222.9 | 222 | 0.9 | 6 | 1 |
| | 35 | ☐ | MPS0510-L35C | 179.4 | 203.9 | 211.9 | 248.9 | 248 | 0.9 | 6 | 1 |
| | 40 | ☐ | MPS0510-L40C | 204.9 | 230.9 | 241.9 | 278.9 | 278 | 0.9 | 6 | 1 |
| | 3 | ☐ | MPS0520S-DIN-C | 20.1 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 1 |
| | 5 | ☐ | MPS0520L-DIN-C | 36.1 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 1 |
| | 8 | ☐ | MPS0520-L8C | 42.5 | 61.9 | 64.9 | 101.9 | 101 | 0.9 | 6 | 1 |
| | 10 | ☐ | MPS0520-L10C | 52.9 | 72.9 | 75.9 | 112.9 | 112 | 0.9 | 6 | 1 |
| | 12 | ☐ | MPS0520-L12C | 63.3 | 83.9 | 86.9 | 123.9 | 123 | 0.9 | 6 | 1 |
| 5.2 | 15 | ☐ | MPS0520-L15C | 78.9 | 99.9 | 102.9 | 139.9 | 139 | 0.9 | 6 | 1 |
| | 20 | ☐ | MPS0520-L20C | 104.9 | 127.9 | 130.9 | 167.9 | 167 | 0.9 | 6 | 1 |
| | 25 | ☐ | MPS0520-L25C | 130.9 | 154.9 | 157.9 | 194.9 | 194 | 0.9 | 6 | 1 |
| | 30 | ☐ | MPS0520-L30C | 156.9 | 182.9 | 185.9 | 222.9 | 222 | 0.9 | 6 | 1 |
| | 35 | ☐ | MPS0520-L35C | 182.9 | 203.9 | 211.9 | 248.9 | 248 | 0.9 | 6 | 1 |
| | 40 | ☐ | MPS0520-L40C | 208.9 | 230.9 | 241.9 | 278.9 | 278 | 0.9 | 6 | 1 |
| | 3 | ☐ | MPS0530S-DIN-C | 20.0 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 1 |
| | 5 | ☐ | MPS0530L-DIN-C | 36.0 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 1 |
| | 8 | ☐ | MPS0530-L8C | 43.4 | 62.0 | 65.0 | 102.0 | 101 | 1.0 | 6 | 1 |
| | 10 | ☐ | MPS0530-L10C | 54.0 | 73.0 | 76.0 | 113.0 | 112 | 1.0 | 6 | 1 |
| | 12 | ☐ | MPS0530-L12C | 64.6 | 84.0 | 87.0 | 124.0 | 123 | 1.0 | 6 | 1 |
| 5.3 | 15 | ☐ | MPS0530-L15C | 80.5 | 100.0 | 103.0 | 140.0 | 139 | 1.0 | 6 | 1 |
| | 20 | ☐ | MPS0530-L20C | 107.0 | 128.0 | 131.0 | 168.0 | 167 | 1.0 | 6 | 1 |
| | 25 | ☐ | MPS0530-L25C | 133.5 | 155.0 | 158.0 | 195.0 | 194 | 1.0 | 6 | 1 |
| | 30 | ☐ | MPS0530-L30C | 160.0 | 183.0 | 186.0 | 223.0 | 222 | 1.0 | 6 | 1 |
| | 35 | ☐ | MPS0530-L35C | 186.5 | 210.0 | 212.0 | 249.0 | 248 | 1.0 | 6 | 1 |
| | 40 | ☐ | MPS0530-L40C | 213.0 | 241.0 | 242.0 | 279.0 | 278 | 1.0 | 6 | 1 |
| | 3 | ☐ | MPS0540S-DIN-C | 19.9 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 1 |
| | 5 | ☐ | MPS0540L-DIN-C | 35.9 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 1 |
| | 8 | ☐ | MPS0540-L8C | 44.2 | 62.0 | 65.0 | 102.0 | 101 | 1.0 | 6 | 1 |
| | 10 | ☐ | MPS0540-L10C | 55.0 | 73.0 | 76.0 | 113.0 | 112 | 1.0 | 6 | 1 |
| | 12 | ☐ | MPS0540-L12C | 65.8 | 84.0 | 87.0 | 124.0 | 123 | 1.0 | 6 | 1 |
| 5.4 | 15 | ☐ | MPS0540-L15C | 82.0 | 100.0 | 103.0 | 140.0 | 139 | 1.0 | 6 | 1 |
| | 20 | ☐ | MPS0540-L20C | 109.0 | 128.0 | 131.0 | 168.0 | 167 | 1.0 | 6 | 1 |
| | 25 | ☐ | MPS0540-L25C | 136.0 | 155.0 | 158.0 | 195.0 | 194 | 1.0 | 6 | 1 |
| | 30 | ☐ | MPS0540-L30C | 163.0 | 183.0 | 186.0 | 223.0 | 222 | 1.0 | 6 | 1 |
| | 35 | ☐ | MPS0540-L35C | 190.0 | 210.0 | 212.0 | 249.0 | 248 | 1.0 | 6 | 1 |
| | 40 | ☐ | MPS0540-L40C | 217.0 | 241.0 | 242.0 | 279.0 | 278 | 1.0 | 6 | 1 |
| | 3 | ☐ | MPS0550S-DIN-C | 19.8 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 1 |
| | 5 | ☐ | MPS0550L-DIN-C | 35.8 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 1 |
| | 8 | ☐ | MPS0550-L8C | 45.0 | 62.0 | 65.0 | 102.0 | 101 | 1.0 | 6 | 1 |
| | 10 | ☐ | MPS0550-L10C | 56.0 | 73.0 | 76.0 | 113.0 | 112 | 1.0 | 6 | 1 |
| | 12 | ☐ | MPS0550-L12C | 67.0 | 84.0 | 87.0 | 124.0 | 123 | 1.0 | 6 | 1 |
| 5.5 | 15 | ☐ | MPS0550-L15C | 83.5 | 100.0 | 103.0 | 140.0 | 139 | 1.0 | 6 | 1 |
| | 20 | ☐ | MPS0550-L20C | 111.0 | 128.0 | 131.0 | 168.0 | 167 | 1.0 | 6 | 1 |
| | 25 | ☐ | MPS0550-L25C | 138.5 | 155.0 | 158.0 | 195.0 | 194 | 1.0 | 6 | 1 |
| | 30 | ☐ | MPS0550-L30C | 166.0 | 183.0 | 186.0 | 223.0 | 222 | 1.0 | 6 | 1 |
| | 35 | ☐ | MPS0550-L35C | 193.5 | 210.0 | 212.0 | 249.0 | 248 | 1.0 | 6 | 1 |
| | 40 | ☐ | MPS0550-L40C | 221.0 | 241.0 | 242.0 | 279.0 | 278 | 1.0 | 6 | 1 |

☐ : Article non stocké - Fabrication sur commande uniquement.

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.55 | 3 | ☐ | MPS0555S-DIN-C | 19.7 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 1 |
| | 5 | ☐ | MPS0555L-DIN-C | 35.7 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 1 |
| 5.6 | 3 | ☐ | MPS0560S-DIN-C | 19.6 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 1 |
| | 5 | ☐ | MPS0560L-DIN-C | 35.6 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 1 |
| | 8 | ☐ | MPS0560-L8C | 45.8 | 67.0 | 70.0 | 107.0 | 106 | 1.0 | 6 | 1 |
| | 10 | ☐ | MPS0560-L10C | 57.0 | 79.0 | 82.0 | 119.0 | 118 | 1.0 | 6 | 1 |
| | 12 | ☐ | MPS0560-L12C | 68.2 | 91.0 | 94.0 | 131.0 | 130 | 1.0 | 6 | 1 |
| | 15 | ☐ | MPS0560-L15C | 85.0 | 109.0 | 112.0 | 149.0 | 148 | 1.0 | 6 | 1 |
| | 20 | ☐ | MPS0560-L20C | 113.0 | 139.0 | 142.0 | 179.0 | 178 | 1.0 | 6 | 1 |
| | 25 | ☐ | MPS0560-L25C | 141.0 | 169.0 | 172.0 | 209.0 | 208 | 1.0 | 6 | 1 |
| | 30 | ☐ | MPS0560-L30C | 169.0 | 199.0 | 202.0 | 239.0 | 238 | 1.0 | 6 | 1 |
| | 35 | ☐ | MPS0560-L35C | 197.0 | 223.0 | 231.0 | 268.0 | 267 | 1.0 | 6 | 1 |
| | 40 | ☐ | MPS0560-L40C | 225.0 | 251.0 | 262.0 | 299.0 | 298 | 1.0 | 6 | 1 |
| 5.7 | 3 | ☐ | MPS0570S-DIN-C | 19.5 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 1 |
| | 5 | ☐ | MPS0570L-DIN-C | 35.5 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 1 |
| | 8 | ☐ | MPS0570-L8C | 46.6 | 67.0 | 70.0 | 107.0 | 106 | 1.0 | 6 | 1 |
| | 10 | ☐ | MPS0570-L10C | 58.0 | 79.0 | 82.0 | 119.0 | 118 | 1.0 | 6 | 1 |
| | 12 | ☐ | MPS0570-L12C | 69.4 | 91.0 | 94.0 | 131.0 | 130 | 1.0 | 6 | 1 |
| | 15 | ☐ | MPS0570-L15C | 86.5 | 109.0 | 112.0 | 149.0 | 148 | 1.0 | 6 | 1 |
| | 20 | ☐ | MPS0570-L20C | 115.0 | 139.0 | 142.0 | 179.0 | 178 | 1.0 | 6 | 1 |
| | 25 | ☐ | MPS0570-L25C | 143.5 | 169.0 | 172.0 | 209.0 | 208 | 1.0 | 6 | 1 |
| | 30 | ☐ | MPS0570-L30C | 172.0 | 199.0 | 202.0 | 239.0 | 238 | 1.0 | 6 | 1 |
| | 35 | ☐ | MPS0570-L35C | 200.5 | 223.0 | 231.0 | 268.0 | 267 | 1.0 | 6 | 1 |
| | 40 | ☐ | MPS0570-L40C | 229.0 | 251.0 | 262.0 | 299.0 | 298 | 1.0 | 6 | 1 |
| 5.8 | 3 | ☐ | MPS0580S-DIN-C | 19.4 | 28.1 | 29.1 | 66.1 | 65 | 1.1 | 6 | 1 |
| | 5 | ☐ | MPS0580L-DIN-C | 35.4 | 44.1 | 45.1 | 82.1 | 81 | 1.1 | 6 | 1 |
| | 8 | ☐ | MPS0580-L8C | 47.5 | 67.1 | 70.1 | 107.1 | 106 | 1.1 | 6 | 1 |
| | 10 | ☐ | MPS0580-L10C | 59.1 | 79.1 | 82.1 | 119.1 | 118 | 1.1 | 6 | 1 |
| | 12 | ☐ | MPS0580-L12C | 70.7 | 91.1 | 94.1 | 131.1 | 130 | 1.1 | 6 | 1 |
| | 15 | ☐ | MPS0580-L15C | 88.1 | 109.1 | 112.1 | 149.1 | 148 | 1.1 | 6 | 1 |
| | 20 | ☐ | MPS0580-L20C | 117.1 | 139.1 | 142.1 | 179.1 | 178 | 1.1 | 6 | 1 |
| | 25 | ☐ | MPS0580-L25C | 146.1 | 169.1 | 172.1 | 209.1 | 208 | 1.1 | 6 | 1 |
| | 30 | ☐ | MPS0580-L30C | 175.1 | 199.1 | 202.1 | 239.1 | 238 | 1.1 | 6 | 1 |
| | 35 | ☐ | MPS0580-L35C | 204.1 | 229.1 | 231.1 | 268.1 | 267 | 1.1 | 6 | 1 |
| | 40 | ☐ | MPS0580-L40C | 233.1 | 261.1 | 262.1 | 299.1 | 298 | 1.1 | 6 | 1 |
| 5.9 | 3 | ☐ | MPS0590S-DIN-C | 19.2 | 28.1 | 29.1 | 66.1 | 65 | 1.1 | 6 | 1 |
| | 5 | ☐ | MPS0590L-DIN-C | 35.2 | 44.1 | 45.1 | 82.1 | 81 | 1.1 | 6 | 1 |
| | 8 | ☐ | MPS0590-L8C | 48.3 | 67.1 | 70.1 | 107.1 | 106 | 1.1 | 6 | 1 |
| | 10 | ☐ | MPS0590-L10C | 60.1 | 79.1 | 82.1 | 119.1 | 118 | 1.1 | 6 | 1 |
| | 12 | ☐ | MPS0590-L12C | 71.9 | 91.1 | 94.1 | 131.1 | 130 | 1.1 | 6 | 1 |
| | 15 | ☐ | MPS0590-L15C | 89.6 | 109.1 | 112.1 | 149.1 | 148 | 1.1 | 6 | 1 |
| | 20 | ☐ | MPS0590-L20C | 119.1 | 139.1 | 142.1 | 179.1 | 178 | 1.1 | 6 | 1 |
| | 25 | ☐ | MPS0590-L25C | 148.6 | 169.1 | 172.1 | 209.1 | 208 | 1.1 | 6 | 1 |
| | 30 | ☐ | MPS0590-L30C | 178.1 | 199.1 | 202.1 | 239.1 | 238 | 1.1 | 6 | 1 |
| | 35 | ☐ | MPS0590-L35C | 207.6 | 229.1 | 231.1 | 268.1 | 267 | 1.1 | 6 | 1 |
| | 40 | ☐ | MPS0590-L40C | 237.1 | 261.1 | 262.1 | 299.1 | 298 | 1.1 | 6 | 1 |
| 6.0 | 3 | ☐ | MPS0600S-DIN-C | 19.1 | 28.1 | 29.1 | 66.1 | 65 | 1.1 | 6 | 2 |
| | 5 | ☐ | MPS0600L-DIN-C | 35.1 | 44.1 | 45.1 | 82.1 | 81 | 1.1 | 6 | 2 |
| | 8 | ☐ | MPS0600-L8C | 49.1 | 67.1 | 70.1 | 107.1 | 106 | 1.1 | 6 | 2 |
| | 10 | ☐ | MPS0600-L10C | 61.1 | 79.1 | 82.1 | 119.1 | 118 | 1.1 | 6 | 2 |
| | 12 | ☐ | MPS0600-L12C | 73.1 | 91.1 | 94.1 | 131.1 | 130 | 1.1 | 6 | 2 |
| | 15 | ☐ | MPS0600-L15C | 91.1 | 109.1 | 112.1 | 149.1 | 148 | 1.1 | 6 | 2 |
| | 20 | ☐ | MPS0600-L20C | 121.1 | 139.1 | 142.1 | 179.1 | 178 | 1.1 | 6 | 2 |
| | 25 | ☐ | MPS0600-L25C | 151.1 | 169.1 | 172.1 | 209.1 | 208 | 1.1 | 6 | 2 |
| | 30 | ☐ | MPS0600-L30C | 181.1 | 199.1 | 202.1 | 239.1 | 238 | 1.1 | 6 | 2 |
| | 35 | ☐ | MPS0600-L35C | 211.1 | 229.1 | 231.1 | 268.1 | 267 | 1.1 | 6 | 2 |
| | 40 | ☐ | MPS0600-L40C | 241.1 | 261.1 | 262.1 | 299.1 | 298 | 1.1 | 6 | 2 |

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.05 | 3 | ☐ | MPS0605S-DIN-C | 25.0 | 34.1 | 42.1 | 79.1 | 78 | 1.1 | 8 | 1 |
| | 5 | ☐ | MPS0605L-DIN-C | 44.0 | 53.1 | 54.1 | 91.1 | 90 | 1.1 | 8 | 1 |
| 6.1 | 3 | ☐ | MPS0610S-DIN-C | 25.0 | 34.1 | 42.1 | 79.1 | 78 | 1.1 | 8 | 1 |
| | 5 | ☐ | MPS0610L-DIN-C | 44.0 | 53.1 | 54.1 | 91.1 | 90 | 1.1 | 8 | 1 |
| | 8 | ☐ | MPS0610-L8C | 49.9 | 73.1 | 76.1 | 113.1 | 112 | 1.1 | 8 | 1 |
| | 10 | ☐ | MPS0610-L10C | 62.1 | 86.1 | 89.1 | 126.1 | 125 | 1.1 | 8 | 1 |
| | 12 | ☐ | MPS0610-L12C | 74.3 | 99.1 | 102.1 | 139.1 | 138 | 1.1 | 8 | 1 |
| | 15 | ☐ | MPS0610-L15C | 92.6 | 118.1 | 121.1 | 158.1 | 157 | 1.1 | 8 | 1 |
| | 20 | ☐ | MPS0610-L20C | 123.1 | 151.1 | 154.1 | 191.1 | 190 | 1.1 | 8 | 1 |
| | 25 | ☐ | MPS0610-L25C | 153.6 | 183.1 | 186.1 | 223.1 | 222 | 1.1 | 8 | 1 |
| | 30 | ☐ | MPS0610-L30C | 184.1 | 216.1 | 219.1 | 256.1 | 255 | 1.1 | 8 | 1 |
| | 35 | ☐ | MPS0610-L35C | 214.6 | 241.1 | 250.1 | 287.1 | 286 | 1.1 | 8 | 1 |
| | 40 | ☐ | MPS0610-L40C | 245.1 | 271.1 | 284.1 | 321.1 | 320 | 1.1 | 8 | 1 |
| 6.2 | 3 | ☐ | MPS0620S-DIN-C | 24.8 | 34.1 | 42.1 | 79.1 | 78 | 1.1 | 8 | 1 |
| | 5 | ☐ | MPS0620L-DIN-C | 43.8 | 53.1 | 54.1 | 91.1 | 90 | 1.1 | 8 | 1 |
| | 8 | ☐ | MPS0620-L8C | 50.7 | 73.1 | 76.1 | 113.1 | 112 | 1.1 | 8 | 1 |
| | 10 | ☐ | MPS0620-L10C | 63.1 | 86.1 | 89.1 | 126.1 | 125 | 1.1 | 8 | 1 |
| | 12 | ☐ | MPS0620-L12C | 75.5 | 99.1 | 102.1 | 139.1 | 138 | 1.1 | 8 | 1 |
| | 15 | ☐ | MPS0620-L15C | 94.1 | 118.1 | 121.1 | 158.1 | 157 | 1.1 | 8 | 1 |
| | 20 | ☐ | MPS0620-L20C | 125.1 | 151.1 | 154.1 | 191.1 | 190 | 1.1 | 8 | 1 |
| | 25 | ☐ | MPS0620-L25C | 156.1 | 183.1 | 186.1 | 223.1 | 222 | 1.1 | 8 | 1 |
| | 30 | ☐ | MPS0620-L30C | 187.1 | 216.1 | 219.1 | 256.1 | 255 | 1.1 | 8 | 1 |
| | 35 | ☐ | MPS0620-L35C | 218.1 | 241.1 | 250.1 | 287.1 | 286 | 1.1 | 8 | 1 |
| | 40 | ☐ | MPS0620-L40C | 249.1 | 271.1 | 284.1 | 321.1 | 320 | 1.1 | 8 | 1 |
| 6.3 | 3 | ☐ | MPS0630S-DIN-C | 24.7 | 34.1 | 42.1 | 79.1 | 78 | 1.1 | 8 | 1 |
| | 5 | ☐ | MPS0630L-DIN-C | 43.7 | 53.1 | 54.1 | 91.1 | 90 | 1.1 | 8 | 1 |
| | 8 | ☐ | MPS0630-L8C | 51.5 | 73.1 | 76.1 | 113.1 | 112 | 1.1 | 8 | 1 |
| | 10 | ☐ | MPS0630-L10C | 64.1 | 86.1 | 89.1 | 126.1 | 125 | 1.1 | 8 | 1 |
| | 12 | ☐ | MPS0630-L12C | 76.7 | 99.1 | 102.1 | 139.1 | 138 | 1.1 | 8 | 1 |
| | 15 | ☐ | MPS0630-L15C | 95.6 | 118.1 | 121.1 | 158.1 | 157 | 1.1 | 8 | 1 |
| | 20 | ☐ | MPS0630-L20C | 127.1 | 151.1 | 154.1 | 191.1 | 190 | 1.1 | 8 | 1 |
| | 25 | ☐ | MPS0630-L25C | 158.6 | 183.1 | 186.1 | 223.1 | 222 | 1.1 | 8 | 1 |
| | 30 | ☐ | MPS0630-L30C | 190.1 | 216.1 | 219.1 | 256.1 | 255 | 1.1 | 8 | 1 |
| | 35 | ☐ | MPS0630-L35C | 221.6 | 248.1 | 250.1 | 287.1 | 286 | 1.1 | 8 | 1 |
| | 40 | ☐ | MPS0630-L40C | 253.1 | 281.1 | 284.1 | 321.1 | 320 | 1.1 | 8 | 1 |
| 6.4 | 3 | ☐ | MPS0640S-DIN-C | 24.6 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 1 |
| | 5 | ☐ | MPS0640L-DIN-C | 43.6 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 1 |
| | 8 | ☐ | MPS0640-L8C | 52.4 | 73.2 | 76.2 | 113.2 | 112 | 1.2 | 8 | 1 |
| | 10 | ☐ | MPS0640-L10C | 65.2 | 86.2 | 89.2 | 126.2 | 125 | 1.2 | 8 | 1 |
| | 12 | ☐ | MPS0640-L12C | 78.0 | 99.2 | 102.2 | 139.2 | 138 | 1.2 | 8 | 1 |
| | 15 | ☐ | MPS0640-L15C | 97.2 | 118.2 | 121.2 | 158.2 | 157 | 1.2 | 8 | 1 |
| | 20 | ☐ | MPS0640-L20C | 129.2 | 151.2 | 154.2 | 191.2 | 190 | 1.2 | 8 | 1 |
| | 25 | ☐ | MPS0640-L25C | 161.2 | 183.2 | 186.2 | 223.2 | 222 | 1.2 | 8 | 1 |
| | 30 | ☐ | MPS0640-L30C | 193.2 | 216.2 | 219.2 | 256.2 | 255 | 1.2 | 8 | 1 |
| | 35 | ☐ | MPS0640-L35C | 225.2 | 248.2 | 250.2 | 287.2 | 286 | 1.2 | 8 | 1 |
| | 40 | ☐ | MPS0640-L40C | 257.2 | 281.2 | 284.2 | 321.2 | 320 | 1.2 | 8 | 1 |
| 6.5 | 3 | ☐ | MPS0650S-DIN-C | 24.4 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 1 |
| | 5 | ☐ | MPS0650L-DIN-C | 43.4 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 1 |
| | 8 | ☐ | MPS0650-L8C | 53.2 | 73.2 | 76.2 | 113.2 | 112 | 1.2 | 8 | 1 |
| | 10 | ☐ | MPS0650-L10C | 66.2 | 86.2 | 89.2 | 126.2 | 125 | 1.2 | 8 | 1 |
| | 12 | ☐ | MPS0650-L12C | 79.2 | 99.2 | 102.2 | 139.2 | 138 | 1.2 | 8 | 1 |
| | 15 | ☐ | MPS0650-L15C | 98.7 | 118.2 | 121.2 | 158.2 | 157 | 1.2 | 8 | 1 |
| | 20 | ☐ | MPS0650-L20C | 131.2 | 151.2 | 154.2 | 191.2 | 190 | 1.2 | 8 | 1 |
| | 25 | ☐ | MPS0650-L25C | 163.7 | 183.2 | 186.2 | 223.2 | 222 | 1.2 | 8 | 1 |
| | 30 | ☐ | MPS0650-L30C | 196.2 | 216.2 | 219.2 | 256.2 | 255 | 1.2 | 8 | 1 |
| | 35 | ☐ | MPS0650-L35C | 228.7 | 248.2 | 250.2 | 287.2 | 286 | 1.2 | 8 | 1 |
| | 40 | ☐ | MPS0650-L40C | 261.2 | 281.2 | 284.2 | 321.2 | 320 | 1.2 | 8 | 1 |

CONDITIONS DE COUPE ➤ M077
DONNÉES TECHNIQUES ➤ P001

# PERÇAGE (CARBURE MONOBLOC)

## MPS

Foret carbure à double listel

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | ☐ | MPS0660S-DIN-C | 24.3 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 1 |
| | 5 | ☐ | MPS0660L-DIN-C | 43.3 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 1 |
| | 8 | ☐ | MPS0660-L8C | 54.0 | 78.2 | 81.2 | 118.2 | 117 | 1.2 | 8 | 1 |
| | 10 | ☐ | MPS0660-L10C | 67.2 | 92.2 | 95.2 | 132.2 | 131 | 1.2 | 8 | 1 |
| | 12 | ☐ | MPS0660-L12C | 80.4 | 106.2 | 109.2 | 146.2 | 145 | 1.2 | 8 | 1 |
| 6.6 | 15 | ☐ | MPS0660-L15C | 100.2 | 127.2 | 130.2 | 167.2 | 166 | 1.2 | 8 | 1 |
| | 20 | ☐ | MPS0660-L20C | 133.2 | 162.2 | 165.2 | 202.2 | 201 | 1.2 | 8 | 1 |
| | 25 | ☐ | MPS0660-L25C | 166.2 | 197.2 | 200.2 | 237.2 | 236 | 1.2 | 8 | 1 |
| | 30 | ☐ | MPS0660-L30C | 199.2 | 232.2 | 235.2 | 272.2 | 271 | 1.2 | 8 | 1 |
| | 35 | ☐ | MPS0660-L35C | 232.2 | 267.2 | 269.2 | 306.2 | 305 | 1.2 | 8 | 1 |
| | 40 | ☐ | MPS0660-L40C | 265.2 | 301.2 | 304.2 | 341.2 | 340 | 1.2 | 8 | 1 |
| | 3 | ☐ | MPS0670S-DIN-C | 24.2 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 1 |
| | 5 | ☐ | MPS0670L-DIN-C | 43.2 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 1 |
| | 8 | ☐ | MPS0670-L8C | 54.8 | 78.2 | 81.2 | 118.2 | 117 | 1.2 | 8 | 1 |
| | 10 | ☐ | MPS0670-L10C | 68.2 | 92.2 | 95.2 | 132.2 | 131 | 1.2 | 8 | 1 |
| | 12 | ☐ | MPS0670-L12C | 81.6 | 106.2 | 109.2 | 146.2 | 145 | 1.2 | 8 | 1 |
| 6.7 | 15 | ☐ | MPS0670-L15C | 101.7 | 127.2 | 130.2 | 167.2 | 166 | 1.2 | 8 | 1 |
| | 20 | ☐ | MPS0670-L20C | 135.2 | 162.2 | 165.2 | 202.2 | 201 | 1.2 | 8 | 1 |
| | 25 | ☐ | MPS0670-L25C | 168.7 | 197.2 | 200.2 | 237.2 | 236 | 1.2 | 8 | 1 |
| | 30 | ☐ | MPS0670-L30C | 202.2 | 232.2 | 235.2 | 272.2 | 271 | 1.2 | 8 | 1 |
| | 35 | ☐ | MPS0670-L35C | 235.7 | 267.2 | 269.2 | 306.2 | 305 | 1.2 | 8 | 1 |
| | 40 | ☐ | MPS0670-L40C | 269.2 | 301.2 | 304.2 | 341.2 | 340 | 1.2 | 8 | 1 |
| | 3 | ☐ | MPS0680S-DIN-C | 24.0 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 1 |
| | 5 | ☐ | MPS0680L-DIN-C | 43.0 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 1 |
| | 8 | ☐ | MPS0680-L8C | 55.6 | 78.2 | 81.2 | 118.2 | 117 | 1.2 | 8 | 1 |
| | 10 | ☐ | MPS0680-L10C | 69.2 | 92.2 | 95.2 | 132.2 | 131 | 1.2 | 8 | 1 |
| | 12 | ☐ | MPS0680-L12C | 82.8 | 106.2 | 109.2 | 146.2 | 145 | 1.2 | 8 | 1 |
| 6.8 | 15 | ☐ | MPS0680-L15C | 103.2 | 127.2 | 130.2 | 167.2 | 166 | 1.2 | 8 | 1 |
| | 20 | ☐ | MPS0680-L20C | 137.2 | 162.2 | 165.2 | 202.2 | 201 | 1.2 | 8 | 1 |
| | 25 | ☐ | MPS0680-L25C | 171.2 | 197.2 | 200.2 | 237.2 | 236 | 1.2 | 8 | 1 |
| | 30 | ☐ | MPS0680-L30C | 205.2 | 232.2 | 235.2 | 272.2 | 271 | 1.2 | 8 | 1 |
| | 35 | ☐ | MPS0680-L35C | 239.2 | 267.2 | 269.2 | 306.2 | 305 | 1.2 | 8 | 1 |
| | 40 | ☐ | MPS0680-L40C | 273.2 | 301.2 | 304.2 | 341.2 | 340 | 1.2 | 8 | 1 |
| | 3 | ☐ | MPS0690S-DIN-C | 23.9 | 34.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 1 |
| | 5 | ☐ | MPS0690L-DIN-C | 42.9 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 1 |
| | 8 | ☐ | MPS0690-L8C | 56.5 | 78.3 | 81.3 | 118.3 | 117 | 1.3 | 8 | 1 |
| | 10 | ☐ | MPS0690-L10C | 70.3 | 92.3 | 95.3 | 132.3 | 131 | 1.3 | 8 | 1 |
| | 12 | ☐ | MPS0690-L12C | 84.1 | 106.3 | 109.3 | 146.3 | 145 | 1.3 | 8 | 1 |
| 6.9 | 15 | ☐ | MPS0690-L15C | 104.8 | 127.3 | 130.3 | 167.3 | 166 | 1.3 | 8 | 1 |
| | 20 | ☐ | MPS0690-L20C | 139.3 | 162.3 | 165.3 | 202.3 | 201 | 1.3 | 8 | 1 |
| | 25 | ☐ | MPS0690-L25C | 173.8 | 197.3 | 200.3 | 237.3 | 236 | 1.3 | 8 | 1 |
| | 30 | ☐ | MPS0690-L30C | 208.3 | 232.3 | 235.3 | 272.3 | 271 | 1.3 | 8 | 1 |
| | 35 | ☐ | MPS0690-L35C | 242.8 | 267.3 | 269.3 | 306.3 | 305 | 1.3 | 8 | 1 |
| | 40 | ☐ | MPS0690-L40C | 277.3 | 301.3 | 304.3 | 341.3 | 340 | 1.3 | 8 | 1 |
| | 3 | ☐ | MPS0700S-DIN-C | 23.8 | 34.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 1 |
| | 5 | ☐ | MPS0700L-DIN-C | 42.8 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 1 |
| | 8 | ☐ | MPS0700-L8C | 57.3 | 78.3 | 81.3 | 118.3 | 117 | 1.3 | 8 | 1 |
| | 10 | ☐ | MPS0700-L10C | 71.3 | 92.3 | 95.3 | 132.3 | 131 | 1.3 | 8 | 1 |
| | 12 | ☐ | MPS0700-L12C | 85.3 | 106.3 | 109.3 | 146.3 | 145 | 1.3 | 8 | 1 |
| 7.0 | 15 | ☐ | MPS0700-L15C | 106.3 | 127.3 | 130.3 | 167.3 | 166 | 1.3 | 8 | 1 |
| | 20 | ☐ | MPS0700-L20C | 141.3 | 162.3 | 165.3 | 202.3 | 201 | 1.3 | 8 | 1 |
| | 25 | ☐ | MPS0700-L25C | 176.3 | 197.3 | 200.3 | 237.3 | 236 | 1.3 | 8 | 1 |
| | 30 | ☐ | MPS0700-L30C | 211.3 | 232.3 | 235.3 | 272.3 | 271 | 1.3 | 8 | 1 |
| | 35 | ☐ | MPS0700-L35C | 246.3 | 267.3 | 269.3 | 306.3 | 305 | 1.3 | 8 | 1 |
| | 40 | ☐ | MPS0700-L40C | 281.3 | 301.3 | 304.3 | 341.3 | 340 | 1.3 | 8 | 1 |

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | ☐ | MPS0710S-DIN-C | 30.6 | 41.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 1 |
| | 5 | ☐ | MPS0710L-DIN-C | 42.6 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 1 |
| | 8 | ☐ | MPS0710-L8C | 58.1 | 84.3 | 87.3 | 124.3 | 123 | 1.3 | 8 | 1 |
| | 10 | ☐ | MPS0710-L10C | 72.3 | 99.3 | 102.3 | 139.3 | 138 | 1.3 | 8 | 1 |
| | 12 | ☐ | MPS0710-L12C | 86.5 | 114.3 | 117.3 | 154.3 | 153 | 1.3 | 8 | 1 |
| 7.1 | 15 | ☐ | MPS0710-L15C | 107.8 | 136.3 | 139.3 | 176.3 | 175 | 1.3 | 8 | 1 |
| | 20 | ☐ | MPS0710-L20C | 143.3 | 174.3 | 177.3 | 214.3 | 213 | 1.3 | 8 | 1 |
| | 25 | ☐ | MPS0710-L25C | 178.8 | 211.3 | 214.3 | 251.3 | 250 | 1.3 | 8 | 1 |
| | 30 | ☐ | MPS0710-L30C | 214.3 | 249.3 | 252.3 | 289.3 | 288 | 1.3 | 8 | 1 |
| | 35 | ☐ | MPS0710-L35C | 249.8 | 286.3 | 288.3 | 325.3 | 324 | 1.3 | 8 | 1 |
| | 40 | ☐ | MPS0710-L40C | 285.3 | 321.3 | 323.3 | 360.3 | 359 | 1.3 | 8 | 1 |
| | 3 | ☐ | MPS0720S-DIN-C | 30.5 | 41.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 1 |
| | 5 | ☐ | MPS0720L-DIN-C | 42.5 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 1 |
| | 8 | ☐ | MPS0720-L8C | 58.9 | 84.3 | 87.3 | 124.3 | 123 | 1.3 | 8 | 1 |
| | 10 | ☐ | MPS0720-L10C | 73.3 | 99.3 | 102.3 | 139.3 | 138 | 1.3 | 8 | 1 |
| | 12 | ☐ | MPS0720-L12C | 87.7 | 114.3 | 117.3 | 154.3 | 153 | 1.3 | 8 | 1 |
| 7.2 | 15 | ☐ | MPS0720-L15C | 109.3 | 136.3 | 139.3 | 176.3 | 175 | 1.3 | 8 | 1 |
| | 20 | ☐ | MPS0720-L20C | 145.3 | 174.3 | 177.3 | 214.3 | 213 | 1.3 | 8 | 1 |
| | 25 | ☐ | MPS0720-L25C | 181.3 | 211.3 | 214.3 | 251.3 | 250 | 1.3 | 8 | 1 |
| | 30 | ☐ | MPS0720-L30C | 217.3 | 249.3 | 252.3 | 289.3 | 288 | 1.3 | 8 | 1 |
| | 35 | ☐ | MPS0720-L35C | 253.3 | 286.3 | 288.3 | 325.3 | 324 | 1.3 | 8 | 1 |
| | 40 | ☐ | MPS0720-L40C | 289.3 | 321.3 | 323.3 | 360.3 | 359 | 1.3 | 8 | 1 |
| | 3 | ☐ | MPS0730S-DIN-C | 30.4 | 41.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 1 |
| | 5 | ☐ | MPS0730L-DIN-C | 42.4 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 1 |
| | 8 | ☐ | MPS0730-L8C | 59.7 | 84.3 | 87.3 | 124.3 | 123 | 1.3 | 8 | 1 |
| | 10 | ☐ | MPS0730-L10C | 74.3 | 99.3 | 102.3 | 139.3 | 138 | 1.3 | 8 | 1 |
| | 12 | ☐ | MPS0730-L12C | 88.9 | 114.3 | 117.3 | 154.3 | 153 | 1.3 | 8 | 1 |
| 7.3 | 15 | ☐ | MPS0730-L15C | 110.8 | 136.3 | 139.3 | 176.3 | 175 | 1.3 | 8 | 1 |
| | 20 | ☐ | MPS0730-L20C | 147.3 | 174.3 | 177.3 | 214.3 | 213 | 1.3 | 8 | 1 |
| | 25 | ☐ | MPS0730-L25C | 183.8 | 211.3 | 214.3 | 251.3 | 250 | 1.3 | 8 | 1 |
| | 30 | ☐ | MPS0730-L30C | 220.3 | 249.3 | 252.3 | 289.3 | 288 | 1.3 | 8 | 1 |
| | 35 | ☐ | MPS0730-L35C | 256.8 | 286.3 | 288.3 | 325.3 | 324 | 1.3 | 8 | 1 |
| | 40 | ☐ | MPS0730-L40C | 293.3 | 321.3 | 323.3 | 360.3 | 359 | 1.3 | 8 | 1 |
| | 3 | ☐ | MPS0740S-DIN-C | 30.2 | 41.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 1 |
| | 5 | ☐ | MPS0740L-DIN-C | 42.2 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 1 |
| | 8 | ☐ | MPS0740-L8C | 60.5 | 84.3 | 87.3 | 124.3 | 123 | 1.3 | 8 | 1 |
| | 10 | ☐ | MPS0740-L10C | 75.3 | 99.3 | 102.3 | 139.3 | 138 | 1.3 | 8 | 1 |
| | 12 | ☐ | MPS0740-L12C | 90.1 | 114.3 | 117.3 | 154.3 | 153 | 1.3 | 8 | 1 |
| 7.4 | 15 | ☐ | MPS0740-L15C | 112.3 | 136.3 | 139.3 | 176.3 | 175 | 1.3 | 8 | 1 |
| | 20 | ☐ | MPS0740-L20C | 149.3 | 174.3 | 177.3 | 214.3 | 213 | 1.3 | 8 | 1 |
| | 25 | ☐ | MPS0740-L25C | 186.3 | 211.3 | 214.3 | 251.3 | 250 | 1.3 | 8 | 1 |
| | 30 | ☐ | MPS0740-L30C | 223.3 | 249.3 | 252.3 | 289.3 | 288 | 1.3 | 8 | 1 |
| | 35 | ☐ | MPS0740-L35C | 260.3 | 286.3 | 288.3 | 325.3 | 324 | 1.3 | 8 | 1 |
| | 40 | ☐ | MPS0740-L40C | 297.3 | 321.3 | 323.3 | 360.3 | 359 | 1.3 | 8 | 1 |
| | 3 | ☐ | MPS0750S-DIN-C | 30.1 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 1 |
| | 5 | ☐ | MPS0750L-DIN-C | 42.1 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 1 |
| | 8 | ☐ | MPS0750-L8C | 61.4 | 84.4 | 87.4 | 124.4 | 123 | 1.4 | 8 | 1 |
| | 10 | ☐ | MPS0750-L10C | 76.4 | 99.4 | 102.4 | 139.4 | 138 | 1.4 | 8 | 1 |
| | 12 | ☐ | MPS0750-L12C | 91.4 | 114.4 | 117.4 | 154.4 | 153 | 1.4 | 8 | 1 |
| 7.5 | 15 | ☐ | MPS0750-L15C | 113.9 | 136.4 | 139.4 | 176.4 | 175 | 1.4 | 8 | 1 |
| | 20 | ☐ | MPS0750-L20C | 151.4 | 174.4 | 177.4 | 214.4 | 213 | 1.4 | 8 | 1 |
| | 25 | ☐ | MPS0750-L25C | 188.9 | 211.4 | 214.4 | 251.4 | 250 | 1.4 | 8 | 1 |
| | 30 | ☐ | MPS0750-L30C | 226.4 | 249.4 | 252.4 | 289.4 | 288 | 1.4 | 8 | 1 |
| | 35 | ☐ | MPS0750-L35C | 263.9 | 286.4 | 288.4 | 325.4 | 324 | 1.4 | 8 | 1 |
| | 40 | ☐ | MPS0750-L40C | 301.4 | 321.4 | 323.4 | 360.4 | 359 | 1.4 | 8 | 1 |

☐ : Article non stocké - Fabrication sur commande uniquement.

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | ☐ | MPS0760S-DIN-C | 30.0 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 1 |
| | 5 | ☐ | MPS0760L-DIN-C | 42.0 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 1 |
| | 8 | ☐ | MPS0760-L8C | 62.2 | 89.4 | 92.4 | 129.4 | 128 | 1.4 | 8 | 1 |
| | 10 | ☐ | MPS0760-L10C | 77.4 | 105.4 | 108.4 | 145.4 | 144 | 1.4 | 8 | 1 |
| | 12 | ☐ | MPS0760-L12C | 92.6 | 121.4 | 124.4 | 161.4 | 160 | 1.4 | 8 | 1 |
| **7.6** | 15 | ☐ | MPS0760-L15C | 115.4 | 145.4 | 148.4 | 185.4 | 184 | 1.4 | 8 | 1 |
| | 20 | ☐ | MPS0760-L20C | 153.4 | 185.4 | 188.4 | 225.4 | 224 | 1.4 | 8 | 1 |
| | 25 | ☐ | MPS0760-L25C | 191.4 | 225.4 | 228.4 | 265.4 | 264 | 1.4 | 8 | 1 |
| | 30 | ☐ | MPS0760-L30C | 229.4 | 265.4 | 268.4 | 305.4 | 304 | 1.4 | 8 | 1 |
| | 35 | ☐ | MPS0760-L35C | 267.4 | 305.4 | 307.4 | 344.4 | 343 | 1.4 | 8 | 1 |
| | 40 | ☐ | MPS0760-L40C | 305.4 | 341.4 | 342.4 | 379.4 | 378 | 1.4 | 8 | 1 |
| | 3 | ☐ | MPS0770S-DIN-C | 29.9 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 1 |
| | 5 | ☐ | MPS0770L-DIN-C | 41.9 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 1 |
| | 8 | ☐ | MPS0770-L8C | 63.0 | 89.4 | 92.4 | 129.4 | 128 | 1.4 | 8 | 1 |
| | 10 | ☐ | MPS0770-L10C | 78.4 | 105.4 | 108.4 | 145.4 | 144 | 1.4 | 8 | 1 |
| | 12 | ☐ | MPS0770-L12C | 93.8 | 121.4 | 124.4 | 161.4 | 160 | 1.4 | 8 | 1 |
| **7.7** | 15 | ☐ | MPS0770-L15C | 116.9 | 145.4 | 148.4 | 185.4 | 184 | 1.4 | 8 | 1 |
| | 20 | ☐ | MPS0770-L20C | 155.4 | 185.4 | 188.4 | 225.4 | 224 | 1.4 | 8 | 1 |
| | 25 | ☐ | MPS0770-L25C | 193.9 | 225.4 | 228.4 | 265.4 | 264 | 1.4 | 8 | 1 |
| | 30 | ☐ | MPS0770-L30C | 232.4 | 265.4 | 268.4 | 305.4 | 304 | 1.4 | 8 | 1 |
| | 35 | ☐ | MPS0770-L35C | 270.9 | 305.4 | 307.4 | 344.4 | 343 | 1.4 | 8 | 1 |
| | 40 | ☐ | MPS0770-L40C | 309.4 | 341.4 | 342.4 | 379.4 | 378 | 1.4 | 8 | 1 |
| | 3 | ☐ | MPS0780S-DIN-C | 29.7 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 1 |
| | 5 | ☐ | MPS0780L-DIN-C | 41.7 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 1 |
| | 8 | ☐ | MPS0780-L8C | 63.8 | 89.4 | 92.4 | 129.4 | 128 | 1.4 | 8 | 1 |
| | 10 | ☐ | MPS0780-L10C | 79.4 | 105.4 | 108.4 | 145.4 | 144 | 1.4 | 8 | 1 |
| | 12 | ☐ | MPS0780-L12C | 95.0 | 121.4 | 124.4 | 161.4 | 160 | 1.4 | 8 | 1 |
| **7.8** | 15 | ☐ | MPS0780-L15C | 118.4 | 145.4 | 148.4 | 185.4 | 184 | 1.4 | 8 | 1 |
| | 20 | ☐ | MPS0780-L20C | 157.4 | 185.4 | 188.4 | 225.4 | 224 | 1.4 | 8 | 1 |
| | 25 | ☐ | MPS0780-L25C | 196.4 | 225.4 | 228.4 | 265.4 | 264 | 1.4 | 8 | 1 |
| | 30 | ☐ | MPS0780-L30C | 235.4 | 265.4 | 268.4 | 305.4 | 304 | 1.4 | 8 | 1 |
| | 35 | ☐ | MPS0780-L35C | 274.4 | 305.4 | 307.4 | 344.4 | 343 | 1.4 | 8 | 1 |
| | 40 | ☐ | MPS0780-L40C | 313.4 | 341.4 | 342.4 | 379.4 | 378 | 1.4 | 8 | 1 |
| | 3 | ☐ | MPS0790S-DIN-C | 29.6 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 1 |
| | 5 | ☐ | MPS0790L-DIN-C | 41.6 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 1 |
| | 8 | ☐ | MPS0790-L8C | 64.6 | 89.4 | 92.4 | 129.4 | 128 | 1.4 | 8 | 1 |
| | 10 | ☐ | MPS0790-L10C | 80.4 | 105.4 | 108.4 | 145.4 | 144 | 1.4 | 8 | 1 |
| | 12 | ☐ | MPS0790-L12C | 96.2 | 121.4 | 124.4 | 161.4 | 160 | 1.4 | 8 | 1 |
| **7.9** | 15 | ☐ | MPS0790-L15C | 119.9 | 145.4 | 148.4 | 185.4 | 184 | 1.4 | 8 | 1 |
| | 20 | ☐ | MPS0790-L20C | 159.4 | 185.4 | 188.4 | 225.4 | 224 | 1.4 | 8 | 1 |
| | 25 | ☐ | MPS0790-L25C | 198.9 | 225.4 | 228.4 | 265.4 | 264 | 1.4 | 8 | 1 |
| | 30 | ☐ | MPS0790-L30C | 238.4 | 265.4 | 268.4 | 305.4 | 304 | 1.4 | 8 | 1 |
| | 35 | ☐ | MPS0790-L35C | 277.9 | 305.4 | 307.4 | 344.4 | 343 | 1.4 | 8 | 1 |
| | 40 | ☐ | MPS0790-L40C | 317.4 | 341.4 | 342.4 | 379.4 | 378 | 1.4 | 8 | 1 |
| | 3 | ☐ | MPS0800S-DIN-C | 29.5 | 41.5 | 42.5 | 79.5 | 78 | 1.5 | 8 | 2 |
| | 5 | ☐ | MPS0800L-DIN-C | 41.5 | 53.5 | 54.5 | 91.5 | 90 | 1.5 | 8 | 2 |
| | 8 | ☐ | MPS0800-L8C | 65.5 | 89.5 | 92.5 | 129.5 | 128 | 1.5 | 8 | 2 |
| | 10 | ☐ | MPS0800-L10C | 81.5 | 105.5 | 108.5 | 145.5 | 144 | 1.5 | 8 | 2 |
| | 12 | ☐ | MPS0800-L12C | 97.5 | 121.5 | 124.5 | 161.5 | 160 | 1.5 | 8 | 2 |
| **8.0** | 15 | ☐ | MPS0800-L15C | 121.5 | 145.5 | 148.5 | 185.5 | 184 | 1.5 | 8 | 2 |
| | 20 | ☐ | MPS0800-L20C | 161.5 | 185.5 | 188.5 | 225.5 | 224 | 1.5 | 8 | 2 |
| | 25 | ☐ | MPS0800-L25C | 201.5 | 225.5 | 228.5 | 265.5 | 264 | 1.5 | 8 | 2 |
| | 30 | ☐ | MPS0800-L30C | 241.5 | 265.5 | 268.5 | 305.5 | 304 | 1.5 | 8 | 2 |
| | 35 | ☐ | MPS0800-L35C | 281.5 | 305.5 | 307.5 | 344.5 | 343 | 1.5 | 8 | 2 |
| | 40 | ☐ | MPS0800-L40C | 321.5 | 341.5 | 342.5 | 379.5 | 378 | 1.5 | 8 | 2 |

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **8.05** | 3 | ☐ | MPS0805S-DIN-C | 34.4 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 1 |
| | 5 | ☐ | MPS0805L-DIN-C | 48.4 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 1 |
| | 3 | ☐ | MPS0810S-DIN-C | 34.3 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 1 |
| | 5 | ☐ | MPS0810L-DIN-C | 48.3 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 1 |
| | 8 | ☐ | MPS0810-L8C | 66.3 | 95.5 | 98.5 | 139.5 | 138 | 1.5 | 10 | 1 |
| | 10 | ☐ | MPS0810-L10C | 82.5 | 112.5 | 115.5 | 156.5 | 155 | 1.5 | 10 | 1 |
| | 12 | ☐ | MPS0810-L12C | 98.7 | 129.5 | 132.5 | 173.5 | 172 | 1.5 | 10 | 1 |
| **8.1** | 15 | ☐ | MPS0810-L15C | 123.0 | 154.5 | 157.5 | 198.5 | 197 | 1.5 | 10 | 1 |
| | 20 | ☐ | MPS0810-L20C | 163.5 | 197.5 | 200.5 | 241.5 | 240 | 1.5 | 10 | 1 |
| | 25 | ☐ | MPS0810-L25C | 204.0 | 239.5 | 242.5 | 283.5 | 282 | 1.5 | 10 | 1 |
| | 30 | ☐ | MPS0810-L30C | 244.5 | 281.5 | 284.5 | 325.5 | 324 | 1.5 | 10 | 1 |
| | 35 | ☐ | MPS0810-L35C | 285.0 | 324.5 | 326.5 | 367.5 | 366 | 1.5 | 10 | 1 |
| | 40 | ☐ | MPS0810-L40C | 325.5 | 366.5 | 370.5 | 411.5 | 410 | 1.5 | 10 | 1 |
| | 3 | ☐ | MPS0820S-DIN-C | 34.2 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 1 |
| | 5 | ☐ | MPS0820L-DIN-C | 48.2 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 1 |
| | 8 | ☐ | MPS0820-L8C | 67.1 | 95.5 | 98.5 | 139.5 | 138 | 1.5 | 10 | 1 |
| | 10 | ☐ | MPS0820-L10C | 83.5 | 112.5 | 115.5 | 156.5 | 155 | 1.5 | 10 | 1 |
| | 12 | ☐ | MPS0820-L12C | 99.9 | 129.5 | 132.5 | 173.5 | 172 | 1.5 | 10 | 1 |
| **8.2** | 15 | ☐ | MPS0820-L15C | 124.5 | 154.5 | 157.5 | 198.5 | 197 | 1.5 | 10 | 1 |
| | 20 | ☐ | MPS0820-L20C | 165.5 | 197.5 | 200.5 | 241.5 | 240 | 1.5 | 10 | 1 |
| | 25 | ☐ | MPS0820-L25C | 206.5 | 239.5 | 242.5 | 283.5 | 282 | 1.5 | 10 | 1 |
| | 30 | ☐ | MPS0820-L30C | 247.5 | 281.5 | 284.5 | 325.5 | 324 | 1.5 | 10 | 1 |
| | 35 | ☐ | MPS0820-L35C | 288.5 | 324.5 | 326.5 | 367.5 | 366 | 1.5 | 10 | 1 |
| | 40 | ☐ | MPS0820-L40C | 329.5 | 366.5 | 370.5 | 411.5 | 410 | 1.5 | 10 | 1 |
| | 3 | ☐ | MPS0830S-DIN-C | 34.1 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 1 |
| | 5 | ☐ | MPS0830L-DIN-C | 48.1 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 1 |
| | 8 | ☐ | MPS0830-L8C | 67.9 | 95.5 | 98.5 | 139.5 | 138 | 1.5 | 10 | 1 |
| | 10 | ☐ | MPS0830-L10C | 84.5 | 112.5 | 115.5 | 156.5 | 155 | 1.5 | 10 | 1 |
| | 12 | ☐ | MPS0830-L12C | 101.1 | 129.5 | 132.5 | 173.5 | 172 | 1.5 | 10 | 1 |
| **8.3** | 15 | ☐ | MPS0830-L15C | 126.0 | 154.5 | 157.5 | 198.5 | 197 | 1.5 | 10 | 1 |
| | 20 | ☐ | MPS0830-L20C | 167.5 | 197.5 | 200.5 | 241.5 | 240 | 1.5 | 10 | 1 |
| | 25 | ☐ | MPS0830-L25C | 209.0 | 239.5 | 242.5 | 283.5 | 282 | 1.5 | 10 | 1 |
| | 30 | ☐ | MPS0830-L30C | 250.5 | 281.5 | 284.5 | 325.5 | 324 | 1.5 | 10 | 1 |
| | 35 | ☐ | MPS0830-L35C | 292.0 | 324.5 | 326.5 | 367.5 | 366 | 1.5 | 10 | 1 |
| | 40 | ☐ | MPS0830-L40C | 333.5 | 366.5 | 370.5 | 411.5 | 410 | 1.5 | 10 | 1 |
| | 3 | ☐ | MPS0840S-DIN-C | 33.9 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 1 |
| | 5 | ☐ | MPS0840L-DIN-C | 47.9 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 1 |
| | 8 | ☐ | MPS0840-L8C | 68.7 | 95.5 | 98.5 | 139.5 | 138 | 1.5 | 10 | 1 |
| | 10 | ☐ | MPS0840-L10C | 85.5 | 112.5 | 115.5 | 156.5 | 155 | 1.5 | 10 | 1 |
| | 12 | ☐ | MPS0840-L12C | 102.3 | 129.5 | 132.5 | 173.5 | 172 | 1.5 | 10 | 1 |
| **8.4** | 15 | ☐ | MPS0840-L15C | 127.5 | 154.5 | 157.5 | 198.5 | 197 | 1.5 | 10 | 1 |
| | 20 | ☐ | MPS0840-L20C | 169.5 | 197.5 | 200.5 | 241.5 | 240 | 1.5 | 10 | 1 |
| | 25 | ☐ | MPS0840-L25C | 211.5 | 239.5 | 242.5 | 283.5 | 282 | 1.5 | 10 | 1 |
| | 30 | ☐ | MPS0840-L30C | 253.5 | 281.5 | 284.5 | 325.5 | 324 | 1.5 | 10 | 1 |
| | 35 | ☐ | MPS0840-L35C | 295.5 | 324.5 | 326.5 | 367.5 | 366 | 1.5 | 10 | 1 |
| | 40 | ☐ | MPS0840-L40C | 337.5 | 366.5 | 370.5 | 411.5 | 410 | 1.5 | 10 | 1 |
| | 3 | ☐ | MPS0850S-DIN-C | 33.8 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 1 |
| | 5 | ☐ | MPS0850L-DIN-C | 47.8 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 1 |
| | 8 | ☐ | MPS0850-L8C | 69.5 | 95.5 | 98.5 | 139.5 | 138 | 1.5 | 10 | 1 |
| | 10 | ☐ | MPS0850-L10C | 86.5 | 112.5 | 115.5 | 156.5 | 155 | 1.5 | 10 | 1 |
| | 12 | ☐ | MPS0850-L12C | 103.5 | 129.5 | 132.5 | 173.5 | 172 | 1.5 | 10 | 1 |
| **8.5** | 15 | ☐ | MPS0850-L15C | 129.0 | 154.5 | 157.5 | 198.5 | 197 | 1.5 | 10 | 1 |
| | 20 | ☐ | MPS0850-L20C | 171.5 | 197.5 | 200.5 | 241.5 | 240 | 1.5 | 10 | 1 |
| | 25 | ☐ | MPS0850-L25C | 214.0 | 239.5 | 242.5 | 283.5 | 282 | 1.5 | 10 | 1 |
| | 30 | ☐ | MPS0850-L30C | 256.5 | 281.5 | 284.5 | 325.5 | 324 | 1.5 | 10 | 1 |
| | 35 | ☐ | MPS0850-L35C | 299.0 | 324.5 | 326.5 | 367.5 | 366 | 1.5 | 10 | 1 |
| | 40 | ☐ | MPS0850-L40C | 341.5 | 366.5 | 370.5 | 411.5 | 410 | 1.5 | 10 | 1 |

CONDITIONS DE COUPE ➤ M077
DONNÉES TECHNIQUES ➤ P001

# PERÇAGE (CARBURE MONOBLOC)

## MPS

Foret carbure à double listel

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.6 | 3 | ☐ | MPS0860S-DIN-C | 33.7 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 1 |
| | 5 | ☐ | MPS0860L-DIN-C | 47.7 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 1 |
| | 8 | ☐ | MPS0860-L8C | 70.4 | 100.6 | 103.6 | 144.6 | 143 | 1.6 | 10 | 1 |
| | 10 | ☐ | MPS0860-L10C | 87.6 | 118.6 | 121.6 | 162.6 | 161 | 1.6 | 10 | 1 |
| | 12 | ☐ | MPS0860-L12C | 104.8 | 136.6 | 139.6 | 180.6 | 179 | 1.6 | 10 | 1 |
| | 15 | ☐ | MPS0860-L15C | 130.6 | 163.6 | 166.6 | 207.6 | 206 | 1.6 | 10 | 1 |
| | 20 | ☐ | MPS0860-L20C | 173.6 | 208.6 | 211.6 | 252.6 | 251 | 1.6 | 10 | 1 |
| | 25 | ☐ | MPS0860-L25C | 216.6 | 253.6 | 256.6 | 297.6 | 296 | 1.6 | 10 | 1 |
| | 30 | ☐ | MPS0860-L30C | 259.6 | 297.6 | 300.6 | 341.6 | 340 | 1.6 | 10 | 1 |
| | 35 | ☐ | MPS0860-L35C | 302.6 | 343.6 | 345.6 | 386.6 | 385 | 1.6 | 10 | 1 |
| | 40 | ☐ | MPS0860-L40C | 345.6 | 391.6 | 394.6 | 435.6 | 434 | 1.6 | 10 | 1 |
| 8.7 | 3 | ☐ | MPS0870S-DIN-C | 33.5 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 1 |
| | 5 | ☐ | MPS0870L-DIN-C | 47.5 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 1 |
| | 8 | ☐ | MPS0870-L8C | 71.2 | 100.6 | 103.6 | 144.6 | 143 | 1.6 | 10 | 1 |
| | 10 | ☐ | MPS0870-L10C | 88.6 | 118.6 | 121.6 | 162.6 | 161 | 1.6 | 10 | 1 |
| | 12 | ☐ | MPS0870-L12C | 106.0 | 136.6 | 139.6 | 180.6 | 179 | 1.6 | 10 | 1 |
| | 15 | ☐ | MPS0870-L15C | 132.1 | 163.6 | 166.6 | 207.6 | 206 | 1.6 | 10 | 1 |
| | 20 | ☐ | MPS0870-L20C | 175.6 | 208.6 | 211.6 | 252.6 | 251 | 1.6 | 10 | 1 |
| | 25 | ☐ | MPS0870-L25C | 219.1 | 253.6 | 256.6 | 297.6 | 296 | 1.6 | 10 | 1 |
| | 30 | ☐ | MPS0870-L30C | 262.6 | 297.6 | 300.6 | 341.6 | 340 | 1.6 | 10 | 1 |
| | 35 | ☐ | MPS0870-L35C | 306.1 | 343.6 | 345.6 | 386.6 | 385 | 1.6 | 10 | 1 |
| | 40 | ☐ | MPS0870-L40C | 349.6 | 391.6 | 394.6 | 435.6 | 434 | 1.6 | 10 | 1 |
| 8.8 | 3 | ☐ | MPS0880S-DIN-C | 33.4 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 1 |
| | 5 | ☐ | MPS0880L-DIN-C | 47.4 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 1 |
| | 8 | ☐ | MPS0880-L8C | 72.0 | 100.6 | 103.6 | 144.6 | 143 | 1.6 | 10 | 1 |
| | 10 | ☐ | MPS0880-L10C | 89.6 | 118.6 | 121.6 | 162.6 | 161 | 1.6 | 10 | 1 |
| | 12 | ☐ | MPS0880-L12C | 107.2 | 136.6 | 139.6 | 180.6 | 179 | 1.6 | 10 | 1 |
| | 15 | ☐ | MPS0880-L15C | 133.6 | 163.6 | 166.6 | 207.6 | 206 | 1.6 | 10 | 1 |
| | 20 | ☐ | MPS0880-L20C | 177.6 | 208.6 | 211.6 | 252.6 | 251 | 1.6 | 10 | 1 |
| | 25 | ☐ | MPS0880-L25C | 221.6 | 253.6 | 256.6 | 297.6 | 296 | 1.6 | 10 | 1 |
| | 30 | ☐ | MPS0880-L30C | 265.6 | 297.6 | 300.6 | 341.6 | 340 | 1.6 | 10 | 1 |
| | 35 | ☐ | MPS0880-L35C | 309.6 | 343.6 | 345.6 | 386.6 | 385 | 1.6 | 10 | 1 |
| | 40 | ☐ | MPS0880-L40C | 353.6 | 391.6 | 394.6 | 435.6 | 434 | 1.6 | 10 | 1 |
| 8.9 | 3 | ☐ | MPS0890S-DIN-C | 33.3 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 1 |
| | 5 | ☐ | MPS0890L-DIN-C | 47.3 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 1 |
| | 8 | ☐ | MPS0890-L8C | 72.8 | 100.6 | 103.6 | 144.6 | 143 | 1.6 | 10 | 1 |
| | 10 | ☐ | MPS0890-L10C | 90.6 | 118.6 | 121.6 | 162.6 | 161 | 1.6 | 10 | 1 |
| | 12 | ☐ | MPS0890-L12C | 108.4 | 136.6 | 139.6 | 180.6 | 179 | 1.6 | 10 | 1 |
| | 15 | ☐ | MPS0890-L15C | 135.1 | 163.6 | 166.6 | 207.6 | 206 | 1.6 | 10 | 1 |
| | 20 | ☐ | MPS0890-L20C | 179.6 | 208.6 | 211.6 | 252.6 | 251 | 1.6 | 10 | 1 |
| | 25 | ☐ | MPS0890-L25C | 224.1 | 253.6 | 256.6 | 297.6 | 296 | 1.6 | 10 | 1 |
| | 30 | ☐ | MPS0890-L30C | 268.6 | 297.6 | 300.6 | 341.6 | 340 | 1.6 | 10 | 1 |
| | 35 | ☐ | MPS0890-L35C | 313.1 | 343.6 | 345.6 | 386.6 | 385 | 1.6 | 10 | 1 |
| | 40 | ☐ | MPS0890-L40C | 357.6 | 391.6 | 394.6 | 435.6 | 434 | 1.6 | 10 | 1 |
| 9.0 | 3 | ☐ | MPS0900S-DIN-C | 33.1 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 1 |
| | 5 | ☐ | MPS0900L-DIN-C | 47.1 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 1 |
| | 8 | ☐ | MPS0900-L8C | 73.6 | 100.6 | 103.6 | 144.6 | 143 | 1.6 | 10 | 1 |
| | 10 | ☐ | MPS0900-L10C | 91.6 | 118.6 | 121.6 | 162.6 | 161 | 1.6 | 10 | 1 |
| | 12 | ☐ | MPS0900-L12C | 109.6 | 136.6 | 139.6 | 180.6 | 179 | 1.6 | 10 | 1 |
| | 15 | ☐ | MPS0900-L15C | 136.6 | 163.6 | 166.6 | 207.6 | 206 | 1.6 | 10 | 1 |
| | 20 | ☐ | MPS0900-L20C | 181.6 | 208.6 | 211.6 | 252.6 | 251 | 1.6 | 10 | 1 |
| | 25 | ☐ | MPS0900-L25C | 226.6 | 253.6 | 256.6 | 297.6 | 296 | 1.6 | 10 | 1 |
| | 30 | ☐ | MPS0900-L30C | 271.6 | 297.6 | 300.6 | 341.6 | 340 | 1.6 | 10 | 1 |
| | 35 | ☐ | MPS0900-L35C | 316.6 | 343.6 | 345.6 | 386.6 | 385 | 1.6 | 10 | 1 |
| | 40 | ☐ | MPS0900-L40C | 361.6 | 391.6 | 394.6 | 435.6 | 434 | 1.6 | 10 | 1 |

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.1 | 3 | ☐ | MPS0910S-DIN-C | 33.0 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 1 |
| | 5 | ☐ | MPS0910L-DIN-C | 47.0 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 1 |
| | 8 | ☐ | MPS0910-L8C | 74.5 | 106.7 | 109.7 | 150.7 | 149 | 1.7 | 10 | 1 |
| | 10 | ☐ | MPS0910-L10C | 92.7 | 125.7 | 128.7 | 169.7 | 168 | 1.7 | 10 | 1 |
| | 12 | ☐ | MPS0910-L12C | 110.9 | 144.7 | 147.7 | 188.7 | 187 | 1.7 | 10 | 1 |
| | 15 | ☐ | MPS0910-L15C | 138.2 | 172.7 | 175.7 | 216.7 | 215 | 1.7 | 10 | 1 |
| | 20 | ☐ | MPS0910-L20C | 183.7 | 220.7 | 223.7 | 264.7 | 263 | 1.7 | 10 | 1 |
| | 25 | ☐ | MPS0910-L25C | 229.2 | 267.7 | 270.7 | 311.7 | 310 | 1.7 | 10 | 1 |
| | 30 | ☐ | MPS0910-L30C | 274.7 | 315.7 | 318.7 | 359.7 | 358 | 1.7 | 10 | 1 |
| | 35 | ☐ | MPS0910-L35C | 320.2 | 362.7 | 364.7 | 405.7 | 404 | 1.7 | 10 | 1 |
| 9.2 | 3 | ☐ | MPS0920S-DIN-C | 32.9 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 1 |
| | 5 | ☐ | MPS0920L-DIN-C | 46.9 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 1 |
| | 8 | ☐ | MPS0920-L8C | 75.3 | 106.7 | 109.7 | 150.7 | 149 | 1.7 | 10 | 1 |
| | 10 | ☐ | MPS0920-L10C | 93.7 | 125.7 | 128.7 | 169.7 | 168 | 1.7 | 10 | 1 |
| | 12 | ☐ | MPS0920-L12C | 112.1 | 144.7 | 147.7 | 188.7 | 187 | 1.7 | 10 | 1 |
| | 15 | ☐ | MPS0920-L15C | 139.7 | 172.7 | 175.7 | 216.7 | 215 | 1.7 | 10 | 1 |
| | 20 | ☐ | MPS0920-L20C | 185.7 | 220.7 | 223.7 | 264.7 | 263 | 1.7 | 10 | 1 |
| | 25 | ☐ | MPS0920-L25C | 231.7 | 267.7 | 270.7 | 311.7 | 310 | 1.7 | 10 | 1 |
| | 30 | ☐ | MPS0920-L30C | 277.7 | 315.7 | 318.7 | 359.7 | 358 | 1.7 | 10 | 1 |
| | 35 | ☐ | MPS0920-L35C | 323.7 | 362.7 | 364.7 | 405.7 | 404 | 1.7 | 10 | 1 |
| 9.3 | 3 | ☐ | MPS0930S-DIN-C | 32.7 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 1 |
| | 5 | ☐ | MPS0930L-DIN-C | 46.7 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 1 |
| | 8 | ☐ | MPS0930-L8C | 76.1 | 106.7 | 109.7 | 150.7 | 149 | 1.7 | 10 | 1 |
| | 10 | ☐ | MPS0930-L10C | 94.7 | 125.7 | 128.7 | 169.7 | 168 | 1.7 | 10 | 1 |
| | 12 | ☐ | MPS0930-L12C | 113.3 | 144.7 | 147.7 | 188.7 | 187 | 1.7 | 10 | 1 |
| | 15 | ☐ | MPS0930-L15C | 141.2 | 172.7 | 175.7 | 216.7 | 215 | 1.7 | 10 | 1 |
| | 20 | ☐ | MPS0930-L20C | 187.7 | 220.7 | 223.7 | 264.7 | 263 | 1.7 | 10 | 1 |
| | 25 | ☐ | MPS0930-L25C | 234.2 | 267.7 | 270.7 | 311.7 | 310 | 1.7 | 10 | 1 |
| | 30 | ☐ | MPS0930-L30C | 280.7 | 315.7 | 318.7 | 359.7 | 358 | 1.7 | 10 | 1 |
| | 35 | ☐ | MPS0930-L35C | 327.2 | 362.7 | 364.7 | 405.7 | 404 | 1.7 | 10 | 1 |
| 9.4 | 3 | ☐ | MPS0940S-DIN-C | 32.6 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 1 |
| | 5 | ☐ | MPS0940L-DIN-C | 46.6 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 1 |
| | 8 | ☐ | MPS0940-L8C | 76.9 | 106.7 | 109.7 | 150.7 | 149 | 1.7 | 10 | 1 |
| | 10 | ☐ | MPS0940-L10C | 95.7 | 125.7 | 128.7 | 169.7 | 168 | 1.7 | 10 | 1 |
| | 12 | ☐ | MPS0940-L12C | 114.5 | 144.7 | 147.7 | 188.7 | 187 | 1.7 | 10 | 1 |
| | 15 | ☐ | MPS0940-L15C | 142.7 | 172.7 | 175.7 | 216.7 | 215 | 1.7 | 10 | 1 |
| | 20 | ☐ | MPS0940-L20C | 189.7 | 220.7 | 223.7 | 264.7 | 263 | 1.7 | 10 | 1 |
| | 25 | ☐ | MPS0940-L25C | 236.7 | 267.7 | 270.7 | 311.7 | 310 | 1.7 | 10 | 1 |
| | 30 | ☐ | MPS0940-L30C | 283.7 | 315.7 | 318.7 | 359.7 | 358 | 1.7 | 10 | 1 |
| | 35 | ☐ | MPS0940-L35C | 330.7 | 362.7 | 364.7 | 405.7 | 404 | 1.7 | 10 | 1 |
| 9.5 | 3 | ☐ | MPS0950S-DIN-C | 32.5 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 1 |
| | 5 | ☐ | MPS0950L-DIN-C | 46.5 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 1 |
| | 8 | ☐ | MPS0950-L8C | 77.7 | 106.7 | 109.7 | 150.7 | 149 | 1.7 | 10 | 1 |
| | 10 | ☐ | MPS0950-L10C | 96.7 | 125.7 | 128.7 | 169.7 | 168 | 1.7 | 10 | 1 |
| | 12 | ☐ | MPS0950-L12C | 115.7 | 144.7 | 147.7 | 188.7 | 187 | 1.7 | 10 | 1 |
| | 15 | ☐ | MPS0950-L15C | 144.2 | 172.7 | 175.7 | 216.7 | 215 | 1.7 | 10 | 1 |
| | 20 | ☐ | MPS0950-L20C | 191.7 | 220.7 | 223.7 | 264.7 | 263 | 1.7 | 10 | 1 |
| | 25 | ☐ | MPS0950-L25C | 239.2 | 267.7 | 270.7 | 311.7 | 310 | 1.7 | 10 | 1 |
| | 30 | ☐ | MPS0950-L30C | 286.7 | 315.7 | 318.7 | 359.7 | 358 | 1.7 | 10 | 1 |
| | 35 | ☐ | MPS0950-L35C | 334.2 | 362.7 | 364.7 | 405.7 | 404 | 1.7 | 10 | 1 |
| 9.6 | 3 | ☐ | MPS0960S-DIN-C | 32.3 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 1 |
| | 5 | ☐ | MPS0960L-DIN-C | 46.3 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 1 |
| | 8 | ☐ | MPS0960-L8C | 78.5 | 111.7 | 114.7 | 155.7 | 154 | 1.7 | 10 | 1 |
| | 10 | ☐ | MPS0960-L10C | 97.7 | 131.7 | 134.7 | 175.7 | 174 | 1.7 | 10 | 1 |
| | 12 | ☐ | MPS0960-L12C | 116.9 | 151.7 | 154.7 | 195.7 | 194 | 1.7 | 10 | 1 |
| | 15 | ☐ | MPS0960-L15C | 145.7 | 181.7 | 184.7 | 225.7 | 224 | 1.7 | 10 | 1 |

☐ : Article non stocké - Fabrication sur commande uniquement.

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.6 | 20 | ☐ | MPS0960-L20C | 193.7 | 231.7 | 234.7 | 275.7 | 274 | 1.7 | 10 | 1 |
| | 25 | ☐ | MPS0960-L25C | 241.7 | 281.7 | 284.7 | 325.7 | 324 | 1.7 | 10 | 1 |
| | 30 | ☐ | MPS0960-L30C | 289.7 | 331.7 | 334.7 | 375.7 | 374 | 1.7 | 10 | 1 |
| | 35 | ☐ | MPS0960-L35C | 337.7 | 381.7 | 383.7 | 424.7 | 423 | 1.7 | 10 | 1 |
| 9.7 | 3 | ☐ | MPS0970S-DIN-C | 32.2 | 46.8 | 47.8 | 88.8 | 87 | 1.8 | 10 | 1 |
| | 5 | ☐ | MPS0970L-DIN-C | 46.2 | 60.8 | 61.8 | 102.8 | 101 | 1.8 | 10 | 1 |
| | 8 | ☐ | MPS0970-L8C | 79.4 | 111.8 | 114.8 | 155.8 | 154 | 1.8 | 10 | 1 |
| | 10 | ☐ | MPS0970-L10C | 98.8 | 131.8 | 134.8 | 175.8 | 174 | 1.8 | 10 | 1 |
| | 12 | ☐ | MPS0970-L12C | 118.2 | 151.8 | 154.8 | 195.8 | 194 | 1.8 | 10 | 1 |
| | 15 | ☐ | MPS0970-L15C | 147.3 | 181.8 | 184.8 | 225.8 | 224 | 1.8 | 10 | 1 |
| | 20 | ☐ | MPS0970-L20C | 195.8 | 231.8 | 234.8 | 275.8 | 274 | 1.8 | 10 | 1 |
| | 25 | ☐ | MPS0970-L25C | 244.3 | 281.8 | 284.8 | 325.8 | 324 | 1.8 | 10 | 1 |
| | 30 | ☐ | MPS0970-L30C | 292.8 | 331.8 | 334.8 | 375.8 | 374 | 1.8 | 10 | 1 |
| | 35 | ☐ | MPS0970-L35C | 341.3 | 381.8 | 383.8 | 424.8 | 423 | 1.8 | 10 | 1 |
| 9.8 | 3 | ☐ | MPS0980S-DIN-C | 32.1 | 46.8 | 47.8 | 88.8 | 87 | 1.8 | 10 | 1 |
| | 5 | ☐ | MPS0980L-DIN-C | 46.1 | 60.8 | 61.8 | 102.8 | 101 | 1.8 | 10 | 1 |
| | 8 | ☐ | MPS0980-L8C | 80.2 | 111.8 | 114.8 | 155.8 | 154 | 1.8 | 10 | 1 |
| | 10 | ☐ | MPS0980-L10C | 99.8 | 131.8 | 134.8 | 175.8 | 174 | 1.8 | 10 | 1 |
| | 12 | ☐ | MPS0980-L12C | 119.4 | 151.8 | 154.8 | 195.8 | 194 | 1.8 | 10 | 1 |
| | 15 | ☐ | MPS0980-L15C | 148.8 | 181.8 | 184.8 | 225.8 | 224 | 1.8 | 10 | 1 |
| | 20 | ☐ | MPS0980-L20C | 197.8 | 231.8 | 234.8 | 275.8 | 274 | 1.8 | 10 | 1 |
| | 25 | ☐ | MPS0980-L25C | 246.8 | 281.8 | 284.8 | 325.8 | 324 | 1.8 | 10 | 1 |
| | 30 | ☐ | MPS0980-L30C | 295.8 | 331.8 | 334.8 | 375.8 | 374 | 1.8 | 10 | 1 |
| | 35 | ☐ | MPS0980-L35C | 344.8 | 381.8 | 383.8 | 424.8 | 423 | 1.8 | 10 | 1 |
| 9.9 | 3 | ☐ | MPS0990S-DIN-C | 32.0 | 46.8 | 47.8 | 88.8 | 87 | 1.8 | 10 | 1 |
| | 5 | ☐ | MPS0990L-DIN-C | 46.0 | 60.8 | 61.8 | 102.8 | 101 | 1.8 | 10 | 1 |
| | 8 | ☐ | MPS0990-L8C | 81.0 | 111.8 | 114.8 | 155.8 | 154 | 1.8 | 10 | 1 |
| | 10 | ☐ | MPS0990-L10C | 100.8 | 131.8 | 134.8 | 175.8 | 174 | 1.8 | 10 | 1 |
| | 12 | ☐ | MPS0990-L12C | 120.6 | 151.8 | 154.8 | 195.8 | 194 | 1.8 | 10 | 1 |
| | 15 | ☐ | MPS0990-L15C | 150.3 | 181.8 | 184.8 | 225.8 | 224 | 1.8 | 10 | 1 |
| | 20 | ☐ | MPS0990-L20C | 199.8 | 231.8 | 234.8 | 275.8 | 274 | 1.8 | 10 | 1 |
| | 25 | ☐ | MPS0990-L25C | 249.3 | 281.8 | 284.8 | 325.8 | 324 | 1.8 | 10 | 1 |
| | 30 | ☐ | MPS0990-L30C | 298.8 | 331.8 | 334.8 | 375.8 | 374 | 1.8 | 10 | 1 |
| | 35 | ☐ | MPS0990-L35C | 348.3 | 381.8 | 383.8 | 424.8 | 423 | 1.8 | 10 | 1 |
| 10.0 | 3 | ☐ | MPS1000S-DIN-C | 31.8 | 46.8 | 47.8 | 88.8 | 87 | 1.8 | 10 | 2 |
| | 5 | ☐ | MPS1000L-DIN-C | 45.8 | 60.8 | 61.8 | 102.8 | 101 | 1.8 | 10 | 2 |
| | 8 | ☐ | MPS1000-L8C | 81.8 | 111.8 | 114.8 | 155.8 | 154 | 1.8 | 10 | 2 |
| | 10 | ☐ | MPS1000-L10C | 101.8 | 131.8 | 134.8 | 175.8 | 174 | 1.8 | 10 | 2 |
| | 12 | ☐ | MPS1000-L12C | 121.8 | 151.8 | 154.8 | 195.8 | 194 | 1.8 | 10 | 2 |
| | 15 | ☐ | MPS1000-L15C | 151.8 | 181.8 | 184.8 | 225.8 | 224 | 1.8 | 10 | 2 |
| | 20 | ☐ | MPS1000-L20C | 201.8 | 231.8 | 234.8 | 275.8 | 274 | 1.8 | 10 | 2 |
| | 25 | ☐ | MPS1000-L25C | 251.8 | 281.8 | 284.8 | 325.8 | 324 | 1.8 | 10 | 2 |
| | 30 | ☐ | MPS1000-L30C | 301.8 | 331.8 | 334.8 | 375.8 | 374 | 1.8 | 10 | 2 |
| | 35 | ☐ | MPS1000-L35C | 351.8 | 381.8 | 383.8 | 424.8 | 423 | 1.8 | 10 | 2 |
| 10.05 | 3 | ☐ | MPS1005S-DIN-C | 39.8 | 54.8 | 55.8 | 101.8 | 100 | 1.8 | 12 | 1 |
| | 5 | ☐ | MPS1005L-DIN-C | 55.8 | 70.8 | 71.8 | 117.8 | 116 | 1.8 | 12 | 1 |
| 10.1 | 3 | ☐ | MPS1010S-DIN-C | 39.7 | 54.8 | 55.8 | 101.8 | 100 | 1.8 | 12 | 1 |
| | 5 | ☐ | MPS1010L-DIN-C | 55.7 | 70.8 | 71.8 | 117.8 | 116 | 1.8 | 12 | 1 |
| | 8 | ☐ | MPS1010-L8C | 82.6 | 117.8 | 120.8 | 166.8 | 165 | 1.8 | 12 | 1 |
| | 10 | ☐ | MPS1010-L10C | 102.8 | 138.8 | 141.8 | 187.8 | 186 | 1.8 | 12 | 1 |
| | 12 | ☐ | MPS1010-L12C | 123.0 | 159.8 | 162.8 | 208.8 | 207 | 1.8 | 12 | 1 |
| | 15 | ☐ | MPS1010-L15C | 153.3 | 190.8 | 193.8 | 239.8 | 238 | 1.8 | 12 | 1 |
| | 20 | ☐ | MPS1010-L20C | 203.8 | 243.8 | 246.8 | 292.8 | 291 | 1.8 | 12 | 1 |
| | 25 | ☐ | MPS1010-L25C | 254.3 | 295.8 | 298.8 | 344.8 | 343 | 1.8 | 12 | 1 |

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.2 | 3 | ☐ | MPS1020S-DIN-C | 39.6 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 1 |
| | 5 | ☐ | MPS1020L-DIN-C | 55.6 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 1 |
| | 8 | ☐ | MPS1020-L8C | 83.5 | 117.9 | 120.9 | 166.9 | 165 | 1.9 | 12 | 1 |
| | 10 | ☐ | MPS1020-L10C | 103.9 | 138.9 | 141.9 | 187.9 | 186 | 1.9 | 12 | 1 |
| | 12 | ☐ | MPS1020-L12C | 124.3 | 159.9 | 162.9 | 208.9 | 207 | 1.9 | 12 | 1 |
| | 15 | ☐ | MPS1020-L15C | 154.9 | 190.9 | 193.9 | 239.9 | 238 | 1.9 | 12 | 1 |
| | 20 | ☐ | MPS1020-L20C | 205.9 | 243.9 | 246.9 | 292.9 | 291 | 1.9 | 12 | 1 |
| | 25 | ☐ | MPS1020-L25C | 256.9 | 295.9 | 298.9 | 344.9 | 343 | 1.9 | 12 | 1 |
| 10.3 | 3 | ☐ | MPS1030S-DIN-C | 39.4 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 1 |
| | 5 | ☐ | MPS1030L-DIN-C | 55.4 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 1 |
| | 8 | ☐ | MPS1030-L8C | 84.3 | 117.9 | 120.9 | 166.9 | 165 | 1.9 | 12 | 1 |
| | 10 | ☐ | MPS1030-L10C | 104.9 | 138.9 | 141.9 | 187.9 | 186 | 1.9 | 12 | 1 |
| | 12 | ☐ | MPS1030-L12C | 125.5 | 159.9 | 162.9 | 208.9 | 207 | 1.9 | 12 | 1 |
| | 15 | ☐ | MPS1030-L15C | 156.4 | 190.9 | 193.9 | 239.9 | 238 | 1.9 | 12 | 1 |
| | 20 | ☐ | MPS1030-L20C | 207.9 | 243.9 | 246.9 | 292.9 | 291 | 1.9 | 12 | 1 |
| | 25 | ☐ | MPS1030-L25C | 259.4 | 295.9 | 298.9 | 344.9 | 343 | 1.9 | 12 | 1 |
| 10.4 | 3 | ☐ | MPS1040S-DIN-C | 39.3 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 1 |
| | 5 | ☐ | MPS1040L-DIN-C | 55.3 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 1 |
| | 8 | ☐ | MPS1040-L8C | 85.1 | 117.9 | 120.9 | 166.9 | 165 | 1.9 | 12 | 1 |
| | 10 | ☐ | MPS1040-L10C | 105.9 | 138.9 | 141.9 | 187.9 | 186 | 1.9 | 12 | 1 |
| | 12 | ☐ | MPS1040-L12C | 126.7 | 159.9 | 162.9 | 208.9 | 207 | 1.9 | 12 | 1 |
| | 15 | ☐ | MPS1040-L15C | 157.9 | 190.9 | 193.9 | 239.9 | 238 | 1.9 | 12 | 1 |
| | 20 | ☐ | MPS1040-L20C | 209.9 | 243.9 | 246.9 | 292.9 | 291 | 1.9 | 12 | 1 |
| | 25 | ☐ | MPS1040-L25C | 261.9 | 295.9 | 298.9 | 344.9 | 343 | 1.9 | 12 | 1 |
| 10.5 | 3 | ☐ | MPS1050S-DIN-C | 39.2 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 1 |
| | 5 | ☐ | MPS1050L-DIN-C | 55.2 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 1 |
| | 8 | ☐ | MPS1050-L8C | 85.9 | 117.9 | 120.9 | 166.9 | 165 | 1.9 | 12 | 1 |
| | 10 | ☐ | MPS1050-L10C | 106.9 | 138.9 | 141.9 | 187.9 | 186 | 1.9 | 12 | 1 |
| | 12 | ☐ | MPS1050-L12C | 127.9 | 159.9 | 162.9 | 208.9 | 207 | 1.9 | 12 | 1 |
| | 15 | ☐ | MPS1050-L15C | 159.4 | 190.9 | 193.9 | 239.9 | 238 | 1.9 | 12 | 1 |
| | 20 | ☐ | MPS1050-L20C | 211.9 | 243.9 | 246.9 | 292.9 | 291 | 1.9 | 12 | 1 |
| | 25 | ☐ | MPS1050-L25C | 264.4 | 295.9 | 298.9 | 344.9 | 343 | 1.9 | 12 | 1 |
| 10.6 | 3 | ☐ | MPS1060S-DIN-C | 39.0 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 1 |
| | 5 | ☐ | MPS1060L-DIN-C | 55.0 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 1 |
| | 8 | ☐ | MPS1060-L8C | 86.7 | 122.9 | 125.9 | 171.9 | 170 | 1.9 | 12 | 1 |
| | 10 | ☐ | MPS1060-L10C | 107.9 | 144.9 | 147.9 | 193.9 | 192 | 1.9 | 12 | 1 |
| | 12 | ☐ | MPS1060-L12C | 129.1 | 166.9 | 169.9 | 215.9 | 214 | 1.9 | 12 | 1 |
| | 15 | ☐ | MPS1060-L15C | 160.9 | 197.9 | 202.9 | 248.9 | 247 | 1.9 | 12 | 1 |
| | 20 | ☐ | MPS1060-L20C | 213.9 | 254.9 | 257.9 | 303.9 | 302 | 1.9 | 12 | 1 |
| | 25 | ☐ | MPS1060-L25C | 266.9 | 309.9 | 312.9 | 358.9 | 357 | 1.9 | 12 | 1 |
| 10.7 | 3 | ☐ | MPS1070S-DIN-C | 38.9 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 1 |
| | 5 | ☐ | MPS1070L-DIN-C | 54.9 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 1 |
| | 8 | ☐ | MPS1070-L8C | 87.5 | 122.9 | 125.9 | 171.9 | 170 | 1.9 | 12 | 1 |
| | 10 | ☐ | MPS1070-L10C | 108.9 | 144.9 | 147.9 | 193.9 | 192 | 1.9 | 12 | 1 |
| | 12 | ☐ | MPS1070-L12C | 130.3 | 166.9 | 169.9 | 215.9 | 214 | 1.9 | 12 | 1 |
| | 15 | ☐ | MPS1070-L15C | 162.4 | 197.9 | 202.9 | 248.9 | 247 | 1.9 | 12 | 1 |
| | 20 | ☐ | MPS1070-L20C | 215.9 | 254.9 | 257.9 | 303.9 | 302 | 1.9 | 12 | 1 |
| | 25 | ☐ | MPS1070-L25C | 269.4 | 309.9 | 312.9 | 358.9 | 357 | 1.9 | 12 | 1 |
| 10.8 | 3 | ☐ | MPS1080S-DIN-C | 38.8 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 1 |
| | 5 | ☐ | MPS1080L-DIN-C | 54.8 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 1 |
| | 8 | ☐ | MPS1080-L8C | 88.4 | 123.0 | 126.0 | 172.0 | 170 | 2.0 | 12 | 1 |
| | 10 | ☐ | MPS1080-L10C | 110.0 | 145.0 | 148.0 | 194.0 | 192 | 2.0 | 12 | 1 |
| | 12 | ☐ | MPS1080-L12C | 131.6 | 167.0 | 170.0 | 216.0 | 214 | 2.0 | 12 | 1 |
| | 15 | ☐ | MPS1080-L15C | 164.0 | 198.0 | 203.0 | 249.0 | 247 | 2.0 | 12 | 1 |
| | 20 | ☐ | MPS1080-L20C | 218.0 | 255.0 | 258.0 | 304.0 | 302 | 2.0 | 12 | 1 |
| | 25 | ☐ | MPS1080-L25C | 272.0 | 310.0 | 313.0 | 359.0 | 357 | 2.0 | 12 | 1 |

CONDITIONS DE COUPE ➤ M077
DONNÉES TECHNIQUES ➤ P001

# PERÇAGE (CARBURE MONOBLOC)

## MPS

Foret carbure à double listel

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.9 | 3 | ☐ | MPS1090S-DIN-C | 38.6 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 1 |
| | 5 | ☐ | MPS1090L-DIN-C | 54.6 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 1 |
| | 8 | ☐ | MPS1090-L8C | 89.2 | 123.0 | 126.0 | 172.0 | 170 | 2.0 | 12 | 1 |
| | 10 | ☐ | MPS1090-L10C | 111.0 | 145.0 | 148.0 | 194.0 | 192 | 2.0 | 12 | 1 |
| | 12 | ☐ | MPS1090-L12C | 132.8 | 167.0 | 170.0 | 216.0 | 214 | 2.0 | 12 | 1 |
| | 15 | ☐ | MPS1090-L15C | 165.5 | 198.0 | 203.0 | 249.0 | 247 | 2.0 | 12 | 1 |
| | 20 | ☐ | MPS1090-L20C | 220.0 | 255.0 | 258.0 | 304.0 | 302 | 2.0 | 12 | 1 |
| | 25 | ☐ | MPS1090-L25C | 274.5 | 310.0 | 313.0 | 359.0 | 357 | 2.0 | 12 | 1 |
| 11.0 | 3 | ☐ | MPS1100S-DIN-C | 38.5 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 1 |
| | 5 | ☐ | MPS1100L-DIN-C | 54.5 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 1 |
| | 8 | ☐ | MPS1100-L8C | 90.0 | 123.0 | 126.0 | 172.0 | 170 | 2.0 | 12 | 1 |
| | 10 | ☐ | MPS1100-L10C | 112.0 | 145.0 | 148.0 | 194.0 | 192 | 2.0 | 12 | 1 |
| | 12 | ☐ | MPS1100-L12C | 134.0 | 167.0 | 170.0 | 216.0 | 214 | 2.0 | 12 | 1 |
| | 15 | ☐ | MPS1100-L15C | 167.0 | 198.0 | 203.0 | 249.0 | 247 | 2.0 | 12 | 1 |
| | 20 | ☐ | MPS1100-L20C | 222.0 | 255.0 | 258.0 | 304.0 | 302 | 2.0 | 12 | 1 |
| | 25 | ☐ | MPS1100-L25C | 277.0 | 310.0 | 313.0 | 359.0 | 357 | 2.0 | 12 | 1 |
| 11.1 | 3 | ☐ | MPS1110S-DIN-C | 38.4 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 1 |
| | 5 | ☐ | MPS1110L-DIN-C | 54.4 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 1 |
| | 8 | ☐ | MPS1110-L8C | 90.8 | 129.0 | 132.0 | 178.0 | 176 | 2.0 | 12 | 1 |
| | 10 | ☐ | MPS1110-L10C | 113.0 | 152.0 | 155.0 | 201.0 | 199 | 2.0 | 12 | 1 |
| | 12 | ☐ | MPS1110-L12C | 135.2 | 175.0 | 178.0 | 224.0 | 222 | 2.0 | 12 | 1 |
| | 15 | ☐ | MPS1110-L15C | 168.5 | 209.0 | 212.0 | 258.0 | 256 | 2.0 | 12 | 1 |
| | 20 | ☐ | MPS1110-L20C | 224.0 | 267.0 | 270.0 | 316.0 | 314 | 2.0 | 12 | 1 |
| | 25 | ☐ | MPS1110-L25C | 279.5 | 324.0 | 327.0 | 373.0 | 371 | 2.0 | 12 | 1 |
| 11.2 | 3 | ☐ | MPS1120S-DIN-C | 38.2 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 1 |
| | 5 | ☐ | MPS1120L-DIN-C | 54.2 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 1 |
| | 8 | ☐ | MPS1120-L8C | 91.6 | 129.0 | 132.0 | 178.0 | 176 | 2.0 | 12 | 1 |
| | 10 | ☐ | MPS1120-L10C | 114.0 | 152.0 | 155.0 | 201.0 | 199 | 2.0 | 12 | 1 |
| | 12 | ☐ | MPS1120-L12C | 136.4 | 175.0 | 178.0 | 224.0 | 222 | 2.0 | 12 | 1 |
| | 15 | ☐ | MPS1120-L15C | 170.0 | 209.0 | 212.0 | 258.0 | 256 | 2.0 | 12 | 1 |
| | 20 | ☐ | MPS1120-L20C | 226.0 | 267.0 | 270.0 | 316.0 | 314 | 2.0 | 12 | 1 |
| | 25 | ☐ | MPS1120-L25C | 282.0 | 324.0 | 327.0 | 373.0 | 371 | 2.0 | 12 | 1 |
| 11.3 | 3 | ☐ | MPS1130S-DIN-C | 38.1 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 1 |
| | 5 | ☐ | MPS1130L-DIN-C | 54.1 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 1 |
| | 8 | ☐ | MPS1130-L8C | 92.5 | 129.1 | 132.1 | 178.1 | 176 | 2.1 | 12 | 1 |
| | 10 | ☐ | MPS1130-L10C | 115.1 | 152.1 | 155.1 | 201.1 | 199 | 2.1 | 12 | 1 |
| | 12 | ☐ | MPS1130-L12C | 137.7 | 175.1 | 178.0 | 224.0 | 222 | 2.1 | 12 | 1 |
| | 15 | ☐ | MPS1130-L15C | 171.6 | 209.1 | 212.1 | 258.1 | 256 | 2.1 | 12 | 1 |
| | 20 | ☐ | MPS1130-L20C | 228.1 | 267.1 | 270.1 | 316.1 | 314 | 2.1 | 12 | 1 |
| | 25 | ☐ | MPS1130-L25C | 284.6 | 324.1 | 327.1 | 373.1 | 371 | 2.1 | 12 | 1 |
| 11.4 | 3 | ☐ | MPS1140S-DIN-C | 38.0 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 1 |
| | 5 | ☐ | MPS1140L-DIN-C | 54.0 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 1 |
| | 8 | ☐ | MPS1140-L8C | 93.3 | 129.1 | 132.1 | 178.1 | 176 | 2.1 | 12 | 1 |
| | 10 | ☐ | MPS1140-L10C | 116.1 | 152.1 | 155.1 | 201.1 | 199 | 2.1 | 12 | 1 |
| | 12 | ☐ | MPS1140-L12C | 138.9 | 175.1 | 178.0 | 224.0 | 222 | 2.1 | 12 | 1 |
| | 15 | ☐ | MPS1140-L15C | 173.1 | 209.1 | 212.1 | 258.1 | 256 | 2.1 | 12 | 1 |
| | 20 | ☐ | MPS1140-L20C | 230.1 | 267.1 | 270.1 | 316.1 | 314 | 2.1 | 12 | 1 |
| | 25 | ☐ | MPS1140-L25C | 287.1 | 324.1 | 327.1 | 373.1 | 371 | 2.1 | 12 | 1 |
| 11.5 | 3 | ☐ | MPS1150S-DIN-C | 37.8 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 1 |
| | 5 | ☐ | MPS1150L-DIN-C | 53.8 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 1 |
| | 8 | ☐ | MPS1150-L8C | 94.1 | 129.1 | 132.1 | 178.1 | 176 | 2.1 | 12 | 1 |
| | 10 | ☐ | MPS1150-L10C | 117.1 | 152.1 | 155.1 | 201.1 | 199 | 2.1 | 12 | 1 |
| | 12 | ☐ | MPS1150-L12C | 140.1 | 175.1 | 178.0 | 224.0 | 222 | 2.1 | 12 | 1 |
| | 15 | ☐ | MPS1150-L15C | 174.6 | 209.1 | 212.1 | 258.1 | 256 | 2.1 | 12 | 1 |
| | 20 | ☐ | MPS1150-L20C | 232.1 | 267.1 | 270.1 | 316.1 | 314 | 2.1 | 12 | 1 |
| | 25 | ☐ | MPS1150-L25C | 289.6 | 324.1 | 327.1 | 373.1 | 371 | 2.1 | 12 | 1 |
| 11.6 | 3 | ☐ | MPS1160S-DIN-C | 37.7 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 1 |
| | 5 | ☐ | MPS1160L-DIN-C | 53.7 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 1 |
| | 8 | ☐ | MPS1160-L8C | 94.9 | 134.1 | 137.1 | 183.1 | 181 | 2.1 | 12 | 1 |
| | 10 | ☐ | MPS1160-L10C | 118.1 | 158.1 | 161.1 | 207.1 | 205 | 2.1 | 12 | 1 |
| | 12 | ☐ | MPS1160-L12C | 141.3 | 182.1 | 185.1 | 231.1 | 229 | 2.1 | 12 | 1 |
| | 15 | ☐ | MPS1160-L15C | 176.1 | 218.1 | 221.1 | 267.1 | 265 | 2.1 | 12 | 1 |
| | 20 | ☐ | MPS1160-L20C | 234.1 | 278.1 | 281.1 | 327.1 | 325 | 2.1 | 12 | 1 |
| | 25 | ☐ | MPS1160-L25C | 292.1 | 338.1 | 341.1 | 387.1 | 385 | 2.1 | 12 | 1 |
| 11.7 | 3 | ☐ | MPS1170S-DIN-C | 37.6 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 1 |
| | 5 | ☐ | MPS1170L-DIN-C | 53.6 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 1 |
| | 8 | ☐ | MPS1170-L8C | 95.7 | 134.1 | 137.1 | 183.1 | 181 | 2.1 | 12 | 1 |
| | 10 | ☐ | MPS1170-L10C | 119.1 | 158.1 | 161.1 | 207.1 | 205 | 2.1 | 12 | 1 |
| | 12 | ☐ | MPS1170-L12C | 142.5 | 182.1 | 185.1 | 231.1 | 229 | 2.1 | 12 | 1 |
| | 15 | ☐ | MPS1170-L15C | 177.6 | 218.1 | 221.1 | 267.1 | 265 | 2.1 | 12 | 1 |
| | 20 | ☐ | MPS1170-L20C | 236.1 | 278.1 | 281.1 | 327.1 | 325 | 2.1 | 12 | 1 |
| | 25 | ☐ | MPS1170-L25C | 294.6 | 338.1 | 341.1 | 387.1 | 385 | 2.1 | 12 | 1 |
| 11.8 | 3 | ☐ | MPS1180S-DIN-C | 37.4 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 1 |
| | 5 | ☐ | MPS1180L-DIN-C | 53.4 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 1 |
| | 8 | ☐ | MPS1180-L8C | 96.5 | 134.1 | 137.1 | 183.1 | 181 | 2.1 | 12 | 1 |
| | 10 | ☐ | MPS1180-L10C | 120.1 | 158.1 | 161.1 | 207.1 | 205 | 2.1 | 12 | 1 |
| | 12 | ☐ | MPS1180-L12C | 143.7 | 182.1 | 185.1 | 231.1 | 229 | 2.1 | 12 | 1 |
| | 15 | ☐ | MPS1180-L15C | 179.1 | 218.1 | 221.1 | 267.1 | 265 | 2.1 | 12 | 1 |
| | 20 | ☐ | MPS1180-L20C | 238.1 | 278.1 | 281.1 | 327.1 | 325 | 2.1 | 12 | 1 |
| | 25 | ☐ | MPS1180-L25C | 297.1 | 338.1 | 341.1 | 387.1 | 385 | 2.1 | 12 | 1 |
| 11.9 | 3 | ☐ | MPS1190S-DIN-C | 37.3 | 55.2 | 56.2 | 102.2 | 100 | 2.2 | 12 | 1 |
| | 5 | ☐ | MPS1190L-DIN-C | 53.3 | 71.2 | 72.2 | 118.2 | 116 | 2.2 | 12 | 1 |
| | 8 | ☐ | MPS1190-L8C | 97.4 | 134.2 | 137.2 | 183.2 | 181 | 2.2 | 12 | 1 |
| | 10 | ☐ | MPS1190-L10C | 121.2 | 158.2 | 161.2 | 207.2 | 205 | 2.2 | 12 | 1 |
| | 12 | ☐ | MPS1190-L12C | 145.0 | 182.2 | 185.2 | 231.2 | 229 | 2.2 | 12 | 1 |
| | 15 | ☐ | MPS1190-L15C | 180.7 | 218.2 | 221.2 | 267.2 | 265 | 2.2 | 12 | 1 |
| | 20 | ☐ | MPS1190-L20C | 240.2 | 278.2 | 281.2 | 327.2 | 325 | 2.2 | 12 | 1 |
| | 25 | ☐ | MPS1190-L25C | 299.7 | 338.2 | 341.2 | 387.2 | 385 | 2.2 | 12 | 1 |
| 12.0 | 3 | ☐ | MPS1200S-DIN-C | 37.2 | 55.2 | 56.2 | 102.2 | 100 | 2.2 | 12 | 2 |
| | 5 | ☐ | MPS1200L-DIN-C | 53.2 | 71.2 | 72.2 | 118.2 | 116 | 2.2 | 12 | 2 |
| | 8 | ☐ | MPS1200-L8C | 98.2 | 134.2 | 137.2 | 183.2 | 181 | 2.2 | 12 | 2 |
| | 10 | ☐ | MPS1200-L10C | 122.2 | 158.2 | 161.2 | 207.2 | 205 | 2.2 | 12 | 2 |
| | 12 | ☐ | MPS1200-L12C | 146.2 | 182.2 | 185.2 | 231.2 | 229 | 2.2 | 12 | 2 |
| | 15 | ☐ | MPS1200-L15C | 182.2 | 218.2 | 221.2 | 267.2 | 265 | 2.2 | 12 | 2 |
| | 20 | ☐ | MPS1200-L20C | 242.2 | 278.2 | 281.2 | 327.2 | 325 | 2.2 | 12 | 2 |
| | 25 | ☐ | MPS1200-L25C | 302.2 | 338.2 | 341.2 | 387.2 | 385 | 2.2 | 12 | 2 |
| 12.05 | 3 | ☐ | MPS1205S-DIN-C | 42.1 | 60.2 | 61.2 | 107.2 | 105 | 2.2 | 14 | 1 |
| | 5 | ☐ | MPS1205L-DIN-C | 59.1 | 77.2 | 78.2 | 124.2 | 122 | 2.2 | 14 | 1 |
| 12.1 | 3 | ☐ | MPS1210S-DIN-C | 42.1 | 60.2 | 61.2 | 107.2 | 105 | 2.2 | 14 | 1 |
| | 5 | ☐ | MPS1210L-DIN-C | 59.1 | 77.2 | 78.2 | 124.2 | 122 | 2.2 | 14 | 1 |
| | 8 | ☐ | MPS1210-L8C | 99.0 | 140.2 | 143.2 | 189.2 | 187 | 2.2 | 14 | 1 |
| | 10 | ☐ | MPS1210-L10C | 123.2 | 165.2 | 168.2 | 214.2 | 212 | 2.2 | 14 | 1 |
| | 12 | ☐ | MPS1210-L12C | 147.4 | 190.2 | 193.2 | 239.2 | 237 | 2.2 | 14 | 1 |
| | 15 | ☐ | MPS1210-L15C | 183.7 | 227.2 | 230.2 | 276.2 | 274 | 2.2 | 14 | 1 |
| | 20 | ☐ | MPS1210-L20C | 244.2 | 290.2 | 293.2 | 339.2 | 337 | 2.2 | 14 | 1 |
| 12.2 | 3 | ☐ | MPS1220S-DIN-C | 41.9 | 60.2 | 61.2 | 107.2 | 105 | 2.2 | 14 | 1 |
| | 5 | ☐ | MPS1220L-DIN-C | 58.9 | 77.2 | 78.2 | 124.2 | 122 | 2.2 | 14 | 1 |
| | 8 | ☐ | MPS1220-L8C | 99.8 | 140.2 | 143.2 | 189.2 | 187 | 2.2 | 14 | 1 |
| | 10 | ☐ | MPS1220-L10C | 124.2 | 165.2 | 168.2 | 214.2 | 212 | 2.2 | 14 | 1 |
| | 12 | ☐ | MPS1220-L12C | 148.6 | 190.2 | 193.2 | 239.2 | 237 | 2.2 | 14 | 1 |
| | 15 | ☐ | MPS1220-L15C | 185.2 | 227.2 | 230.2 | 276.2 | 274 | 2.2 | 14 | 1 |
| | 20 | ☐ | MPS1220-L20C | 246.2 | 290.2 | 293.2 | 339.2 | 337 | 2.2 | 14 | 1 |

☐ : Article non stocké - Fabrication sur commande uniquement.

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) | | | | | | | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | LU | LCF | LH | OAL | LF | PL | DCON | |
| | 3 | ☐ | MPS1230S-DIN-C | 41.8 | 60.2 | 61.2 | 107.2 | 105 | 2.2 | 14 | 1 |
| | 5 | ☐ | MPS1230L-DIN-C | 58.8 | 77.2 | 78.2 | 124.2 | 122 | 2.2 | 14 | 1 |
| | 8 | ☐ | MPS1230-L8C | 100.6 | 140.2 | 143.2 | 189.2 | 187 | 2.2 | 14 | 1 |
| 12.3 | 10 | ☐ | MPS1230-L10C | 125.2 | 165.2 | 168.2 | 214.2 | 212 | 2.2 | 14 | 1 |
| | 12 | ☐ | MPS1230-L12C | 149.8 | 190.2 | 193.2 | 239.2 | 237 | 2.2 | 14 | 1 |
| | 15 | ☐ | MPS1230-L15C | 186.7 | 227.2 | 230.2 | 276.2 | 274 | 2.2 | 14 | 1 |
| | 20 | ☐ | MPS1230-L20C | 248.2 | 290.2 | 293.2 | 339.2 | 337 | 2.2 | 14 | 1 |
| | 3 | ☐ | MPS1240S-DIN-C | 41.7 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 1 |
| | 5 | ☐ | MPS1240L-DIN-C | 58.7 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 1 |
| | 8 | ☐ | MPS1240-L8C | 101.5 | 140.3 | 143.3 | 189.3 | 187 | 2.3 | 14 | 1 |
| 12.4 | 10 | ☐ | MPS1240-L10C | 126.3 | 165.3 | 168.3 | 214.3 | 212 | 2.3 | 14 | 1 |
| | 12 | ☐ | MPS1240-L12C | 151.1 | 190.3 | 193.3 | 239.3 | 237 | 2.3 | 14 | 1 |
| | 15 | ☐ | MPS1240-L15C | 188.3 | 227.3 | 230.3 | 276.3 | 274 | 2.3 | 14 | 1 |
| | 20 | ☐ | MPS1240-L20C | 250.3 | 290.3 | 293.3 | 339.3 | 337 | 2.3 | 14 | 1 |
| | 3 | ☐ | MPS1250S-DIN-C | 41.5 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 1 |
| | 5 | ☐ | MPS1250L-DIN-C | 58.5 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 1 |
| | 8 | ☐ | MPS1250-L8C | 102.3 | 140.3 | 143.3 | 189.3 | 187 | 2.3 | 14 | 1 |
| 12.5 | 10 | ☐ | MPS1250-L10C | 127.3 | 165.3 | 168.3 | 214.3 | 212 | 2.3 | 14 | 1 |
| | 12 | ☐ | MPS1250-L12C | 152.3 | 190.3 | 193.3 | 239.3 | 237 | 2.3 | 14 | 1 |
| | 15 | ☐ | MPS1250-L15C | 189.8 | 227.3 | 230.3 | 276.3 | 274 | 2.3 | 14 | 1 |
| | 20 | ☐ | MPS1250-L20C | 252.3 | 290.3 | 293.3 | 339.3 | 337 | 2.3 | 14 | 1 |
| | 3 | ☐ | MPS1260S-DIN-C | 41.4 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 1 |
| | 5 | ☐ | MPS1260L-DIN-C | 58.4 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 1 |
| | 8 | ☐ | MPS1260-L8C | 103.1 | 145.3 | 148.3 | 194.3 | 192 | 2.3 | 14 | 1 |
| 12.6 | 10 | ☐ | MPS1260-L10C | 128.3 | 171.3 | 174.3 | 220.3 | 218 | 2.3 | 14 | 1 |
| | 12 | ☐ | MPS1260-L12C | 153.5 | 197.3 | 200.3 | 246.3 | 244 | 2.3 | 14 | 1 |
| | 15 | ☐ | MPS1260-L15C | 191.3 | 236.3 | 239.3 | 285.3 | 283 | 2.3 | 14 | 1 |
| | 20 | ☐ | MPS1260-L20C | 254.3 | 301.3 | 304.3 | 350.3 | 348 | 2.3 | 14 | 1 |
| | 3 | ☐ | MPS1270S-DIN-C | 41.3 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 1 |
| | 5 | ☐ | MPS1270L-DIN-C | 58.3 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 1 |
| | 8 | ☐ | MPS1270-L8C | 103.9 | 145.3 | 148.3 | 194.3 | 192 | 2.3 | 14 | 1 |
| 12.7 | 10 | ☐ | MPS1270-L10C | 129.3 | 171.3 | 174.3 | 220.3 | 218 | 2.3 | 14 | 1 |
| | 12 | ☐ | MPS1270-L12C | 154.7 | 197.3 | 200.3 | 246.3 | 244 | 2.3 | 14 | 1 |
| | 15 | ☐ | MPS1270-L15C | 192.8 | 236.3 | 239.3 | 285.3 | 283 | 2.3 | 14 | 1 |
| | 20 | ☐ | MPS1270-L20C | 256.3 | 301.3 | 304.3 | 350.3 | 348 | 2.3 | 14 | 1 |
| | 3 | ☐ | MPS1280S-DIN-C | 41.1 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 1 |
| | 5 | ☐ | MPS1280L-DIN-C | 58.1 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 1 |
| | 8 | ☐ | MPS1280-L8C | 104.7 | 145.3 | 148.3 | 194.3 | 192 | 2.3 | 14 | 1 |
| 12.8 | 10 | ☐ | MPS1280-L10C | 130.3 | 171.3 | 174.3 | 220.3 | 218 | 2.3 | 14 | 1 |
| | 12 | ☐ | MPS1280-L12C | 155.9 | 197.3 | 200.3 | 246.3 | 244 | 2.3 | 14 | 1 |
| | 15 | ☐ | MPS1280-L15C | 194.3 | 236.3 | 239.3 | 285.3 | 283 | 2.3 | 14 | 1 |
| | 20 | ☐ | MPS1280-L20C | 258.3 | 301.3 | 304.3 | 350.3 | 348 | 2.3 | 14 | 1 |
| | 3 | ☐ | MPS1290S-DIN-C | 41.0 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 1 |
| | 5 | ☐ | MPS1290L-DIN-C | 58.0 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 1 |
| | 8 | ☐ | MPS1290-L8C | 105.5 | 145.3 | 148.3 | 194.3 | 192 | 2.3 | 14 | 1 |
| 12.9 | 10 | ☐ | MPS1290-L10C | 131.3 | 171.3 | 174.3 | 220.3 | 218 | 2.3 | 14 | 1 |
| | 12 | ☐ | MPS1290-L12C | 157.1 | 197.3 | 200.3 | 246.3 | 244 | 2.3 | 14 | 1 |
| | 15 | ☐ | MPS1290-L15C | 195.8 | 236.3 | 239.3 | 285.3 | 283 | 2.3 | 14 | 1 |
| | 20 | ☐ | MPS1290-L20C | 260.3 | 301.3 | 304.3 | 350.3 | 348 | 2.3 | 14 | 1 |
| | 3 | ☐ | MPS1300S-DIN-C | 40.9 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 1 |
| | 5 | ☐ | MPS1300L-DIN-C | 57.9 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 1 |
| | 8 | ☐ | MPS1300-L8C | 106.4 | 145.4 | 148.4 | 194.4 | 192 | 2.4 | 14 | 1 |
| 13.0 | 10 | ☐ | MPS1300-L10C | 132.4 | 171.4 | 174.4 | 220.4 | 218 | 2.4 | 14 | 1 |
| | 12 | ☐ | MPS1300-L12C | 158.4 | 197.4 | 200.4 | 246.4 | 244 | 2.4 | 14 | 1 |
| | 15 | ☐ | MPS1300-L15C | 197.4 | 236.4 | 239.4 | 285.4 | 283 | 2.4 | 14 | 1 |
| | 20 | ☐ | MPS1300-L20C | 262.4 | 301.4 | 304.4 | 350.4 | 348 | 2.4 | 14 | 1 |

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) | | | | | | | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | LU | LCF | LH | OAL | LF | PL | DCON | |
| | 3 | ☐ | MPS1310S-DIN-C | 40.7 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 1 |
| | 5 | ☐ | MPS1310L-DIN-C | 57.7 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 1 |
| | 8 | ☐ | MPS1310-L8C | 107.2 | 151.4 | 154.4 | 200.4 | 198 | 2.4 | 14 | 1 |
| 13.1 | 10 | ☐ | MPS1310-L10C | 133.4 | 178.4 | 181.4 | 227.4 | 225 | 2.4 | 14 | 1 |
| | 12 | ☐ | MPS1310-L12C | 159.6 | 205.4 | 208.4 | 254.4 | 252 | 2.4 | 14 | 1 |
| | 15 | ☐ | MPS1310-L15C | 198.9 | 245.4 | 248.4 | 294.4 | 292 | 2.4 | 14 | 1 |
| | 20 | ☐ | MPS1310-L20C | 264.4 | 313.4 | 316.4 | 362.4 | 360 | 2.4 | 14 | 1 |
| | 3 | ☐ | MPS1320S-DIN-C | 40.6 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 1 |
| | 5 | ☐ | MPS1320L-DIN-C | 57.6 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 1 |
| | 8 | ☐ | MPS1320-L8C | 108.0 | 151.4 | 154.4 | 200.4 | 198 | 2.4 | 14 | 1 |
| 13.2 | 10 | ☐ | MPS1320-L10C | 134.4 | 178.4 | 181.4 | 227.4 | 225 | 2.4 | 14 | 1 |
| | 12 | ☐ | MPS1320-L12C | 160.8 | 205.4 | 208.4 | 254.4 | 252 | 2.4 | 14 | 1 |
| | 15 | ☐ | MPS1320-L15C | 200.4 | 245.4 | 248.4 | 294.4 | 292 | 2.4 | 14 | 1 |
| | 20 | ☐ | MPS1320-L20C | 266.4 | 313.4 | 316.4 | 362.4 | 360 | 2.4 | 14 | 1 |
| | 3 | ☐ | MPS1330S-DIN-C | 40.5 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 1 |
| | 5 | ☐ | MPS1330L-DIN-C | 57.5 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 1 |
| | 8 | ☐ | MPS1330-L8C | 108.8 | 151.4 | 154.4 | 200.4 | 198 | 2.4 | 14 | 1 |
| 13.3 | 10 | ☐ | MPS1330-L10C | 135.4 | 178.4 | 181.4 | 227.4 | 225 | 2.4 | 14 | 1 |
| | 12 | ☐ | MPS1330-L12C | 162.0 | 205.4 | 208.4 | 254.4 | 252 | 2.4 | 14 | 1 |
| | 15 | ☐ | MPS1330-L15C | 201.9 | 245.4 | 248.4 | 294.4 | 292 | 2.4 | 14 | 1 |
| | 20 | ☐ | MPS1330-L20C | 268.4 | 313.4 | 316.4 | 362.4 | 360 | 2.4 | 14 | 1 |
| | 3 | ☐ | MPS1340S-DIN-C | 40.3 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 1 |
| | 5 | ☐ | MPS1340L-DIN-C | 57.3 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 1 |
| | 8 | ☐ | MPS1340-L8C | 109.6 | 151.4 | 154.4 | 200.4 | 198 | 2.4 | 14 | 1 |
| 13.4 | 10 | ☐ | MPS1340-L10C | 136.4 | 178.4 | 181.4 | 227.4 | 225 | 2.4 | 14 | 1 |
| | 12 | ☐ | MPS1340-L12C | 163.2 | 205.4 | 208.4 | 254.4 | 252 | 2.4 | 14 | 1 |
| | 15 | ☐ | MPS1340-L15C | 203.4 | 245.4 | 248.4 | 294.4 | 292 | 2.4 | 14 | 1 |
| | 20 | ☐ | MPS1340-L20C | 270.4 | 313.4 | 316.4 | 362.4 | 360 | 2.4 | 14 | 1 |
| | 3 | ☐ | MPS1350S-DIN-C | 40.2 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 1 |
| | 5 | ☐ | MPS1350L-DIN-C | 57.2 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 1 |
| | 8 | ☐ | MPS1350-L8C | 110.5 | 151.5 | 154.5 | 200.5 | 198 | 2.5 | 14 | 1 |
| 13.5 | 10 | ☐ | MPS1350-L10C | 137.5 | 178.5 | 181.5 | 227.5 | 225 | 2.5 | 14 | 1 |
| | 12 | ☐ | MPS1350-L12C | 164.5 | 205.5 | 208.5 | 254.5 | 252 | 2.5 | 14 | 1 |
| | 15 | ☐ | MPS1350-L15C | 205.0 | 245.5 | 248.5 | 294.5 | 292 | 2.5 | 14 | 1 |
| | 20 | ☐ | MPS1350-L20C | 272.5 | 313.5 | 316.5 | 362.5 | 360 | 2.5 | 14 | 1 |
| | 3 | ☐ | MPS1360S-DIN-C | 40.1 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 1 |
| | 5 | ☐ | MPS1360L-DIN-C | 57.1 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 1 |
| | 8 | ☐ | MPS1360-L8C | 111.3 | 156.5 | 159.5 | 205.5 | 203 | 2.5 | 14 | 1 |
| 13.6 | 10 | ☐ | MPS1360-L10C | 138.5 | 184.5 | 187.5 | 233.5 | 231 | 2.5 | 14 | 1 |
| | 12 | ☐ | MPS1360-L12C | 165.7 | 212.5 | 215.5 | 261.5 | 259 | 2.5 | 14 | 1 |
| | 15 | ☐ | MPS1360-L15C | 206.5 | 254.5 | 257.5 | 303.5 | 301 | 2.5 | 14 | 1 |
| | 20 | ☐ | MPS1360-L20C | 274.5 | 324.5 | 327.5 | 373.5 | 371 | 2.5 | 14 | 1 |
| | 3 | ☐ | MPS1370S-DIN-C | 39.9 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 1 |
| | 5 | ☐ | MPS1370L-DIN-C | 56.9 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 1 |
| | 8 | ☐ | MPS1370-L8C | 112.1 | 156.5 | 159.5 | 205.5 | 203 | 2.5 | 14 | 1 |
| 13.7 | 10 | ☐ | MPS1370-L10C | 139.5 | 184.5 | 187.5 | 233.5 | 231 | 2.5 | 14 | 1 |
| | 12 | ☐ | MPS1370-L12C | 166.9 | 212.5 | 215.5 | 261.5 | 259 | 2.5 | 14 | 1 |
| | 15 | ☐ | MPS1370-L15C | 208.0 | 254.5 | 257.5 | 303.5 | 301 | 2.5 | 14 | 1 |
| | 20 | ☐ | MPS1370-L20C | 276.5 | 324.5 | 327.5 | 373.5 | 371 | 2.5 | 14 | 1 |
| | 3 | ☐ | MPS1380S-DIN-C | 39.8 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 1 |
| | 5 | ☐ | MPS1380L-DIN-C | 56.8 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 1 |
| | 8 | ☐ | MPS1380-L8C | 112.9 | 156.5 | 159.5 | 205.5 | 203 | 2.5 | 14 | 1 |
| 13.8 | 10 | ☐ | MPS1380-L10C | 140.5 | 184.5 | 187.5 | 233.5 | 231 | 2.5 | 14 | 1 |
| | 12 | ☐ | MPS1380-L12C | 168.1 | 212.5 | 215.5 | 261.5 | 259 | 2.5 | 14 | 1 |
| | 15 | ☐ | MPS1380-L15C | 209.5 | 254.5 | 257.5 | 303.5 | 301 | 2.5 | 14 | 1 |
| | 20 | ☐ | MPS1380-L20C | 278.5 | 324.5 | 327.5 | 373.5 | 371 | 2.5 | 14 | 1 |

CONDITIONS DE COUPE ➤ M077
DONNÉES TECHNIQUES ➤ P001

# PERÇAGE (CARBURE MONOBLOC)

## MPS

Foret carbure à double listel

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.9 | 3 | ☐ | MPS1390S-DIN-C | 39.7 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 1 |
| | 5 | ☐ | MPS1390L-DIN-C | 56.7 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 1 |
| | 8 | ☐ | MPS1390-L8C | 113.7 | 156.5 | 159.5 | 205.5 | 203 | 2.5 | 14 | 1 |
| | 10 | ☐ | MPS1390-L10C | 141.5 | 184.5 | 187.5 | 233.5 | 231 | 2.5 | 14 | 1 |
| | 12 | ☐ | MPS1390-L12C | 169.3 | 212.5 | 215.5 | 261.5 | 259 | 2.5 | 14 | 1 |
| | 15 | ☐ | MPS1390-L15C | 211.0 | 254.5 | 257.5 | 303.5 | 301 | 2.5 | 14 | 1 |
| | 20 | ☐ | MPS1390-L20C | 280.5 | 324.5 | 327.5 | 373.5 | 371 | 2.5 | 14 | 1 |
| 14.0 | 3 | ☐ | MPS1400S-DIN-C | 39.5 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 2 |
| | 5 | ☐ | MPS1400L-DIN-C | 56.5 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 2 |
| | 8 | ☐ | MPS1400-L8C | 114.5 | 156.5 | 159.5 | 205.5 | 203 | 2.5 | 14 | 2 |
| | 10 | ☐ | MPS1400-L10C | 142.5 | 184.5 | 187.5 | 233.5 | 231 | 2.5 | 14 | 2 |
| | 12 | ☐ | MPS1400-L12C | 170.5 | 212.5 | 215.5 | 261.5 | 259 | 2.5 | 14 | 2 |
| | 15 | ☐ | MPS1400-L15C | 212.5 | 254.5 | 257.5 | 303.5 | 301 | 2.5 | 14 | 2 |
| | 20 | ☐ | MPS1400-L20C | 282.5 | 324.5 | 327.5 | 373.5 | 371 | 2.5 | 14 | 2 |
| 14.1 | 3 | ☐ | MPS1410S-DIN-C | 43.4 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 1 |
| | 5 | ☐ | MPS1410L-DIN-C | 61.4 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 1 |
| 14.2 | 3 | ☐ | MPS1420S-DIN-C | 43.3 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 1 |
| | 5 | ☐ | MPS1420L-DIN-C | 61.3 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 1 |
| 14.3 | 3 | ☐ | MPS1430S-DIN-C | 43.2 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 1 |
| | 5 | ☐ | MPS1430L-DIN-C | 61.2 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 1 |
| 14.4 | 3 | ☐ | MPS1440S-DIN-C | 43.0 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 1 |
| | 5 | ☐ | MPS1440L-DIN-C | 61.0 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 1 |
| 14.5 | 3 | ☐ | MPS1450S-DIN-C | 42.9 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 1 |
| | 5 | ☐ | MPS1450L-DIN-C | 60.9 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 1 |
| 14.6 | 3 | ☐ | MPS1460S-DIN-C | 42.8 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 1 |
| | 5 | ☐ | MPS1460L-DIN-C | 60.8 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 1 |
| 14.7 | 3 | ☐ | MPS1470S-DIN-C | 42.6 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 1 |
| | 5 | ☐ | MPS1470L-DIN-C | 60.6 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 1 |
| 14.8 | 3 | ☐ | MPS1480S-DIN-C | 42.5 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 1 |
| | 5 | ☐ | MPS1480L-DIN-C | 60.5 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 1 |
| 14.9 | 3 | ☐ | MPS1490S-DIN-C | 42.4 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 1 |
| | 5 | ☐ | MPS1490L-DIN-C | 60.4 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 1 |
| 15.0 | 3 | ☐ | MPS1500S-DIN-C | 42.2 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 1 |
| | 5 | ☐ | MPS1500L-DIN-C | 60.2 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 1 |
| 15.1 | 3 | ☐ | MPS1510S-DIN-C | 42.1 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 1 |
| | 5 | ☐ | MPS1510L-DIN-C | 60.1 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 1 |
| 15.2 | 3 | ☐ | MPS1520S-DIN-C | 42.0 | 64.8 | 65.8 | 114.8 | 112 | 2.8 | 16 | 1 |
| | 5 | ☐ | MPS1520L-DIN-C | 60.0 | 82.8 | 83.8 | 132.8 | 130 | 2.8 | 16 | 1 |
| 15.3 | 3 | ☐ | MPS1530S-DIN-C | 41.8 | 64.8 | 65.8 | 114.8 | 112 | 2.8 | 16 | 1 |
| | 5 | ☐ | MPS1530L-DIN-C | 59.8 | 82.8 | 83.8 | 132.8 | 130 | 2.8 | 16 | 1 |
| 15.4 | 3 | ☐ | MPS1540S-DIN-C | 41.7 | 64.8 | 65.8 | 114.8 | 112 | 2.8 | 16 | 1 |
| | 5 | ☐ | MPS1540L-DIN-C | 59.7 | 82.8 | 83.8 | 132.8 | 130 | 2.8 | 16 | 1 |
| 15.5 | 3 | ☐ | MPS1550S-DIN-C | 41.6 | 64.8 | 65.8 | 114.8 | 112 | 2.8 | 16 | 1 |
| | 5 | ☐ | MPS1550L-DIN-C | 59.6 | 82.8 | 83.8 | 132.8 | 130 | 2.8 | 16 | 1 |
| 15.6 | 3 | ☐ | MPS1560S-DIN-C | 41.4 | 64.8 | 65.8 | 114.8 | 112 | 2.8 | 16 | 1 |
| | 5 | ☐ | MPS1560L-DIN-C | 59.4 | 82.8 | 83.8 | 132.8 | 130 | 2.8 | 16 | 1 |
| 15.7 | 3 | ☐ | MPS1570S-DIN-C | 41.3 | 64.9 | 65.9 | 114.9 | 112 | 2.9 | 16 | 1 |
| | 5 | ☐ | MPS1570L-DIN-C | 59.3 | 82.9 | 83.9 | 132.9 | 130 | 2.9 | 16 | 1 |
| 15.8 | 3 | ☐ | MPS1580S-DIN-C | 41.2 | 64.9 | 65.9 | 114.9 | 112 | 2.9 | 16 | 1 |
| | 5 | ☐ | MPS1580L-DIN-C | 59.2 | 82.9 | 83.9 | 132.9 | 130 | 2.9 | 16 | 1 |
| 15.9 | 3 | ☐ | MPS1590S-DIN-C | 41.0 | 64.9 | 65.9 | 114.9 | 112 | 2.9 | 16 | 1 |
| | 5 | ☐ | MPS1590L-DIN-C | 59.0 | 82.9 | 83.9 | 132.9 | 130 | 2.9 | 16 | 1 |
| 16.0 | 3 | ☐ | MPS1600S-DIN-C | 40.9 | 64.9 | 65.9 | 114.9 | 112 | 2.9 | 16 | 2 |
| | 5 | ☐ | MPS1600L-DIN-C | 58.9 | 82.9 | 83.9 | 132.9 | 130 | 2.9 | 16 | 2 |
| 16.1 | 3 | ☐ | MPS1610S-DIN-C | 48.8 | 72.9 | 73.9 | 122.9 | 120 | 2.9 | 18 | 1 |
| | 5 | ☐ | MPS1610L-DIN-C | 68.8 | 92.9 | 93.9 | 142.9 | 140 | 2.9 | 18 | 1 |
| 16.2 | 3 | ☐ | MPS1620S-DIN-C | 48.6 | 72.9 | 73.9 | 122.9 | 120 | 2.9 | 18 | 1 |
| | 5 | ☐ | MPS1620L-DIN-C | 68.6 | 92.9 | 93.9 | 142.9 | 140 | 2.9 | 18 | 1 |
| 16.3 | 3 | ☐ | MPS1630S-DIN-C | 48.5 | 73.0 | 74.0 | 123.0 | 120 | 3.0 | 18 | 1 |
| | 5 | ☐ | MPS1630L-DIN-C | 68.5 | 93.0 | 94.0 | 143.0 | 140 | 3.0 | 18 | 1 |
| 16.4 | 3 | ☐ | MPS1640S-DIN-C | 48.4 | 73.0 | 74.0 | 123.0 | 120 | 3.0 | 18 | 1 |
| | 5 | ☐ | MPS1640L-DIN-C | 68.4 | 93.0 | 94.0 | 143.0 | 140 | 3.0 | 18 | 1 |
| 16.5 | 3 | ☐ | MPS1650S-DIN-C | 48.3 | 73.0 | 74.0 | 123.0 | 120 | 3.0 | 18 | 1 |
| | 5 | ☐ | MPS1650L-DIN-C | 68.3 | 93.0 | 94.0 | 143.0 | 140 | 3.0 | 18 | 1 |
| 16.6 | 3 | ☐ | MPS1660S-DIN-C | 48.1 | 73.0 | 74.0 | 123.0 | 120 | 3.0 | 18 | 1 |
| | 5 | ☐ | MPS1660L-DIN-C | 68.1 | 93.0 | 94.0 | 143.0 | 140 | 3.0 | 18 | 1 |
| 16.7 | 3 | ☐ | MPS1670S-DIN-C | 48.0 | 73.0 | 74.0 | 123.0 | 120 | 3.0 | 18 | 1 |
| | 5 | ☐ | MPS1670L-DIN-C | 68.0 | 93.0 | 94.0 | 143.0 | 140 | 3.0 | 18 | 1 |
| 16.8 | 3 | ☐ | MPS1680S-DIN-C | 47.9 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 1 |
| | 5 | ☐ | MPS1680L-DIN-C | 67.9 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 1 |
| 16.9 | 3 | ☐ | MPS1690S-DIN-C | 47.7 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 1 |
| | 5 | ☐ | MPS1690L-DIN-C | 67.7 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 1 |
| 17.0 | 3 | ☐ | MPS1700S-DIN-C | 47.6 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 1 |
| | 5 | ☐ | MPS1700L-DIN-C | 67.6 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 1 |
| 17.1 | 3 | ☐ | MPS1710S-DIN-C | 47.5 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 1 |
| | 5 | ☐ | MPS1710L-DIN-C | 67.5 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 1 |
| 17.2 | 3 | ☐ | MPS1720S-DIN-C | 47.3 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 1 |
| | 5 | ☐ | MPS1720L-DIN-C | 67.3 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 1 |
| 17.3 | 3 | ☐ | MPS1730S-DIN-C | 47.2 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 1 |
| | 5 | ☐ | MPS1730L-DIN-C | 67.2 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 1 |
| 17.4 | 3 | ☐ | MPS1740S-DIN-C | 47.1 | 73.2 | 74.2 | 123.2 | 120 | 3.2 | 18 | 1 |
| | 5 | ☐ | MPS1740L-DIN-C | 67.1 | 93.2 | 94.2 | 143.2 | 140 | 3.2 | 18 | 1 |
| 17.5 | 3 | ☐ | MPS1750S-DIN-C | 46.9 | 73.2 | 74.2 | 123.2 | 120 | 3.2 | 18 | 1 |
| | 5 | ☐ | MPS1750L-DIN-C | 66.9 | 93.2 | 94.2 | 143.2 | 140 | 3.2 | 18 | 1 |
| 17.6 | 3 | ☐ | MPS1760S-DIN-C | 46.8 | 73.2 | 74.2 | 123.2 | 120 | 3.2 | 18 | 1 |
| | 5 | ☐ | MPS1760L-DIN-C | 66.8 | 93.2 | 94.2 | 143.2 | 140 | 3.2 | 18 | 1 |
| 17.7 | 3 | ☐ | MPS1770S-DIN-C | 46.7 | 73.2 | 74.2 | 123.2 | 120 | 3.2 | 18 | 1 |
| | 5 | ☐ | MPS1770L-DIN-C | 66.7 | 93.2 | 94.2 | 143.2 | 140 | 3.2 | 18 | 1 |
| 17.8 | 3 | ☐ | MPS1780S-DIN-C | 46.5 | 73.2 | 74.2 | 123.2 | 120 | 3.2 | 18 | 1 |
| | 5 | ☐ | MPS1780L-DIN-C | 66.5 | 93.2 | 94.2 | 143.2 | 140 | 3.2 | 18 | 1 |
| 17.9 | 3 | ☐ | MPS1790S-DIN-C | 46.4 | 73.3 | 74.3 | 123.3 | 120 | 3.3 | 18 | 1 |
| | 5 | ☐ | MPS1790L-DIN-C | 66.4 | 93.3 | 94.3 | 143.3 | 140 | 3.3 | 18 | 1 |
| 18.0 | 3 | ☐ | MPS1800S-DIN-C | 46.3 | 73.3 | 74.3 | 123.3 | 120 | 3.3 | 18 | 2 |
| | 5 | ☐ | MPS1800L-DIN-C | 66.3 | 93.3 | 94.3 | 143.3 | 140 | 3.3 | 18 | 2 |
| 18.1 | 3 | ☐ | MPS1810S-DIN-C | 52.1 | 79.3 | 80.3 | 131.3 | 128 | 3.3 | 20 | 1 |
| | 5 | ☐ | MPS1810L-DIN-C | 74.1 | 101.3 | 102.3 | 153.3 | 150 | 3.3 | 20 | 1 |
| 18.2 | 3 | ☐ | MPS1820S-DIN-C | 52.0 | 79.3 | 80.3 | 131.3 | 128 | 3.3 | 20 | 1 |
| | 5 | ☐ | MPS1820L-DIN-C | 74.0 | 101.3 | 102.3 | 153.3 | 150 | 3.3 | 20 | 1 |
| 18.3 | 3 | ☐ | MPS1830S-DIN-C | 51.9 | 79.3 | 80.3 | 131.3 | 128 | 3.3 | 20 | 1 |
| | 5 | ☐ | MPS1830L-DIN-C | 73.9 | 101.3 | 102.3 | 153.3 | 150 | 3.3 | 20 | 1 |
| 18.4 | 3 | ☐ | MPS1840S-DIN-C | 51.7 | 79.3 | 80.3 | 131.3 | 128 | 3.3 | 20 | 1 |
| | 5 | ☐ | MPS1840L-DIN-C | 73.7 | 101.3 | 102.3 | 153.3 | 150 | 3.3 | 20 | 1 |
| 18.5 | 3 | ☐ | MPS1850S-DIN-C | 51.6 | 79.4 | 80.4 | 131.4 | 128 | 3.4 | 20 | 1 |
| | 5 | ☐ | MPS1850L-DIN-C | 73.6 | 101.4 | 102.4 | 153.4 | 150 | 3.4 | 20 | 1 |
| 18.6 | 3 | ☐ | MPS1860S-DIN-C | 51.5 | 79.4 | 80.4 | 131.4 | 128 | 3.4 | 20 | 1 |
| | 5 | ☐ | MPS1860L-DIN-C | 73.5 | 101.4 | 102.4 | 153.4 | 150 | 3.4 | 20 | 1 |
| 18.7 | 3 | ☐ | MPS1870S-DIN-C | 51.4 | 79.4 | 80.4 | 131.4 | 128 | 3.4 | 20 | 1 |
| | 5 | ☐ | MPS1870L-DIN-C | 73.4 | 101.4 | 102.4 | 153.4 | 150 | 3.4 | 20 | 1 |
| 18.8 | 3 | ☐ | MPS1880S-DIN-C | 51.2 | 79.4 | 80.4 | 131.4 | 128 | 3.4 | 20 | 1 |
| | 5 | ☐ | MPS1880L-DIN-C | 73.2 | 101.4 | 102.4 | 153.4 | 150 | 3.4 | 20 | 1 |
| 18.9 | 3 | ☐ | MPS1890S-DIN-C | 51.1 | 79.4 | 80.4 | 131.4 | 128 | 3.4 | 20 | 1 |
| | 5 | ☐ | MPS1890L-DIN-C | 73.1 | 101.4 | 102.4 | 153.4 | 150 | 3.4 | 20 | 1 |

☐ : Article non stocké - Fabrication sur commande uniquement.

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) | | | | | | | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | LU | LCF | LH | OAL | LF | PL | DCON | |
| **19.0** | 3 | ☐ | **MPS1900S-DIN-C** | 51.0 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 1 |
| | 5 | ☐ | **MPS1900L-DIN-C** | 73.0 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 1 |
| **19.1** | 3 | ☐ | **MPS1910S-DIN-C** | 50.8 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 1 |
| | 5 | ☐ | **MPS1910L-DIN-C** | 72.8 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 1 |
| **19.2** | 3 | ☐ | **MPS1920S-DIN-C** | 50.7 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 1 |
| | 5 | ☐ | **MPS1920L-DIN-C** | 72.7 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 1 |
| **19.3** | 3 | ☐ | **MPS1930S-DIN-C** | 50.6 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 1 |
| | 5 | ☐ | **MPS1930L-DIN-C** | 72.6 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 1 |
| **19.4** | 3 | ☐ | **MPS1940S-DIN-C** | 50.4 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 1 |
| | 5 | ☐ | **MPS1940L-DIN-C** | 72.4 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 1 |
| **19.5** | 3 | ☐ | **MPS1950S-DIN-C** | 50.3 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 1 |
| | 5 | ☐ | **MPS1950L-DIN-C** | 72.3 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 1 |
| **19.6** | 3 | ☐ | **MPS1960S-DIN-C** | 50.2 | 79.6 | 80.6 | 131.6 | 128 | 3.6 | 20 | 1 |
| | 5 | ☐ | **MPS1960L-DIN-C** | 72.2 | 101.6 | 102.6 | 153.6 | 150 | 3.6 | 20 | 1 |
| **19.7** | 3 | ☐ | **MPS1970S-DIN-C** | 50.0 | 79.6 | 80.6 | 131.6 | 128 | 3.6 | 20 | 1 |
| | 5 | ☐ | **MPS1970L-DIN-C** | 72.0 | 101.6 | 102.6 | 153.6 | 150 | 3.6 | 20 | 1 |
| **19.8** | 3 | ☐ | **MPS1980S-DIN-C** | 49.9 | 79.6 | 80.6 | 131.6 | 128 | 3.6 | 20 | 1 |
| | 5 | ☐ | **MPS1980L-DIN-C** | 71.9 | 101.6 | 102.6 | 153.6 | 150 | 3.6 | 20 | 1 |
| **19.9** | 3 | ☐ | **MPS1990S-DIN-C** | 49.8 | 79.6 | 80.6 | 131.6 | 128 | 3.6 | 20 | 1 |
| | 5 | ☐ | **MPS1990L-DIN-C** | 71.8 | 101.6 | 102.6 | 153.6 | 150 | 3.6 | 20 | 1 |
| **20.0** | 3 | ☐ | **MPS2000S-DIN-C** | 49.6 | 79.6 | 80.6 | 131.6 | 128 | 3.6 | 20 | 2 |
| | 5 | ☐ | **MPS2000L-DIN-C** | 71.6 | 101.6 | 102.6 | 153.6 | 150 | 3.6 | 20 | 2 |

CONDITIONS DE COUPE ➤ M077
DONNÉES TECHNIQUES ➤ P001

# PERÇAGE (CARBURE MONOBLOC)

## MSL

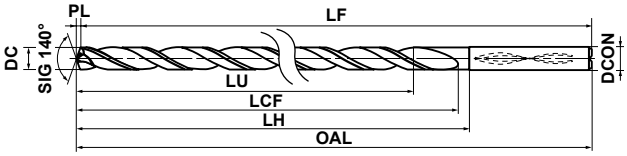
Foret carbure super long à simple listel

- De 20 à 30 L/D diamètre/longueur.
- Foret MSL à 2 listels pour un perçage précis et assurant la sécurité du processus.

P | M | K | N | S | H

Arrosage intérieur

- Attachement cylindrique




| 3.0≤DC≤6.0 | 6.0<DC≤10.0 | 10.0<DC≤14.0 |
|---|---|---|
| 0 −0.012 | 0 −0.015 | 0 −0.018 |
| 0 −0.008 | 0 −0.009 | 0 −0.011 |

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON |
|---|---|---|---|---|---|---|---|---|---|---|
| 3.0 | 20 | □ | MSL0300-L20C | 60.5 | 69.5 | 72.5 | 109.5 | 109 | 0.5 | 6 |
| | 25 | □ | MSL0300-L25C | 75.5 | 84.5 | 87.5 | 124.5 | 124 | 0.5 | 6 |
| | 30 | □ | MSL0300-L30C | 90.5 | 99.5 | 102.5 | 139.5 | 139 | 0.5 | 6 |
| 3.1 | 20 | □ | MSL0310-L20C | 62.6 | 81.6 | 84.6 | 121.6 | 121 | 0.6 | 6 |
| | 25 | □ | MSL0310-L25C | 78.1 | 98.6 | 101.6 | 138.6 | 138 | 0.6 | 6 |
| | 30 | □ | MSL0310-L30C | 93.6 | 116.6 | 119.6 | 156.6 | 156 | 0.6 | 6 |
| 3.2 | 20 | □ | MSL0320-L20C | 64.6 | 81.6 | 84.6 | 121.6 | 121 | 0.6 | 6 |
| | 25 | □ | MSL0320-L25C | 80.6 | 98.6 | 101.6 | 138.6 | 138 | 0.6 | 6 |
| | 30 | □ | MSL0320-L30C | 96.6 | 116.6 | 119.6 | 156.6 | 156 | 0.6 | 6 |
| 3.3 | 20 | □ | MSL0330-L20C | 66.6 | 81.6 | 84.6 | 121.6 | 121 | 0.6 | 6 |
| | 25 | □ | MSL0330-L25C | 83.1 | 98.6 | 101.6 | 138.6 | 138 | 0.6 | 6 |
| | 30 | □ | MSL0330-L30C | 99.6 | 116.6 | 119.6 | 156.6 | 156 | 0.6 | 6 |
| 3.4 | 20 | □ | MSL0340-L20C | 68.6 | 81.6 | 84.6 | 121.6 | 121 | 0.6 | 6 |
| | 25 | □ | MSL0340-L25C | 85.6 | 98.6 | 101.6 | 138.6 | 138 | 0.6 | 6 |
| | 30 | □ | MSL0340-L30C | 102.6 | 116.6 | 119.6 | 156.6 | 156 | 0.6 | 6 |
| 3.5 | 20 | □ | MSL0350-L20C | 70.6 | 81.6 | 84.6 | 121.6 | 121 | 0.6 | 6 |
| | 25 | □ | MSL0350-L25C | 88.1 | 98.6 | 101.6 | 138.6 | 138 | 0.6 | 6 |
| | 30 | □ | MSL0350-L30C | 105.6 | 116.6 | 119.6 | 156.6 | 156 | 0.6 | 6 |
| 3.6 | 20 | □ | MSL0360-L20C | 72.7 | 92.7 | 95.7 | 132.7 | 132 | 0.7 | 6 |
| | 25 | □ | MSL0360-L25C | 90.7 | 112.7 | 115.7 | 152.7 | 152 | 0.7 | 6 |
| | 30 | □ | MSL0360-L30C | 108.7 | 132.7 | 135.7 | 172.7 | 172 | 0.7 | 6 |
| 3.7 | 20 | □ | MSL0370-L20C | 74.7 | 92.7 | 95.7 | 132.7 | 132 | 0.7 | 6 |
| | 25 | □ | MSL0370-L25C | 93.2 | 112.7 | 115.7 | 152.7 | 152 | 0.7 | 6 |
| | 30 | □ | MSL0370-L30C | 111.7 | 132.7 | 135.7 | 172.7 | 172 | 0.7 | 6 |
| 3.8 | 20 | □ | MSL0380-L20C | 76.7 | 92.7 | 95.7 | 132.7 | 132 | 0.7 | 6 |
| | 25 | □ | MSL0380-L25C | 95.7 | 112.7 | 115.7 | 152.7 | 152 | 0.7 | 6 |
| | 30 | □ | MSL0380-L30C | 114.7 | 132.7 | 135.7 | 172.7 | 172 | 0.7 | 6 |
| 3.9 | 20 | □ | MSL0390-L20C | 78.7 | 92.7 | 95.7 | 132.7 | 132 | 0.7 | 6 |
| | 25 | □ | MSL0390-L25C | 98.2 | 112.7 | 115.7 | 152.7 | 152 | 0.7 | 6 |
| | 30 | □ | MSL0390-L30C | 117.7 | 132.7 | 135.7 | 172.7 | 172 | 0.7 | 6 |
| 4.0 | 20 | □ | MSL0400-L20C | 80.7 | 92.7 | 95.7 | 132.7 | 132 | 0.7 | 6 |
| | 25 | □ | MSL0400-L25C | 100.7 | 112.7 | 115.7 | 152.7 | 152 | 0.7 | 6 |
| | 30 | □ | MSL0400-L30C | 120.7 | 132.7 | 135.7 | 172.7 | 172 | 0.7 | 6 |
| 4.1 | 20 | □ | MSL0410-L20C | 82.7 | 104.7 | 107.7 | 144.7 | 144 | 0.7 | 6 |
| | 25 | □ | MSL0410-L25C | 103.2 | 126.7 | 129.7 | 166.7 | 166 | 0.7 | 6 |
| | 30 | □ | MSL0410-L30C | 123.7 | 149.7 | 152.7 | 189.7 | 189 | 0.7 | 6 |
| 4.2 | 20 | □ | MSL0420-L20C | 84.8 | 104.8 | 107.8 | 144.8 | 144 | 0.8 | 6 |
| | 25 | □ | MSL0420-L25C | 105.8 | 126.8 | 129.8 | 166.8 | 166 | 0.8 | 6 |
| | 30 | □ | MSL0420-L30C | 126.8 | 149.8 | 152.8 | 189.8 | 189 | 0.8 | 6 |
| 4.3 | 20 | □ | MSL0430-L20C | 86.8 | 104.8 | 107.8 | 144.8 | 144 | 0.8 | 6 |
| | 25 | □ | MSL0430-L25C | 108.3 | 126.8 | 129.8 | 166.8 | 166 | 0.8 | 6 |
| | 30 | □ | MSL0430-L30C | 129.8 | 149.8 | 152.8 | 189.8 | 189 | 0.8 | 6 |

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON |
|---|---|---|---|---|---|---|---|---|---|---|
| 4.4 | 20 | □ | MSL0440-L20C | 88.8 | 104.8 | 107.8 | 144.8 | 144 | 0.8 | 6 |
| | 25 | □ | MSL0440-L25C | 110.8 | 126.8 | 129.8 | 166.8 | 166 | 0.8 | 6 |
| | 30 | □ | MSL0440-L30C | 132.8 | 149.8 | 152.8 | 189.8 | 189 | 0.8 | 6 |
| 4.5 | 20 | □ | MSL0450-L20C | 90.8 | 104.8 | 107.8 | 144.8 | 144 | 0.8 | 6 |
| | 25 | □ | MSL0450-L25C | 113.3 | 126.8 | 129.8 | 166.8 | 166 | 0.8 | 6 |
| | 30 | □ | MSL0450-L30C | 135.8 | 149.8 | 152.8 | 189.8 | 189 | 0.8 | 6 |
| 4.6 | 20 | □ | MSL0460-L20C | 92.8 | 115.8 | 118.8 | 155.8 | 155 | 0.8 | 6 |
| | 25 | □ | MSL0460-L25C | 115.8 | 140.8 | 143.8 | 180.8 | 180 | 0.8 | 6 |
| | 30 | □ | MSL0460-L30C | 138.8 | 165.8 | 168.8 | 205.8 | 205 | 0.8 | 6 |
| 4.7 | 20 | □ | MSL0470-L20C | 94.9 | 115.9 | 118.9 | 155.9 | 155 | 0.9 | 6 |
| | 25 | □ | MSL0470-L25C | 118.4 | 140.9 | 143.9 | 180.9 | 180 | 0.9 | 6 |
| | 30 | □ | MSL0470-L30C | 141.9 | 165.9 | 168.9 | 205.9 | 205 | 0.9 | 6 |
| 4.8 | 20 | □ | MSL0480-L20C | 96.9 | 115.9 | 118.9 | 155.9 | 155 | 0.9 | 6 |
| | 25 | □ | MSL0480-L25C | 120.9 | 140.9 | 143.9 | 180.9 | 180 | 0.9 | 6 |
| | 30 | □ | MSL0480-L30C | 144.9 | 165.9 | 168.9 | 205.9 | 205 | 0.9 | 6 |
| 4.9 | 20 | □ | MSL0490-L20C | 98.9 | 115.9 | 118.9 | 155.9 | 155 | 0.9 | 6 |
| | 25 | □ | MSL0490-L25C | 123.4 | 140.9 | 143.9 | 180.9 | 180 | 0.9 | 6 |
| | 30 | □ | MSL0490-L30C | 147.9 | 165.9 | 168.9 | 205.9 | 205 | 0.9 | 6 |
| 5.0 | 20 | □ | MSL0500-L20C | 100.9 | 115.9 | 118.9 | 155.9 | 155 | 0.9 | 6 |
| | 25 | □ | MSL0500-L25C | 125.9 | 140.9 | 143.9 | 180.9 | 180 | 0.9 | 6 |
| | 30 | □ | MSL0500-L30C | 150.9 | 165.9 | 168.9 | 205.9 | 205 | 0.9 | 6 |
| 5.1 | 20 | □ | MSL0510-L20C | 102.9 | 127.9 | 130.9 | 167.9 | 167 | 0.9 | 6 |
| | 25 | □ | MSL0510-L25C | 128.4 | 154.9 | 157.9 | 194.9 | 194 | 0.9 | 6 |
| | 30 | □ | MSL0510-L30C | 153.9 | 182.9 | 185.9 | 222.9 | 222 | 0.9 | 6 |
| 5.2 | 20 | □ | MSL0520-L20C | 104.9 | 127.9 | 130.9 | 167.9 | 167 | 0.9 | 6 |
| | 25 | □ | MSL0520-L25C | 130.9 | 154.9 | 157.9 | 194.9 | 194 | 0.9 | 6 |
| | 30 | □ | MSL0520-L30C | 156.9 | 182.9 | 185.9 | 222.9 | 222 | 0.9 | 6 |
| 5.3 | 20 | □ | MSL0530-L20C | 107.0 | 128.0 | 131.0 | 168.0 | 167 | 1.0 | 6 |
| | 25 | □ | MSL0530-L25C | 133.5 | 155.0 | 158.0 | 195.0 | 194 | 1.0 | 6 |
| | 30 | □ | MSL0530-L30C | 160.0 | 183.0 | 186.0 | 223.0 | 222 | 1.0 | 6 |
| 5.4 | 20 | □ | MSL0540-L20C | 109.0 | 128.0 | 131.0 | 168.0 | 167 | 1.0 | 6 |
| | 25 | □ | MSL0540-L25C | 136.0 | 155.0 | 158.0 | 195.0 | 194 | 1.0 | 6 |
| | 30 | □ | MSL0540-L30C | 163.0 | 183.0 | 186.0 | 223.0 | 222 | 1.0 | 6 |
| 5.5 | 20 | □ | MSL0550-L20C | 111.0 | 128.0 | 131.0 | 168.0 | 167 | 1.0 | 6 |
| | 25 | □ | MSL0550-L25C | 138.5 | 155.0 | 158.0 | 195.0 | 194 | 1.0 | 6 |
| | 30 | □ | MSL0550-L30C | 166.0 | 183.0 | 186.0 | 223.0 | 222 | 1.0 | 6 |
| 5.6 | 20 | □ | MSL0560-L20C | 113.0 | 139.0 | 142.0 | 179.0 | 178 | 1.0 | 6 |
| | 25 | □ | MSL0560-L25C | 141.0 | 169.0 | 172.0 | 209.0 | 208 | 1.0 | 6 |
| | 30 | □ | MSL0560-L30C | 169.0 | 199.0 | 202.0 | 239.0 | 238 | 1.0 | 6 |
| 5.7 | 20 | □ | MSL0570-L20C | 115.0 | 139.0 | 142.0 | 179.0 | 178 | 1.0 | 6 |
| | 25 | □ | MSL0570-L25C | 143.5 | 169.0 | 172.0 | 209.0 | 208 | 1.0 | 6 |
| | 30 | □ | MSL0570-L30C | 172.0 | 199.0 | 202.0 | 239.0 | 238 | 1.0 | 6 |

Dès maintenant, veuillez remplacer tous les forets aux références en caractères gris (MPS, MSL) par des produits équivalents de la série MPS1. La production de ces produits est progressivement réduite et prendra fin en mars 2023.

□ : **Article non stocké - Fabrication sur commande uniquement.**

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON |
|---|---|---|---|---|---|---|---|---|---|---|
| 5.8 | 20 | □ | **MSL0580-L20C** | 117.1 | 139.1 | 142.1 | 179.1 | 178 | 1.1 | 6 |
| | 25 | □ | **MSL0580-L25C** | 146.1 | 169.1 | 172.1 | 209.1 | 208 | 1.1 | 6 |
| | 30 | □ | **MSL0580-L30C** | 175.1 | 199.1 | 202.1 | 239.1 | 238 | 1.1 | 6 |
| 5.9 | 20 | □ | **MSL0590-L20C** | 119.1 | 139.1 | 142.1 | 179.1 | 178 | 1.1 | 6 |
| | 25 | □ | **MSL0590-L25C** | 148.6 | 169.1 | 172.1 | 209.1 | 208 | 1.1 | 6 |
| | 30 | □ | **MSL0590-L30C** | 178.1 | 199.1 | 202.1 | 239.1 | 238 | 1.1 | 6 |
| 6.0 | 20 | □ | **MSL0600-L20C** | 121.1 | 139.1 | 142.1 | 179.1 | 178 | 1.1 | 6 |
| | 25 | □ | **MSL0600-L25C** | 151.1 | 169.1 | 172.1 | 209.1 | 208 | 1.1 | 6 |
| | 30 | □ | **MSL0600-L30C** | 181.1 | 199.1 | 202.1 | 239.1 | 238 | 1.1 | 6 |
| 6.1 | 20 | □ | **MSL0610-L20C** | 123.1 | 151.1 | 154.1 | 191.1 | 190 | 1.1 | 8 |
| | 25 | □ | **MSL0610-L25C** | 153.6 | 183.1 | 186.1 | 223.1 | 222 | 1.1 | 8 |
| | 30 | □ | **MSL0610-L30C** | 184.1 | 216.1 | 219.1 | 256.1 | 255 | 1.1 | 8 |
| 6.2 | 20 | □ | **MSL0620-L20C** | 125.1 | 151.1 | 154.1 | 191.1 | 190 | 1.1 | 8 |
| | 25 | □ | **MSL0620-L25C** | 156.1 | 183.1 | 186.1 | 223.1 | 222 | 1.1 | 8 |
| | 30 | □ | **MSL0620-L30C** | 187.1 | 216.1 | 219.1 | 256.1 | 255 | 1.1 | 8 |
| 6.3 | 20 | □ | **MSL0630-L20C** | 127.1 | 151.1 | 154.1 | 191.1 | 190 | 1.1 | 8 |
| | 25 | □ | **MSL0630-L25C** | 158.6 | 183.1 | 186.1 | 223.1 | 222 | 1.1 | 8 |
| | 30 | □ | **MSL0630-L30C** | 190.1 | 216.1 | 219.1 | 256.1 | 255 | 1.1 | 8 |
| 6.4 | 20 | □ | **MSL0640-L20C** | 129.2 | 151.2 | 154.2 | 191.2 | 190 | 1.2 | 8 |
| | 25 | □ | **MSL0640-L25C** | 161.2 | 183.2 | 186.2 | 223.2 | 222 | 1.2 | 8 |
| | 30 | □ | **MSL0640-L30C** | 193.2 | 216.2 | 219.2 | 256.2 | 255 | 1.2 | 8 |
| 6.5 | 20 | □ | **MSL0650-L20C** | 131.2 | 151.2 | 154.2 | 191.2 | 190 | 1.2 | 8 |
| | 25 | □ | **MSL0650-L25C** | 163.7 | 183.2 | 186.2 | 223.2 | 222 | 1.2 | 8 |
| | 30 | □ | **MSL0650-L30C** | 196.2 | 216.2 | 219.2 | 256.2 | 255 | 1.2 | 8 |
| 6.6 | 20 | □ | **MSL0660-L20C** | 133.2 | 162.2 | 165.2 | 202.2 | 201 | 1.2 | 8 |
| | 25 | □ | **MSL0660-L25C** | 166.2 | 197.2 | 200.2 | 237.2 | 236 | 1.2 | 8 |
| | 30 | □ | **MSL0660-L30C** | 199.2 | 232.2 | 235.2 | 272.2 | 271 | 1.2 | 8 |
| 6.7 | 20 | □ | **MSL0670-L20C** | 135.2 | 162.2 | 165.2 | 202.2 | 201 | 1.2 | 8 |
| | 25 | □ | **MSL0670-L25C** | 168.7 | 197.2 | 200.2 | 237.2 | 236 | 1.2 | 8 |
| | 30 | □ | **MSL0670-L30C** | 202.2 | 232.2 | 235.2 | 272.2 | 271 | 1.2 | 8 |
| 6.8 | 20 | □ | **MSL0680-L20C** | 137.2 | 162.2 | 165.2 | 202.2 | 201 | 1.2 | 8 |
| | 25 | □ | **MSL0680-L25C** | 171.2 | 197.2 | 200.2 | 237.2 | 236 | 1.2 | 8 |
| | 30 | □ | **MSL0680-L30C** | 205.2 | 232.2 | 235.2 | 272.2 | 271 | 1.2 | 8 |
| 6.9 | 20 | □ | **MSL0690-L20C** | 139.3 | 162.3 | 165.3 | 202.3 | 201 | 1.3 | 8 |
| | 25 | □ | **MSL0690-L25C** | 173.8 | 197.3 | 200.3 | 237.3 | 236 | 1.3 | 8 |
| | 30 | □ | **MSL0690-L30C** | 208.3 | 232.3 | 235.3 | 272.3 | 271 | 1.3 | 8 |
| 7.0 | 20 | □ | **MSL0700-L20C** | 141.3 | 162.3 | 165.3 | 202.3 | 201 | 1.3 | 8 |
| | 25 | □ | **MSL0700-L25C** | 176.3 | 197.3 | 200.3 | 237.3 | 236 | 1.3 | 8 |
| | 30 | □ | **MSL0700-L30C** | 211.3 | 232.3 | 235.3 | 272.3 | 271 | 1.3 | 8 |
| 7.1 | 20 | □ | **MSL0710-L20C** | 143.3 | 174.3 | 177.3 | 214.3 | 213 | 1.3 | 8 |
| | 25 | □ | **MSL0710-L25C** | 178.8 | 211.3 | 214.3 | 251.3 | 250 | 1.3 | 8 |
| | 30 | □ | **MSL0710-L30C** | 214.3 | 249.3 | 252.3 | 289.3 | 288 | 1.3 | 8 |
| 7.2 | 20 | □ | **MSL0720-L20C** | 145.3 | 174.3 | 177.3 | 214.3 | 213 | 1.3 | 8 |
| | 25 | □ | **MSL0720-L25C** | 181.3 | 211.3 | 214.3 | 251.3 | 250 | 1.3 | 8 |
| | 30 | □ | **MSL0720-L30C** | 217.3 | 249.3 | 252.3 | 289.3 | 288 | 1.3 | 8 |
| 7.3 | 20 | □ | **MSL0730-L20C** | 147.3 | 174.3 | 177.3 | 214.3 | 213 | 1.3 | 8 |
| | 25 | □ | **MSL0730-L25C** | 183.8 | 211.3 | 214.3 | 251.3 | 250 | 1.3 | 8 |
| | 30 | □ | **MSL0730-L30C** | 220.3 | 249.3 | 252.3 | 289.3 | 288 | 1.3 | 8 |
| 7.4 | 20 | □ | **MSL0740-L20C** | 149.3 | 174.3 | 177.3 | 214.3 | 213 | 1.3 | 8 |
| | 25 | □ | **MSL0740-L25C** | 186.3 | 211.3 | 214.3 | 251.3 | 250 | 1.3 | 8 |
| | 30 | □ | **MSL0740-L30C** | 223.3 | 249.3 | 252.3 | 289.3 | 288 | 1.3 | 8 |
| 7.5 | 20 | □ | **MSL0750-L20C** | 151.4 | 174.4 | 177.4 | 214.4 | 213 | 1.4 | 8 |
| | 25 | □ | **MSL0750-L25C** | 188.9 | 211.4 | 214.4 | 251.4 | 250 | 1.4 | 8 |
| | 30 | □ | **MSL0750-L30C** | 226.4 | 249.4 | 252.4 | 289.4 | 288 | 1.4 | 8 |

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON |
|---|---|---|---|---|---|---|---|---|---|---|
| 7.6 | 20 | □ | **MSL0760-L20C** | 153.4 | 185.4 | 188.4 | 225.4 | 224 | 1.4 | 8 |
| | 25 | □ | **MSL0760-L25C** | 191.4 | 225.4 | 228.4 | 265.4 | 264 | 1.4 | 8 |
| | 30 | □ | **MSL0760-L30C** | 229.4 | 265.4 | 268.4 | 305.4 | 304 | 1.4 | 8 |
| 7.7 | 20 | □ | **MSL0770-L20C** | 155.4 | 185.4 | 188.4 | 225.4 | 224 | 1.4 | 8 |
| | 25 | □ | **MSL0770-L25C** | 193.9 | 225.4 | 228.4 | 265.4 | 264 | 1.4 | 8 |
| | 30 | □ | **MSL0770-L30C** | 232.4 | 265.4 | 268.4 | 305.4 | 304 | 1.4 | 8 |
| 7.8 | 20 | □ | **MSL0780-L20C** | 157.4 | 185.4 | 188.4 | 225.4 | 224 | 1.4 | 8 |
| | 25 | □ | **MSL0780-L25C** | 196.4 | 225.4 | 228.4 | 265.4 | 264 | 1.4 | 8 |
| | 30 | □ | **MSL0780-L30C** | 235.4 | 265.4 | 268.4 | 305.4 | 304 | 1.4 | 8 |
| 7.9 | 20 | □ | **MSL0790-L20C** | 159.4 | 185.4 | 188.4 | 225.4 | 224 | 1.4 | 8 |
| | 25 | □ | **MSL0790-L25C** | 198.9 | 225.4 | 228.4 | 265.4 | 264 | 1.4 | 8 |
| | 30 | □ | **MSL0790-L30C** | 238.4 | 265.4 | 268.4 | 305.4 | 304 | 1.4 | 8 |
| 8.0 | 20 | □ | **MSL0800-L20C** | 161.5 | 185.5 | 188.5 | 225.5 | 224 | 1.5 | 8 |
| | 25 | □ | **MSL0800-L25C** | 201.5 | 225.5 | 228.5 | 265.5 | 264 | 1.5 | 8 |
| | 30 | □ | **MSL0800-L30C** | 241.5 | 265.5 | 268.5 | 305.5 | 304 | 1.5 | 8 |
| 8.1 | 20 | □ | **MSL0810-L20C** | 163.5 | 197.5 | 200.5 | 241.5 | 240 | 1.5 | 10 |
| | 25 | □ | **MSL0810-L25C** | 204.0 | 239.5 | 242.5 | 283.5 | 282 | 1.5 | 10 |
| | 30 | □ | **MSL0810-L30C** | 244.5 | 281.5 | 284.5 | 325.5 | 324 | 1.5 | 10 |
| 8.2 | 20 | □ | **MSL0820-L20C** | 165.5 | 197.5 | 200.5 | 241.5 | 240 | 1.5 | 10 |
| | 25 | □ | **MSL0820-L25C** | 206.5 | 239.5 | 242.5 | 283.5 | 282 | 1.5 | 10 |
| | 30 | □ | **MSL0820-L30C** | 247.5 | 281.5 | 284.5 | 325.5 | 324 | 1.5 | 10 |
| 8.3 | 20 | □ | **MSL0830-L20C** | 167.5 | 197.5 | 200.5 | 241.5 | 240 | 1.5 | 10 |
| | 25 | □ | **MSL0830-L25C** | 209.0 | 239.5 | 242.5 | 283.5 | 282 | 1.5 | 10 |
| | 30 | □ | **MSL0830-L30C** | 250.5 | 281.5 | 284.5 | 325.5 | 324 | 1.5 | 10 |
| 8.4 | 20 | □ | **MSL0840-L20C** | 169.5 | 197.5 | 200.5 | 241.5 | 240 | 1.5 | 10 |
| | 25 | □ | **MSL0840-L25C** | 211.5 | 239.5 | 242.5 | 283.5 | 282 | 1.5 | 10 |
| | 30 | □ | **MSL0840-L30C** | 253.5 | 281.5 | 284.5 | 325.5 | 324 | 1.5 | 10 |
| 8.5 | 20 | □ | **MSL0850-L20C** | 171.5 | 197.5 | 200.5 | 241.5 | 240 | 1.5 | 10 |
| | 25 | □ | **MSL0850-L25C** | 214.0 | 239.5 | 242.5 | 283.5 | 282 | 1.5 | 10 |
| | 30 | □ | **MSL0850-L30C** | 256.5 | 281.5 | 284.5 | 325.5 | 324 | 1.5 | 10 |
| 8.6 | 20 | □ | **MSL0860-L20C** | 173.6 | 208.6 | 211.6 | 252.6 | 251 | 1.6 | 10 |
| | 25 | □ | **MSL0860-L25C** | 216.6 | 253.6 | 256.6 | 297.6 | 296 | 1.6 | 10 |
| | 30 | □ | **MSL0860-L30C** | 259.6 | 297.6 | 300.6 | 341.6 | 340 | 1.6 | 10 |
| 8.7 | 20 | □ | **MSL0870-L20C** | 175.6 | 208.6 | 211.6 | 252.6 | 251 | 1.6 | 10 |
| | 25 | □ | **MSL0870-L25C** | 219.1 | 253.6 | 256.6 | 297.6 | 296 | 1.6 | 10 |
| | 30 | □ | **MSL0870-L30C** | 262.6 | 297.6 | 300.6 | 341.6 | 340 | 1.6 | 10 |
| 8.8 | 20 | □ | **MSL0880-L20C** | 177.6 | 208.6 | 211.6 | 252.6 | 251 | 1.6 | 10 |
| | 25 | □ | **MSL0880-L25C** | 221.6 | 253.6 | 256.6 | 297.6 | 296 | 1.6 | 10 |
| | 30 | □ | **MSL0880-L30C** | 265.6 | 297.6 | 300.6 | 341.6 | 340 | 1.6 | 10 |
| 8.9 | 20 | □ | **MSL0890-L20C** | 179.6 | 208.6 | 211.6 | 252.6 | 251 | 1.6 | 10 |
| | 25 | □ | **MSL0890-L25C** | 224.1 | 253.6 | 256.6 | 297.6 | 296 | 1.6 | 10 |
| | 30 | □ | **MSL0890-L30C** | 268.6 | 297.6 | 300.6 | 341.6 | 340 | 1.6 | 10 |
| 9.0 | 20 | □ | **MSL0900-L20C** | 181.6 | 208.6 | 211.6 | 252.6 | 251 | 1.6 | 10 |
| | 25 | □ | **MSL0900-L25C** | 226.6 | 253.6 | 256.6 | 297.6 | 296 | 1.6 | 10 |
| | 30 | □ | **MSL0900-L30C** | 271.6 | 297.6 | 300.6 | 341.6 | 340 | 1.6 | 10 |
| 9.1 | 20 | □ | **MSL0910-L20C** | 183.7 | 220.7 | 223.7 | 264.7 | 263 | 1.7 | 10 |
| | 25 | □ | **MSL0910-L25C** | 229.2 | 267.7 | 270.7 | 311.7 | 310 | 1.7 | 10 |
| | 30 | □ | **MSL0910-L30C** | 274.7 | 315.7 | 318.7 | 359.7 | 358 | 1.7 | 10 |
| 9.2 | 20 | □ | **MSL0920-L20C** | 185.7 | 220.7 | 223.7 | 264.7 | 263 | 1.7 | 10 |
| | 25 | □ | **MSL0920-L25C** | 231.7 | 267.7 | 270.7 | 311.7 | 310 | 1.7 | 10 |
| | 30 | □ | **MSL0920-L30C** | 277.7 | 315.7 | 318.7 | 359.7 | 358 | 1.7 | 10 |
| 9.3 | 20 | □ | **MSL0930-L20C** | 187.7 | 220.7 | 223.7 | 264.7 | 263 | 1.7 | 10 |
| | 25 | □ | **MSL0930-L25C** | 234.2 | 267.7 | 270.7 | 311.7 | 310 | 1.7 | 10 |
| | 30 | □ | **MSL0930-L30C** | 280.7 | 315.7 | 318.7 | 359.7 | 358 | 1.7 | 10 |

# PERÇAGE (CARBURE MONOBLOC)

## MSL

Foret carbure super long à simple listel

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON |
|---|---|---|---|---|---|---|---|---|---|---|
| 9.4 | 20 | □ | MSL0940-L20C | 189.7 | 220.7 | 223.7 | 264.7 | 263 | 1.7 | 10 |
| | 25 | □ | MSL0940-L25C | 236.7 | 267.7 | 270.7 | 311.7 | 310 | 1.7 | 10 |
| | 30 | □ | MSL0940-L30C | 283.7 | 315.7 | 318.7 | 359.7 | 358 | 1.7 | 10 |
| 9.5 | 20 | □ | MSL0950-L20C | 191.7 | 220.7 | 223.7 | 264.7 | 263 | 1.7 | 10 |
| | 25 | □ | MSL0950-L25C | 239.2 | 267.7 | 270.7 | 311.7 | 310 | 1.7 | 10 |
| | 30 | □ | MSL0950-L30C | 286.7 | 315.7 | 318.7 | 359.7 | 358 | 1.7 | 10 |
| 9.6 | 20 | □ | MSL0960-L20C | 193.7 | 231.7 | 234.7 | 275.7 | 274 | 1.7 | 10 |
| | 25 | □ | MSL0960-L25C | 241.7 | 281.7 | 284.7 | 325.7 | 324 | 1.7 | 10 |
| | 30 | □ | MSL0960-L30C | 289.7 | 331.7 | 334.7 | 375.7 | 374 | 1.7 | 10 |
| 9.7 | 20 | □ | MSL0970-L20C | 195.8 | 231.8 | 234.8 | 275.8 | 274 | 1.8 | 10 |
| | 25 | □ | MSL0970-L25C | 244.3 | 281.8 | 284.8 | 325.8 | 324 | 1.8 | 10 |
| | 30 | □ | MSL0970-L30C | 292.8 | 331.8 | 334.8 | 375.8 | 374 | 1.8 | 10 |
| 9.8 | 20 | □ | MSL0980-L20C | 197.8 | 231.8 | 234.8 | 275.8 | 274 | 1.8 | 10 |
| | 25 | □ | MSL0980-L25C | 246.8 | 281.8 | 284.8 | 325.8 | 324 | 1.8 | 10 |
| | 30 | □ | MSL0980-L30C | 295.8 | 331.8 | 334.8 | 375.8 | 374 | 1.8 | 10 |
| 9.9 | 20 | □ | MSL0990-L20C | 199.8 | 231.8 | 234.8 | 275.8 | 274 | 1.8 | 10 |
| | 25 | □ | MSL0990-L25C | 249.3 | 281.8 | 284.8 | 325.8 | 324 | 1.8 | 10 |
| | 30 | □ | MSL0990-L30C | 298.8 | 331.8 | 334.8 | 375.8 | 374 | 1.8 | 10 |
| 10.0 | 20 | □ | MSL1000-L20C | 201.8 | 231.8 | 234.8 | 275.8 | 274 | 1.8 | 10 |
| | 25 | □ | MSL1000-L25C | 251.8 | 281.8 | 284.8 | 325.8 | 324 | 1.8 | 10 |
| | 30 | □ | MSL1000-L30C | 301.8 | 331.8 | 334.8 | 375.8 | 374 | 1.8 | 10 |
| 10.1 | 20 | □ | MSL1010-L20C | 203.8 | 243.8 | 246.8 | 292.8 | 291 | 1.8 | 12 |
| | 25 | □ | MSL1010-L25C | 254.3 | 295.8 | 298.8 | 344.8 | 343 | 1.8 | 12 |
| 10.2 | 20 | □ | MSL1020-L20C | 205.9 | 243.9 | 246.9 | 292.9 | 291 | 1.9 | 12 |
| | 25 | □ | MSL1020-L25C | 256.9 | 295.9 | 298.9 | 344.9 | 343 | 1.9 | 12 |
| 10.3 | 20 | □ | MSL1030-L20C | 207.9 | 243.9 | 246.9 | 292.9 | 291 | 1.9 | 12 |
| | 25 | □ | MSL1030-L25C | 259.4 | 295.9 | 298.9 | 344.9 | 343 | 1.9 | 12 |
| 10.4 | 20 | □ | MSL1040-L20C | 209.9 | 243.9 | 246.9 | 292.9 | 291 | 1.9 | 12 |
| | 25 | □ | MSL1040-L25C | 261.9 | 295.9 | 298.9 | 344.9 | 343 | 1.9 | 12 |
| 10.5 | 20 | □ | MSL1050-L20C | 211.9 | 243.9 | 246.9 | 292.9 | 291 | 1.9 | 12 |
| | 25 | □ | MSL1050-L25C | 264.4 | 295.9 | 298.9 | 344.9 | 343 | 1.9 | 12 |
| 10.6 | 20 | □ | MSL1060-L20C | 213.9 | 254.9 | 257.9 | 303.9 | 302 | 1.9 | 12 |
| | 25 | □ | MSL1060-L25C | 266.9 | 309.9 | 312.9 | 358.9 | 357 | 1.9 | 12 |
| 10.7 | 20 | □ | MSL1070-L20C | 215.9 | 254.9 | 257.9 | 303.9 | 302 | 1.9 | 12 |
| | 25 | □ | MSL1070-L25C | 269.4 | 309.9 | 312.9 | 358.9 | 357 | 1.9 | 12 |
| 10.8 | 20 | □ | MSL1080-L20C | 218.0 | 255.0 | 258.0 | 304.0 | 302 | 2.0 | 12 |
| | 25 | □ | MSL1080-L25C | 272.0 | 310.0 | 313.0 | 359.0 | 357 | 2.0 | 12 |
| 10.9 | 20 | □ | MSL1090-L20C | 220.0 | 255.0 | 258.0 | 304.0 | 302 | 2.0 | 12 |
| | 25 | □ | MSL1090-L25C | 274.5 | 310.0 | 313.0 | 359.0 | 357 | 2.0 | 12 |
| 11.0 | 20 | □ | MSL1100-L20C | 222.0 | 255.0 | 258.0 | 304.0 | 302 | 2.0 | 12 |
| | 25 | □ | MSL1100-L25C | 277.0 | 310.0 | 313.0 | 359.0 | 357 | 2.0 | 12 |
| 11.1 | 20 | □ | MSL1110-L20C | 224.0 | 267.0 | 270.0 | 316.0 | 314 | 2.0 | 12 |
| | 25 | □ | MSL1110-L25C | 279.5 | 324.0 | 327.0 | 373.0 | 371 | 2.0 | 12 |
| 11.2 | 20 | □ | MSL1120-L20C | 226.0 | 267.0 | 270.0 | 316.0 | 314 | 2.0 | 12 |
| | 25 | □ | MSL1120-L25C | 282.0 | 324.0 | 327.0 | 373.0 | 371 | 2.0 | 12 |
| 11.3 | 20 | □ | MSL1130-L20C | 228.1 | 267.1 | 270.1 | 316.1 | 314 | 2.1 | 12 |
| | 25 | □ | MSL1130-L25C | 284.6 | 324.1 | 327.1 | 373.1 | 371 | 2.1 | 12 |
| 11.4 | 20 | □ | MSL1140-L20C | 230.1 | 267.1 | 270.1 | 316.1 | 314 | 2.1 | 12 |
| | 25 | □ | MSL1140-L25C | 287.1 | 324.1 | 327.1 | 373.1 | 371 | 2.1 | 12 |
| 11.5 | 20 | □ | MSL1150-L20C | 232.1 | 267.1 | 270.1 | 316.1 | 314 | 2.1 | 12 |
| | 25 | □ | MSL1150-L25C | 289.6 | 324.1 | 327.1 | 373.1 | 371 | 2.1 | 12 |
| 11.6 | 20 | □ | MSL1160-L20C | 234.1 | 278.1 | 281.1 | 327.1 | 325 | 2.1 | 12 |
| | 25 | □ | MSL1160-L25C | 292.1 | 338.1 | 341.1 | 387.1 | 385 | 2.1 | 12 |
| 11.7 | 20 | □ | MSL1170-L20C | 236.1 | 278.1 | 281.1 | 327.1 | 325 | 2.1 | 12 |
| | 25 | □ | MSL1170-L25C | 294.6 | 338.1 | 341.1 | 387.1 | 385 | 2.1 | 12 |
| 11.8 | 20 | □ | MSL1180-L20C | 238.1 | 278.1 | 281.1 | 327.1 | 325 | 2.1 | 12 |
| | 25 | □ | MSL1180-L25C | 297.1 | 338.1 | 341.1 | 387.1 | 385 | 2.1 | 12 |
| 11.9 | 20 | □ | MSL1190-L20C | 240.2 | 278.2 | 281.2 | 327.2 | 325 | 2.2 | 12 |
| | 25 | □ | MSL1190-L25C | 299.7 | 338.2 | 341.2 | 387.2 | 385 | 2.2 | 12 |
| 12.0 | 20 | □ | MSL1200-L20C | 242.2 | 278.2 | 281.2 | 327.2 | 325 | 2.2 | 12 |
| | 25 | □ | MSL1200-L25C | 302.2 | 338.2 | 341.2 | 387.2 | 385 | 2.2 | 12 |
| 12.1 | 20 | □ | MSL1210-L20C | 244.2 | 290.2 | 293.2 | 339.2 | 337 | 2.2 | 14 |
| 12.2 | 20 | □ | MSL1220-L20C | 246.2 | 290.2 | 293.2 | 339.2 | 337 | 2.2 | 14 |
| 12.3 | 20 | □ | MSL1230-L20C | 248.2 | 290.2 | 293.2 | 339.2 | 337 | 2.2 | 14 |
| 12.4 | 20 | □ | MSL1240-L20C | 250.3 | 290.3 | 293.3 | 339.3 | 337 | 2.3 | 14 |
| 12.5 | 20 | □ | MSL1250-L20C | 252.3 | 290.3 | 293.3 | 339.3 | 337 | 2.3 | 14 |
| 12.6 | 20 | □ | MSL1260-L20C | 254.3 | 301.3 | 304.3 | 350.3 | 348 | 2.3 | 14 |
| 12.7 | 20 | □ | MSL1270-L20C | 256.3 | 301.3 | 304.3 | 350.3 | 348 | 2.3 | 14 |
| 12.8 | 20 | □ | MSL1280-L20C | 258.3 | 301.3 | 304.3 | 350.3 | 348 | 2.3 | 14 |
| 12.9 | 20 | □ | MSL1290-L20C | 260.3 | 301.3 | 304.3 | 350.3 | 348 | 2.3 | 14 |
| 13.0 | 20 | □ | MSL1300-L20C | 262.4 | 301.4 | 304.4 | 350.4 | 348 | 2.4 | 14 |
| 13.1 | 20 | □ | MSL1310-L20C | 264.4 | 313.4 | 316.4 | 362.4 | 360 | 2.4 | 14 |
| 13.2 | 20 | □ | MSL1320-L20C | 266.4 | 313.4 | 316.4 | 362.4 | 360 | 2.4 | 14 |
| 13.3 | 20 | □ | MSL1330-L20C | 268.4 | 313.4 | 316.4 | 362.4 | 360 | 2.4 | 14 |
| 13.4 | 20 | □ | MSL1340-L20C | 270.4 | 313.4 | 316.4 | 362.4 | 360 | 2.4 | 14 |
| 13.5 | 20 | □ | MSL1350-L20C | 272.5 | 313.5 | 316.5 | 362.5 | 360 | 2.5 | 14 |
| 13.6 | 20 | □ | MSL1360-L20C | 274.5 | 324.5 | 327.5 | 373.5 | 371 | 2.5 | 14 |
| 13.7 | 20 | □ | MSL1370-L20C | 276.5 | 324.5 | 327.5 | 373.5 | 371 | 2.5 | 14 |
| 13.8 | 20 | □ | MSL1380-L20C | 278.5 | 324.5 | 327.5 | 373.5 | 371 | 2.5 | 14 |
| 13.9 | 20 | □ | MSL1390-L20C | 280.5 | 324.5 | 327.5 | 373.5 | 371 | 2.5 | 14 |
| 14.0 | 20 | □ | MSL1400-L20C | 282.5 | 324.5 | 327.5 | 373.5 | 371 | 2.5 | 14 |

□ : Article non stocké - Fabrication sur commande uniquement.

# MPS/MSL

## CONDITIONS DE COUPE RECOMMANDÉES

### ● FORETS MPS (3xDC, 5xDC, 8xDC, 12xDC)

| Matière | | Diamètre foret / Conditions / Dureté | ϕ3.0−ϕ6.0 | | ϕ6.0−ϕ10.0 | | ϕ10.0−ϕ14.0 | | ϕ14.0−ϕ20.0 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Vitesse de coupe (m/min) | Avance (mm/tour) | Vitesse de coupe (m/min) | Avance (mm/tour) | Vitesse de coupe (m/min) | Avance (mm/tour) | Vitesse de coupe (m/min) | Avance (mm/tour) |
| P | Acier doux | ≤180HB | 110 (50−120) | 0.20 (0.15−0.25) | 130 (80−140) | 0.25 (0.20−0.35) | 150 (90−170) | 0.30 (0.20−0.40) | 160 (100−180) | 0.35 (0.20−0.40) |
| | Acier carbone Acier allié | 180−280HB | 90 (50−100) | 0.20 (0.15−0.25) | 110 (70−120) | 0.25 (0.20−0.35) | 130 (80−140) | 0.25 (0.20−0.40) | 140 (100−150) | 0.30 (0.20−0.40) |
| | | 280−350HB | 80 (40−90) | 0.20 (0.15−0.30) | 90 (60−110) | 0.25 (0.15−0.30) | 110 (70−130) | 0.25 (0.15−0.40) | 120 (90−140) | 0.30 (0.20−0.40) |
| M | Acier inoxydable | ≤200HB | 50 (20−100) | 0.10 (0.05−0.15) | 60 (40−120) | 0.20 (0.10−0.25) | 70 (50−120) | 0.25 (0.15−0.30) | 80 (60−120) | 0.25 (0.15−0.30) |
| K | Fonte | Résistance à la traction ≤350MPa | 100 (70−120) | 0.25 (0.15−0.30) | 130 (100−140) | 0.30 (0.20−0.35) | 150 (110−160) | 0.35 (0.25−0.40) | 160 (120−170) | 0.35 (0.25−0.40) |
| | Fonte ductile | Résistance à la traction ≤450MPa | 60 (30−80) | 0.20 (0.15−0.25) | 70 (40−90) | 0.20 (0.15−0.30) | 90 (50−110) | 0.25 (0.20−0.40) | 100 (60−110) | 0.3 (0.20−0.40) |
| S | Alliage réfractaire | − | 20 (10−25) | 0.10 (0.05−0.15) | 25 (15−30) | 0.12 (0.05−0.15) | 25 (15−30) | 0.15 (0.10−0.20) | 30 (25−35) | 0.15 (0.10−0.20) |

### ● FORETS MPS (L/D=15−30), FORETS MSL (L/D=20−30)

| Matière | | Diamètre foret / Conditions / Dureté | ϕ3.0−ϕ6.0 | | ϕ6.0−ϕ10.0 | | ϕ10.0−ϕ14.0 | |
|---|---|---|---|---|---|---|---|---|
| | | | Vitesse de coupe (m/min) | Avance (mm/tour) | Vitesse de coupe (m/min) | Avance (mm/tour) | Vitesse de coupe (m/min) | Avance (mm/tour) |
| P | Acier doux | ≤180HB | 85 (35−100) | 0.20 (0.15−0.25) | 85 (45−120) | 0.25 (0.15−0.35) | 90 (55−120) | 0.30 (0.20−0.35) |
| | Acier carbone Acier allié | 180−280HB | 80 (40−95) | 0.20 (0.15−0.25) | 90 (50−120) | 0.25 (0.20−0.35) | 90 (60−130) | 0.30 (0.15−0.35) |
| | | 280−350HB | 75 (35−80) | 0.15 (0.15−0.20) | 80 (45−115) | 0.20 (0.15−0.25) | 85 (55−115) | 0.25 (0.15−0.30) |
| M | Acier inoxydable | ≤200HB | 50 (20−80) | 0.10 (0.05−0.15) | 60 (20−90) | 0.12 (0.05−0.15) | 70 (20−90) | 0.15 (0.10−0.20) |
| K | Fonte | Résistance à la traction ≤350MPa | 70 (40−85) | 0.25 (0.15−0.30) | 75 (50−90) | 0.30 (0.20−0.35) | 80 (50−95) | 0.35 (0.20−0.40) |
| | Fonte ductile | Résistance à la traction ≤450MPa | 65 (35−80) | 0.20 (0.15−0.25) | 70 (45−85) | 0.25 (0.15−0.30) | 75 (45−90) | 0.30 (0.20−0.35) |
| S | Alliage réfractaire | − | 20 (10−25) | 0.10 (0.05−0.15) | 25 (15−30) | 0.12 (0.05−0.15) | 25 (15−30) | 0.15 (0.10−0.20) |

### ● FORETS MPS (L/D=35−40)

| Matière | | Diamètre foret / Conditions / Dureté | ϕ3.0−ϕ4.0 | | ϕ5.0−ϕ6.0 | | ϕ6.0−ϕ9.0 | |
|---|---|---|---|---|---|---|---|---|
| | | | Vitesse de coupe (m/min) | Avance (mm/tour) | Vitesse de coupe (m/min) | Avance (mm/tour) | Vitesse de coupe (m/min) | Avance (mm/tour) |
| P | Acier doux | ≤180HB | 60 (50−70) | 0.18 (0.13−0.20) | 70 (55−80) | 0.20 (0.15−0.23) | 75 (60−85) | 0.25 (0.18−0.28) |
| | Acier carbone Acier allié | 180−280HB | 55 (40−65) | 0.15 (0.10−0.18) | 65 (45−75) | 0.18 (0.13−0.22) | 70 (55−80) | 0.23 (0.15−0.25) |
| | | 280−350HB | 50 (40−60) | 0.12 (0.08−0.15) | 55 (40−65) | 0.17 (0.13−0.20) | 60 (40−75) | 0.20 (0.15−0.23) |
| M | Acier inoxydable | ≤200HB | 35 (30−45) | 0.10 (0.07−0.15) | 40 (30−50) | 0.12 (0.08−0.15) | 45 (30−60) | 0.15 (0.13−0.20) |
| K | Fonte | Résistance à la traction ≤350MPa | 55 (35−70) | 0.15 (0.10−0.20) | 60 (40−65) | 0.20 (0.15−0.23) | 60 (45−70) | 0.23 (0.18−0.28) |
| | Fonte ductile | Résistance à la traction ≤450MPa | 45 (30−60) | 0.12 (0.08−0.15) | 50 (40−60) | 0.17 (0.13−0.20) | 55 (40−65) | 0.20 (0.15−0.23) |
| S | Alliage réfractaire | − | 15 (10−25) | 0.07 (0.05−0.10) | 20 (10−25) | 0.07 (0.05−0.10) | 20 (10−25) | 0.10 (0.06−0.12) |

Les conditions d'usinages peuvent varier considérablement, employer les données ci-dessus comme point de référence et ajuster les valeurs selon les conditions. Pour des longueurs supérieures à L/D=10, il est recommandé de faire un centrage.

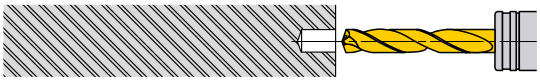
⚠ Dès maintenant, veuillez remplacer tous les forets aux références en caractères gris (MPS, MSL) par des produits équivalents de la série MPS1. La production de ces produits est progressivement réduite et prendra fin en mars 2023.

# MPS/MSL

## UTILISATION DE FORETS LONG TYPE MPS/MSL

## TROUS BORGNES

### ■ 1. Perçage du trou pilote

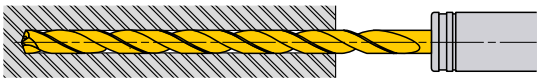


①Utilisez un foret avec une extrémité plus large (plus plate) que celle du foret super-long. Utiliser la goujure la plus courte possible.
②Veillez à percer un avant-trou très précis.
③Profondeur de perçage : environ 1DC ou plus.
(Ajustez la profondeur de l'avant-trou selon la longueur du foret super-long.)

### ■ 2. Introduction du foret long

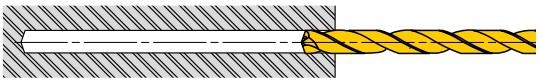
①Insérez le foret dans l'avant-trou à faible vitesse. (Vitesse de rotation 1000min$^{-1}$, avance 0.2mm－0.3mm/tour)
②Arrêtez le foret long à 0.5mm－1mm du fond de l'avant-trou.

### ■ 3. Perçage profond



①Commencez à percer avec la vitesse et l'avance recommandées, avec un cycle sans débourrage (avance continue).

### ■ 4. Retrait du foret

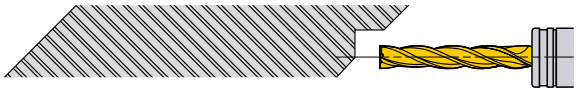


①Après le perçage, diminuez la vitesse de rotation à environ 0.5mm-1mm de l'extrémité du trou. (Vitesse de rotation d'env. 1 000 min$^{-1}$)
②Retirez le foret jusqu'à l'entrée de l'avant-trou, avec une vitesse d'avance de 3000mm/min.
③Enfin, sortez l'outil du trou avec une vitesse de coupe de 20m-30m/min et une vitesse d'avance de 0.2mm-0.3mm/tour.

## ATTAQUE OBLIQUE ET TROUS DÉBOUCHANTS

●Perçage et trous débouchants sur des faces ou des angles irréguliers

### ■ 1. Lamage

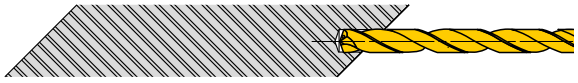


①Usinez à plat sur la face irrégulière à l'aide d'une fraise capable de lamage. Utilisez un diamètre de lamage identique au diamètre du trou profond à percer.

### ■ 2. Perçage du trou pilote

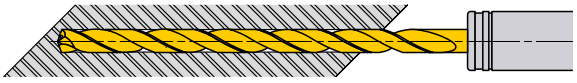
①Utilisez un foret avec une extrémité plus large (plus plate) que celle du foret super-long. Utiliser la goujure la plus courte possible.
②Veillez à percer un avant-trou très précis.
③Profondeur de perçage : environ 1DC ou plus.
(Ajustez la profondeur de l'avant-trou selon la longueur du foret super-long.)

### ■ 3. Introduction du foret long



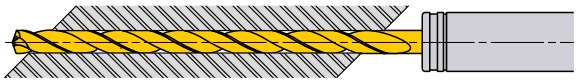
①Insérez le foret dans l'avant-trou à faible vitesse. (Vitesse de rotation 1000min$^{-1}$, avance 0.2mm－0.3mm/tour)
②Arrêtez le foret long à 0.5mm－1mm du fond de l'avant-trou.

### ■ 4. Perçage profond



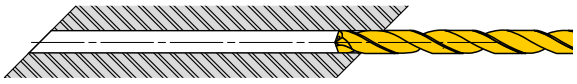
①Commencez à percer avec la vitesse et l'avance recommandées, avec un cycle sans débourrage (avance continue).

### ■ 5. Déboucher



①Lors de la traversée, l'arête de coupe peut être endommagée.
②Diminuez la vitesse d'avance au moment de l'introduction.

### ■ 6. Retrait du foret



①Enfin, sortez l'outil du trou avec une vitesse de coupe de 20m-30m/min et une vitesse d'avance de 0.2mm-0.3mm/tour.
②Retirez le foret jusqu'à l'entrée de l'avant-trou, avec une vitesse d'avance de 3000mm/min.

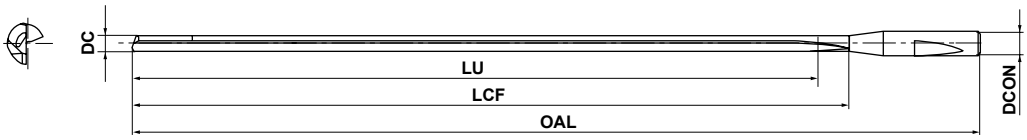
⚠ Dès maintenant, veuillez remplacer tous les forets aux références en caractères gris (MPS, MSL) par des produits équivalents de la série MPS1. La production de ces produits est progressivement réduite et prendra fin en mars 2023.

# MICRO-MGS

- Micro foret ¾ carbure super long.
- Excellente précision de circularité garantissant un perçage de grande précision.

P M K N S H

Arrosage intérieur




DC≤3 $^{0}_{-0.005}$

● Un attachement par frettage est recommandé pour les forets MGS.

| DC (mm) | Rapport (L/D) | HTi10 | Référence | Dimensions (mm) LU | LCF | OAL | DCON |
|---|---|---|---|---|---|---|---|
| 0.7 | 50 | ★ | MGS0070L040B | 35.0 | 40 | 80 | 3 |
| | 80 | ★ | MGS0070L060B | 56.0 | 60 | 100 | 3 |
| 0.8 | 45 | ★ | MGS0080L040B | 36.0 | 40 | 80 | 3 |
| | 70 | ★ | MGS0080L060B | 56.0 | 60 | 100 | 3 |
| 0.9 | 40 | ★ | MGS0090L040B | 36.0 | 40 | 80 | 3 |
| | 60 | ★ | MGS0090L060B | 54.0 | 60 | 100 | 3 |
| 1.0 | 35 | ★ | MGS0100L040B | 35.0 | 40 | 80 | 3 |
| | 55 | ★ | MGS0100L060B | 55.0 | 60 | 100 | 3 |
| | 75 | ★ | MGS0100L080B | 75.0 | 80 | 120 | 3 |
| 1.1 | 30 | ★ | MGS0110L040B | 33.0 | 40 | 80 | 3 |
| | 50 | ★ | MGS0110L060B | 55.0 | 60 | 100 | 3 |
| | 65 | ★ | MGS0110L080B | 71.5 | 80 | 120 | 3 |
| 1.2 | 30 | ★ | MGS0120L040B | 36.0 | 40 | 80 | 3 |
| | 45 | ★ | MGS0120L060B | 54.0 | 60 | 100 | 3 |
| | 60 | ★ | MGS0120L080B | 72.0 | 80 | 120 | 3 |
| 1.3 | 40 | ★ | MGS0130L060B | 52.0 | 60 | 100 | 3 |
| | 55 | ★ | MGS0130L080B | 71.5 | 80 | 120 | 3 |
| | 70 | ★ | MGS0130L100B | 91.0 | 100 | 140 | 3 |
| 1.4 | 35 | ★ | MGS0140L060B | 49.0 | 60 | 100 | 3 |
| | 50 | ★ | MGS0140L080B | 70.0 | 80 | 120 | 3 |
| | 65 | ★ | MGS0140L100B | 91.0 | 100 | 140 | 3 |
| 1.5 | 35 | ★ | MGS0150L060B | 52.5 | 60 | 100 | 3 |
| | 50 | ★ | MGS0150L080B | 75.0 | 80 | 120 | 3 |
| | 60 | ★ | MGS0150L100B | 90.0 | 100 | 140 | 3 |
| 1.6 | 30 | ★ | MGS0160L060B | 48.0 | 60 | 100 | 3 |
| | 45 | ★ | MGS0160L080B | 72.0 | 80 | 120 | 3 |
| | 55 | ★ | MGS0160L100B | 88.0 | 100 | 140 | 3 |
| 1.7 | 30 | ★ | MGS0170L060B | 51.0 | 60 | 100 | 3 |
| | 40 | ★ | MGS0170L080B | 68.0 | 80 | 120 | 3 |
| | 55 | ★ | MGS0170L100B | 93.5 | 100 | 140 | 3 |

| DC (mm) | Rapport (L/D) | HTi10 | Référence | Dimensions (mm) LU | LCF | OAL | DCON |
|---|---|---|---|---|---|---|---|
| 1.8 | 30 | ★ | MGS0180L060B | 54.0 | 60 | 100 | 3 |
| | 40 | ★ | MGS0180L080B | 72.0 | 80 | 120 | 3 |
| | 50 | ★ | MGS0180L100B | 90.0 | 100 | 140 | 3 |
| 1.9 | 25 | ★ | MGS0190L060B | 47.5 | 60 | 100 | 3 |
| | 35 | ★ | MGS0190L080B | 66.5 | 80 | 120 | 3 |
| | 45 | ★ | MGS0190L100B | 85.5 | 100 | 140 | 3 |
| 2.0 | 25 | ★ | MGS0200L060B | 50.0 | 60 | 100 | 3 |
| | 35 | ★ | MGS0200L080B | 70.0 | 80 | 120 | 3 |
| | 45 | ★ | MGS0200L100B | 90.0 | 100 | 140 | 3 |
| 2.1 | 35 | ★ | MGS0210L080B | 73.5 | 80 | 120 | 3 |
| | 40 | ★ | MGS0210L100B | 84.0 | 100 | 140 | 3 |
| 2.2 | 30 | ★ | MGS0220L080B | 66.0 | 80 | 120 | 3 |
| | 40 | ★ | MGS0220L100B | 88.0 | 100 | 140 | 3 |
| 2.3 | 30 | ★ | MGS0230L080B | 69.0 | 80 | 120 | 3 |
| | 40 | ★ | MGS0230L100B | 92.0 | 100 | 140 | 3 |
| 2.4 | 30 | ★ | MGS0240L080B | 72.0 | 80 | 120 | 3 |
| | 35 | ★ | MGS0240L100B | 84.0 | 100 | 140 | 3 |
| 2.5 | 25 | ★ | MGS0250L080B | 62.5 | 80 | 120 | 3 |
| | 35 | ★ | MGS0250L100B | 87.5 | 100 | 140 | 3 |
| 2.6 | 25 | ★ | MGS0260L080B | 65.0 | 80 | 120 | 3 |
| | 35 | ★ | MGS0260L100B | 91.0 | 100 | 140 | 3 |
| 2.7 | 25 | ★ | MGS0270L080B | 67.5 | 80 | 120 | 3 |
| | 30 | ★ | MGS0270L100B | 81.0 | 100 | 140 | 3 |
| 2.8 | 25 | ★ | MGS0280L080B | 70.0 | 80 | 120 | 3 |
| | 30 | ★ | MGS0280L100B | 84.0 | 100 | 140 | 3 |
| 2.9 | 20 | ★ | MGS0290L080B | 58.0 | 80 | 120 | 3 |
| | 30 | ★ | MGS0290L100B | 87.0 | 100 | 140 | 3 |
| 3.0 | 20 | ★ | MGS0300L080B | 60.0 | 80 | 120 | 3 |
| | 30 | ★ | MGS0300L100B | 90.0 | 100 | 140 | 3 |

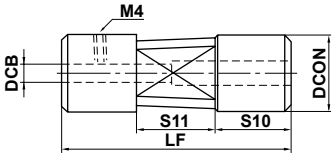
Remarque 1) Veuillez nous consulter pour plus d'informations sur les forets avec revêtement (Carbure revêtu **VP**, **GP** et **UP** ).

★ : **Article standard Japon.**

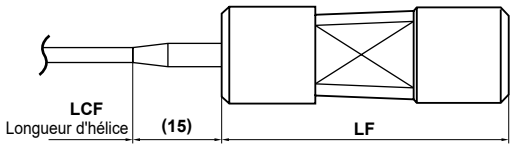
CONDITIONS DE COUPE ➢ L080
DONNÉES TECHNIQUES ➢ P001

# MICRO-MGS

## ■ DOUILLES D'ATTACHEMENT




## ■ COTES AVEC DOUILLE D'ATTACHEMENT




| Référence | Stock | Dimensions (mm) | | | | | Vis | Clé |
|---|---|---|---|---|---|---|---|---|
| | | DCON | DCB | LF | S10 | S11 | | |
| **MGD38** | ★ | 12.7 | 3.0 | 38.1 | 12.6 | 12.7 | HSS04004 | HKY20F |
| **MGD70** | ★ | 12.7 | 3.0 | 70.0 | 25.0 | 20.0 | HSS04004 | HKY20F |

## CONDITIONS DE COUPE RECOMMANDÉES

| Matière | P | | | | P | | | |
|---|---|---|---|---|---|---|---|---|
| | Acier doux (≤180HB) Ck10 | | | | Acier carbone Acier allié (180—280HB) Ck45, 42CrMo4 | | | |
| Type de liquide de coupe | Huile entière | | | | Huile entière | | | |
| Diamètre foret **DC** (mm) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Avance table (mm/min) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Avance table (mm/min) |
| **0.8** | 50 | 19800 | 0.01 (0.005—0.016) | 195 | 40 | 15900 | 0.01 (0.005—0.016) | 155 |
| **1.0** | 50 | 15900 | 0.01 (0.007—0.020) | 155 | 40 | 12700 | 0.01 (0.007—0.020) | 125 |
| **1.2** | 60 | 15900 | 0.015 (0.008—0.024) | 235 | 50 | 13200 | 0.015 (0.008—0.024) | 195 |
| **1.6** | 60 | 11900 | 0.02 (0.011—0.032) | 235 | 50 | 9900 | 0.02 (0.011—0.032) | 195 |
| **2.0** | 60 | 9500 | 0.025 (0.013—0.040) | 235 | 50 | 7900 | 0.025 (0.013—0.040) | 195 |
| **2.5** | 70 | 8900 | 0.03 (0.017—0.050) | 265 | 60 | 7600 | 0.03 (0.017—0.050) | 225 |
| **3.0** | 70 | 7400 | 0.04 (0.020—0.060) | 295 | 60 | 6300 | 0.04 (0.020—0.060) | 250 |

| Matière | P | | | | M | | | |
|---|---|---|---|---|---|---|---|---|
| | Acier carbone Acier allié (280—350HB) 36CrNiMo4 | | | | Acier inoxydable austénitique (≤200HB) X5CrNi1810, X5CrNiMo17-12-2 | | | |
| Type de liquide de coupe | Huile entière | | | | Huile entière | | | |
| Diamètre foret **DC** (mm) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Avance table (mm/min) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Avance table (mm/min) |
| **0.8** | 30 | 11900 | 0.005 (0.004—0.005) | 55 | 30 | 11900 | 0.01 (0.005—0.016) | 115 |
| **1.0** | 30 | 9500 | 0.005 (0.005—0.007) | 45 | 30 | 9500 | 0.01 (0.007—0.020) | 95 |
| **1.2** | 40 | 10600 | 0.005 (0.006—0.008) | 50 | 30 | 7900 | 0.015 (0.008—0.024) | 115 |
| **1.6** | 40 | 7900 | 0.01 (0.008—0.011) | 75 | 40 | 7900 | 0.02 (0.011—0.032) | 155 |
| **2.0** | 40 | 6300 | 0.01 (0.010—0.013) | 60 | 40 | 6300 | 0.025 (0.013—0.040) | 155 |
| **2.5** | 50 | 6300 | 0.015 (0.013—0.017) | 90 | 40 | 5000 | 0.03 (0.017—0.050) | 150 |
| **3.0** | 50 | 5300 | 0.015 (0.015—0.020) | 75 | 40 | 4200 | 0.04 (0.020—0.060) | 165 |

| Matière | K | | | | K | | | |
|---|---|---|---|---|---|---|---|---|
| | Fonte grise (≤350MPa) GG30 | | | | Fonte ductile (≤450MPa) GGG45 | | | |
| Type de liquide de coupe | Huile entière • Huile de coupe soluble dans l'eau | | | | Huile entière • Huile de coupe soluble dans l'eau | | | |
| Diamètre foret **DC** (mm) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Avance table (mm/min) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Avance table (mm/min) |
| **0.8** | 50 | 19800 | 0.01 (0.008—0.016) | 195 | 40 | 15900 | 0.005 (0.005—0.008) | 75 |
| **1.0** | 50 | 15900 | 0.015 (0.010—0.020) | 235 | 40 | 12700 | 0.005 (0.007—0.010) | 60 |
| **1.2** | 60 | 15900 | 0.015 (0.012—0.024) | 235 | 50 | 13200 | 0.01 (0.008—0.012) | 130 |
| **1.6** | 60 | 11900 | 0.02 (0.016—0.032) | 235 | 50 | 9900 | 0.01 (0.011—0.016) | 95 |
| **2.0** | 60 | 9500 | 0.03 (0.020—0.040) | 285 | 50 | 7900 | 0.015 (0.013—0.020) | 115 |
| **2.5** | 70 | 8900 | 0.035 (0.025—0.050) | 310 | 60 | 7600 | 0.02 (0.017—0.025) | 150 |
| **3.0** | 70 | 7400 | 0.045 (0.030—0.060) | 330 | 60 | 6300 | 0.025 (0.020—0.030) | 155 |

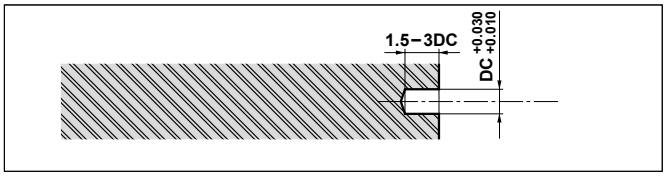
Remarque 1) Afin d'augmenter la fiabilité et l'efficacité, il est recommandé d'utiliser l'arrosage à haute pression (Pression d'arrosage recommandée 70 bar)
Remarque 2) Le filtre de liquide de coupe doit être inférieur à 5 microns.
Un filtre très fin est nécessaire pour éviter tout blocage des trous par le liquide de coupe.
Remarque 3) Un trou pilote ou un canon de guidage est nécessaire.
**★ : Article standard Japon.**

## CONDITIONS DE COUPE RECOMMANDÉES

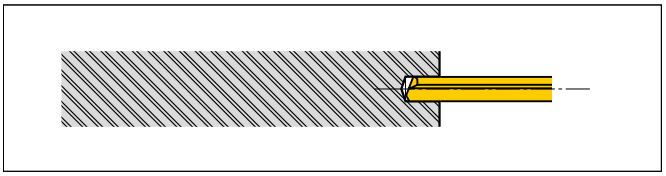
| Matière | N | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Alliage aluminium (Si<5%) | | | | Cuivre , Alliage cuivreux | | | |
| Type de liquide de coupe | Huile entière • Huile de coupe soluble dans l'eau | | | | Huile entière • Huile de coupe soluble dans l'eau | | | |
| Diamètre foret **DC** (mm) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Avance table (mm/min) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Avance table (mm/min) |
| **0.8** | 50 | 19800 | 0.01 (0.008—0.016) | 195 | 40 | 15900 | 0.01 (0.008—0.016) | 155 |
| **1.0** | 60 | 19000 | 0.015 (0.010—0.020) | 285 | 50 | 15900 | 0.015 (0.010—0.020) | 235 |
| **1.2** | 70 | 18500 | 0.015 (0.012—0.024) | 275 | 60 | 15900 | 0.015 (0.012—0.024) | 235 |
| **1.6** | 80 | 15900 | 0.02 (0.016—0.032) | 315 | 70 | 13900 | 0.02 (0.016—0.032) | 275 |
| **2.0** | 90 | 14300 | 0.03 (0.020—0.040) | 425 | 80 | 12700 | 0.03 (0.020—0.040) | 380 |
| **2.5** | 100 | 12700 | 0.035 (0.025—0.050) | 440 | 90 | 11400 | 0.035 (0.025—0.050) | 395 |
| **3.0** | 100 | 10600 | 0.045 (0.030—0.060) | 475 | 100 | 10600 | 0.045 (0.030—0.060) | 475 |

Remarque 1) Afin d'augmenter la sécurité et l'efficacité, il est recommandé d'utiliser un liquide de coupe à haute pression (pression moyenne du liquide de coupe = 70 bar)
Remarque 2) Le filtre de liquide de coupe doit être inférieur à 5 microns.
Un filtre très fin est nécessaire pour éviter tout blocage des trous par le liquide de coupe.
Remarque 3) Un trou pilote ou un canon de guidage est nécessaire.

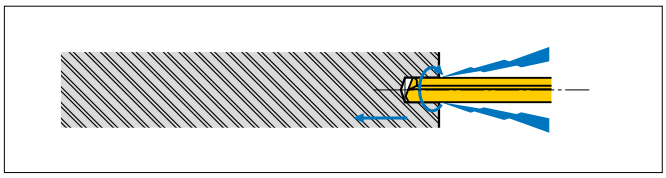
## NOTICE D'UTILISATION



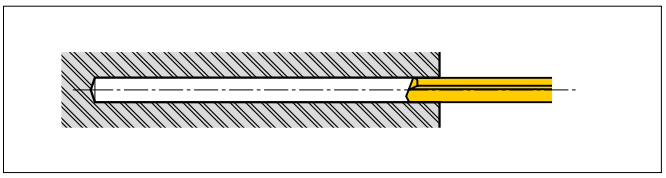

1. Perçage d'un trou pilote.
(Les forets Mitsubishi MWE ou MWS sont recommandés.)



2. Introduction dans le trou pilote sans rotation ou à une vitesse de rotation inférieure à 300 tr/min.
Arrêt du MGS à 1 à 2 mm du fond du trou pilote.



3. Faites couler le liquide de coupe, augmentez la vitesse de coupe et l'avance en vous reportant aux conditions de coupe recommandées, et commencez le perçage.



4. Revenez en "position 2" après le perçage, arrêtez le liquide de coupe et stoppez la rotation du foret.

# PERÇAGE (CARBURE MONOBLOC)

# MMS

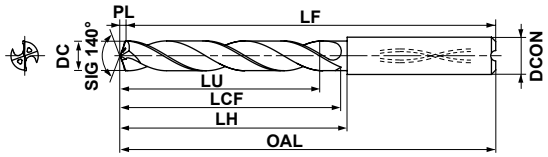
- Pour le perçage hautement précis et efficace des aciers inoxydables.
- Les trous trigones sont utilisés à partir du diamètre 4.60 mm.

P | **M** | K | N | S | H

Arrosage intérieur

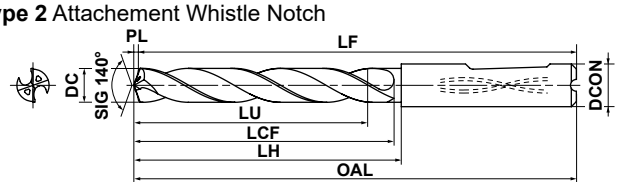
| | DC=3 | 3<DC≤6 | 6<DC≤10 | 10<DC≤18 | 18<DC≤20 |
|---|---|---|---|---|---|
| DIN (m7) | +0.012 +0.002 | +0.016 +0.004 | +0.021 +0.006 | +0.025 +0.007 | +0.029 +0.008 |
| Autres (h8) | 0 −0.014 | 0 −0.018 | 0 −0.022 | 0 −0.027 | 0 −0.033 |
| | | 0 −0.008 | 0 −0.009 | 0 −0.011 | 0 −0.013 |

**●Type 1** Attachement cylindrique



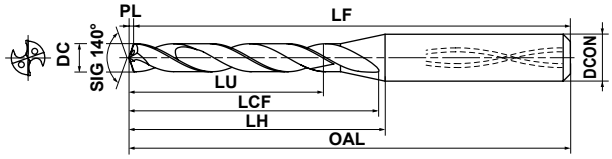

**MMS----S/L-DIN-C** (L/D 3−5)
**MMS----X3/X5DB** (L/D 3−5)

**●Type 2** Attachement Whistle Notch



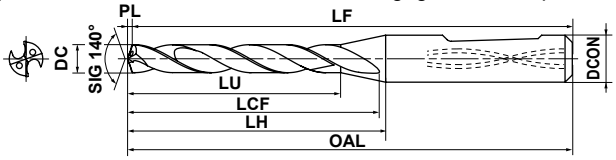

**MMS----S/L-DIN** (L/D 3−5)

**●Type 3** Attachement cylindrique avec dégagement conique




**MMS----S/L-DIN-C** (L/D 3−5)
**MMS----X3/X5DB** (L/D 3−5)

**●Type 4** Attachement Whistle Notch avec dégagement conique




**MMS----S/L-DIN** (L/D 3−5)

| DC (mm) | Rapport (L/D) | DP7020 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.0 | 3 | □ | MMS0300S-DIN | 15.0 | 19.5 | 24.5 | 61.5 | 61 | 0.5 | 6 | 4 |
| | 3 | ● | MMS0300S-DIN-C | 15.0 | 19.5 | 24.5 | 61.5 | 61 | 0.5 | 6 | 3 |
| | 5 | □ | MMS0300L-DIN | 23.0 | 27.5 | 28.5 | 65.5 | 65 | 0.5 | 6 | 4 |
| | 5 | ● | MMS0300L-DIN-C | 23.0 | 27.5 | 28.5 | 65.5 | 65 | 0.5 | 6 | 3 |
| | 3 | ★ | MMS0300X3DB | 9.5 | 21.5 | 23.5 | 70.5 | 70 | 0.5 | 6 | 3 |
| | 5 | ★ | MMS0300X5DB | 15.5 | 28.5 | 31.5 | 78.5 | 78 | 0.5 | 6 | 3 |
| 3.05 | 3 | □ | MMS0305S-DIN | 15.0 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 4 |
| | 3 | ● | MMS0305S-DIN-C | 15.0 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 3 |
| | 5 | □ | MMS0305L-DIN | 23.0 | 27.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 4 |
| | 5 | ● | MMS0305L-DIN-C | 23.0 | 27.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 3 |
| 3.1 | 3 | □ | MMS0310S-DIN | 14.9 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 4 |
| | 3 | ● | MMS0310S-DIN-C | 14.9 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 3 |
| | 5 | □ | MMS0310L-DIN | 22.9 | 27.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 4 |
| | 5 | ● | MMS0310L-DIN-C | 22.9 | 27.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 3 |
| | 3 | ★ | MMS0310X3DB | 9.9 | 21.6 | 23.6 | 70.6 | 70 | 0.6 | 6 | 3 |
| | 5 | ★ | MMS0310X5DB | 16.1 | 28.6 | 31.6 | 78.6 | 78 | 0.6 | 6 | 3 |
| 3.2 | 3 | □ | MMS0320S-DIN | 14.8 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 4 |
| | 3 | ● | MMS0320S-DIN-C | 14.8 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 3 |
| | 5 | □ | MMS0320L-DIN | 22.8 | 27.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 4 |
| | 5 | ● | MMS0320L-DIN-C | 22.8 | 27.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 3 |
| | 3 | ★ | MMS0320X3DB | 10.2 | 21.6 | 23.6 | 70.6 | 70 | 0.6 | 6 | 3 |
| | 5 | ★ | MMS0320X5DB | 16.6 | 28.6 | 31.6 | 78.6 | 78 | 0.6 | 6 | 3 |
| 3.3 | 3 | □ | MMS0330S-DIN | 14.7 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 4 |
| | 3 | ● | MMS0330S-DIN-C | 14.7 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 3 |
| | 5 | □ | MMS0330L-DIN | 22.7 | 27.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 4 |
| | 5 | ● | MMS0330L-DIN-C | 22.7 | 27.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 3 |
| | 3 | ★ | MMS0330X3DB | 10.5 | 21.6 | 23.6 | 70.6 | 70 | 0.6 | 6 | 3 |
| | 5 | ★ | MMS0330X5DB | 17.1 | 28.6 | 31.6 | 78.6 | 78 | 0.6 | 6 | 3 |
| 3.4 | 3 | □ | MMS0340S-DIN | 14.5 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 4 |
| | 3 | ● | MMS0340S-DIN-C | 14.5 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 3 |
| | 5 | □ | MMS0340L-DIN | 22.5 | 27.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 4 |
| | 5 | ● | MMS0340L-DIN-C | 22.5 | 27.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 3 |

| DC (mm) | Rapport (L/D) | DP7020 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.4 | 3 | ★ | MMS0340X3DB | 10.8 | 21.6 | 23.6 | 70.6 | 70 | 0.6 | 6 | 3 |
| | 5 | ★ | MMS0340X5DB | 17.6 | 28.6 | 31.6 | 78.6 | 78 | 0.6 | 6 | 3 |
| 3.5 | 3 | □ | MMS0350S-DIN | 14.4 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 4 |
| | 3 | ● | MMS0350S-DIN-C | 14.4 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 3 |
| | 5 | □ | MMS0350L-DIN | 22.4 | 27.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 4 |
| | 5 | ● | MMS0350L-DIN-C | 22.4 | 27.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 3 |
| | 3 | ★ | MMS0350X3DB | 11.1 | 21.6 | 23.6 | 70.6 | 70 | 0.6 | 6 | 3 |
| | 5 | ★ | MMS0350X5DB | 18.1 | 28.6 | 31.6 | 78.6 | 78 | 0.6 | 6 | 3 |
| 3.6 | 3 | □ | MMS0360S-DIN | 14.3 | 19.7 | 24.7 | 61.7 | 61 | 0.7 | 6 | 4 |
| | 3 | ● | MMS0360S-DIN-C | 14.3 | 19.7 | 24.7 | 61.7 | 61 | 0.7 | 6 | 3 |
| | 5 | □ | MMS0360L-DIN | 22.3 | 27.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 4 |
| | 5 | ● | MMS0360L-DIN-C | 22.3 | 27.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 3 |
| | 3 | ★ | MMS0360X3DB | 11.5 | 22.7 | 23.7 | 70.7 | 70 | 0.7 | 6 | 3 |
| | 5 | ★ | MMS0360X5DB | 18.7 | 30.7 | 31.7 | 78.7 | 78 | 0.7 | 6 | 3 |
| 3.7 | 3 | □ | MMS0370S-DIN | 14.1 | 19.7 | 24.7 | 61.7 | 61 | 0.7 | 6 | 4 |
| | 3 | ● | MMS0370S-DIN-C | 14.1 | 19.7 | 24.7 | 61.7 | 61 | 0.7 | 6 | 3 |
| | 5 | □ | MMS0370L-DIN | 22.1 | 27.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 4 |
| | 5 | ● | MMS0370L-DIN-C | 22.1 | 27.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 3 |
| | 3 | ★ | MMS0370X3DB | 11.8 | 22.7 | 23.7 | 70.7 | 70 | 0.7 | 6 | 3 |
| | 5 | ★ | MMS0370X5DB | 19.2 | 30.7 | 31.7 | 78.7 | 78 | 0.7 | 6 | 3 |
| 3.8 | 3 | □ | MMS0380S-DIN | 18.0 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 4 |
| | 3 | ● | MMS0380S-DIN-C | 18.0 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 3 |
| | 5 | □ | MMS0380L-DIN | 30.0 | 35.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 4 |
| | 5 | ● | MMS0380L-DIN-C | 30.0 | 35.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 3 |
| | 3 | ★ | MMS0380X3DB | 12.1 | 22.7 | 23.7 | 70.7 | 70 | 0.7 | 6 | 3 |
| | 5 | ★ | MMS0380X5DB | 19.7 | 30.7 | 31.7 | 78.7 | 78 | 0.7 | 6 | 3 |
| 3.9 | 3 | □ | MMS0390S-DIN | 17.9 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 4 |
| | 3 | ● | MMS0390S-DIN-C | 17.9 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 3 |
| | 5 | □ | MMS0390L-DIN | 29.9 | 35.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 4 |
| | 5 | ● | MMS0390L-DIN-C | 29.9 | 35.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 3 |
| | 3 | ★ | MMS0390X3DB | 12.4 | 22.7 | 23.7 | 70.7 | 70 | 0.7 | 6 | 3 |
| | 5 | ★ | MMS0390X5DB | 20.2 | 30.7 | 31.7 | 78.7 | 78 | 0.7 | 6 | 3 |

**● : Article stocké. ★ : Article standard Japon.**
**□ : Article non stocké - Fabrication sur commande uniquement.**

| DC (mm) | Rapport (L/D) | DP7020 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.0 | 3 | □ | MMS0400S-DIN | 17.7 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 4 |
| | 3 | ● | MMS0400S-DIN-C | 17.7 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 3 |
| | 5 | □ | MMS0400L-DIN | 29.7 | 35.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 4 |
| | 5 | ● | MMS0400L-DIN-C | 29.7 | 35.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 3 |
| | 3 | ★ | MMS0400X3DB | 12.7 | 22.7 | 23.7 | 70.7 | 70 | 0.7 | 6 | 3 |
| | 5 | ★ | MMS0400X5DB | 20.7 | 30.7 | 31.7 | 78.7 | 78 | 0.7 | 6 | 3 |
| 4.05 | 3 | □ | MMS0405S-DIN | 17.7 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 4 |
| | 3 | ● | MMS0405S-DIN-C | 17.7 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 3 |
| | 5 | □ | MMS0405L-DIN | 29.7 | 35.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 4 |
| | 5 | ● | MMS0405L-DIN-C | 29.7 | 35.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 3 |
| 4.1 | 3 | □ | MMS0410S-DIN | 17.6 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 4 |
| | 3 | ● | MMS0410S-DIN-C | 17.6 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 3 |
| | 5 | □ | MMS0410L-DIN | 29.6 | 35.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 4 |
| | 5 | ● | MMS0410L-DIN-C | 29.6 | 35.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 3 |
| | 3 | ★ | MMS0410X3DB | 13.0 | 24.7 | 26.7 | 73.7 | 73 | 0.7 | 6 | 3 |
| | 5 | ★ | MMS0410X5DB | 21.2 | 33.7 | 35.7 | 82.7 | 82 | 0.7 | 6 | 3 |
| 4.2 | 3 | □ | MMS0420S-DIN | 17.5 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 4 |
| | 3 | ● | MMS0420S-DIN-C | 17.5 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 3 |
| | 5 | □ | MMS0420L-DIN | 29.5 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 4 |
| | 5 | ● | MMS0420L-DIN-C | 29.5 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 3 |
| | 3 | ★ | MMS0420X3DB | 13.4 | 24.8 | 26.8 | 73.8 | 73 | 0.8 | 6 | 3 |
| | 5 | ★ | MMS0420X5DB | 21.8 | 33.8 | 35.8 | 82.8 | 82 | 0.8 | 6 | 3 |
| 4.3 | 3 | □ | MMS0430S-DIN | 17.3 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 4 |
| | 3 | ● | MMS0430S-DIN-C | 17.3 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 3 |
| | 5 | □ | MMS0430L-DIN | 29.3 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 4 |
| | 5 | ● | MMS0430L-DIN-C | 29.3 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 3 |
| | 3 | ★ | MMS0430X3DB | 13.7 | 24.8 | 26.8 | 73.8 | 73 | 0.8 | 6 | 3 |
| | 5 | ★ | MMS0430X5DB | 22.3 | 33.8 | 35.8 | 82.8 | 82 | 0.8 | 6 | 3 |
| 4.4 | 3 | □ | MMS0440S-DIN | 17.2 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 4 |
| | 3 | □ | MMS0440S-DIN-C | 17.2 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 3 |
| | 5 | □ | MMS0440L-DIN | 29.2 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 4 |
| | 5 | □ | MMS0440L-DIN-C | 29.2 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 3 |
| | 3 | ★ | MMS0440X3DB | 14.0 | 24.8 | 26.8 | 73.8 | 73 | 0.8 | 6 | 3 |
| | 5 | ★ | MMS0440X5DB | 22.8 | 33.8 | 35.8 | 82.8 | 82 | 0.8 | 6 | 3 |
| 4.5 | 3 | □ | MMS0450S-DIN | 17.1 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 4 |
| | 3 | ● | MMS0450S-DIN-C | 17.1 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 3 |
| | 5 | □ | MMS0450L-DIN | 29.1 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 4 |
| | 5 | ● | MMS0450L-DIN-C | 29.1 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 3 |
| | 3 | ★ | MMS0450X3DB | 14.3 | 24.8 | 26.8 | 73.8 | 73 | 0.8 | 6 | 3 |
| | 5 | ★ | MMS0450X5DB | 23.3 | 33.8 | 35.8 | 82.8 | 82 | 0.8 | 6 | 3 |
| 4.6 | 3 | □ | MMS0460S-DIN | 16.9 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 2 |
| | 3 | ● | MMS0460S-DIN-C | 16.9 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 1 |
| | 5 | □ | MMS0460L-DIN | 28.9 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 2 |
| | 5 | ● | MMS0460L-DIN-C | 28.9 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 1 |
| | 3 | ★ | MMS0460X3DB | 14.6 | 25.8 | 28.8 | 75.8 | 75 | 0.8 | 6 | 1 |
| | 5 | ★ | MMS0460X5DB | 23.8 | 35.8 | 38.8 | 85.8 | 85 | 0.8 | 6 | 1 |
| 4.65 | 3 | □ | MMS0465S-DIN | 16.9 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 2 |
| | 3 | ● | MMS0465S-DIN-C | 16.9 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 1 |
| | 5 | □ | MMS0465L-DIN | 28.9 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 2 |
| | 5 | ● | MMS0465L-DIN-C | 28.9 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 1 |

| DC (mm) | Rapport (L/D) | DP7020 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.7 | 3 | □ | MMS0470S-DIN | 16.8 | 23.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 2 |
| | 3 | □ | MMS0470S-DIN-C | 16.8 | 23.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 1 |
| | 5 | □ | MMS0470L-DIN | 28.8 | 35.9 | 36.9 | 73.9 | 73 | 0.9 | 6 | 2 |
| | 5 | □ | MMS0470L-DIN-C | 28.8 | 35.9 | 36.9 | 73.9 | 73 | 0.9 | 6 | 1 |
| | 3 | ★ | MMS0470X3DB | 15.0 | 25.9 | 28.9 | 75.9 | 75 | 0.9 | 6 | 1 |
| | 5 | ★ | MMS0470X5DB | 24.4 | 35.9 | 38.9 | 85.9 | 85 | 0.9 | 6 | 1 |
| 4.8 | 3 | □ | MMS0480S-DIN | 20.7 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 2 |
| | 3 | ● | MMS0480S-DIN-C | 20.7 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 1 |
| | 5 | □ | MMS0480L-DIN | 36.7 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 2 |
| | 5 | ● | MMS0480L-DIN-C | 36.7 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 1 |
| | 3 | ★ | MMS0480X3DB | 15.3 | 25.9 | 28.9 | 75.9 | 75 | 0.9 | 6 | 1 |
| | 5 | ★ | MMS0480X5DB | 24.9 | 35.9 | 38.9 | 85.9 | 85 | 0.9 | 6 | 1 |
| 4.9 | 3 | □ | MMS0490S-DIN | 20.5 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 2 |
| | 3 | □ | MMS0490S-DIN-C | 20.5 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 1 |
| | 5 | □ | MMS0490L-DIN | 36.5 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 2 |
| | 5 | □ | MMS0490L-DIN-C | 36.5 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 1 |
| | 3 | ★ | MMS0490X3DB | 15.6 | 25.9 | 28.9 | 75.9 | 75 | 0.9 | 6 | 1 |
| | 5 | ★ | MMS0490X5DB | 25.4 | 35.9 | 38.9 | 85.9 | 85 | 0.9 | 6 | 1 |
| 5.0 | 3 | □ | MMS0500S-DIN | 20.4 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 2 |
| | 3 | ● | MMS0500S-DIN-C | 20.4 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 1 |
| | 5 | □ | MMS0500L-DIN | 36.4 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 2 |
| | 5 | ● | MMS0500L-DIN-C | 36.4 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 1 |
| | 3 | ★ | MMS0500X3DB | 15.9 | 25.9 | 28.9 | 75.9 | 75 | 0.9 | 6 | 1 |
| | 5 | ★ | MMS0500X5DB | 25.9 | 35.9 | 38.9 | 85.9 | 85 | 0.9 | 6 | 1 |
| 5.05 | 3 | □ | MMS0505S-DIN | 20.3 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 2 |
| | 3 | ● | MMS0505S-DIN-C | 20.3 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 1 |
| | 5 | □ | MMS0505L-DIN | 36.3 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 2 |
| | 5 | ● | MMS0505L-DIN-C | 36.3 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 1 |
| 5.1 | 3 | □ | MMS0510S-DIN | 20.3 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 2 |
| | 3 | ● | MMS0510S-DIN-C | 20.3 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 1 |
| | 5 | □ | MMS0510L-DIN | 36.3 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 2 |
| | 5 | ● | MMS0510L-DIN-C | 36.3 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 1 |
| | 3 | ★ | MMS0510X3DB | 16.2 | 28.9 | 30.9 | 81.9 | 81 | 0.9 | 6 | 1 |
| | 5 | ★ | MMS0510X5DB | 26.4 | 39.9 | 42.9 | 89.9 | 89 | 0.9 | 6 | 1 |
| 5.2 | 3 | □ | MMS0520S-DIN | 20.1 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 2 |
| | 3 | ● | MMS0520S-DIN-C | 20.1 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 1 |
| | 5 | □ | MMS0520L-DIN | 36.1 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 2 |
| | 5 | ● | MMS0520L-DIN-C | 36.1 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 1 |
| | 3 | ★ | MMS0520X3DB | 16.5 | 28.9 | 30.9 | 81.9 | 81 | 0.9 | 6 | 1 |
| | 5 | ★ | MMS0520X5DB | 26.9 | 39.9 | 42.9 | 89.9 | 89 | 0.9 | 6 | 1 |
| 5.3 | 3 | □ | MMS0530S-DIN | 20.0 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 2 |
| | 3 | □ | MMS0530S-DIN-C | 20.0 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 1 |
| | 5 | □ | MMS0530L-DIN | 36.0 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 2 |
| | 5 | □ | MMS0530L-DIN-C | 36.0 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 1 |
| | 3 | ★ | MMS0530X3DB | 16.9 | 29.0 | 31.0 | 82.0 | 81 | 1.0 | 6 | 1 |
| | 5 | ★ | MMS0530X5DB | 27.5 | 40.0 | 43.0 | 90.0 | 89 | 1.0 | 6 | 1 |
| 5.4 | 3 | □ | MMS0540S-DIN | 19.9 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 2 |
| | 3 | □ | MMS0540S-DIN-C | 19.9 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 1 |
| | 5 | □ | MMS0540L-DIN | 35.9 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 2 |
| | 5 | □ | MMS0540L-DIN-C | 35.9 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 1 |
| | 3 | ★ | MMS0540X3DB | 17.2 | 29.0 | 31.0 | 82.0 | 81 | 1.0 | 6 | 1 |
| | 5 | ★ | MMS0540X5DB | 28.0 | 40.0 | 43.0 | 90.0 | 89 | 1.0 | 6 | 1 |

CONDITIONS DE COUPE ➤ M094

MÉTHODE D'UTILISATION ➤ M093

DONNÉES TECHNIQUES ➤ P001

# MMS

| DC (mm) | Rapport (L/D) | DP7020 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.5 | 3 | □ | MMS0550S-DIN | 19.8 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 2 |
| | 3 | ● | MMS0550S-DIN-C | 19.8 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 1 |
| | 5 | □ | MMS0550L-DIN | 35.8 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 2 |
| | 5 | ● | MMS0550L-DIN-C | 35.8 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 1 |
| | 3 | ★ | MMS0550X3DB | 17.5 | 29.0 | 31.0 | 82.0 | 81 | 1.0 | 6 | 1 |
| | 5 | ★ | MMS0550X5DB | 28.5 | 40.0 | 43.0 | 90.0 | 89 | 1.0 | 6 | 1 |
| 5.55 | 3 | □ | MMS0555S-DIN | 19.7 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 2 |
| | 3 | ● | MMS0555S-DIN-C | 19.7 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 1 |
| | 5 | ● | MMS0555L-DIN-C | 35.7 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 1 |
| 5.6 | 3 | □ | MMS0560S-DIN | 19.6 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 2 |
| | 3 | ● | MMS0560S-DIN-C | 19.6 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 1 |
| | 5 | □ | MMS0560L-DIN | 35.6 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 2 |
| | 5 | ● | MMS0560L-DIN-C | 35.6 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 1 |
| | 3 | ★ | MMS0560X3DB | 17.8 | 31.0 | 31.0 | 82.0 | 81 | 1.0 | 6 | 1 |
| | 5 | ★ | MMS0560X5DB | 29.0 | 43.0 | 43.0 | 90.0 | 89 | 1.0 | 6 | 1 |
| 5.7 | 3 | □ | MMS0570S-DIN | 19.5 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 2 |
| | 3 | ● | MMS0570S-DIN-C | 19.5 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 1 |
| | 5 | □ | MMS0570L-DIN | 35.5 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 2 |
| | 5 | ● | MMS0570L-DIN-C | 35.5 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 1 |
| | 3 | ★ | MMS0570X3DB | 18.1 | 31.0 | 31.0 | 82.0 | 81 | 1.0 | 6 | 1 |
| | 5 | ★ | MMS0570X5DB | 29.5 | 43.0 | 43.0 | 90.0 | 89 | 1.0 | 6 | 1 |
| 5.8 | 3 | □ | MMS0580S-DIN | 19.4 | 28.1 | 29.1 | 66.1 | 65 | 1.1 | 6 | 2 |
| | 3 | ● | MMS0580S-DIN-C | 19.4 | 28.1 | 29.1 | 66.1 | 65 | 1.1 | 6 | 1 |
| | 5 | □ | MMS0580L-DIN | 35.4 | 44.1 | 45.1 | 82.1 | 81 | 1.1 | 6 | 2 |
| | 5 | ● | MMS0580L-DIN-C | 35.4 | 44.1 | 45.1 | 82.1 | 81 | 1.1 | 6 | 1 |
| | 3 | ★ | MMS0580X3DB | 18.5 | 31.1 | 31.1 | 82.1 | 81 | 1.1 | 6 | 1 |
| | 5 | ★ | MMS0580X5DB | 30.1 | 43.1 | 43.1 | 90.1 | 89 | 1.1 | 6 | 1 |
| 5.9 | 3 | □ | MMS0590S-DIN | 19.2 | 28.1 | 29.1 | 66.1 | 65 | 1.1 | 6 | 2 |
| | 3 | □ | MMS0590S-DIN-C | 19.2 | 28.1 | 29.1 | 66.1 | 65 | 1.1 | 6 | 1 |
| | 5 | □ | MMS0590L-DIN | 35.2 | 44.1 | 45.1 | 82.1 | 81 | 1.1 | 6 | 2 |
| | 5 | □ | MMS0590L-DIN-C | 35.2 | 44.1 | 45.1 | 82.1 | 81 | 1.1 | 6 | 1 |
| | 3 | ★ | MMS0590X3DB | 18.8 | 31.1 | 31.1 | 82.1 | 81 | 1.1 | 6 | 1 |
| | 5 | ★ | MMS0590X5DB | 30.6 | 43.1 | 43.1 | 90.1 | 89 | 1.1 | 6 | 1 |
| 6.0 | 3 | □ | MMS0600S-DIN | 19.1 | 28.1 | 29.1 | 66.1 | 65 | 1.1 | 6 | 2 |
| | 3 | ● | MMS0600S-DIN-C | 19.1 | 28.1 | 29.1 | 66.1 | 65 | 1.1 | 6 | 1 |
| | 5 | □ | MMS0600L-DIN | 35.1 | 44.1 | 45.1 | 82.1 | 81 | 1.1 | 6 | 2 |
| | 5 | ● | MMS0600L-DIN-C | 35.1 | 44.1 | 45.1 | 82.1 | 81 | 1.1 | 6 | 1 |
| | 3 | ★ | MMS0600X3DB | 19.1 | 31.1 | 31.1 | 82.1 | 81 | 1.1 | 6 | 1 |
| | 5 | ★ | MMS0600X5DB | 31.1 | 43.1 | 43.1 | 90.1 | 89 | 1.1 | 6 | 1 |
| 6.05 | 3 | □ | MMS0605S-DIN | 25.0 | 34.1 | 42.1 | 79.1 | 78 | 1.1 | 8 | 2 |
| | 3 | ● | MMS0605S-DIN-C | 25.0 | 34.1 | 42.1 | 79.1 | 78 | 1.1 | 8 | 1 |
| | 5 | □ | MMS0605L-DIN | 44.0 | 53.1 | 54.1 | 91.1 | 90 | 1.1 | 8 | 2 |
| | 5 | ● | MMS0605L-DIN-C | 44.0 | 53.1 | 54.1 | 91.1 | 90 | 1.1 | 8 | 1 |
| 6.1 | 3 | □ | MMS0610S-DIN | 25.0 | 34.1 | 42.1 | 79.1 | 78 | 1.1 | 8 | 2 |
| | 3 | ● | MMS0610S-DIN-C | 25.0 | 34.1 | 42.1 | 79.1 | 78 | 1.1 | 8 | 1 |
| | 5 | □ | MMS0610L-DIN | 44.0 | 53.1 | 54.1 | 91.1 | 90 | 1.1 | 8 | 2 |
| | 5 | ● | MMS0610L-DIN-C | 44.0 | 53.1 | 54.1 | 91.1 | 90 | 1.1 | 8 | 1 |
| | 3 | ★ | MMS0610X3DB | 19.4 | 34.1 | 36.1 | 87.1 | 86 | 1.1 | 8 | 1 |
| | 5 | ★ | MMS0610X5DB | 31.6 | 47.1 | 49.1 | 96.1 | 95 | 1.1 | 8 | 1 |

| DC (mm) | Rapport (L/D) | DP7020 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.2 | 3 | □ | MMS0620S-DIN | 24.8 | 34.1 | 42.1 | 79.1 | 78 | 1.1 | 8 | 2 |
| | 3 | ● | MMS0620S-DIN-C | 24.8 | 34.1 | 42.1 | 79.1 | 78 | 1.1 | 8 | 1 |
| | 5 | □ | MMS0620L-DIN | 43.8 | 53.1 | 54.1 | 91.1 | 90 | 1.1 | 8 | 2 |
| | 5 | ● | MMS0620L-DIN-C | 43.8 | 53.1 | 54.1 | 91.1 | 90 | 1.1 | 8 | 1 |
| | 3 | ★ | MMS0620X3DB | 19.7 | 34.1 | 36.1 | 87.1 | 86 | 1.1 | 8 | 1 |
| | 5 | ★ | MMS0620X5DB | 32.1 | 47.1 | 49.1 | 96.1 | 95 | 1.1 | 8 | 1 |
| 6.3 | 3 | □ | MMS0630S-DIN | 24.7 | 34.1 | 42.1 | 79.1 | 78 | 1.1 | 8 | 2 |
| | 3 | □ | MMS0630S-DIN-C | 24.7 | 34.1 | 42.1 | 79.1 | 78 | 1.1 | 8 | 1 |
| | 5 | □ | MMS0630L-DIN | 43.7 | 53.1 | 54.1 | 91.1 | 90 | 1.1 | 8 | 2 |
| | 5 | □ | MMS0630L-DIN-C | 43.7 | 53.1 | 54.1 | 91.1 | 90 | 1.1 | 8 | 1 |
| | 3 | ★ | MMS0630X3DB | 20.0 | 34.1 | 36.1 | 87.1 | 86 | 1.1 | 8 | 1 |
| | 5 | ★ | MMS0630X5DB | 32.6 | 47.1 | 49.1 | 96.1 | 95 | 1.1 | 8 | 1 |
| 6.4 | 3 | □ | MMS0640S-DIN | 24.6 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 2 |
| | 3 | □ | MMS0640S-DIN-C | 24.6 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 1 |
| | 5 | □ | MMS0640L-DIN | 43.6 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 2 |
| | 5 | □ | MMS0640L-DIN-C | 43.6 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 1 |
| | 3 | ★ | MMS0640X3DB | 20.4 | 34.2 | 36.2 | 87.2 | 86 | 1.2 | 8 | 1 |
| | 5 | ★ | MMS0640X5DB | 33.2 | 47.2 | 49.2 | 96.2 | 95 | 1.2 | 8 | 1 |
| 6.5 | 3 | □ | MMS0650S-DIN | 24.4 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 2 |
| | 3 | ● | MMS0650S-DIN-C | 24.4 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 1 |
| | 5 | □ | MMS0650L-DIN | 43.4 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 2 |
| | 5 | ● | MMS0650L-DIN-C | 43.4 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 1 |
| | 3 | ★ | MMS0650X3DB | 20.7 | 34.2 | 36.2 | 87.2 | 86 | 1.2 | 8 | 1 |
| | 5 | ★ | MMS0650X5DB | 33.7 | 47.2 | 49.2 | 96.2 | 95 | 1.2 | 8 | 1 |
| 6.6 | 3 | □ | MMS0660S-DIN | 24.3 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 2 |
| | 3 | ● | MMS0660S-DIN-C | 24.3 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 1 |
| | 5 | □ | MMS0660L-DIN | 43.3 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 2 |
| | 5 | ● | MMS0660L-DIN-C | 43.3 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 1 |
| | 3 | ★ | MMS0660X3DB | 21.0 | 36.2 | 38.2 | 91.2 | 90 | 1.2 | 8 | 1 |
| | 5 | ★ | MMS0660X5DB | 34.2 | 50.2 | 52.2 | 99.2 | 98 | 1.2 | 8 | 1 |
| 6.7 | 3 | □ | MMS0670S-DIN | 24.2 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 2 |
| | 3 | □ | MMS0670S-DIN-C | 24.2 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 1 |
| | 5 | □ | MMS0670L-DIN | 43.2 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 2 |
| | 5 | □ | MMS0670L-DIN-C | 43.2 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 1 |
| | 3 | ★ | MMS0670X3DB | 21.3 | 36.2 | 38.2 | 91.2 | 90 | 1.2 | 8 | 1 |
| | 5 | ★ | MMS0670X5DB | 34.7 | 50.2 | 52.2 | 99.2 | 98 | 1.2 | 8 | 1 |
| 6.8 | 3 | □ | MMS0680S-DIN | 24.0 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 2 |
| | 3 | ● | MMS0680S-DIN-C | 24.0 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 1 |
| | 5 | □ | MMS0680L-DIN | 43.0 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 2 |
| | 5 | ● | MMS0680L-DIN-C | 43.0 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 1 |
| | 3 | ★ | MMS0680X3DB | 21.6 | 36.2 | 38.2 | 91.2 | 90 | 1.2 | 8 | 1 |
| | 5 | ★ | MMS0680X5DB | 35.2 | 50.2 | 52.2 | 99.2 | 98 | 1.2 | 8 | 1 |
| 6.9 | 3 | □ | MMS0690S-DIN | 23.9 | 34.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 2 |
| | 3 | ● | MMS0690S-DIN-C | 23.9 | 34.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 1 |
| | 5 | □ | MMS0690L-DIN | 42.9 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 2 |
| | 5 | ● | MMS0690L-DIN-C | 42.9 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 1 |
| | 3 | ★ | MMS0690X3DB | 22.0 | 36.3 | 38.3 | 91.3 | 90 | 1.3 | 8 | 1 |
| | 5 | ★ | MMS0690X5DB | 35.8 | 50.3 | 52.3 | 99.3 | 98 | 1.3 | 8 | 1 |

● : Article stocké. ★ : Article standard Japon.

□ : Article non stocké - Fabrication sur commande uniquement.

| DC (mm) | Rapport (L/D) | DP7020 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.0 | 3 | □ | MMS0700S-DIN | 23.8 | 34.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 2 |
| | 3 | ● | MMS0700S-DIN-C | 23.8 | 34.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 1 |
| | 5 | □ | MMS0700L-DIN | 42.8 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 2 |
| | 5 | ● | MMS0700L-DIN-C | 42.8 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 1 |
| | 3 | ★ | MMS0700X3DB | 22.3 | 36.3 | 38.3 | 91.3 | 90 | 1.3 | 8 | 1 |
| | 5 | ★ | MMS0700X5DB | 36.3 | 50.3 | 52.3 | 99.3 | 98 | 1.3 | 8 | 1 |
| 7.1 | 3 | □ | MMS0710S-DIN | 30.6 | 41.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 2 |
| | 3 | □ | MMS0710S-DIN-C | 30.6 | 41.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 1 |
| | 5 | □ | MMS0710L-DIN | 42.6 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 2 |
| | 5 | □ | MMS0710L-DIN-C | 42.6 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 1 |
| | 3 | ★ | MMS0710X3DB | 22.6 | 39.3 | 40.3 | 91.3 | 90 | 1.3 | 8 | 1 |
| | 5 | ★ | MMS0710X5DB | 36.8 | 54.3 | 57.3 | 104.3 | 103 | 1.3 | 8 | 1 |
| 7.2 | 3 | □ | MMS0720S-DIN | 30.5 | 41.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 2 |
| | 3 | □ | MMS0720S-DIN-C | 30.5 | 41.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 1 |
| | 5 | □ | MMS0720L-DIN | 42.5 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 2 |
| | 5 | □ | MMS0720L-DIN-C | 42.5 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 1 |
| | 3 | ★ | MMS0720X3DB | 22.9 | 39.3 | 40.3 | 91.3 | 90 | 1.3 | 8 | 1 |
| | 5 | ★ | MMS0720X5DB | 37.3 | 54.3 | 57.3 | 104.3 | 103 | 1.3 | 8 | 1 |
| 7.3 | 3 | □ | MMS0730S-DIN | 30.4 | 41.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 2 |
| | 3 | ● | MMS0730S-DIN-C | 30.4 | 41.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 1 |
| | 5 | □ | MMS0730L-DIN | 42.4 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 2 |
| | 5 | ● | MMS0730L-DIN-C | 42.4 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 1 |
| | 3 | ★ | MMS0730X3DB | 23.2 | 39.3 | 40.3 | 91.3 | 90 | 1.3 | 8 | 1 |
| | 5 | ★ | MMS0730X5DB | 37.8 | 54.3 | 57.3 | 104.3 | 103 | 1.3 | 8 | 1 |
| 7.4 | 3 | □ | MMS0740S-DIN | 30.2 | 41.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 2 |
| | 3 | ● | MMS0740S-DIN-C | 30.2 | 41.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 1 |
| | 5 | □ | MMS0740L-DIN | 42.2 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 2 |
| | 5 | ● | MMS0740L-DIN-C | 42.2 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 1 |
| | 3 | ★ | MMS0740X3DB | 23.5 | 39.3 | 40.3 | 91.3 | 90 | 1.3 | 8 | 1 |
| | 5 | ★ | MMS0740X5DB | 38.3 | 54.3 | 57.3 | 104.3 | 103 | 1.3 | 8 | 1 |
| 7.5 | 3 | □ | MMS0750S-DIN | 30.1 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 2 |
| | 3 | ● | MMS0750S-DIN-C | 30.1 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 1 |
| | 5 | □ | MMS0750L-DIN | 42.1 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 2 |
| | 5 | ● | MMS0750L-DIN-C | 42.1 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 1 |
| | 3 | ★ | MMS0750X3DB | 23.9 | 39.4 | 40.4 | 91.4 | 90 | 1.4 | 8 | 1 |
| | 5 | ★ | MMS0750X5DB | 38.9 | 54.4 | 57.4 | 104.4 | 103 | 1.4 | 8 | 1 |
| 7.6 | 3 | □ | MMS0760S-DIN | 30.0 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 2 |
| | 3 | □ | MMS0760S-DIN-C | 30.0 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 1 |
| | 5 | □ | MMS0760L-DIN | 42.0 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 2 |
| | 5 | □ | MMS0760L-DIN-C | 42.0 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 1 |
| | 3 | ★ | MMS0760X3DB | 24.2 | 41.4 | 41.4 | 91.4 | 90 | 1.4 | 8 | 1 |
| | 5 | ★ | MMS0760X5DB | 39.4 | 57.4 | 57.4 | 104.4 | 103 | 1.4 | 8 | 1 |
| 7.7 | 3 | □ | MMS0770S-DIN | 29.9 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 2 |
| | 3 | □ | MMS0770S-DIN-C | 29.9 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 1 |
| | 5 | □ | MMS0770L-DIN | 41.9 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 2 |
| | 5 | □ | MMS0770L-DIN-C | 41.9 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 1 |
| | 3 | ★ | MMS0770X3DB | 24.5 | 41.4 | 41.4 | 91.4 | 90 | 1.4 | 8 | 1 |
| | 5 | ★ | MMS0770X5DB | 39.9 | 57.4 | 57.4 | 104.4 | 103 | 1.4 | 8 | 1 |
| 7.8 | 3 | □ | MMS0780S-DIN | 29.7 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 2 |
| | 3 | ● | MMS0780S-DIN-C | 29.7 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 1 |
| | 5 | □ | MMS0780L-DIN | 41.7 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 2 |
| | 5 | ● | MMS0780L-DIN-C | 41.7 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 1 |
| | 3 | ★ | MMS0780X3DB | 24.8 | 41.4 | 41.4 | 91.4 | 90 | 1.4 | 8 | 1 |
| | 5 | ★ | MMS0780X5DB | 40.4 | 57.4 | 57.4 | 104.4 | 103 | 1.4 | 8 | 1 |
| 7.9 | 3 | □ | MMS0790S-DIN | 29.6 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 2 |
| | 3 | □ | MMS0790S-DIN-C | 29.6 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 1 |
| | 5 | □ | MMS0790L-DIN | 41.6 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 2 |
| | 5 | □ | MMS0790L-DIN-C | 41.6 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 1 |
| | 3 | ★ | MMS0790X3DB | 25.1 | 41.4 | 41.4 | 91.4 | 90 | 1.4 | 8 | 1 |
| | 5 | ★ | MMS0790X5DB | 40.9 | 57.4 | 57.4 | 104.4 | 103 | 1.4 | 8 | 1 |
| 8.0 | 3 | □ | MMS0800S-DIN | 29.5 | 41.5 | 42.5 | 79.5 | 78 | 1.5 | 8 | 2 |
| | 3 | ● | MMS0800S-DIN-C | 29.5 | 41.5 | 42.5 | 79.5 | 78 | 1.5 | 8 | 1 |
| | 5 | □ | MMS0800L-DIN | 41.5 | 53.5 | 54.5 | 91.5 | 90 | 1.5 | 8 | 2 |
| | 5 | ● | MMS0800L-DIN-C | 41.5 | 53.5 | 54.5 | 91.5 | 90 | 1.5 | 8 | 1 |
| | 3 | ★ | MMS0800X3DB | 25.5 | 41.5 | 41.5 | 91.5 | 90 | 1.5 | 8 | 1 |
| | 5 | ★ | MMS0800X5DB | 41.5 | 57.5 | 57.5 | 104.5 | 103 | 1.5 | 8 | 1 |
| 8.05 | 3 | □ | MMS0805S-DIN | 34.4 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 2 |
| | 3 | ● | MMS0805S-DIN-C | 34.4 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 1 |
| | 5 | □ | MMS0805L-DIN | 48.4 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 2 |
| | 5 | ● | MMS0805L-DIN-C | 48.4 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 1 |
| 8.1 | 3 | □ | MMS0810S-DIN | 34.3 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 2 |
| | 3 | □ | MMS0810S-DIN-C | 34.3 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 1 |
| | 5 | □ | MMS0810L-DIN | 48.3 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 2 |
| | 5 | □ | MMS0810L-DIN-C | 48.3 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 1 |
| | 3 | ★ | MMS0810X3DB | 25.8 | 44.5 | 46.5 | 97.5 | 96 | 1.5 | 10 | 1 |
| | 5 | ★ | MMS0810X5DB | 42.0 | 61.5 | 63.5 | 114.5 | 113 | 1.5 | 10 | 1 |
| 8.2 | 3 | □ | MMS0820S-DIN | 34.2 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 2 |
| | 3 | □ | MMS0820S-DIN-C | 34.2 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 1 |
| | 5 | □ | MMS0820L-DIN | 48.2 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 2 |
| | 5 | □ | MMS0820L-DIN-C | 48.2 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 1 |
| | 3 | ★ | MMS0820X3DB | 26.1 | 44.5 | 46.5 | 97.5 | 96 | 1.5 | 10 | 1 |
| | 5 | ★ | MMS0820X5DB | 42.5 | 61.5 | 63.5 | 114.5 | 113 | 1.5 | 10 | 1 |
| 8.3 | 3 | □ | MMS0830S-DIN | 34.1 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 2 |
| | 3 | ● | MMS0830S-DIN-C | 34.1 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 1 |
| | 5 | □ | MMS0830L-DIN | 48.1 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 2 |
| | 5 | ● | MMS0830L-DIN-C | 48.1 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 1 |
| | 3 | ★ | MMS0830X3DB | 26.4 | 44.5 | 46.5 | 97.5 | 96 | 1.5 | 10 | 1 |
| | 5 | ★ | MMS0830X5DB | 43.0 | 61.5 | 63.5 | 114.5 | 113 | 1.5 | 10 | 1 |
| 8.4 | 3 | □ | MMS0840S-DIN | 33.9 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 2 |
| | 3 | □ | MMS0840S-DIN-C | 33.9 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 1 |
| | 5 | □ | MMS0840L-DIN | 47.9 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 2 |
| | 5 | □ | MMS0840L-DIN-C | 47.9 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 1 |
| | 3 | ★ | MMS0840X3DB | 26.7 | 44.5 | 46.5 | 97.5 | 96 | 1.5 | 10 | 1 |
| | 5 | ★ | MMS0840X5DB | 43.5 | 61.5 | 63.5 | 114.5 | 113 | 1.5 | 10 | 1 |
| 8.5 | 3 | □ | MMS0850S-DIN | 33.8 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 2 |
| | 3 | ● | MMS0850S-DIN-C | 33.8 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 1 |
| | 5 | □ | MMS0850L-DIN | 47.8 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 2 |
| | 5 | ● | MMS0850L-DIN-C | 47.8 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 1 |
| | 3 | ★ | MMS0850X3DB | 27.0 | 44.5 | 46.5 | 97.5 | 96 | 1.5 | 10 | 1 |
| | 5 | ★ | MMS0850X5DB | 44.0 | 61.5 | 63.5 | 114.5 | 113 | 1.5 | 10 | 1 |

CONDITIONS DE COUPE ➤ M094

MÉTHODE D'UTILISATION ➤ M093

DONNÉES TECHNIQUES ➤ P001

# MMS

| DC (mm) | Rapport (L/D) | DP7020 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.6 | 3 | □ | MMS0860S-DIN | 33.7 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 2 |
| | 3 | ● | MMS0860S-DIN-C | 33.7 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 1 |
| | 5 | □ | MMS0860L-DIN | 47.7 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 2 |
| | 5 | ● | MMS0860L-DIN-C | 47.7 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 1 |
| | 3 | ★ | MMS0860X3DB | 27.4 | 46.6 | 48.6 | 102.6 | 101 | 1.6 | 10 | 1 |
| | 5 | ★ | MMS0860X5DB | 44.6 | 64.6 | 66.6 | 117.6 | 116 | 1.6 | 10 | 1 |
| 8.7 | 3 | □ | MMS0870S-DIN | 33.5 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 2 |
| | 3 | ● | MMS0870S-DIN-C | 33.5 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 1 |
| | 5 | □ | MMS0870L-DIN | 47.5 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 2 |
| | 5 | ● | MMS0870L-DIN-C | 47.5 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 1 |
| | 3 | ★ | MMS0870X3DB | 27.7 | 46.6 | 48.6 | 102.6 | 101 | 1.6 | 10 | 1 |
| | 5 | ★ | MMS0870X5DB | 45.1 | 64.6 | 66.6 | 117.6 | 116 | 1.6 | 10 | 1 |
| 8.8 | 3 | □ | MMS0880S-DIN | 33.4 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 2 |
| | 3 | ● | MMS0880S-DIN-C | 33.4 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 1 |
| | 5 | □ | MMS0880L-DIN | 47.4 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 2 |
| | 5 | ● | MMS0880L-DIN-C | 47.4 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 1 |
| | 3 | ★ | MMS0880X3DB | 28.0 | 46.6 | 48.6 | 102.6 | 101 | 1.6 | 10 | 1 |
| | 5 | ★ | MMS0880X5DB | 45.6 | 64.6 | 66.6 | 117.6 | 116 | 1.6 | 10 | 1 |
| 8.9 | 3 | □ | MMS0890S-DIN | 33.3 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 2 |
| | 3 | □ | MMS0890S-DIN-C | 33.3 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 1 |
| | 5 | □ | MMS0890L-DIN | 47.3 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 2 |
| | 5 | □ | MMS0890L-DIN-C | 47.3 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 1 |
| | 3 | ★ | MMS0890X3DB | 28.3 | 46.6 | 48.6 | 102.6 | 101 | 1.6 | 10 | 1 |
| | 5 | ★ | MMS0890X5DB | 46.1 | 64.6 | 66.6 | 117.6 | 116 | 1.6 | 10 | 1 |
| 9.0 | 3 | □ | MMS0900S-DIN | 33.1 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 2 |
| | 3 | ● | MMS0900S-DIN-C | 33.1 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 1 |
| | 5 | □ | MMS0900L-DIN | 47.1 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 2 |
| | 5 | ● | MMS0900L-DIN-C | 47.1 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 1 |
| | 3 | ★ | MMS0900X3DB | 28.6 | 46.6 | 48.6 | 102.6 | 101 | 1.6 | 10 | 1 |
| | 5 | ★ | MMS0900X5DB | 46.6 | 64.6 | 66.6 | 117.6 | 116 | 1.6 | 10 | 1 |
| 9.1 | 3 | □ | MMS0910S-DIN | 33.0 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 2 |
| | 3 | □ | MMS0910S-DIN-C | 33.0 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 1 |
| | 5 | □ | MMS0910L-DIN | 47.0 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 2 |
| | 5 | □ | MMS0910L-DIN-C | 47.0 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 1 |
| | 3 | ★ | MMS0910X3DB | 29.0 | 49.7 | 51.7 | 102.7 | 101 | 1.7 | 10 | 1 |
| | 5 | ★ | MMS0910X5DB | 47.2 | 68.7 | 71.7 | 122.7 | 121 | 1.7 | 10 | 1 |
| 9.2 | 3 | □ | MMS0920S-DIN | 32.9 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 2 |
| | 3 | □ | MMS0920S-DIN-C | 32.9 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 1 |
| | 5 | □ | MMS0920L-DIN | 46.9 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 2 |
| | 5 | □ | MMS0920L-DIN-C | 46.9 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 1 |
| | 3 | ★ | MMS0920X3DB | 29.3 | 49.7 | 51.7 | 102.7 | 101 | 1.7 | 10 | 1 |
| | 5 | ★ | MMS0920X5DB | 47.7 | 68.7 | 71.7 | 122.7 | 121 | 1.7 | 10 | 1 |
| 9.3 | 3 | □ | MMS0930S-DIN | 32.7 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 2 |
| | 3 | ● | MMS0930S-DIN-C | 32.7 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 1 |
| | 5 | □ | MMS0930L-DIN | 46.7 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 2 |
| | 5 | ● | MMS0930L-DIN-C | 46.7 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 1 |
| | 3 | ★ | MMS0930X3DB | 29.6 | 49.7 | 51.7 | 102.7 | 101 | 1.7 | 10 | 1 |
| | 5 | ★ | MMS0930X5DB | 48.2 | 68.7 | 71.7 | 122.7 | 121 | 1.7 | 10 | 1 |

| DC (mm) | Rapport (L/D) | DP7020 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.4 | 3 | □ | MMS0940S-DIN | 32.6 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 2 |
| | 3 | □ | MMS0940S-DIN-C | 32.6 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 1 |
| | 5 | □ | MMS0940L-DIN | 46.6 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 2 |
| | 5 | □ | MMS0940L-DIN-C | 46.6 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 1 |
| | 3 | ★ | MMS0940X3DB | 29.9 | 49.7 | 51.7 | 102.7 | 101 | 1.7 | 10 | 1 |
| | 5 | ★ | MMS0940X5DB | 48.7 | 68.7 | 71.7 | 122.7 | 121 | 1.7 | 10 | 1 |
| 9.5 | 3 | □ | MMS0950S-DIN | 32.5 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 2 |
| | 3 | ● | MMS0950S-DIN-C | 32.5 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 1 |
| | 5 | □ | MMS0950L-DIN | 46.5 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 2 |
| | 5 | ● | MMS0950L-DIN-C | 46.5 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 1 |
| | 3 | ★ | MMS0950X3DB | 30.2 | 49.7 | 51.7 | 102.7 | 101 | 1.7 | 10 | 1 |
| | 5 | ★ | MMS0950X5DB | 49.2 | 68.7 | 71.7 | 122.7 | 121 | 1.7 | 10 | 1 |
| 9.6 | 3 | □ | MMS0960S-DIN | 32.3 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 2 |
| | 3 | □ | MMS0960S-DIN-C | 32.3 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 1 |
| | 5 | □ | MMS0960L-DIN | 46.3 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 2 |
| | 5 | □ | MMS0960L-DIN-C | 46.3 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 1 |
| | 3 | ★ | MMS0960X3DB | 30.5 | 51.7 | 51.7 | 102.7 | 101 | 1.7 | 10 | 1 |
| | 5 | ★ | MMS0960X5DB | 49.7 | 71.7 | 71.7 | 122.7 | 121 | 1.7 | 10 | 1 |
| 9.7 | 3 | □ | MMS0970S-DIN | 32.2 | 46.8 | 47.8 | 88.8 | 87 | 1.8 | 10 | 2 |
| | 3 | □ | MMS0970S-DIN-C | 32.2 | 46.8 | 47.8 | 88.8 | 87 | 1.8 | 10 | 1 |
| | 5 | □ | MMS0970L-DIN | 46.2 | 60.8 | 61.8 | 102.8 | 101 | 1.8 | 10 | 2 |
| | 5 | □ | MMS0970L-DIN-C | 46.2 | 60.8 | 61.8 | 102.8 | 101 | 1.8 | 10 | 1 |
| | 3 | ★ | MMS0970X3DB | 30.9 | 51.8 | 51.8 | 102.8 | 101 | 1.8 | 10 | 1 |
| | 5 | ★ | MMS0970X5DB | 50.3 | 71.8 | 71.8 | 122.8 | 121 | 1.8 | 10 | 1 |
| 9.8 | 3 | □ | MMS0980S-DIN | 32.1 | 46.8 | 47.8 | 88.8 | 87 | 1.8 | 10 | 2 |
| | 3 | ● | MMS0980S-DIN-C | 32.1 | 46.8 | 47.8 | 88.8 | 87 | 1.8 | 10 | 1 |
| | 5 | □ | MMS0980L-DIN | 46.1 | 60.8 | 61.8 | 102.8 | 101 | 1.8 | 10 | 2 |
| | 5 | ● | MMS0980L-DIN-C | 46.1 | 60.8 | 61.8 | 102.8 | 101 | 1.8 | 10 | 1 |
| | 3 | ★ | MMS0980X3DB | 31.2 | 51.8 | 51.8 | 102.8 | 101 | 1.8 | 10 | 1 |
| | 5 | ★ | MMS0980X5DB | 50.8 | 71.8 | 71.8 | 122.8 | 121 | 1.8 | 10 | 1 |
| 9.9 | 3 | □ | MMS0990S-DIN | 32.0 | 46.8 | 47.8 | 88.8 | 87 | 1.8 | 10 | 2 |
| | 3 | □ | MMS0990S-DIN-C | 32.0 | 46.8 | 47.8 | 88.8 | 87 | 1.8 | 10 | 1 |
| | 5 | □ | MMS0990L-DIN | 46.0 | 60.8 | 61.8 | 102.8 | 101 | 1.8 | 10 | 2 |
| | 5 | □ | MMS0990L-DIN-C | 46.0 | 60.8 | 61.8 | 102.8 | 101 | 1.8 | 10 | 1 |
| | 3 | ★ | MMS0990X3DB | 31.5 | 51.8 | 51.8 | 102.8 | 101 | 1.8 | 10 | 1 |
| | 5 | ★ | MMS0990X5DB | 51.3 | 71.8 | 71.8 | 122.8 | 121 | 1.8 | 10 | 1 |
| 10.0 | 3 | □ | MMS1000S-DIN | 31.8 | 46.8 | 47.8 | 88.8 | 87 | 1.8 | 10 | 2 |
| | 3 | ● | MMS1000S-DIN-C | 31.8 | 46.8 | 47.8 | 88.8 | 87 | 1.8 | 10 | 1 |
| | 5 | □ | MMS1000L-DIN | 45.8 | 60.8 | 61.8 | 102.8 | 101 | 1.8 | 10 | 2 |
| | 5 | ● | MMS1000L-DIN-C | 45.8 | 60.8 | 61.8 | 102.8 | 101 | 1.8 | 10 | 1 |
| | 3 | ★ | MMS1000X3DB | 31.8 | 51.8 | 51.8 | 102.8 | 101 | 1.8 | 10 | 1 |
| | 5 | ★ | MMS1000X5DB | 51.8 | 71.8 | 71.8 | 122.8 | 121 | 1.8 | 10 | 1 |
| 10.05 | 3 | □ | MMS1005S-DIN | 39.8 | 54.8 | 55.8 | 101.8 | 100 | 1.8 | 12 | 2 |
| | 3 | ● | MMS1005S-DIN-C | 39.8 | 54.8 | 55.8 | 101.8 | 100 | 1.8 | 12 | 1 |
| | 5 | □ | MMS1005L-DIN | 55.8 | 70.8 | 71.8 | 117.8 | 116 | 1.8 | 12 | 2 |
| | 5 | ● | MMS1005L-DIN-C | 55.8 | 70.8 | 71.8 | 117.8 | 116 | 1.8 | 12 | 1 |

● : Article stocké. ★ : Article standard Japon.

□ : Article non stocké - Fabrication sur commande uniquement.

| DC (mm) | Rapport (L/D) | DP7020 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.1 | 3 | □ | MMS1010S-DIN | 39.7 | 54.8 | 55.8 | 101.8 | 100 | 1.8 | 12 | 2 |
| | 3 | □ | MMS1010S-DIN-C | 39.7 | 54.8 | 55.8 | 101.8 | 100 | 1.8 | 12 | 1 |
| | 5 | □ | MMS1010L-DIN | 55.7 | 70.8 | 71.8 | 117.8 | 116 | 1.8 | 12 | 2 |
| | 5 | □ | MMS1010L-DIN-C | 55.7 | 70.8 | 71.8 | 117.8 | 116 | 1.8 | 12 | 1 |
| | 3 | ★ | MMS1010X3DB | 32.1 | 54.8 | 56.8 | 112.8 | 111 | 1.8 | 12 | 1 |
| | 5 | ★ | MMS1010X5DB | 52.3 | 75.8 | 79.8 | 135.8 | 134 | 1.8 | 12 | 1 |
| 10.2 | 3 | □ | MMS1020S-DIN | 39.6 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 2 |
| | 3 | ● | MMS1020S-DIN-C | 39.6 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 1 |
| | 5 | □ | MMS1020L-DIN | 55.6 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 2 |
| | 5 | ● | MMS1020L-DIN-C | 55.6 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 1 |
| | 3 | ★ | MMS1020X3DB | 32.5 | 54.9 | 56.9 | 112.9 | 111 | 1.9 | 12 | 1 |
| | 5 | ★ | MMS1020X5DB | 52.9 | 75.9 | 79.9 | 135.9 | 134 | 1.9 | 12 | 1 |
| 10.3 | 3 | □ | MMS1030S-DIN | 39.4 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 2 |
| | 3 | ● | MMS1030S-DIN-C | 39.4 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 1 |
| | 5 | □ | MMS1030L-DIN | 55.4 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 2 |
| | 5 | ● | MMS1030L-DIN-C | 55.4 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 1 |
| | 3 | ★ | MMS1030X3DB | 32.8 | 54.9 | 56.9 | 112.9 | 111 | 1.9 | 12 | 1 |
| | 5 | ★ | MMS1030X5DB | 53.4 | 75.9 | 79.9 | 135.9 | 134 | 1.9 | 12 | 1 |
| 10.4 | 3 | □ | MMS1040S-DIN | 39.3 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 2 |
| | 3 | ● | MMS1040S-DIN-C | 39.3 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 1 |
| | 5 | □ | MMS1040L-DIN | 55.3 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 2 |
| | 5 | ● | MMS1040L-DIN-C | 55.3 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 1 |
| | 3 | ★ | MMS1040X3DB | 33.1 | 54.9 | 56.9 | 112.9 | 111 | 1.9 | 12 | 1 |
| | 5 | ★ | MMS1040X5DB | 53.9 | 75.9 | 79.9 | 135.9 | 134 | 1.9 | 12 | 1 |
| 10.5 | 3 | □ | MMS1050S-DIN | 39.2 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 2 |
| | 3 | ● | MMS1050S-DIN-C | 39.2 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 1 |
| | 5 | □ | MMS1050L-DIN | 55.2 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 2 |
| | 5 | ● | MMS1050L-DIN-C | 55.2 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 1 |
| | 3 | ★ | MMS1050X3DB | 33.4 | 54.9 | 56.9 | 112.9 | 111 | 1.9 | 12 | 1 |
| | 5 | ★ | MMS1050X5DB | 54.4 | 75.9 | 79.9 | 135.9 | 134 | 1.9 | 12 | 1 |
| 10.6 | 3 | □ | MMS1060S-DIN | 39.0 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 2 |
| | 3 | □ | MMS1060S-DIN-C | 39.0 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 1 |
| | 5 | □ | MMS1060L-DIN | 55.0 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 2 |
| | 5 | □ | MMS1060L-DIN-C | 55.0 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 1 |
| | 3 | ★ | MMS1060X3DB | 33.7 | 56.9 | 57.9 | 117.9 | 116 | 1.9 | 12 | 1 |
| | 5 | ★ | MMS1060X5DB | 54.9 | 78.9 | 79.9 | 135.9 | 134 | 1.9 | 12 | 1 |
| 10.7 | 3 | □ | MMS1070S-DIN | 38.9 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 2 |
| | 3 | ● | MMS1070S-DIN-C | 38.9 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 1 |
| | 5 | □ | MMS1070L-DIN | 54.9 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 2 |
| | 5 | ● | MMS1070L-DIN-C | 54.9 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 1 |
| | 3 | ★ | MMS1070X3DB | 34.0 | 56.9 | 57.9 | 117.9 | 116 | 1.9 | 12 | 1 |
| | 5 | ★ | MMS1070X5DB | 55.4 | 78.9 | 79.9 | 135.9 | 134 | 1.9 | 12 | 1 |
| 10.8 | 3 | □ | MMS1080S-DIN | 38.8 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 2 |
| | 3 | ● | MMS1080S-DIN-C | 38.8 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 1 |
| | 5 | □ | MMS1080L-DIN | 54.8 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 2 |
| | 5 | ● | MMS1080L-DIN-C | 54.8 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 1 |
| | 3 | ★ | MMS1080X3DB | 34.4 | 57.0 | 58.0 | 118.0 | 116 | 2.0 | 12 | 1 |
| | 5 | ★ | MMS1080X5DB | 56.0 | 79.0 | 80.0 | 136.0 | 134 | 2.0 | 12 | 1 |

| DC (mm) | Rapport (L/D) | DP7020 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.9 | 3 | □ | MMS1090S-DIN | 38.6 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 2 |
| | 3 | □ | MMS1090S-DIN-C | 38.6 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 1 |
| | 5 | □ | MMS1090L-DIN | 54.6 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 2 |
| | 5 | □ | MMS1090L-DIN-C | 54.6 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 1 |
| | 3 | ★ | MMS1090X3DB | 34.7 | 57.0 | 58.0 | 118.0 | 116 | 2.0 | 12 | 1 |
| | 5 | ★ | MMS1090X5DB | 56.5 | 79.0 | 80.0 | 136.0 | 134 | 2.0 | 12 | 1 |
| 11.0 | 3 | □ | MMS1100S-DIN | 38.5 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 2 |
| | 3 | ● | MMS1100S-DIN-C | 38.5 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 1 |
| | 5 | □ | MMS1100L-DIN | 54.5 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 2 |
| | 5 | ● | MMS1100L-DIN-C | 54.5 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 1 |
| | 3 | ★ | MMS1100X3DB | 35.0 | 57.0 | 58.0 | 118.0 | 116 | 2.0 | 12 | 1 |
| | 5 | ★ | MMS1100X5DB | 57.0 | 79.0 | 80.0 | 136.0 | 134 | 2.0 | 12 | 1 |
| 11.1 | 3 | □ | MMS1110S-DIN | 38.4 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 2 |
| | 3 | □ | MMS1110S-DIN-C | 38.4 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 1 |
| | 5 | □ | MMS1110L-DIN | 54.4 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 2 |
| | 5 | □ | MMS1110L-DIN-C | 54.4 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 1 |
| | 3 | ★ | MMS1110X3DB | 35.3 | 60.0 | 62.0 | 118.0 | 116 | 2.0 | 12 | 1 |
| | 5 | ★ | MMS1110X5DB | 57.5 | 83.0 | 86.0 | 142.0 | 140 | 2.0 | 12 | 1 |
| 11.2 | 3 | □ | MMS1120S-DIN | 38.2 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 2 |
| | 3 | ● | MMS1120S-DIN-C | 38.2 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 1 |
| | 5 | □ | MMS1120L-DIN | 54.2 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 2 |
| | 5 | ● | MMS1120L-DIN-C | 54.2 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 1 |
| | 3 | ★ | MMS1120X3DB | 35.6 | 60.0 | 62.0 | 118.0 | 116 | 2.0 | 12 | 1 |
| | 5 | ★ | MMS1120X5DB | 58.0 | 83.0 | 86.0 | 142.0 | 140 | 2.0 | 12 | 1 |
| 11.3 | 3 | □ | MMS1130S-DIN | 38.1 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 2 |
| | 3 | □ | MMS1130S-DIN-C | 38.1 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 1 |
| | 5 | □ | MMS1130L-DIN | 54.1 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 2 |
| | 5 | □ | MMS1130L-DIN-C | 54.1 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 1 |
| | 3 | ★ | MMS1130X3DB | 36.0 | 60.1 | 62.1 | 118.1 | 116 | 2.1 | 12 | 1 |
| | 5 | ★ | MMS1130X5DB | 58.6 | 83.1 | 86.1 | 142.1 | 140 | 2.1 | 12 | 1 |
| 11.4 | 3 | □ | MMS1140S-DIN | 38.0 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 2 |
| | 3 | ● | MMS1140S-DIN-C | 38.0 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 1 |
| | 5 | □ | MMS1140L-DIN | 54.0 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 2 |
| | 5 | ● | MMS1140L-DIN-C | 54.0 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 1 |
| | 3 | ★ | MMS1140X3DB | 36.3 | 60.1 | 62.1 | 118.1 | 116 | 2.1 | 12 | 1 |
| | 5 | ★ | MMS1140X5DB | 59.1 | 83.1 | 86.1 | 142.1 | 140 | 2.1 | 12 | 1 |
| 11.5 | 3 | □ | MMS1150S-DIN | 37.8 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 2 |
| | 3 | ● | MMS1150S-DIN-C | 37.8 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 1 |
| | 5 | □ | MMS1150L-DIN | 53.8 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 2 |
| | 5 | ● | MMS1150L-DIN-C | 53.8 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 1 |
| | 3 | ★ | MMS1150X3DB | 36.6 | 60.1 | 62.1 | 118.1 | 116 | 2.1 | 12 | 1 |
| | 5 | ★ | MMS1150X5DB | 59.6 | 83.1 | 86.1 | 142.1 | 140 | 2.1 | 12 | 1 |
| 11.6 | 3 | □ | MMS1160S-DIN | 37.7 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 2 |
| | 3 | □ | MMS1160S-DIN-C | 37.7 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 1 |
| | 5 | □ | MMS1160L-DIN | 53.7 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 2 |
| | 5 | □ | MMS1160L-DIN-C | 53.7 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 1 |
| | 3 | ★ | MMS1160X3DB | 36.9 | 62.1 | 62.1 | 118.1 | 116 | 2.1 | 12 | 1 |
| | 5 | ★ | MMS1160X5DB | 60.1 | 86.1 | 86.1 | 142.1 | 140 | 2.1 | 12 | 1 |

CONDITIONS DE COUPE ➤ M094
MÉTHODE D'UTILISATION ➤ M093
DONNÉES TECHNIQUES ➤ P001

# MMS

| DC (mm) | Rapport (L/D) | DP7020 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.7 | 3 | □ | MMS1170S-DIN | 37.6 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 2 |
| | 3 | ● | MMS1170S-DIN-C | 37.6 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 1 |
| | 5 | □ | MMS1170L-DIN | 53.6 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 2 |
| | 5 | ● | MMS1170L-DIN-C | 53.6 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 1 |
| | 3 | ★ | MMS1170X3DB | 37.2 | 62.1 | 62.1 | 118.1 | 116 | 2.1 | 12 | 1 |
| | 5 | ★ | MMS1170X5DB | 60.6 | 86.1 | 86.1 | 142.1 | 140 | 2.1 | 12 | 1 |
| 11.8 | 3 | □ | MMS1180S-DIN | 37.4 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 2 |
| | 3 | ● | MMS1180S-DIN-C | 37.4 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 1 |
| | 5 | □ | MMS1180L-DIN | 53.4 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 2 |
| | 5 | ● | MMS1180L-DIN-C | 53.4 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 1 |
| | 3 | ★ | MMS1180X3DB | 37.5 | 62.1 | 62.1 | 118.1 | 116 | 2.1 | 12 | 1 |
| | 5 | ★ | MMS1180X5DB | 61.1 | 86.1 | 86.1 | 142.1 | 140 | 2.1 | 12 | 1 |
| 11.9 | 3 | □ | MMS1190S-DIN | 37.3 | 55.2 | 56.2 | 102.2 | 100 | 2.2 | 12 | 2 |
| | 3 | □ | MMS1190S-DIN-C | 37.3 | 55.2 | 56.2 | 102.2 | 100 | 2.2 | 12 | 1 |
| | 5 | □ | MMS1190L-DIN | 53.3 | 71.2 | 72.2 | 118.2 | 116 | 2.2 | 12 | 2 |
| | 5 | □ | MMS1190L-DIN-C | 53.3 | 71.2 | 72.2 | 118.2 | 116 | 2.2 | 12 | 1 |
| | 3 | ★ | MMS1190X3DB | 37.9 | 62.2 | 62.2 | 118.2 | 116 | 2.2 | 12 | 1 |
| | 5 | ★ | MMS1190X5DB | 61.7 | 86.2 | 86.2 | 142.2 | 140 | 2.2 | 12 | 1 |
| 12.0 | 3 | □ | MMS1200S-DIN | 37.2 | 55.2 | 56.2 | 102.2 | 100 | 2.2 | 12 | 2 |
| | 3 | ● | MMS1200S-DIN-C | 37.2 | 55.2 | 56.2 | 102.2 | 100 | 2.2 | 12 | 1 |
| | 5 | □ | MMS1200L-DIN | 53.2 | 71.2 | 72.2 | 118.2 | 116 | 2.2 | 12 | 2 |
| | 5 | ● | MMS1200L-DIN-C | 53.2 | 71.2 | 72.2 | 118.2 | 116 | 2.2 | 12 | 1 |
| | 3 | ★ | MMS1200X3DB | 38.2 | 62.2 | 62.2 | 118.2 | 116 | 2.2 | 12 | 1 |
| | 5 | ★ | MMS1200X5DB | 62.2 | 86.2 | 86.2 | 142.2 | 140 | 2.2 | 12 | 1 |
| 12.05 | 3 | □ | MMS1205S-DIN | 42.1 | 60.2 | 61.2 | 107.2 | 105 | 2.2 | 14 | 2 |
| | 3 | ● | MMS1205S-DIN-C | 42.1 | 60.2 | 61.2 | 107.2 | 105 | 2.2 | 14 | 1 |
| | 5 | □ | MMS1205L-DIN | 59.1 | 77.2 | 78.2 | 124.2 | 122 | 2.2 | 14 | 2 |
| | 5 | ● | MMS1205L-DIN-C | 59.1 | 77.2 | 78.2 | 124.2 | 122 | 2.2 | 14 | 1 |
| 12.1 | 3 | □ | MMS1210S-DIN | 42.1 | 60.2 | 61.2 | 107.2 | 105 | 2.2 | 14 | 2 |
| | 3 | □ | MMS1210S-DIN-C | 42.1 | 60.2 | 61.2 | 107.2 | 105 | 2.2 | 14 | 1 |
| | 5 | □ | MMS1210L-DIN | 59.1 | 77.2 | 78.2 | 124.2 | 122 | 2.2 | 14 | 2 |
| | 5 | □ | MMS1210L-DIN-C | 59.1 | 77.2 | 78.2 | 124.2 | 122 | 2.2 | 14 | 1 |
| | 3 | ★ | MMS1210X3DB | 38.5 | 65.2 | 68.2 | 124.2 | 122 | 2.2 | 14 | 1 |
| | 5 | ★ | MMS1210X5DB | 62.7 | 90.2 | 94.2 | 150.2 | 148 | 2.2 | 14 | 1 |
| 12.2 | 3 | □ | MMS1220S-DIN | 41.9 | 60.2 | 61.2 | 107.2 | 105 | 2.2 | 14 | 2 |
| | 3 | □ | MMS1220S-DIN-C | 41.9 | 60.2 | 61.2 | 107.2 | 105 | 2.2 | 14 | 1 |
| | 5 | □ | MMS1220L-DIN | 58.9 | 77.2 | 78.2 | 124.2 | 122 | 2.2 | 14 | 2 |
| | 5 | □ | MMS1220L-DIN-C | 58.9 | 77.2 | 78.2 | 124.2 | 122 | 2.2 | 14 | 1 |
| | 3 | ★ | MMS1220X3DB | 38.8 | 65.2 | 68.2 | 124.2 | 122 | 2.2 | 14 | 1 |
| | 5 | ★ | MMS1220X5DB | 63.2 | 90.2 | 94.2 | 150.2 | 148 | 2.2 | 14 | 1 |
| 12.3 | 3 | □ | MMS1230S-DIN | 41.8 | 60.2 | 61.2 | 107.2 | 105 | 2.2 | 14 | 2 |
| | 3 | □ | MMS1230S-DIN-C | 41.8 | 60.2 | 61.2 | 107.2 | 105 | 2.2 | 14 | 1 |
| | 5 | □ | MMS1230L-DIN | 58.8 | 77.2 | 78.2 | 124.2 | 122 | 2.2 | 14 | 2 |
| | 5 | □ | MMS1230L-DIN-C | 58.8 | 77.2 | 78.2 | 124.2 | 122 | 2.2 | 14 | 1 |
| | 3 | ★ | MMS1230X3DB | 39.1 | 65.2 | 68.2 | 124.2 | 122 | 2.2 | 14 | 1 |
| | 5 | ★ | MMS1230X5DB | 63.7 | 90.2 | 94.2 | 150.2 | 148 | 2.2 | 14 | 1 |

| DC (mm) | Rapport (L/D) | DP7020 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.4 | 3 | □ | MMS1240S-DIN | 41.7 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 2 |
| | 3 | □ | MMS1240S-DIN-C | 41.7 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 1 |
| | 5 | □ | MMS1240L-DIN | 58.7 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 2 |
| | 5 | □ | MMS1240L-DIN-C | 58.7 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 1 |
| | 3 | ★ | MMS1240X3DB | 39.5 | 65.3 | 68.3 | 124.3 | 122 | 2.3 | 14 | 1 |
| | 5 | ★ | MMS1240X5DB | 64.3 | 90.3 | 94.3 | 150.3 | 148 | 2.3 | 14 | 1 |
| 12.5 | 3 | □ | MMS1250S-DIN | 41.5 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 2 |
| | 3 | ● | MMS1250S-DIN-C | 41.5 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 1 |
| | 5 | □ | MMS1250L-DIN | 58.5 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 2 |
| | 5 | ● | MMS1250L-DIN-C | 58.5 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 1 |
| | 3 | ★ | MMS1250X3DB | 39.8 | 65.3 | 68.3 | 124.3 | 122 | 2.3 | 14 | 1 |
| | 5 | ★ | MMS1250X5DB | 64.8 | 90.3 | 94.3 | 150.3 | 148 | 2.3 | 14 | 1 |
| 12.6 | 3 | □ | MMS1260S-DIN | 41.4 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 2 |
| | 3 | ● | MMS1260S-DIN-C | 41.4 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 1 |
| | 5 | □ | MMS1260L-DIN | 58.4 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 2 |
| | 5 | ● | MMS1260L-DIN-C | 58.4 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 1 |
| | 3 | ★ | MMS1260X3DB | 40.1 | 67.3 | 68.3 | 124.3 | 122 | 2.3 | 14 | 1 |
| | 5 | ★ | MMS1260X5DB | 65.3 | 93.3 | 94.3 | 150.3 | 148 | 2.3 | 14 | 1 |
| 12.7 | 3 | □ | MMS1270S-DIN | 41.3 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 2 |
| | 3 | ● | MMS1270S-DIN-C | 41.3 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 1 |
| | 5 | □ | MMS1270L-DIN | 58.3 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 2 |
| | 5 | ● | MMS1270L-DIN-C | 58.3 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 1 |
| | 3 | ★ | MMS1270X3DB | 40.4 | 67.3 | 68.3 | 124.3 | 122 | 2.3 | 14 | 1 |
| | 5 | ★ | MMS1270X5DB | 65.8 | 93.3 | 94.3 | 150.3 | 148 | 2.3 | 14 | 1 |
| 12.8 | 3 | □ | MMS1280S-DIN | 41.1 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 2 |
| | 3 | □ | MMS1280S-DIN-C | 41.1 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 1 |
| | 5 | □ | MMS1280L-DIN | 58.1 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 2 |
| | 5 | □ | MMS1280L-DIN-C | 58.1 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 1 |
| | 3 | ★ | MMS1280X3DB | 40.7 | 67.3 | 68.3 | 124.3 | 122 | 2.3 | 14 | 1 |
| | 5 | ★ | MMS1280X5DB | 66.3 | 93.3 | 94.3 | 150.3 | 148 | 2.3 | 14 | 1 |
| 12.9 | 3 | □ | MMS1290S-DIN | 41.0 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 2 |
| | 3 | □ | MMS1290S-DIN-C | 41.0 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 1 |
| | 5 | □ | MMS1290L-DIN | 58.0 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 2 |
| | 5 | □ | MMS1290L-DIN-C | 58.0 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 1 |
| | 3 | ★ | MMS1290X3DB | 41.0 | 67.3 | 68.3 | 124.3 | 122 | 2.3 | 14 | 1 |
| | 5 | ★ | MMS1290X5DB | 66.8 | 93.3 | 94.3 | 150.3 | 148 | 2.3 | 14 | 1 |
| 13.0 | 3 | □ | MMS1300S-DIN | 40.9 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 2 |
| | 3 | ● | MMS1300S-DIN-C | 40.9 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 1 |
| | 5 | □ | MMS1300L-DIN | 57.9 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 2 |
| | 5 | ● | MMS1300L-DIN-C | 57.9 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 1 |
| | 3 | ★ | MMS1300X3DB | 41.4 | 67.4 | 68.4 | 124.4 | 122 | 2.4 | 14 | 1 |
| | 5 | ★ | MMS1300X5DB | 67.4 | 93.4 | 94.4 | 150.4 | 148 | 2.4 | 14 | 1 |
| 13.1 | 3 | □ | MMS1310S-DIN | 40.7 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 2 |
| | 3 | □ | MMS1310S-DIN-C | 40.7 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 1 |
| | 5 | □ | MMS1310L-DIN | 57.7 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 2 |
| | 5 | □ | MMS1310L-DIN-C | 57.7 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 1 |
| | 3 | ★ | MMS1310X3DB | 41.7 | 70.4 | 72.4 | 128.4 | 126 | 2.4 | 14 | 1 |
| | 5 | ★ | MMS1310X5DB | 67.9 | 97.4 | 100.4 | 156.4 | 154 | 2.4 | 14 | 1 |

● : Article stocké. ★ : Article standard Japon.

□ : Article non stocké - Fabrication sur commande uniquement.

| DC (mm) | Rapport (L/D) | DP7020 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.2 | 3 | □ | MMS1320S-DIN | 40.6 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 2 |
| | 3 | □ | MMS1320S-DIN-C | 40.6 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 1 |
| | 5 | □ | MMS1320L-DIN | 57.6 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 2 |
| | 5 | □ | MMS1320L-DIN-C | 57.6 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 1 |
| | 3 | ★ | MMS1320X3DB | 42.0 | 70.4 | 72.4 | 128.4 | 126 | 2.4 | 14 | 1 |
| | 5 | ★ | MMS1320X5DB | 68.4 | 97.4 | 100.4 | 156.4 | 154 | 2.4 | 14 | 1 |
| 13.3 | 3 | □ | MMS1330S-DIN | 40.5 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 2 |
| | 3 | □ | MMS1330S-DIN-C | 40.5 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 1 |
| | 5 | □ | MMS1330L-DIN | 57.5 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 2 |
| | 5 | □ | MMS1330L-DIN-C | 57.5 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 1 |
| | 3 | ★ | MMS1330X3DB | 42.3 | 70.4 | 72.4 | 128.4 | 126 | 2.4 | 14 | 1 |
| | 5 | ★ | MMS1330X5DB | 68.9 | 97.4 | 100.4 | 156.4 | 154 | 2.4 | 14 | 1 |
| 13.4 | 3 | □ | MMS1340S-DIN | 40.3 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 2 |
| | 3 | □ | MMS1340S-DIN-C | 40.3 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 1 |
| | 5 | □ | MMS1340L-DIN | 57.3 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 2 |
| | 5 | □ | MMS1340L-DIN-C | 57.3 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 1 |
| | 3 | ★ | MMS1340X3DB | 42.6 | 70.4 | 72.4 | 128.4 | 126 | 2.4 | 14 | 1 |
| | 5 | ★ | MMS1340X5DB | 69.4 | 97.4 | 100.4 | 156.4 | 154 | 2.4 | 14 | 1 |
| 13.5 | 3 | □ | MMS1350S-DIN | 40.2 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 2 |
| | 3 | ● | MMS1350S-DIN-C | 40.2 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 1 |
| | 5 | □ | MMS1350L-DIN | 57.2 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 2 |
| | 5 | ● | MMS1350L-DIN-C | 57.2 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 1 |
| | 3 | ★ | MMS1350X3DB | 43.0 | 70.5 | 72.5 | 128.5 | 126 | 2.5 | 14 | 1 |
| | 5 | ★ | MMS1350X5DB | 70.0 | 97.5 | 100.5 | 156.5 | 154 | 2.5 | 14 | 1 |
| 13.6 | 3 | □ | MMS1360S-DIN | 40.1 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 2 |
| | 3 | □ | MMS1360S-DIN-C | 40.1 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 1 |
| | 5 | □ | MMS1360L-DIN | 57.1 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 2 |
| | 5 | □ | MMS1360L-DIN-C | 57.1 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 1 |
| | 3 | ★ | MMS1360X3DB | 43.3 | 72.5 | 72.5 | 128.5 | 126 | 2.5 | 14 | 1 |
| | 5 | ★ | MMS1360X5DB | 70.5 | 100.5 | 100.5 | 156.5 | 154 | 2.5 | 14 | 1 |
| 13.7 | 3 | □ | MMS1370S-DIN | 39.9 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 2 |
| | 3 | ● | MMS1370S-DIN-C | 39.9 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 1 |
| | 5 | □ | MMS1370L-DIN | 56.9 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 2 |
| | 5 | ● | MMS1370L-DIN-C | 56.9 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 1 |
| | 3 | ★ | MMS1370X3DB | 43.6 | 72.5 | 72.5 | 128.5 | 126 | 2.5 | 14 | 1 |
| | 5 | ★ | MMS1370X5DB | 71.0 | 100.5 | 100.5 | 156.5 | 154 | 2.5 | 14 | 1 |
| 13.8 | 3 | □ | MMS1380S-DIN | 39.8 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 2 |
| | 3 | □ | MMS1380S-DIN-C | 39.8 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 1 |
| | 5 | □ | MMS1380L-DIN | 56.8 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 2 |
| | 5 | □ | MMS1380L-DIN-C | 56.8 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 1 |
| | 3 | ★ | MMS1380X3DB | 43.9 | 72.5 | 72.5 | 128.5 | 126 | 2.5 | 14 | 1 |
| | 5 | ★ | MMS1380X5DB | 71.5 | 100.5 | 100.5 | 156.5 | 154 | 2.5 | 14 | 1 |
| 13.9 | 3 | □ | MMS1390S-DIN | 39.7 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 2 |
| | 3 | □ | MMS1390S-DIN-C | 39.7 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 1 |
| | 5 | □ | MMS1390L-DIN | 56.7 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 2 |
| | 5 | □ | MMS1390L-DIN-C | 56.7 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 1 |
| | 3 | ★ | MMS1390X3DB | 44.2 | 72.5 | 72.5 | 128.5 | 126 | 2.5 | 14 | 1 |
| | 5 | ★ | MMS1390X5DB | 72.0 | 100.5 | 100.5 | 156.5 | 154 | 2.5 | 14 | 1 |

| DC (mm) | Rapport (L/D) | DP7020 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.0 | 3 | □ | MMS1400S-DIN | 39.5 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 2 |
| | 3 | ● | MMS1400S-DIN-C | 39.5 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 1 |
| | 5 | □ | MMS1400L-DIN | 56.5 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 2 |
| | 5 | ● | MMS1400L-DIN-C | 56.5 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 1 |
| | 3 | ★ | MMS1400X3DB | 44.5 | 72.5 | 72.5 | 128.5 | 126 | 2.5 | 14 | 1 |
| | 5 | ★ | MMS1400X5DB | 72.5 | 100.5 | 100.5 | 156.5 | 154 | 2.5 | 14 | 1 |
| 14.05 | 3 | □ | MMS1405S-DIN | 43.5 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 2 |
| | 3 | □ | MMS1405S-DIN-C | 43.5 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 1 |
| | 5 | □ | MMS1405L-DIN | 61.5 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 2 |
| | 5 | □ | MMS1405L-DIN-C | 61.5 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 1 |
| 14.1 | 3 | □ | MMS1410S-DIN | 43.4 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 2 |
| | 3 | □ | MMS1410S-DIN-C | 43.4 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 1 |
| | 5 | □ | MMS1410L-DIN | 61.4 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 2 |
| | 5 | □ | MMS1410L-DIN-C | 61.4 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 1 |
| | 3 | ★ | MMS1410X3DB | 44.9 | 75.6 | 78.6 | 137.6 | 135 | 2.6 | 16 | 1 |
| | 5 | ★ | MMS1410X5DB | 73.1 | 104.6 | 108.6 | 167.6 | 165 | 2.6 | 16 | 1 |
| 14.2 | 3 | □ | MMS1420S-DIN | 43.3 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 2 |
| | 3 | □ | MMS1420S-DIN-C | 43.3 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 1 |
| | 5 | □ | MMS1420L-DIN | 61.3 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 2 |
| | 5 | □ | MMS1420L-DIN-C | 61.3 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 1 |
| | 3 | ★ | MMS1420X3DB | 45.2 | 75.6 | 78.6 | 137.6 | 135 | 2.6 | 16 | 1 |
| | 5 | ★ | MMS1420X5DB | 73.6 | 104.6 | 108.6 | 167.6 | 165 | 2.6 | 16 | 1 |
| 14.3 | 3 | □ | MMS1430S-DIN | 43.2 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 2 |
| | 3 | □ | MMS1430S-DIN-C | 43.2 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 1 |
| | 5 | □ | MMS1430L-DIN | 61.2 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 2 |
| | 5 | □ | MMS1430L-DIN-C | 61.2 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 1 |
| | 3 | ★ | MMS1430X3DB | 45.5 | 75.6 | 78.6 | 137.6 | 135 | 2.6 | 16 | 1 |
| | 5 | ★ | MMS1430X5DB | 74.1 | 104.6 | 108.6 | 167.6 | 165 | 2.6 | 16 | 1 |
| 14.4 | 3 | □ | MMS1440S-DIN | 43.0 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 2 |
| | 3 | □ | MMS1440S-DIN-C | 43.0 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 1 |
| | 5 | □ | MMS1440L-DIN | 61.0 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 2 |
| | 5 | □ | MMS1440L-DIN-C | 61.0 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 1 |
| | 3 | ★ | MMS1440X3DB | 45.8 | 75.6 | 78.6 | 137.6 | 135 | 2.6 | 16 | 1 |
| | 5 | ★ | MMS1440X5DB | 74.6 | 104.6 | 108.6 | 167.6 | 165 | 2.6 | 16 | 1 |
| 14.5 | 3 | □ | MMS1450S-DIN | 42.9 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 2 |
| | 3 | □ | MMS1450S-DIN-C | 42.9 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 1 |
| | 5 | □ | MMS1450L-DIN | 60.9 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 2 |
| | 5 | □ | MMS1450L-DIN-C | 60.9 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 1 |
| | 3 | ★ | MMS1450X3DB | 46.1 | 75.6 | 78.6 | 137.6 | 135 | 2.6 | 16 | 1 |
| | 5 | ★ | MMS1450X5DB | 75.1 | 104.6 | 108.6 | 167.6 | 165 | 2.6 | 16 | 1 |
| 14.6 | 3 | □ | MMS1460S-DIN | 42.8 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 2 |
| | 3 | □ | MMS1460S-DIN-C | 42.8 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 1 |
| | 5 | □ | MMS1460L-DIN | 60.8 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 2 |
| | 5 | □ | MMS1460L-DIN-C | 60.8 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 1 |
| | 3 | ★ | MMS1460X3DB | 46.5 | 77.7 | 78.7 | 137.7 | 135 | 2.7 | 16 | 1 |
| | 5 | ★ | MMS1460X5DB | 75.7 | 107.7 | 108.7 | 167.7 | 165 | 2.7 | 16 | 1 |
| 14.7 | 3 | □ | MMS1470S-DIN | 42.6 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 2 |
| | 3 | □ | MMS1470S-DIN-C | 42.6 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 1 |
| | 5 | □ | MMS1470L-DIN | 60.6 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 2 |
| | 5 | □ | MMS1470L-DIN-C | 60.6 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 1 |
| | 3 | ★ | MMS1470X3DB | 46.8 | 77.7 | 78.7 | 137.7 | 135 | 2.7 | 16 | 1 |
| | 5 | ★ | MMS1470X5DB | 76.2 | 107.7 | 108.7 | 167.7 | 165 | 2.7 | 16 | 1 |

CONDITIONS DE COUPE ➤ M094

MÉTHODE D'UTILISATION ➤ M093

DONNÉES TECHNIQUES ➤ P001

# MMS

| DC (mm) | Rapport (L/D) | DP7020 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.8 | 3 | □ | MMS1480S-DIN | 42.5 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 2 |
| | 3 | □ | MMS1480S-DIN-C | 42.5 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 1 |
| | 5 | □ | MMS1480L-DIN | 60.5 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 2 |
| | 5 | □ | MMS1480L-DIN-C | 60.5 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 1 |
| | 3 | ★ | MMS1480X3DB | 47.1 | 77.7 | 78.7 | 137.7 | 135 | 2.7 | 16 | 1 |
| | 5 | ★ | MMS1480X5DB | 76.7 | 107.7 | 108.7 | 167.7 | 165 | 2.7 | 16 | 1 |
| 14.9 | 3 | □ | MMS1490S-DIN | 42.4 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 2 |
| | 3 | □ | MMS1490S-DIN-C | 42.4 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 1 |
| | 5 | □ | MMS1490L-DIN | 60.4 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 2 |
| | 5 | □ | MMS1490L-DIN-C | 60.4 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 1 |
| | 3 | ★ | MMS1490X3DB | 47.4 | 77.7 | 78.7 | 137.7 | 135 | 2.7 | 16 | 1 |
| | 5 | ★ | MMS1490X5DB | 77.2 | 107.7 | 108.7 | 167.7 | 165 | 2.7 | 16 | 1 |
| 15.0 | 3 | □ | MMS1500S-DIN | 42.2 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 2 |
| | 3 | □ | MMS1500S-DIN-C | 42.2 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 1 |
| | 5 | □ | MMS1500L-DIN | 60.2 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 2 |
| | 5 | □ | MMS1500L-DIN-C | 60.2 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 1 |
| | 3 | ★ | MMS1500X3DB | 47.7 | 77.7 | 78.7 | 137.7 | 135 | 2.7 | 16 | 1 |
| | 5 | ★ | MMS1500X5DB | 77.7 | 107.7 | 108.7 | 167.7 | 165 | 2.7 | 16 | 1 |
| 15.1 | 3 | □ | MMS1510S-DIN | 42.1 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 2 |
| | 3 | □ | MMS1510S-DIN-C | 42.1 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 1 |
| | 5 | □ | MMS1510L-DIN | 60.1 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 2 |
| | 5 | □ | MMS1510L-DIN-C | 60.1 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 1 |
| | 3 | ★ | MMS1510X3DB | 48.0 | 80.7 | 82.7 | 141.7 | 139 | 2.7 | 16 | 1 |
| | 5 | ★ | MMS1510X5DB | 78.2 | 111.7 | 114.7 | 173.7 | 171 | 2.7 | 16 | 1 |
| 15.2 | 3 | □ | MMS1520S-DIN | 42.0 | 64.8 | 65.8 | 114.8 | 112 | 2.8 | 16 | 2 |
| | 3 | □ | MMS1520S-DIN-C | 42.0 | 64.8 | 65.8 | 114.8 | 112 | 2.8 | 16 | 1 |
| | 5 | □ | MMS1520L-DIN | 60.0 | 82.8 | 83.8 | 132.8 | 130 | 2.8 | 16 | 2 |
| | 5 | □ | MMS1520L-DIN-C | 60.0 | 82.8 | 83.8 | 132.8 | 130 | 2.8 | 16 | 1 |
| | 3 | ★ | MMS1520X3DB | 48.4 | 80.8 | 82.8 | 141.8 | 139 | 2.8 | 16 | 1 |
| | 5 | ★ | MMS1520X5DB | 78.8 | 111.8 | 114.8 | 173.8 | 171 | 2.8 | 16 | 1 |
| 15.3 | 3 | □ | MMS1530S-DIN | 41.8 | 64.8 | 65.8 | 114.8 | 112 | 2.8 | 16 | 2 |
| | 3 | □ | MMS1530S-DIN-C | 41.8 | 64.8 | 65.8 | 114.8 | 112 | 2.8 | 16 | 1 |
| | 5 | □ | MMS1530L-DIN | 59.8 | 82.8 | 83.8 | 132.8 | 130 | 2.8 | 16 | 2 |
| | 5 | □ | MMS1530L-DIN-C | 59.8 | 82.8 | 83.8 | 132.8 | 130 | 2.8 | 16 | 1 |
| | 3 | ★ | MMS1530X3DB | 48.7 | 80.8 | 82.8 | 141.8 | 139 | 2.8 | 16 | 1 |
| | 5 | ★ | MMS1530X5DB | 79.3 | 111.8 | 114.8 | 173.8 | 171 | 2.8 | 16 | 1 |
| 15.4 | 3 | □ | MMS1540S-DIN | 41.7 | 64.8 | 65.8 | 114.8 | 112 | 2.8 | 16 | 2 |
| | 3 | □ | MMS1540S-DIN-C | 41.7 | 64.8 | 65.8 | 114.8 | 112 | 2.8 | 16 | 1 |
| | 5 | □ | MMS1540L-DIN | 59.7 | 82.8 | 83.8 | 132.8 | 130 | 2.8 | 16 | 2 |
| | 5 | □ | MMS1540L-DIN-C | 59.7 | 82.8 | 83.8 | 132.8 | 130 | 2.8 | 16 | 1 |
| | 3 | ★ | MMS1540X3DB | 49.0 | 80.8 | 82.8 | 141.8 | 139 | 2.8 | 16 | 1 |
| | 5 | ★ | MMS1540X5DB | 79.8 | 111.8 | 114.8 | 173.8 | 171 | 2.8 | 16 | 1 |
| 15.5 | 3 | □ | MMS1550S-DIN | 41.6 | 64.8 | 65.8 | 114.8 | 112 | 2.8 | 16 | 2 |
| | 3 | □ | MMS1550S-DIN-C | 41.6 | 64.8 | 65.8 | 114.8 | 112 | 2.8 | 16 | 1 |
| | 5 | □ | MMS1550L-DIN | 59.6 | 82.8 | 83.8 | 132.8 | 130 | 2.8 | 16 | 2 |
| | 5 | □ | MMS1550L-DIN-C | 59.6 | 82.8 | 83.8 | 132.8 | 130 | 2.8 | 16 | 1 |
| | 3 | ★ | MMS1550X3DB | 49.3 | 80.8 | 82.8 | 141.8 | 139 | 2.8 | 16 | 1 |
| | 5 | ★ | MMS1550X5DB | 80.3 | 111.8 | 114.8 | 173.8 | 171 | 2.8 | 16 | 1 |

| DC (mm) | Rapport (L/D) | DP7020 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.6 | 3 | □ | MMS1560S-DIN | 41.4 | 64.8 | 65.8 | 114.8 | 112 | 2.8 | 16 | 2 |
| | 3 | □ | MMS1560S-DIN-C | 41.4 | 64.8 | 65.8 | 114.8 | 112 | 2.8 | 16 | 1 |
| | 5 | □ | MMS1560L-DIN | 59.4 | 82.8 | 83.8 | 132.8 | 130 | 2.8 | 16 | 2 |
| | 5 | □ | MMS1560L-DIN-C | 59.4 | 82.8 | 83.8 | 132.8 | 130 | 2.8 | 16 | 1 |
| | 3 | ★ | MMS1560X3DB | 49.6 | 82.8 | 82.8 | 141.8 | 139 | 2.8 | 16 | 1 |
| | 5 | ★ | MMS1560X5DB | 80.8 | 114.8 | 114.8 | 173.8 | 171 | 2.8 | 16 | 1 |
| 15.7 | 3 | □ | MMS1570S-DIN | 41.3 | 64.9 | 65.9 | 114.9 | 112 | 2.9 | 16 | 2 |
| | 3 | □ | MMS1570S-DIN-C | 41.3 | 64.9 | 65.9 | 114.9 | 112 | 2.9 | 16 | 1 |
| | 5 | □ | MMS1570L-DIN | 59.3 | 82.9 | 83.9 | 132.9 | 130 | 2.9 | 16 | 2 |
| | 5 | □ | MMS1570L-DIN-C | 59.3 | 82.9 | 83.9 | 132.9 | 130 | 2.9 | 16 | 1 |
| | 3 | ★ | MMS1570X3DB | 50.0 | 82.9 | 82.9 | 141.9 | 139 | 2.9 | 16 | 1 |
| | 5 | ★ | MMS1570X5DB | 81.4 | 114.9 | 114.9 | 173.9 | 171 | 2.9 | 16 | 1 |
| 15.8 | 3 | □ | MMS1580S-DIN | 41.2 | 64.9 | 65.9 | 114.9 | 112 | 2.9 | 16 | 2 |
| | 3 | □ | MMS1580S-DIN-C | 41.2 | 64.9 | 65.9 | 114.9 | 112 | 2.9 | 16 | 1 |
| | 5 | □ | MMS1580L-DIN | 59.2 | 82.9 | 83.9 | 132.9 | 130 | 2.9 | 16 | 2 |
| | 5 | □ | MMS1580L-DIN-C | 59.2 | 82.9 | 83.9 | 132.9 | 130 | 2.9 | 16 | 1 |
| | 3 | ★ | MMS1580X3DB | 50.3 | 82.9 | 82.9 | 141.9 | 139 | 2.9 | 16 | 1 |
| | 5 | ★ | MMS1580X5DB | 81.9 | 114.9 | 114.9 | 173.9 | 171 | 2.9 | 16 | 1 |
| 15.9 | 3 | □ | MMS1590S-DIN | 41.0 | 64.9 | 65.9 | 114.9 | 112 | 2.9 | 16 | 2 |
| | 3 | □ | MMS1590S-DIN-C | 41.0 | 64.9 | 65.9 | 114.9 | 112 | 2.9 | 16 | 1 |
| | 5 | □ | MMS1590L-DIN | 59.0 | 82.9 | 83.9 | 132.9 | 130 | 2.9 | 16 | 2 |
| | 5 | □ | MMS1590L-DIN-C | 59.0 | 82.9 | 83.9 | 132.9 | 130 | 2.9 | 16 | 1 |
| | 3 | ★ | MMS1590X3DB | 50.6 | 82.9 | 82.9 | 141.9 | 139 | 2.9 | 16 | 1 |
| | 5 | ★ | MMS1590X5DB | 82.4 | 114.9 | 114.9 | 173.9 | 171 | 2.9 | 16 | 1 |
| 16.0 | 3 | □ | MMS1600S-DIN | 40.9 | 64.9 | 65.9 | 114.9 | 112 | 2.9 | 16 | 2 |
| | 3 | □ | MMS1600S-DIN-C | 40.9 | 64.9 | 65.9 | 114.9 | 112 | 2.9 | 16 | 1 |
| | 5 | □ | MMS1600L-DIN | 58.9 | 82.9 | 83.9 | 132.9 | 130 | 2.9 | 16 | 2 |
| | 5 | □ | MMS1600L-DIN-C | 58.9 | 82.9 | 83.9 | 132.9 | 130 | 2.9 | 16 | 1 |
| | 3 | ★ | MMS1600X3DB | 50.9 | 82.9 | 82.9 | 141.9 | 139 | 2.9 | 16 | 1 |
| | 5 | ★ | MMS1600X5DB | 82.9 | 114.9 | 114.9 | 173.9 | 171 | 2.9 | 16 | 1 |
| 16.1 | 3 | □ | MMS1610S-DIN | 48.8 | 72.9 | 73.9 | 122.9 | 120 | 2.9 | 18 | 2 |
| | 3 | □ | MMS1610S-DIN-C | 48.8 | 72.9 | 73.9 | 122.9 | 120 | 2.9 | 18 | 1 |
| | 5 | □ | MMS1610L-DIN | 68.8 | 92.9 | 93.9 | 142.9 | 140 | 2.9 | 18 | 2 |
| | 5 | □ | MMS1610L-DIN-C | 68.8 | 92.9 | 93.9 | 142.9 | 140 | 2.9 | 18 | 1 |
| | 3 | □ | MMS1610X3DB | 51.2 | 85.9 | 88.9 | 147.9 | 145 | 2.9 | 18 | 1 |
| | 5 | □ | MMS1610X5DB | 83.4 | 118.9 | 122.9 | 181.9 | 179 | 2.9 | 18 | 1 |
| 16.2 | 3 | □ | MMS1620S-DIN | 48.6 | 72.9 | 73.9 | 122.9 | 120 | 2.9 | 18 | 2 |
| | 3 | □ | MMS1620S-DIN-C | 48.6 | 72.9 | 73.9 | 122.9 | 120 | 2.9 | 18 | 1 |
| | 5 | □ | MMS1620L-DIN | 68.6 | 92.9 | 93.9 | 142.9 | 140 | 2.9 | 18 | 2 |
| | 5 | □ | MMS1620L-DIN-C | 68.6 | 92.9 | 93.9 | 142.9 | 140 | 2.9 | 18 | 1 |
| | 3 | □ | MMS1620X3DB | 51.5 | 85.9 | 88.9 | 147.9 | 145 | 2.9 | 18 | 1 |
| | 5 | □ | MMS1620X5DB | 83.9 | 118.9 | 122.9 | 181.9 | 179 | 2.9 | 18 | 1 |
| 16.3 | 3 | □ | MMS1630S-DIN | 48.5 | 73.0 | 74.0 | 123.0 | 120 | 3.0 | 18 | 2 |
| | 3 | □ | MMS1630S-DIN-C | 48.5 | 73.0 | 74.0 | 123.0 | 120 | 3.0 | 18 | 1 |
| | 5 | □ | MMS1630L-DIN | 68.5 | 93.0 | 94.0 | 143.0 | 140 | 3.0 | 18 | 2 |
| | 5 | □ | MMS1630L-DIN-C | 68.5 | 93.0 | 94.0 | 143.0 | 140 | 3.0 | 18 | 1 |
| | 3 | □ | MMS1630X3DB | 51.9 | 86.0 | 89.0 | 148.0 | 145 | 3.0 | 18 | 1 |
| | 5 | □ | MMS1630X5DB | 84.5 | 119.0 | 123.0 | 182.0 | 179 | 3.0 | 18 | 1 |

★ : Article standard Japon. □ : Article non stocké - Fabrication sur commande uniquement.

| DC (mm) | Rapport (L/D) | DP7020 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.4 | 3 | □ | MMS1640S-DIN | 48.4 | 73.0 | 74.0 | 123.0 | 120 | 3.0 | 18 | 2 |
| | 3 | □ | MMS1640S-DIN-C | 48.4 | 73.0 | 74.0 | 123.0 | 120 | 3.0 | 18 | 1 |
| | 5 | □ | MMS1640L-DIN | 68.4 | 93.0 | 94.0 | 143.0 | 140 | 3.0 | 18 | 2 |
| | 5 | □ | MMS1640L-DIN-C | 68.4 | 93.0 | 94.0 | 143.0 | 140 | 3.0 | 18 | 1 |
| | 3 | □ | MMS1640X3DB | 52.2 | 86.0 | 89.0 | 148.0 | 145 | 3.0 | 18 | 1 |
| | 5 | □ | MMS1640X5DB | 85.0 | 119.0 | 123.0 | 182.0 | 179 | 3.0 | 18 | 1 |
| 16.5 | 3 | □ | MMS1650S-DIN | 48.3 | 73.0 | 74.0 | 123.0 | 120 | 3.0 | 18 | 2 |
| | 3 | □ | MMS1650S-DIN-C | 48.3 | 73.0 | 74.0 | 123.0 | 120 | 3.0 | 18 | 1 |
| | 5 | □ | MMS1650L-DIN | 68.3 | 93.0 | 94.0 | 143.0 | 140 | 3.0 | 18 | 2 |
| | 5 | □ | MMS1650L-DIN-C | 68.3 | 93.0 | 94.0 | 143.0 | 140 | 3.0 | 18 | 1 |
| | 3 | ★ | MMS1650X3DB | 52.5 | 86.0 | 89.0 | 148.0 | 145 | 3.0 | 18 | 1 |
| | 5 | ★ | MMS1650X5DB | 85.5 | 119.0 | 123.0 | 182.0 | 179 | 3.0 | 18 | 1 |
| 16.6 | 3 | □ | MMS1660S-DIN | 48.1 | 73.0 | 74.0 | 123.0 | 120 | 3.0 | 18 | 2 |
| | 3 | □ | MMS1660S-DIN-C | 48.1 | 73.0 | 74.0 | 123.0 | 120 | 3.0 | 18 | 1 |
| | 5 | □ | MMS1660L-DIN | 68.1 | 93.0 | 94.0 | 143.0 | 140 | 3.0 | 18 | 2 |
| | 5 | □ | MMS1660L-DIN-C | 68.1 | 93.0 | 94.0 | 143.0 | 140 | 3.0 | 18 | 1 |
| | 3 | □ | MMS1660X3DB | 52.8 | 88.0 | 89.0 | 148.0 | 145 | 3.0 | 18 | 1 |
| | 5 | □ | MMS1660X5DB | 86.0 | 122.0 | 123.0 | 182.0 | 179 | 3.0 | 18 | 1 |
| 16.7 | 3 | □ | MMS1670S-DIN | 48.0 | 73.0 | 74.0 | 123.0 | 120 | 3.0 | 18 | 2 |
| | 3 | □ | MMS1670S-DIN-C | 48.0 | 73.0 | 74.0 | 123.0 | 120 | 3.0 | 18 | 1 |
| | 5 | □ | MMS1670L-DIN | 68.0 | 93.0 | 94.0 | 143.0 | 140 | 3.0 | 18 | 2 |
| | 5 | □ | MMS1670L-DIN-C | 68.0 | 93.0 | 94.0 | 143.0 | 140 | 3.0 | 18 | 1 |
| | 3 | □ | MMS1670X3DB | 53.1 | 88.0 | 89.0 | 148.0 | 145 | 3.0 | 18 | 1 |
| | 5 | □ | MMS1670X5DB | 86.5 | 122.0 | 123.0 | 182.0 | 179 | 3.0 | 18 | 1 |
| 16.8 | 3 | □ | MMS1680S-DIN | 47.9 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 2 |
| | 3 | □ | MMS1680S-DIN-C | 47.9 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 1 |
| | 5 | □ | MMS1680L-DIN | 67.9 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 2 |
| | 5 | □ | MMS1680L-DIN-C | 67.9 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 1 |
| | 3 | □ | MMS1680X3DB | 53.5 | 88.1 | 89.1 | 148.1 | 145 | 3.1 | 18 | 1 |
| | 5 | □ | MMS1680X5DB | 87.1 | 122.1 | 123.1 | 182.1 | 179 | 3.1 | 18 | 1 |
| 16.9 | 3 | □ | MMS1690S-DIN | 47.7 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 2 |
| | 3 | □ | MMS1690S-DIN-C | 47.7 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 1 |
| | 5 | □ | MMS1690L-DIN | 67.7 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 2 |
| | 5 | □ | MMS1690L-DIN-C | 67.7 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 1 |
| | 3 | □ | MMS1690X3DB | 53.8 | 88.1 | 89.1 | 148.1 | 145 | 3.1 | 18 | 1 |
| | 5 | □ | MMS1690X5DB | 87.6 | 122.1 | 123.1 | 182.1 | 179 | 3.1 | 18 | 1 |
| 17.0 | 3 | □ | MMS1700S-DIN | 47.6 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 2 |
| | 3 | □ | MMS1700S-DIN-C | 47.6 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 1 |
| | 5 | □ | MMS1700L-DIN | 67.6 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 2 |
| | 5 | □ | MMS1700L-DIN-C | 67.6 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 1 |
| | 3 | ★ | MMS1700X3DB | 54.1 | 88.1 | 89.1 | 148.1 | 145 | 3.1 | 18 | 1 |
| | 5 | ★ | MMS1700X5DB | 88.1 | 122.1 | 123.1 | 182.1 | 179 | 3.1 | 18 | 1 |
| 17.1 | 3 | □ | MMS1710S-DIN | 47.5 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 2 |
| | 3 | □ | MMS1710S-DIN-C | 47.5 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 1 |
| | 5 | □ | MMS1710L-DIN | 67.5 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 2 |
| | 5 | □ | MMS1710L-DIN-C | 67.5 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 1 |
| | 3 | □ | MMS1710X3DB | 54.4 | 91.1 | 93.1 | 152.1 | 149 | 3.1 | 18 | 1 |
| | 5 | □ | MMS1710X5DB | 88.6 | 126.1 | 129.1 | 188.1 | 185 | 3.1 | 18 | 1 |

| DC (mm) | Rapport (L/D) | DP7020 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.2 | 3 | □ | MMS1720S-DIN | 47.3 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 2 |
| | 3 | □ | MMS1720S-DIN-C | 47.3 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 1 |
| | 5 | □ | MMS1720L-DIN | 67.3 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 2 |
| | 5 | □ | MMS1720L-DIN-C | 67.3 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 1 |
| | 3 | □ | MMS1720X3DB | 54.7 | 91.1 | 93.1 | 152.1 | 149 | 3.1 | 18 | 1 |
| | 5 | □ | MMS1720X5DB | 89.1 | 126.1 | 129.1 | 188.1 | 185 | 3.1 | 18 | 1 |
| 17.3 | 3 | □ | MMS1730S-DIN | 47.2 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 2 |
| | 3 | □ | MMS1730S-DIN-C | 47.2 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 1 |
| | 5 | □ | MMS1730L-DIN | 67.2 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 2 |
| | 5 | □ | MMS1730L-DIN-C | 67.2 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 1 |
| | 3 | □ | MMS1730X3DB | 55.0 | 91.1 | 93.1 | 152.1 | 149 | 3.1 | 18 | 1 |
| | 5 | □ | MMS1730X5DB | 89.6 | 126.1 | 129.1 | 188.1 | 185 | 3.1 | 18 | 1 |
| 17.4 | 3 | □ | MMS1740S-DIN | 47.1 | 73.2 | 74.2 | 123.2 | 120 | 3.2 | 18 | 2 |
| | 3 | □ | MMS1740S-DIN-C | 47.1 | 73.2 | 74.2 | 123.2 | 120 | 3.2 | 18 | 1 |
| | 5 | □ | MMS1740L-DIN | 67.1 | 93.2 | 94.2 | 143.2 | 140 | 3.2 | 18 | 2 |
| | 5 | □ | MMS1740L-DIN-C | 67.1 | 93.2 | 94.2 | 143.2 | 140 | 3.2 | 18 | 1 |
| | 3 | □ | MMS1740X3DB | 55.4 | 91.2 | 93.2 | 152.2 | 149 | 3.2 | 18 | 1 |
| | 5 | □ | MMS1740X5DB | 90.2 | 126.2 | 129.2 | 188.2 | 185 | 3.2 | 18 | 1 |
| 17.5 | 3 | □ | MMS1750S-DIN | 46.9 | 73.2 | 74.2 | 123.2 | 120 | 3.2 | 18 | 2 |
| | 3 | □ | MMS1750S-DIN-C | 46.9 | 73.2 | 74.2 | 123.2 | 120 | 3.2 | 18 | 1 |
| | 5 | □ | MMS1750L-DIN | 66.9 | 93.2 | 94.2 | 143.2 | 140 | 3.2 | 18 | 2 |
| | 5 | □ | MMS1750L-DIN-C | 66.9 | 93.2 | 94.2 | 143.2 | 140 | 3.2 | 18 | 1 |
| | 3 | ★ | MMS1750X3DB | 55.7 | 91.2 | 93.2 | 152.2 | 149 | 3.2 | 18 | 1 |
| | 5 | ★ | MMS1750X5DB | 90.7 | 126.2 | 129.2 | 188.2 | 185 | 3.2 | 18 | 1 |
| 17.6 | 3 | □ | MMS1760S-DIN | 46.8 | 73.2 | 74.2 | 123.2 | 120 | 3.2 | 18 | 2 |
| | 3 | □ | MMS1760S-DIN-C | 46.8 | 73.2 | 74.2 | 123.2 | 120 | 3.2 | 18 | 1 |
| | 5 | □ | MMS1760L-DIN | 66.8 | 93.2 | 94.2 | 143.2 | 140 | 3.2 | 18 | 2 |
| | 5 | □ | MMS1760L-DIN-C | 66.8 | 93.2 | 94.2 | 143.2 | 140 | 3.2 | 18 | 1 |
| | 3 | □ | MMS1760X3DB | 56.0 | 93.2 | 93.2 | 152.2 | 149 | 3.2 | 18 | 1 |
| | 5 | □ | MMS1760X5DB | 91.2 | 129.2 | 129.2 | 188.2 | 185 | 3.2 | 18 | 1 |
| 17.7 | 3 | □ | MMS1770S-DIN | 46.7 | 73.2 | 74.2 | 123.2 | 120 | 3.2 | 18 | 2 |
| | 3 | □ | MMS1770S-DIN-C | 46.7 | 73.2 | 74.2 | 123.2 | 120 | 3.2 | 18 | 1 |
| | 5 | □ | MMS1770L-DIN | 66.7 | 93.2 | 94.2 | 143.2 | 140 | 3.2 | 18 | 2 |
| | 5 | □ | MMS1770L-DIN-C | 66.7 | 93.2 | 94.2 | 143.2 | 140 | 3.2 | 18 | 1 |
| | 3 | □ | MMS1770X3DB | 56.3 | 93.2 | 93.2 | 152.2 | 149 | 3.2 | 18 | 1 |
| | 5 | □ | MMS1770X5DB | 91.7 | 129.2 | 129.2 | 188.2 | 185 | 3.2 | 18 | 1 |
| 17.8 | 3 | □ | MMS1780S-DIN | 46.5 | 73.2 | 74.2 | 123.2 | 120 | 3.2 | 18 | 2 |
| | 3 | □ | MMS1780S-DIN-C | 46.5 | 73.2 | 74.2 | 123.2 | 120 | 3.2 | 18 | 1 |
| | 5 | □ | MMS1780L-DIN | 66.5 | 93.2 | 94.2 | 143.2 | 140 | 3.2 | 18 | 2 |
| | 5 | □ | MMS1780L-DIN-C | 66.5 | 93.2 | 94.2 | 143.2 | 140 | 3.2 | 18 | 1 |
| | 3 | □ | MMS1780X3DB | 56.6 | 93.2 | 93.2 | 152.2 | 149 | 3.2 | 18 | 1 |
| | 5 | □ | MMS1780X5DB | 92.2 | 129.2 | 129.2 | 188.2 | 185 | 3.2 | 18 | 1 |
| 17.9 | 3 | □ | MMS1790S-DIN | 46.4 | 73.3 | 74.3 | 123.3 | 120 | 3.3 | 18 | 2 |
| | 3 | □ | MMS1790S-DIN-C | 46.4 | 73.3 | 74.3 | 123.3 | 120 | 3.3 | 18 | 1 |
| | 5 | □ | MMS1790L-DIN | 66.4 | 93.3 | 94.3 | 143.3 | 140 | 3.3 | 18 | 2 |
| | 5 | □ | MMS1790L-DIN-C | 66.4 | 93.3 | 94.3 | 143.3 | 140 | 3.3 | 18 | 1 |
| | 3 | □ | MMS1790X3DB | 57.0 | 93.3 | 93.3 | 152.3 | 149 | 3.3 | 18 | 1 |
| | 5 | □ | MMS1790X5DB | 92.8 | 129.3 | 129.3 | 188.3 | 185 | 3.3 | 18 | 1 |

CONDITIONS DE COUPE ➤ M094
MÉTHODE D'UTILISATION ➤ M093
DONNÉES TECHNIQUES ➤ P001

# MMS

| DC (mm) | Rapport (L/D) | DP7020 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.0 | 3 | □ | MMS1800S-DIN | 46.3 | 73.3 | 74.3 | 123.3 | 120 | 3.3 | 18 | 2 |
| | 3 | □ | MMS1800S-DIN-C | 46.3 | 73.3 | 74.3 | 123.3 | 120 | 3.3 | 18 | 1 |
| | 5 | □ | MMS1800L-DIN | 66.3 | 93.3 | 94.3 | 143.3 | 140 | 3.3 | 18 | 2 |
| | 5 | □ | MMS1800L-DIN-C | 66.3 | 93.3 | 94.3 | 143.3 | 140 | 3.3 | 18 | 1 |
| | 3 | ★ | MMS1800X3DB | 57.3 | 93.3 | 93.3 | 152.3 | 149 | 3.3 | 18 | 1 |
| | 5 | ★ | MMS1800X5DB | 93.3 | 129.3 | 129.3 | 188.3 | 185 | 3.3 | 18 | 1 |
| 18.1 | 3 | □ | MMS1810S-DIN | 52.1 | 79.3 | 80.3 | 131.3 | 128 | 3.3 | 20 | 2 |
| | 3 | □ | MMS1810S-DIN-C | 52.1 | 79.3 | 80.3 | 131.3 | 128 | 3.3 | 20 | 1 |
| | 5 | □ | MMS1810L-DIN | 74.1 | 101.3 | 102.3 | 153.3 | 150 | 3.3 | 20 | 2 |
| | 5 | □ | MMS1810L-DIN-C | 74.1 | 101.3 | 102.3 | 153.3 | 150 | 3.3 | 20 | 1 |
| | 3 | □ | MMS1810X3DB | 57.6 | 96.3 | 99.3 | 160.3 | 157 | 3.3 | 20 | 1 |
| | 5 | □ | MMS1810X5DB | 93.8 | 133.3 | 137.3 | 198.3 | 195 | 3.3 | 20 | 1 |
| 18.2 | 3 | □ | MMS1820S-DIN | 52.0 | 79.3 | 80.3 | 131.3 | 128 | 3.3 | 20 | 2 |
| | 3 | □ | MMS1820S-DIN-C | 52.0 | 79.3 | 80.3 | 131.3 | 128 | 3.3 | 20 | 1 |
| | 5 | □ | MMS1820L-DIN | 74.0 | 101.3 | 102.3 | 153.3 | 150 | 3.3 | 20 | 2 |
| | 5 | □ | MMS1820L-DIN-C | 74.0 | 101.3 | 102.3 | 153.3 | 150 | 3.3 | 20 | 1 |
| | 3 | □ | MMS1820X3DB | 57.9 | 96.3 | 99.3 | 160.3 | 157 | 3.3 | 20 | 1 |
| | 5 | □ | MMS1820X5DB | 94.3 | 133.3 | 137.3 | 198.3 | 195 | 3.3 | 20 | 1 |
| 18.3 | 3 | □ | MMS1830S-DIN | 51.9 | 79.3 | 80.3 | 131.3 | 128 | 3.3 | 20 | 2 |
| | 3 | □ | MMS1830S-DIN-C | 51.9 | 79.3 | 80.3 | 131.3 | 128 | 3.3 | 20 | 1 |
| | 5 | □ | MMS1830L-DIN | 73.9 | 101.3 | 102.3 | 153.3 | 150 | 3.3 | 20 | 2 |
| | 5 | □ | MMS1830L-DIN-C | 73.9 | 101.3 | 102.3 | 153.3 | 150 | 3.3 | 20 | 1 |
| | 3 | □ | MMS1830X3DB | 58.2 | 96.3 | 99.3 | 160.3 | 157 | 3.3 | 20 | 1 |
| | 5 | □ | MMS1830X5DB | 94.8 | 133.3 | 137.3 | 198.3 | 195 | 3.3 | 20 | 1 |
| 18.4 | 3 | □ | MMS1840S-DIN | 51.7 | 79.3 | 80.3 | 131.3 | 128 | 3.3 | 20 | 2 |
| | 3 | □ | MMS1840S-DIN-C | 51.7 | 79.3 | 80.3 | 131.3 | 128 | 3.3 | 20 | 1 |
| | 5 | □ | MMS1840L-DIN | 73.7 | 101.3 | 102.3 | 153.3 | 150 | 3.3 | 20 | 2 |
| | 5 | □ | MMS1840L-DIN-C | 73.7 | 101.3 | 102.3 | 153.3 | 150 | 3.3 | 20 | 1 |
| | 3 | □ | MMS1840X3DB | 58.5 | 96.3 | 99.3 | 160.3 | 157 | 3.3 | 20 | 1 |
| | 5 | □ | MMS1840X5DB | 95.3 | 133.3 | 137.3 | 198.3 | 195 | 3.3 | 20 | 1 |
| 18.5 | 3 | □ | MMS1850S-DIN | 51.6 | 79.4 | 80.4 | 131.4 | 128 | 3.4 | 20 | 2 |
| | 3 | □ | MMS1850S-DIN-C | 51.6 | 79.4 | 80.4 | 131.4 | 128 | 3.4 | 20 | 1 |
| | 5 | □ | MMS1850L-DIN | 73.6 | 101.4 | 102.4 | 153.4 | 150 | 3.4 | 20 | 2 |
| | 5 | □ | MMS1850L-DIN-C | 73.6 | 101.4 | 102.4 | 153.4 | 150 | 3.4 | 20 | 1 |
| | 3 | ★ | MMS1850X3DB | 58.9 | 96.4 | 99.4 | 160.4 | 157 | 3.4 | 20 | 1 |
| | 5 | ★ | MMS1850X5DB | 95.9 | 133.4 | 137.4 | 198.4 | 195 | 3.4 | 20 | 1 |
| 18.6 | 3 | □ | MMS1860S-DIN | 51.5 | 79.4 | 80.4 | 131.4 | 128 | 3.4 | 20 | 2 |
| | 3 | □ | MMS1860S-DIN-C | 51.5 | 79.4 | 80.4 | 131.4 | 128 | 3.4 | 20 | 1 |
| | 5 | □ | MMS1860L-DIN | 73.5 | 101.4 | 102.4 | 153.4 | 150 | 3.4 | 20 | 2 |
| | 5 | □ | MMS1860L-DIN-C | 73.5 | 101.4 | 102.4 | 153.4 | 150 | 3.4 | 20 | 1 |
| | 3 | □ | MMS1860X3DB | 59.2 | 98.4 | 99.4 | 160.4 | 157 | 3.4 | 20 | 1 |
| | 5 | □ | MMS1860X5DB | 96.4 | 136.4 | 137.4 | 198.4 | 195 | 3.4 | 20 | 1 |
| 18.7 | 3 | □ | MMS1870S-DIN | 51.4 | 79.4 | 80.4 | 131.4 | 128 | 3.4 | 20 | 2 |
| | 3 | □ | MMS1870S-DIN-C | 51.4 | 79.4 | 80.4 | 131.4 | 128 | 3.4 | 20 | 1 |
| | 5 | □ | MMS1870L-DIN | 73.4 | 101.4 | 102.4 | 153.4 | 150 | 3.4 | 20 | 2 |
| | 5 | □ | MMS1870L-DIN-C | 73.4 | 101.4 | 102.4 | 153.4 | 150 | 3.4 | 20 | 1 |
| | 3 | □ | MMS1870X3DB | 59.5 | 98.4 | 99.4 | 160.4 | 157 | 3.4 | 20 | 1 |
| | 5 | □ | MMS1870X5DB | 96.9 | 136.4 | 137.4 | 198.4 | 195 | 3.4 | 20 | 1 |

| DC (mm) | Rapport (L/D) | DP7020 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.8 | 3 | □ | MMS1880S-DIN | 51.2 | 79.4 | 80.4 | 131.4 | 128 | 3.4 | 20 | 2 |
| | 3 | □ | MMS1880S-DIN-C | 51.2 | 79.4 | 80.4 | 131.4 | 128 | 3.4 | 20 | 1 |
| | 5 | □ | MMS1880L-DIN | 73.2 | 101.4 | 102.4 | 153.4 | 150 | 3.4 | 20 | 2 |
| | 5 | □ | MMS1880L-DIN-C | 73.2 | 101.4 | 102.4 | 153.4 | 150 | 3.4 | 20 | 1 |
| | 3 | □ | MMS1880X3DB | 59.8 | 98.4 | 99.4 | 160.4 | 157 | 3.4 | 20 | 1 |
| | 5 | □ | MMS1880X5DB | 97.4 | 136.4 | 137.4 | 198.4 | 195 | 3.4 | 20 | 1 |
| 18.9 | 3 | □ | MMS1890S-DIN | 51.1 | 79.4 | 80.4 | 131.4 | 128 | 3.4 | 20 | 2 |
| | 3 | □ | MMS1890S-DIN-C | 51.1 | 79.4 | 80.4 | 131.4 | 128 | 3.4 | 20 | 1 |
| | 5 | □ | MMS1890L-DIN | 73.1 | 101.4 | 102.4 | 153.4 | 150 | 3.4 | 20 | 2 |
| | 5 | □ | MMS1890L-DIN-C | 73.1 | 101.4 | 102.4 | 153.4 | 150 | 3.4 | 20 | 1 |
| | 3 | □ | MMS1890X3DB | 60.1 | 98.4 | 99.4 | 160.4 | 157 | 3.4 | 20 | 1 |
| | 5 | □ | MMS1890X5DB | 97.9 | 136.4 | 137.4 | 198.4 | 195 | 3.4 | 20 | 1 |
| 19.0 | 3 | □ | MMS1900S-DIN | 51.0 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 2 |
| | 3 | □ | MMS1900S-DIN-C | 51.0 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 1 |
| | 5 | □ | MMS1900L-DIN | 73.0 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 2 |
| | 5 | □ | MMS1900L-DIN-C | 73.0 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 1 |
| | 3 | ★ | MMS1900X3DB | 60.5 | 98.5 | 99.5 | 160.5 | 157 | 3.5 | 20 | 1 |
| | 5 | ★ | MMS1900X5DB | 98.5 | 136.5 | 137.5 | 198.5 | 195 | 3.5 | 20 | 1 |
| 19.1 | 3 | □ | MMS1910S-DIN | 50.8 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 2 |
| | 3 | □ | MMS1910S-DIN-C | 50.8 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 1 |
| | 5 | □ | MMS1910L-DIN | 72.8 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 2 |
| | 5 | □ | MMS1910L-DIN-C | 72.8 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 1 |
| | 3 | □ | MMS1910X3DB | 60.8 | 101.5 | 103.5 | 164.5 | 161 | 3.5 | 20 | 1 |
| | 5 | □ | MMS1910X5DB | 99.0 | 140.5 | 143.5 | 204.5 | 201 | 3.5 | 20 | 1 |
| 19.2 | 3 | □ | MMS1920S-DIN | 50.7 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 2 |
| | 3 | □ | MMS1920S-DIN-C | 50.7 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 1 |
| | 5 | □ | MMS1920L-DIN | 72.7 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 2 |
| | 5 | □ | MMS1920L-DIN-C | 72.7 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 1 |
| | 3 | □ | MMS1920X3DB | 61.1 | 101.5 | 103.5 | 164.5 | 161 | 3.5 | 20 | 1 |
| | 5 | □ | MMS1920X5DB | 99.5 | 140.5 | 143.5 | 204.5 | 201 | 3.5 | 20 | 1 |
| 19.3 | 3 | □ | MMS1930S-DIN | 50.6 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 2 |
| | 3 | □ | MMS1930S-DIN-C | 50.6 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 1 |
| | 5 | □ | MMS1930L-DIN | 72.6 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 2 |
| | 5 | □ | MMS1930L-DIN-C | 72.6 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 1 |
| | 3 | □ | MMS1930X3DB | 61.4 | 101.5 | 103.5 | 164.5 | 161 | 3.5 | 20 | 1 |
| | 5 | □ | MMS1930X5DB | 100.0 | 140.5 | 143.5 | 204.5 | 201 | 3.5 | 20 | 1 |
| 19.4 | 3 | □ | MMS1940S-DIN | 50.4 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 2 |
| | 3 | □ | MMS1940S-DIN-C | 50.4 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 1 |
| | 5 | □ | MMS1940L-DIN | 72.4 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 2 |
| | 5 | □ | MMS1940L-DIN-C | 72.4 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 1 |
| | 3 | □ | MMS1940X3DB | 61.7 | 101.5 | 103.5 | 164.5 | 161 | 3.5 | 20 | 1 |
| | 5 | □ | MMS1940X5DB | 100.5 | 140.5 | 143.5 | 204.5 | 201 | 3.5 | 20 | 1 |
| 19.5 | 3 | □ | MMS1950S-DIN | 50.3 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 2 |
| | 3 | □ | MMS1950S-DIN-C | 50.3 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 1 |
| | 5 | □ | MMS1950L-DIN | 72.3 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 2 |
| | 5 | □ | MMS1950L-DIN-C | 72.3 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 1 |
| | 3 | ★ | MMS1950X3DB | 62.0 | 101.5 | 103.5 | 164.5 | 161 | 3.5 | 20 | 1 |
| | 5 | ★ | MMS1950X5DB | 101.0 | 140.5 | 143.5 | 204.5 | 201 | 3.5 | 20 | 1 |

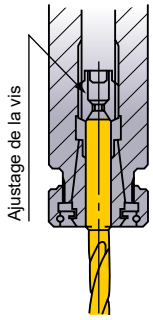
★ : Article standard Japon. □ : Article non stocké - Fabrication sur commande uniquement.

| DC (mm) | Rapport (L/D) | DP7020 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.6 | 3 | □ | MMS1960S-DIN | 50.2 | 79.6 | 80.6 | 131.6 | 128 | 3.6 | 20 | 2 |
| | 3 | □ | MMS1960S-DIN-C | 50.2 | 79.6 | 80.6 | 131.6 | 128 | 3.6 | 20 | 1 |
| | 5 | □ | MMS1960L-DIN | 72.2 | 101.6 | 102.6 | 153.6 | 150 | 3.6 | 20 | 2 |
| | 5 | □ | MMS1960L-DIN-C | 72.2 | 101.6 | 102.6 | 153.6 | 150 | 3.6 | 20 | 1 |
| | 3 | □ | MMS1960X3DB | 62.4 | 103.6 | 103.6 | 164.6 | 161 | 3.6 | 20 | 1 |
| | 5 | □ | MMS1960X5DB | 101.6 | 143.6 | 143.6 | 204.6 | 201 | 3.6 | 20 | 1 |
| 19.7 | 3 | □ | MMS1970S-DIN | 50.0 | 79.6 | 80.6 | 131.6 | 128 | 3.6 | 20 | 2 |
| | 3 | □ | MMS1970S-DIN-C | 50.0 | 79.6 | 80.6 | 131.6 | 128 | 3.6 | 20 | 1 |
| | 5 | □ | MMS1970L-DIN | 72.0 | 101.6 | 102.6 | 153.6 | 150 | 3.6 | 20 | 2 |
| | 5 | □ | MMS1970L-DIN-C | 72.0 | 101.6 | 102.6 | 153.6 | 150 | 3.6 | 20 | 1 |
| | 3 | □ | MMS1970X3DB | 62.7 | 103.6 | 103.6 | 164.6 | 161 | 3.6 | 20 | 1 |
| | 5 | □ | MMS1970X5DB | 102.1 | 143.6 | 143.6 | 204.6 | 201 | 3.6 | 20 | 1 |
| 19.8 | 3 | □ | MMS1980S-DIN | 49.9 | 79.6 | 80.6 | 131.6 | 128 | 3.6 | 20 | 2 |
| | 3 | □ | MMS1980S-DIN-C | 49.9 | 79.6 | 80.6 | 131.6 | 128 | 3.6 | 20 | 1 |
| | 5 | □ | MMS1980L-DIN | 71.9 | 101.6 | 102.6 | 153.6 | 150 | 3.6 | 20 | 2 |
| | 5 | □ | MMS1980L-DIN-C | 71.9 | 101.6 | 102.6 | 153.6 | 150 | 3.6 | 20 | 1 |
| | 3 | □ | MMS1980X3DB | 63.0 | 103.6 | 103.6 | 164.6 | 161 | 3.6 | 20 | 1 |
| | 5 | □ | MMS1980X5DB | 102.6 | 143.6 | 143.6 | 204.6 | 201 | 3.6 | 20 | 1 |

| DC (mm) | Rapport (L/D) | DP7020 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.9 | 3 | □ | MMS1990S-DIN | 49.8 | 79.6 | 80.6 | 131.6 | 128 | 3.6 | 20 | 2 |
| | 3 | □ | MMS1990S-DIN-C | 49.8 | 79.6 | 80.6 | 131.6 | 128 | 3.6 | 20 | 1 |
| | 5 | □ | MMS1990L-DIN | 71.8 | 101.6 | 102.6 | 153.6 | 150 | 3.6 | 20 | 2 |
| | 5 | □ | MMS1990L-DIN-C | 71.8 | 101.6 | 102.6 | 153.6 | 150 | 3.6 | 20 | 1 |
| | 3 | □ | MMS1990X3DB | 63.3 | 103.6 | 103.6 | 164.6 | 161 | 3.6 | 20 | 1 |
| | 5 | □ | MMS1990X5DB | 103.1 | 143.6 | 143.6 | 204.6 | 201 | 3.6 | 20 | 1 |
| 20.2 | 3 | □ | MMS2000S-DIN | 49.6 | 79.6 | 80.6 | 131.6 | 128 | 3.6 | 20 | 2 |
| | 3 | □ | MMS2000S-DIN-C | 49.6 | 79.6 | 80.6 | 131.6 | 128 | 3.6 | 20 | 1 |
| | 5 | □ | MMS2000L-DIN | 71.6 | 101.6 | 102.6 | 153.6 | 150 | 3.6 | 20 | 2 |
| | 5 | □ | MMS2000L-DIN-C | 71.6 | 101.6 | 102.6 | 153.6 | 150 | 3.6 | 20 | 1 |
| | 3 | ★ | MMS2000X3DB | 63.6 | 103.6 | 103.6 | 164.6 | 161 | 3.6 | 20 | 1 |
| | 5 | ★ | MMS2000X5DB | 103.6 | 143.6 | 143.6 | 204.6 | 201 | 3.6 | 20 | 1 |

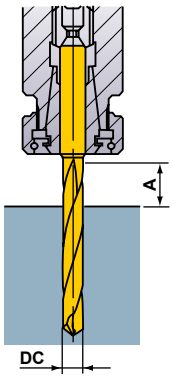
## MÉTHODE D'UTILISATION

### Fixation du foret



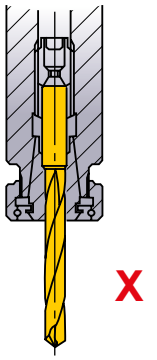

Les attachements de type à pince serrent le foret solidement.

### Longueur du foret



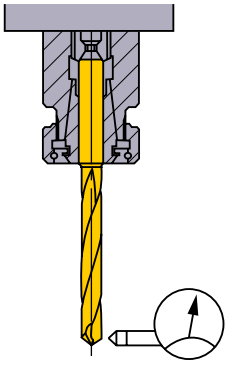

A ≥ DC x 1.5

### Installation du foret




Ne pas serrer sur les goujures.

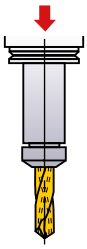
### Tolérance d'installation



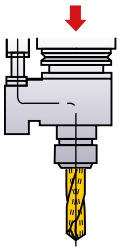
Concentricité ≤ 0.03mm

### Type d'arrosage

Arrosage par la broche



Arrosage par joint tournant



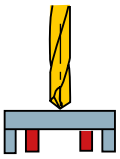
La pression du liquide de refroidissement est d'environ. 5 bar—70 bar

### Liquide réfrigérant : manipulation

1) Les particules de saletés et poussières adhèrent au liquide de refroidissement et empêchent un bon écoulement. Le remplacement régulier du liquide coupe est recommandé.

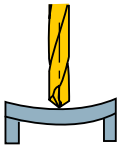
2) De petites particules de copeaux peuvent se coincer dans le trou de lubrification des forets de petit diamètre. Par précaution, utilisez toujours un filtre. Pour les forets de petit diamètre, utilisez un filtre à tamis fin.

### Pièce mince



OK

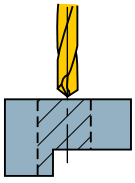
Rigidifier le montage



X

En cas d'effort et de déformation

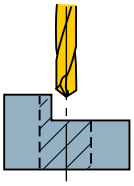
### Coupe interrompue



Un procédé

OK

①Diminuer l'avance pour percer une surface interrompue.



Usinage requis au préalable

①Utiliser une fraise 2 tailles sur une surface irrégulière avant de percer avec le foret.

CONDITIONS DE COUPE ➤ M094
DONNÉES TECHNIQUES ➤ P001

# MMS

## CONDITIONS DE COUPE RECOMMANDÉES

| Matière | M | | | | | M | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Acier inoxydable austénitique (≤180HB)<br>X5CrNi18-10, X5CrNiMo17-12-2 | | | | | Acier inoxydable austénitique (180—280HB)<br>X2CrNiN18-10, X2CrNiMoN17-12-2 | | | | |
| Diamètre foret **DC** (mm) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | | Avance table (mm/min) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | | Avance table (mm/min) |
| **3.2** | 80 | 7900 | 0.13 | (0.08—0.18) | 1025 | 60 | 5900 | 0.10 | (0.05—0.15) | 590 |
| **4.0** | 80 | 6300 | 0.15 | (0.10—0.20) | 945 | 60 | 4700 | 0.12 | (0.08—0.18) | 560 |
| **5.0** | 80 | 5000 | 0.15 | (0.10—0.20) | 750 | 60 | 3800 | 0.12 | (0.08—0.18) | 455 |
| **6.3** | 80 | 4000 | 0.17 | (0.12—0.22) | 680 | 60 | 3000 | 0.15 | (0.10—0.20) | 450 |
| **8.0** | 80 | 3100 | 0.19 | (0.14—0.24) | 585 | 60 | 2300 | 0.17 | (0.12—0.22) | 390 |
| **10.0** | 60 | 1900 | 0.20 | (0.15—0.25) | 380 | 50 | 1500 | 0.18 | (0.13—0.23) | 270 |
| **12.0** | 60 | 1500 | 0.21 | (0.16—0.26) | 315 | 50 | 1300 | 0.19 | (0.14—0.24) | 245 |
| **16.0** | 60 | 1100 | 0.22 | (0.17—0.27) | 240 | 50 | 900 | 0.20 | (0.15—0.25) | 180 |
| **20.0** | 60 | 900 | 0.23 | (0.18—0.28) | 205 | 50 | 700 | 0.21 | (0.16—0.26) | 145 |

| Matière | M | | | | | M | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Acier inoxydable duplex (≤280HB)<br>X3CrNiMoN27-5-2 | | | | | Aciers inoxydables ferritiques et martensitiques (≤200HB)<br>X10Cr13, X6Cr17 | | | | |
| Diamètre foret **DC** (mm) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | | Avance table (mm/min) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | | Avance table (mm/min) |
| **3.2** | 50 | 4900 | 0.10 | (0.05—0.15) | 490 | 80 | 7900 | 0.13 | (0.08—0.18) | 1025 |
| **4.0** | 50 | 3900 | 0.12 | (0.08—0.18) | 465 | 80 | 6300 | 0.15 | (0.10—0.20) | 945 |
| **5.0** | 50 | 3100 | 0.12 | (0.08—0.18) | 370 | 80 | 5000 | 0.15 | (0.10—0.20) | 750 |
| **6.3** | 50 | 2500 | 0.15 | (0.10—0.20) | 375 | 80 | 4000 | 0.17 | (0.12—0.22) | 680 |
| **8.0** | 50 | 1900 | 0.17 | (0.12—0.22) | 320 | 80 | 3100 | 0.19 | (0.14—0.24) | 585 |
| **10.0** | 40 | 1200 | 0.18 | (0.13—0.23) | 215 | 60 | 1900 | 0.20 | (0.15—0.25) | 380 |
| **12.0** | 40 | 1000 | 0.19 | (0.14—0.24) | 190 | 60 | 1500 | 0.21 | (0.16—0.26) | 315 |
| **16.0** | 40 | 700 | 0.20 | (0.15—0.25) | 140 | 60 | 1100 | 0.22 | (0.17—0.27) | 240 |
| **20.0** | 40 | 600 | 0.21 | (0.16—0.26) | 125 | 60 | 900 | 0.23 | (0.18—0.28) | 205 |

| Matière | M | | | | | M | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Aciers inoxydables ferritiques et martensitiques (>200HB)<br>X20CrNi17-2, X30Cr13 | | | | | Aciers inoxydables traités (<450HB)<br>X5CrNiCuNb16-4, X7CrNiAl17-7, 17-4PH, 17-7PH | | | | |
| Diamètre foret **DC** (mm) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | | Avance table (mm/min) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | | Avance table (mm/min) |
| **3.2** | 60 | 5900 | 0.10 | (0.05—0.15) | 590 | 50 | 4900 | 0.10 | (0.05—0.15) | 490 |
| **4.0** | 60 | 4700 | 0.12 | (0.08—0.18) | 560 | 50 | 3900 | 0.12 | (0.08—0.18) | 465 |
| **5.0** | 60 | 3800 | 0.12 | (0.08—0.18) | 455 | 50 | 3100 | 0.12 | (0.08—0.18) | 370 |
| **6.3** | 60 | 3000 | 0.15 | (0.10—0.20) | 450 | 50 | 2500 | 0.15 | (0.10—0.20) | 375 |
| **8.0** | 60 | 2300 | 0.17 | (0.12—0.22) | 390 | 50 | 1900 | 0.17 | (0.12—0.22) | 320 |
| **10.0** | 50 | 1500 | 0.18 | (0.13—0.23) | 270 | 40 | 1200 | 0.18 | (0.13—0.23) | 215 |
| **12.0** | 50 | 1300 | 0.19 | (0.14—0.24) | 245 | 40 | 1000 | 0.19 | (0.14—0.24) | 190 |
| **16.0** | 50 | 900 | 0.20 | (0.15—0.25) | 180 | 40 | 700 | 0.20 | (0.15—0.25) | 140 |
| **20.0** | 50 | 700 | 0.21 | (0.16—0.26) | 145 | 40 | 600 | 0.21 | (0.16—0.26) | 125 |

Remarque 1) L'arrosage haute pression par la broche est recommandé pour percer de manière stable.
Remarque 2) Le liquide de coupe par émulsion est recommandé.
Remarque 3) En utilisant un liquide de coupe non soluble, nous recommandons de réduire la vitesse de rotation de 10 à 20%.

## ■ TABLEAU D'ÉQUIVALENCE DES ACIERS INOXYDABLES

| Matière | | Allemagne | | USA | Japon |
|---|---|---|---|---|---|
| | | **W-no.** | **DIN** | AISI/SAE | JIS |
| Aciers inoxydables austénitiques et martensitiques | ≤200HB | 1.4005 | X12CrS3 | 416 | SUS416 |
| | | 1.4006 | X10Cr13 | 410 | SUS410 |
| | | 1.4016 | X6Cr17 | 430 | SUS430 |
| | | 1.4113 | X6CrMo17 | 434 | SUS434 |
| | | 1.4510 | X6CrTi17 | 430Ti | SUS430LX |
| | | 1.4512 | X6CrTi12 | 409 | — |
| | >200HB | 1.4021 | X20Cr13 | 420 | SUS420J1 |
| | | 1.4057 | X20CrNi17-2 | 431 | SUS431 |
| | | 1.4028 | X30Cr13 | 420 | SUS420J2 |
| | | 1.4125 | X10CrMo17 | 440C | SUS440C |
| Acier inoxydable | <450HB | 1.4542 | X5CrNiCuNb16 4 | 630 (17-4PH) | SUS630 |
| | | 1.4545 | — | S15500 (15-5PH) | — |
| | | 1.4568 | X7CrNiAl17 7 | 631 (17-7PH) | SUS631 |
| Acier inoxydable austénitique | ≤200HB | 1.4301 | X5CrNi18 10 | 304 | SUS304 |
| | | 1.4303 | X5CrNi8-12 | 305 | SUS305 |
| | | 1.4305 | X12CrNiS18-9 | 303 | SUS303 |
| | | 1.4307 | X2CrNi19-11 | 304L | SUS304L |
| | | 1.4401 | X5CrNiMo17 12 2 | 316 | SUS316 |
| | >200HB | 1.4311 | X2CrNiN18 10 | 304LN | SUS304LN |
| | | 1.4404 | X2CrNiMo17 12 2 | 316L | SUS316L |
| | | 1.4406 | X2CrNiMoN17 12 2 | 316LN | SUS316LN |
| | | 1.4435 | X2CrNiMo18 14 3 | — | SUS316L |
| | | 1.4438 | X2CrNiMo18 15 4 | 317L | SUS317L |
| | | 1.4529 | X1NiCrMoCuN25 20 7 | N08926 | — |
| | | 1.4541 | X6CrNiTi18-10 | 321 | SUS321 |
| | | 1.4550 | X6CrNiNb18-10 | 347 | SUS347 |
| | | 1.4571 | X6CrNiMoTi17 12 2 | 316Ti | SUS316Ti |
| Acier Duplex | ≤280HB | 1.4362 | X2CrNiN23 4 | — | — |
| | | 1.4410 | X2CrNiMoN25 7 4 | S32750 | SCS14A |
| | | 1.4460 | X3CrNiMoN27 5 2 | 329 | SUS329J1 |
| | | 1.4462 | X2CrNiMoN22 5 3 | S31803 | SUS329J3L |

# PERÇAGE (CARBURE MONOBLOC)

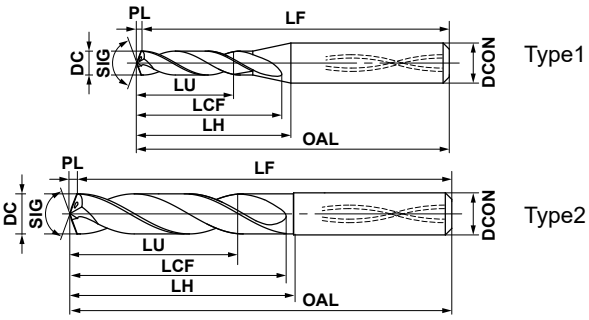
# DSAS NEW

P | M | K | N | **S** | H

Arrosage intérieur

La couleur du revêtement peut varier selon la direction d'observation.
Cela n'a aucun effet sur les performances du foret.

| DC=3 | 3<DC≤6 | 6<DC≤10 | 10<DC≤12 | |
|---|---|---|---|---|
| 0 −0.018 | 0 −0.018 | 0 −0.022 | 0 −0.027 | |
| DCON=6 | 6<DCON≤10 | DCON=12 | | |
| 0 −0.018 | 0 −0.009 | 0 −0.011 | | |




| DC (mm) | Rapport (L/D) | DP9020 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **3.00** | 3 | ● | **DSAS0300X03S060** | 9.5 | 21.5 | 23.5 | 70.5 | 70 | 0.5 | 6 | 1 |
| **3.10** | 3 | ● | **DSAS0310X03S060** | 9.9 | 21.6 | 23.6 | 70.6 | 70 | 0.6 | 6 | 1 |
| **3.18** | 3 | ● | **DSAS0318X03S060** | 10.1 | 21.6 | 23.6 | 70.6 | 70 | 0.6 | 6 | 1 |
| **3.20** | 3 | ● | **DSAS0320X03S060** | 10.2 | 21.6 | 23.6 | 70.6 | 70 | 0.6 | 6 | 1 |
| **3.26** | 3 | ● | **DSAS0326X03S060** | 10.4 | 21.6 | 23.6 | 70.6 | 70 | 0.6 | 6 | 1 |
| **3.30** | 3 | ● | **DSAS0330X03S060** | 10.5 | 21.6 | 23.6 | 70.6 | 70 | 0.6 | 6 | 1 |
| **3.40** | 3 | ● | **DSAS0340X03S060** | 10.8 | 21.6 | 23.6 | 70.6 | 70 | 0.6 | 6 | 1 |
| **3.50** | 3 | ● | **DSAS0350X03S060** | 11.1 | 21.6 | 23.6 | 70.6 | 70 | 0.6 | 6 | 1 |
| **3.57** | 3 | ● | **DSAS0357X03S060** | 11.4 | 22.7 | 23.7 | 70.7 | 70 | 0.7 | 6 | 1 |
| **3.60** | 3 | ● | **DSAS0360X03S060** | 11.5 | 22.7 | 23.7 | 70.7 | 70 | 0.7 | 6 | 1 |
| **3.70** | 3 | ● | **DSAS0370X03S060** | 11.8 | 22.7 | 23.7 | 70.7 | 70 | 0.7 | 6 | 1 |
| **3.80** | 3 | ● | **DSAS0380X03S060** | 12.1 | 22.7 | 23.7 | 70.7 | 70 | 0.7 | 6 | 1 |
| **3.90** | 3 | ● | **DSAS0390X03S060** | 12.4 | 22.7 | 23.7 | 70.7 | 70 | 0.7 | 6 | 1 |
| **3.97** | 3 | ● | **DSAS0397X03S060** | 12.6 | 22.7 | 23.7 | 70.7 | 70 | 0.7 | 6 | 1 |
| **4.00** | 3 | ● | **DSAS0400X03S060** | 12.7 | 22.7 | 23.7 | 70.7 | 70 | 0.7 | 6 | 1 |
| **4.10** | 3 | ● | **DSAS0410X03S060** | 13.0 | 24.7 | 26.7 | 73.7 | 73 | 0.7 | 6 | 1 |
| **4.20** | 3 | ● | **DSAS0420X03S060** | 13.4 | 24.8 | 26.8 | 73.8 | 73 | 0.8 | 6 | 1 |
| **4.30** | 3 | ● | **DSAS0430X03S060** | 13.7 | 24.8 | 26.8 | 73.8 | 73 | 0.8 | 6 | 1 |
| **4.37** | 3 | ● | **DSAS0437X03S060** | 13.9 | 24.8 | 26.8 | 73.8 | 73 | 0.8 | 6 | 1 |
| **4.40** | 3 | ● | **DSAS0440X03S060** | 14.0 | 24.8 | 26.8 | 73.8 | 73 | 0.8 | 6 | 1 |
| **4.50** | 3 | ● | **DSAS0450X03S060** | 14.3 | 24.8 | 26.8 | 73.8 | 73 | 0.8 | 6 | 1 |
| **4.60** | 3 | ● | **DSAS0460X03S060** | 14.6 | 25.8 | 28.8 | 75.8 | 75 | 0.8 | 6 | 1 |
| **4.70** | 3 | ● | **DSAS0470X03S060** | 15.0 | 25.9 | 28.9 | 75.9 | 75 | 0.9 | 6 | 1 |
| **4.76** | 3 | ● | **DSAS0476X03S060** | 15.2 | 25.9 | 28.9 | 75.9 | 75 | 0.9 | 6 | 1 |
| **4.80** | 3 | ● | **DSAS0480X03S060** | 15.3 | 25.9 | 28.9 | 75.9 | 75 | 0.9 | 6 | 1 |
| **4.86** | 3 | ● | **DSAS0486X03S060** | 15.5 | 25.9 | 28.9 | 75.9 | 75 | 0.9 | 6 | 1 |
| **4.90** | 3 | ● | **DSAS0490X03S060** | 15.6 | 25.9 | 28.9 | 75.9 | 75 | 0.9 | 6 | 1 |
| **5.00** | 3 | ● | **DSAS0500X03S060** | 15.9 | 28.9 | 29.9 | 81.9 | 81 | 0.9 | 6 | 2 |
| **5.10** | 3 | ● | **DSAS0510X03S060** | 16.2 | 28.9 | 29.9 | 81.9 | 81 | 0.9 | 6 | 2 |
| **5.16** | 3 | ● | **DSAS0516X03S060** | 16.5 | 29.0 | 30.0 | 82.0 | 81 | 1.0 | 6 | 2 |
| **5.20** | 3 | ● | **DSAS0520X03S060** | 16.6 | 29.0 | 30.0 | 82.0 | 81 | 1.0 | 6 | 2 |
| **5.30** | 3 | ● | **DSAS0530X03S060** | 16.9 | 29.0 | 30.0 | 82.0 | 81 | 1.0 | 6 | 2 |

Remarque 1) Les trous d'arrosage des forets Ø5 mm ou inférieur sont ronds.

● : **Article stocké.**

| DC (mm) | Rapport (L/D) | DP9020 | Référence | Dimensions (mm) | | | | | | | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | LU | LCF | LH | OAL | LF | PL | DCON | |
| **5.40** | 3 | ● | **DSAS0540X03S060** | 17.2 | 29.0 | 30.0 | 82.0 | 81 | 1.0 | 6 | 2 |
| **5.50** | 3 | ● | **DSAS0550X03S060** | 17.5 | 29.0 | 30.0 | 82.0 | 81 | 1.0 | 6 | 2 |
| **5.56** | 3 | ● | **DSAS0556X03S060** | 17.8 | 31.1 | 31.1 | 82.1 | 81 | 1.1 | 6 | 2 |
| **5.60** | 3 | ● | **DSAS0560X03S060** | 17.9 | 31.1 | 31.1 | 82.1 | 81 | 1.1 | 6 | 2 |
| **5.70** | 3 | ● | **DSAS0570X03S060** | 18.2 | 31.1 | 31.1 | 82.1 | 81 | 1.1 | 6 | 2 |
| **5.80** | 3 | ● | **DSAS0580X03S060** | 18.5 | 31.1 | 31.1 | 82.1 | 81 | 1.1 | 6 | 2 |
| **5.90** | 3 | ● | **DSAS0590X03S060** | 18.8 | 31.1 | 31.1 | 82.1 | 81 | 1.1 | 6 | 2 |
| **5.95** | 3 | ● | **DSAS0595X03S060** | 19.0 | 31.1 | 31.1 | 82.1 | 81 | 1.1 | 6 | 2 |
| **6.00** | 3 | ● | **DSAS0600X03S060** | 19.1 | 31.1 | 31.1 | 82.1 | 81 | 1.1 | 6 | 2 |
| **6.10** | 3 | ● | **DSAS0610X03S080** | 19.5 | 34.2 | 37.2 | 87.2 | 86 | 1.2 | 8 | 2 |
| **6.20** | 3 | ● | **DSAS0620X03S080** | 19.8 | 34.2 | 37.2 | 87.2 | 86 | 1.2 | 8 | 2 |
| **6.30** | 3 | ● | **DSAS0630X03S080** | 20.1 | 34.2 | 37.2 | 87.2 | 86 | 1.2 | 8 | 2 |
| **6.35** | 3 | ● | **DSAS0635X03S080** | 20.3 | 34.2 | 37.2 | 87.2 | 86 | 1.2 | 8 | 2 |
| **6.40** | 3 | ● | **DSAS0640X03S080** | 20.4 | 34.2 | 37.2 | 87.2 | 86 | 1.2 | 8 | 2 |
| **6.50** | 3 | ● | **DSAS0650X03S080** | 20.7 | 34.2 | 37.2 | 87.2 | 86 | 1.2 | 8 | 2 |
| **6.60** | 3 | ● | **DSAS0660X03S080** | 21.1 | 36.3 | 38.3 | 91.3 | 90 | 1.3 | 8 | 2 |
| **6.70** | 3 | ● | **DSAS0670X03S080** | 21.4 | 36.3 | 38.3 | 91.3 | 90 | 1.3 | 8 | 2 |
| **6.75** | 3 | ● | **DSAS0675X03S080** | 21.6 | 36.3 | 38.3 | 91.3 | 90 | 1.3 | 8 | 2 |
| **6.80** | 3 | ● | **DSAS0680X03S080** | 21.7 | 36.3 | 38.3 | 91.3 | 90 | 1.3 | 8 | 2 |
| **6.90** | 3 | ● | **DSAS0690X03S080** | 22.0 | 36.3 | 38.3 | 91.3 | 90 | 1.3 | 8 | 2 |
| **6.95** | 3 | ● | **DSAS0695X03S080** | 22.2 | 36.3 | 38.3 | 91.3 | 90 | 1.3 | 8 | 2 |
| **7.00** | 3 | ● | **DSAS0700X03S080** | 22.3 | 36.3 | 38.3 | 91.3 | 90 | 1.3 | 8 | 2 |
| **7.10** | 3 | ● | **DSAS0710X03S080** | 22.7 | 39.4 | 40.4 | 91.4 | 90 | 1.4 | 8 | 2 |
| **7.14** | 3 | ● | **DSAS0714X03S080** | 22.8 | 39.4 | 40.4 | 91.4 | 90 | 1.4 | 8 | 2 |
| **7.20** | 3 | ● | **DSAS0720X03S080** | 23.0 | 39.4 | 40.4 | 91.4 | 90 | 1.4 | 8 | 2 |
| **7.30** | 3 | ● | **DSAS0730X03S080** | 23.3 | 39.4 | 40.4 | 91.4 | 90 | 1.4 | 8 | 2 |
| **7.40** | 3 | ● | **DSAS0740X03S080** | 23.6 | 39.4 | 40.4 | 91.4 | 90 | 1.4 | 8 | 2 |
| **7.50** | 3 | ● | **DSAS0750X03S080** | 23.9 | 39.4 | 40.4 | 91.4 | 90 | 1.4 | 8 | 2 |
| **7.54** | 3 | ● | **DSAS0754X03S080** | 24.0 | 41.5 | 41.5 | 91.5 | 90 | 1.5 | 8 | 2 |
| **7.60** | 3 | ● | **DSAS0760X03S080** | 24.3 | 41.5 | 41.5 | 91.5 | 90 | 1.5 | 8 | 2 |
| **7.70** | 3 | ● | **DSAS0770X03S080** | 24.6 | 41.5 | 41.5 | 91.5 | 90 | 1.5 | 8 | 2 |
| **7.80** | 3 | ● | **DSAS0780X03S080** | 24.9 | 41.5 | 41.5 | 91.5 | 90 | 1.5 | 8 | 2 |
| **7.90** | 3 | ● | **DSAS0790X03S080** | 25.2 | 41.5 | 41.5 | 91.5 | 90 | 1.5 | 8 | 2 |
| **7.94** | 3 | ● | **DSAS0794X03S080** | 25.3 | 41.5 | 41.5 | 91.5 | 90 | 1.5 | 8 | 2 |
| **8.00** | 3 | ● | **DSAS0800X03S080** | 25.5 | 41.5 | 41.5 | 91.5 | 90 | 1.5 | 8 | 2 |
| **8.10** | 3 | ● | **DSAS0810X03S100** | 25.8 | 44.5 | 47.5 | 97.5 | 96 | 1.5 | 10 | 2 |
| **8.20** | 3 | ● | **DSAS0820X03S100** | 26.1 | 44.5 | 47.5 | 97.5 | 96 | 1.5 | 10 | 2 |
| **8.30** | 3 | ● | **DSAS0830X03S100** | 26.4 | 44.5 | 47.5 | 97.5 | 96 | 1.5 | 10 | 2 |
| **8.33** | 3 | ● | **DSAS0833X03S100** | 26.5 | 44.5 | 47.5 | 97.5 | 96 | 1.5 | 10 | 2 |
| **8.40** | 3 | ● | **DSAS0840X03S100** | 26.7 | 44.5 | 47.5 | 97.5 | 96 | 1.5 | 10 | 2 |
| **8.50** | 3 | ● | **DSAS0850X03S100** | 27.0 | 44.5 | 47.5 | 97.5 | 96 | 1.5 | 10 | 2 |
| **8.60** | 3 | ● | **DSAS0860X03S100** | 27.4 | 46.6 | 48.6 | 102.6 | 101 | 1.6 | 10 | 2 |
| **8.70** | 3 | ● | **DSAS0870X03S100** | 27.7 | 46.6 | 48.6 | 102.6 | 101 | 1.6 | 10 | 2 |
| **8.73** | 3 | ● | **DSAS0873X03S100** | 27.8 | 46.6 | 48.6 | 102.6 | 101 | 1.6 | 10 | 2 |
| **8.80** | 3 | ● | **DSAS0880X03S100** | 28.0 | 46.6 | 48.6 | 102.6 | 101 | 1.6 | 10 | 2 |
| **8.90** | 3 | ● | **DSAS0890X03S100** | 28.3 | 46.6 | 48.6 | 102.6 | 101 | 1.6 | 10 | 2 |
| **9.00** | 3 | ● | **DSAS0900X03S100** | 28.6 | 46.6 | 48.6 | 102.6 | 101 | 1.6 | 10 | 2 |
| **9.10** | 3 | ● | **DSAS0910X03S100** | 29.1 | 49.8 | 50.8 | 102.8 | 101 | 1.8 | 10 | 2 |
| **9.20** | 3 | ● | **DSAS0920X03S100** | 29.4 | 49.8 | 50.8 | 102.8 | 101 | 1.8 | 10 | 2 |
| **9.30** | 3 | ● | **DSAS0930X03S100** | 29.7 | 49.8 | 50.8 | 102.8 | 101 | 1.8 | 10 | 2 |
| **9.40** | 3 | ● | **DSAS0940X03S100** | 30.0 | 49.8 | 50.8 | 102.8 | 101 | 1.8 | 10 | 2 |
| **9.50** | 3 | ● | **DSAS0950X03S100** | 30.3 | 49.8 | 50.8 | 102.8 | 101 | 1.8 | 10 | 2 |
| **9.53** | 3 | ● | **DSAS0953X03S100** | 30.4 | 49.8 | 50.8 | 102.8 | 101 | 1.8 | 10 | 2 |
| **9.60** | 3 | ● | **DSAS0960X03S100** | 30.6 | 49.8 | 50.8 | 102.8 | 101 | 1.8 | 10 | 2 |
| **9.70** | 3 | ● | **DSAS0970X03S100** | 30.9 | 49.8 | 50.8 | 102.8 | 101 | 1.8 | 10 | 2 |
| **9.80** | 3 | ● | **DSAS0980X03S100** | 31.2 | 51.8 | 51.8 | 102.8 | 101 | 1.8 | 10 | 2 |
| **9.90** | 3 | ● | **DSAS0990X03S100** | 31.5 | 51.8 | 51.8 | 102.8 | 101 | 1.8 | 10 | 2 |
| **9.92** | 3 | ● | **DSAS0992X03S100** | 31.6 | 51.8 | 51.8 | 102.8 | 101 | 1.8 | 10 | 2 |

CONDITIONS DE COUPE ➤ M099
DONNÉES TECHNIQUES ➤ P001

# PERÇAGE (CARBURE MONOBLOC)

## DSAS NEW

| DC (mm) | Rapport (L/D) | DP9020 | Référence | Dimensions (mm) | | | | | | | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | LU | LCF | LH | OAL | LF | PL | DCON | |
| **10.00** | 3 | ● | **DSAS1000X03S100** | 31.8 | 51.8 | 51.8 | 102.8 | 101 | 1.8 | 10 | 2 |
| **10.10** | 3 | ● | **DSAS1010X03S120** | 32.2 | 54.9 | 57.9 | 112.9 | 111 | 1.9 | 12 | 2 |
| **10.20** | 3 | ● | **DSAS1020X03S120** | 32.5 | 54.9 | 57.9 | 112.9 | 111 | 1.9 | 12 | 2 |
| **10.30** | 3 | ● | **DSAS1030X03S120** | 32.8 | 54.9 | 57.9 | 112.9 | 111 | 1.9 | 12 | 2 |
| **10.32** | 3 | ● | **DSAS1032X03S120** | 32.9 | 54.9 | 57.9 | 112.9 | 111 | 1.9 | 12 | 2 |
| **10.40** | 3 | ● | **DSAS1040X03S120** | 33.1 | 54.9 | 57.9 | 112.9 | 111 | 1.9 | 12 | 2 |
| **10.50** | 3 | ● | **DSAS1050X03S120** | 33.4 | 54.9 | 57.9 | 112.9 | 111 | 1.9 | 12 | 2 |
| **10.60** | 3 | ● | **DSAS1060X03S120** | 33.7 | 54.9 | 57.9 | 112.9 | 111 | 1.9 | 12 | 2 |
| **10.70** | 3 | ● | **DSAS1070X03S120** | 34.0 | 54.9 | 57.9 | 112.9 | 111 | 1.9 | 12 | 2 |
| **10.72** | 3 | ● | **DSAS1072X03S120** | 34.2 | 57.0 | 59.0 | 118.0 | 116 | 2.0 | 12 | 2 |
| **10.80** | 3 | ● | **DSAS1080X03S120** | 34.4 | 57.0 | 59.0 | 118.0 | 116 | 2.0 | 12 | 2 |
| **10.90** | 3 | ● | **DSAS1090X03S120** | 34.7 | 57.0 | 59.0 | 118.0 | 116 | 2.0 | 12 | 2 |
| **11.00** | 3 | ● | **DSAS1100X03S120** | 35.0 | 57.0 | 59.0 | 118.0 | 116 | 2.0 | 12 | 2 |
| **11.10** | 3 | ● | **DSAS1110X03S120** | 35.4 | 60.1 | 61.1 | 118.1 | 116 | 2.1 | 12 | 2 |
| **11.11** | 3 | ● | **DSAS1111X03S120** | 35.4 | 60.1 | 61.1 | 118.1 | 116 | 2.1 | 12 | 2 |
| **11.20** | 3 | ● | **DSAS1120X03S120** | 35.7 | 60.1 | 61.1 | 118.1 | 116 | 2.1 | 12 | 2 |
| **11.30** | 3 | ● | **DSAS1130X03S120** | 36.0 | 60.1 | 61.1 | 118.1 | 116 | 2.1 | 12 | 2 |
| **11.40** | 3 | ● | **DSAS1140X03S120** | 36.3 | 60.1 | 61.1 | 118.1 | 116 | 2.1 | 12 | 2 |
| **11.50** | 3 | ● | **DSAS1150X03S120** | 36.6 | 60.1 | 61.1 | 118.1 | 116 | 2.1 | 12 | 2 |
| **11.51** | 3 | ● | **DSAS1151X03S120** | 36.7 | 62.2 | 62.2 | 118.2 | 116 | 2.2 | 12 | 2 |
| **11.60** | 3 | ● | **DSAS1160X03S120** | 37.0 | 62.2 | 62.2 | 118.2 | 116 | 2.2 | 12 | 2 |
| **11.70** | 3 | ● | **DSAS1170X03S120** | 37.3 | 62.2 | 62.2 | 118.2 | 116 | 2.2 | 12 | 2 |
| **11.80** | 3 | ● | **DSAS1180X03S120** | 37.6 | 62.2 | 62.2 | 118.2 | 116 | 2.2 | 12 | 2 |
| **11.90** | 3 | ● | **DSAS1190X03S120** | 37.9 | 62.2 | 62.2 | 118.2 | 116 | 2.2 | 12 | 2 |
| **12.00** | 3 | ● | **DSAS1200X03S120** | 38.2 | 62.2 | 62.2 | 118.2 | 116 | 2.2 | 12 | 2 |

● : **Article stocké.**

## CONDITIONS DE COUPE RECOMMANDÉES

| Matière | | S | | | |
|---|---|---|---|---|---|
| | | Alliages réfractaires<br>Inconel718 etc. | | Alliage de titane<br>TA6V, etc. | |
| Diamètre foret **DC** (mm) | **L/D** | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) |
| **3** | **≤ 3** | 1000 | 0.06 (0.04—0.10) | 4200 | 0.08 (0.06—0.12) |
| **4** | **≤ 3** | 790 | 0.06 (0.04—0.10) | 3100 | 0.10 (0.08—0.16) |
| **5** | **≤ 3** | 760 | 0.08 (0.06—0.12) | 2500 | 0.12 (0.08—0.20) |
| **6** | **≤ 3** | 790 | 0.10 (0.08—0.15) | 2100 | 0.14 (0.10—0.20) |
| **8** | **≤ 3** | 590 | 0.10 (0.08—0.15) | 1600 | 0.18 (0.15—0.25) |
| **10** | **≤ 3** | 570 | 0.10 (0.08—0.15) | 1300 | 0.22 (0.18—0.28) |
| **12** | **≤ 3** | 530 | 0.12 (0.08—0.15) | 1100 | 0.24 (0.20—0.30) |

Remarque 1) L'arrosage haute pression centre broche est recommandé pour un perçage fiable.
Remarque 2) L'arrosage à l'huile soluble est préconisé.
Remarque 3) Lors de l'utilisation d'huile entière, réduire la vitesse de coupe de 10 à 20 %.
Remarque 4) Lors du perçage sous arrosage externe, le perçage avec cycle de brise-copeaux est recommandé tous les 0,5xDC pour favoriser l'évacuation des copeaux.

# PERÇAGE (CARBURE MONOBLOC)

# MNS

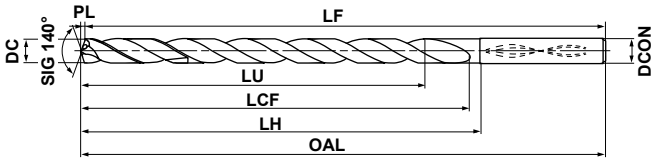
P | M | K | **N** | S | H

Arrosage intérieur

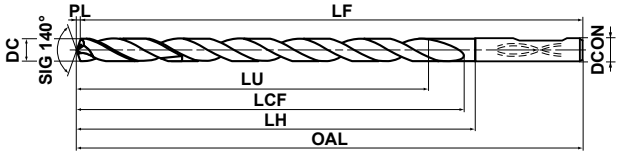
| | DC=3 | 3<DC≤6 | 6<DC≤10 | 10<DC≤18 | 18<DC≤20 |
|---|---|---|---|---|---|
| DIN | +0.016<br>+0.004 | +0.016<br>+0.004 | +0.021<br>+0.006 | +0.025<br>+0.007 | +0.029<br>+0.008 |
| Autres | 0<br>−0.014 | 0<br>−0.018 | 0<br>−0.022 | 0<br>−0.027 | |
| h6 | 0<br>−0.006 | 0<br>−0.008 | 0<br>−0.009 | 0<br>−0.011 | 0<br>−0.013 |

● Les forets d'un diamètre de 4.5 mm ou moins sont pourvus de 2 trous d'arrosage.
● Les forets d'un diamètre de 4,6 mm ou plus sont pourvus de 4 trous d'arrosage.

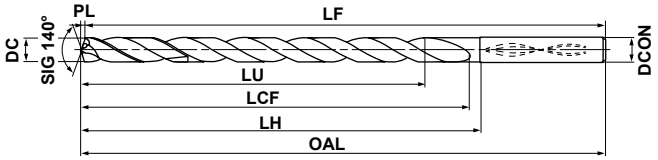
**●Type 1** **MNS----DIN-C, MNS-C, MNS----LB, MNS----DB** (Attachement cylindrique)



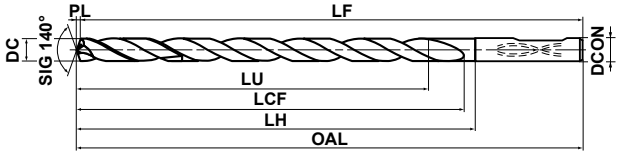

**●Type 2** **MNS----S/L-DIN** (Attachement Whistle Notch)




**●Type 3** **MNS----DIN-C, MNS-C, MNS----LB, MNS----DB** (Attachement cylindrique)




**●Type 4** **MNS----S/L-DIN** (Attachement Whistle Notch)




● MNS forets recommandés pour l'utilisation avec attachements de frettage.

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | □ | **MNS0300S-DIN** | 15.0 | 19.5 | 24.5 | 61.5 | 61 | 0.5 | 6 | 2 |
| | 3 | □ | **MNS0300S-DIN-C** | 15.0 | 19.5 | 24.5 | 61.5 | 61 | 0.5 | 6 | 1 |
| | 5 | □ | **MNS0300L-DIN** | 23.0 | 27.5 | 28.5 | 65.5 | 65 | 0.5 | 6 | 2 |
| | 5 | ● | **MNS0300L-DIN-C** | 23.0 | 27.5 | 28.5 | 65.5 | 65 | 0.5 | 6 | 1 |
| | 8 | □ | **MNS0300-L8C** | 24.5 | 33.5 | 36.5 | 73.5 | 73 | 0.5 | 6 | 1 |
| | 10 | □ | **MNS0300-L10C** | 30.5 | 39.5 | 42.5 | 79.5 | 79 | 0.5 | 6 | 1 |
| | 12 | ● | **MNS0300-L12C** | 36.5 | 45.5 | 48.5 | 85.5 | 85 | 0.5 | 6 | 1 |
| **3.0** | 15 | □ | **MNS0300-L15C** | 45.5 | 54.5 | 57.5 | 94.5 | 94 | 0.5 | 6 | 1 |
| | 20 | ● | **MNS0300-L20C** | 60.5 | 69.5 | 72.5 | 109.5 | 109 | 0.5 | 6 | 1 |
| | 25 | □ | **MNS0300-L25C** | 75.5 | 84.5 | 87.5 | 124.5 | 124 | 0.5 | 6 | 1 |
| | 30 | ● | **MNS0300-L30C** | 90.5 | 99.5 | 102.5 | 139.5 | 139 | 0.5 | 6 | 1 |
| | 5 | ★ | **MNS0300LB** | 15.5 | 33.5 | 33.5 | 81.5 | 81 | 0.5 | 3 | 1 |
| | 10 | ★ | **MNS0300X10DB** | 30.5 | 39.5 | 42.5 | 90.5 | 90 | 0.5 | 3 | 1 |
| | 20 | ★ | **MNS0300X20DB** | 60.5 | 69.5 | 72.5 | 120.5 | 120 | 0.5 | 3 | 1 |
| | 30 | ★ | **MNS0300X30DB** | 90.5 | 99.5 | 102.5 | 150.5 | 150 | 0.5 | 3 | 1 |
| | 3 | □ | **MNS0310S-DIN** | 14.9 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 2 |
| | 3 | □ | **MNS0310S-DIN-C** | 14.9 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 1 |
| | 5 | □ | **MNS0310L-DIN** | 22.9 | 27.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 2 |
| | 5 | □ | **MNS0310L-DIN-C** | 22.9 | 27.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 1 |
| | 8 | □ | **MNS0310-L8C** | 25.4 | 39.6 | 42.6 | 79.6 | 79 | 0.6 | 6 | 1 |
| | 10 | □ | **MNS0310-L10C** | 31.6 | 46.6 | 49.6 | 86.6 | 86 | 0.6 | 6 | 1 |
| | 12 | □ | **MNS0310-L12C** | 37.8 | 53.6 | 56.6 | 93.6 | 93 | 0.6 | 6 | 1 |
| **3.1** | 15 | □ | **MNS0310-L15C** | 47.1 | 63.6 | 66.6 | 103.6 | 103 | 0.6 | 6 | 1 |
| | 20 | □ | **MNS0310-L20C** | 62.6 | 81.6 | 84.6 | 121.6 | 121 | 0.6 | 6 | 1 |
| | 25 | □ | **MNS0310-L25C** | 78.1 | 98.6 | 101.6 | 138.6 | 138 | 0.6 | 6 | 1 |
| | 30 | □ | **MNS0310-L30C** | 93.6 | 116.6 | 119.6 | 156.6 | 156 | 0.6 | 6 | 1 |
| | 5 | ★ | **MNS0310LB** | 16.1 | 39.6 | 39.6 | 87.6 | 87 | 0.6 | 4 | 1 |
| | 10 | □ | **MNS0310X10DB** | 31.6 | 46.6 | 49.6 | 97.6 | 97 | 0.6 | 4 | 1 |
| | 20 | □ | **MNS0310X20DB** | 62.6 | 81.6 | 84.6 | 132.6 | 132 | 0.6 | 4 | 1 |
| | 30 | □ | **MNS0310X30DB** | 93.6 | 116.6 | 119.6 | 167.6 | 167 | 0.6 | 4 | 1 |

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | □ | **MNS0320S-DIN** | 14.8 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 2 |
| | 3 | □ | **MNS0320S-DIN-C** | 14.8 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 1 |
| | 5 | □ | **MNS0320L-DIN** | 22.8 | 27.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 2 |
| | 5 | ● | **MNS0320L-DIN-C** | 22.8 | 27.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 1 |
| | 8 | □ | **MNS0320-L8C** | 26.2 | 39.6 | 42.6 | 79.6 | 79 | 0.6 | 6 | 1 |
| | 10 | □ | **MNS0320-L10C** | 32.6 | 46.6 | 49.6 | 86.6 | 86 | 0.6 | 6 | 1 |
| | 12 | ● | **MNS0320-L12C** | 39.0 | 53.6 | 56.6 | 93.6 | 93 | 0.6 | 6 | 1 |
| **3.2** | 15 | □ | **MNS0320-L15C** | 48.6 | 63.6 | 66.6 | 103.6 | 103 | 0.6 | 6 | 1 |
| | 20 | ● | **MNS0320-L20C** | 64.6 | 81.6 | 84.6 | 121.6 | 121 | 0.6 | 6 | 1 |
| | 25 | □ | **MNS0320-L25C** | 80.6 | 98.6 | 101.6 | 138.6 | 138 | 0.6 | 6 | 1 |
| | 30 | ● | **MNS0320-L30C** | 96.6 | 116.6 | 119.6 | 156.6 | 156 | 0.6 | 6 | 1 |
| | 5 | ★ | **MNS0320LB** | 16.6 | 39.6 | 39.6 | 87.6 | 87 | 0.6 | 4 | 1 |
| | 10 | ★ | **MNS0320X10DB** | 32.6 | 46.6 | 49.6 | 97.6 | 97 | 0.6 | 4 | 1 |
| | 20 | ★ | **MNS0320X20DB** | 64.6 | 81.6 | 84.6 | 132.6 | 132 | 0.6 | 4 | 1 |
| | 30 | ★ | **MNS0320X30DB** | 96.6 | 116.6 | 119.6 | 167.6 | 167 | 0.6 | 4 | 1 |
| | 3 | □ | **MNS0330S-DIN** | 14.7 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 2 |
| | 3 | □ | **MNS0330S-DIN-C** | 14.7 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 1 |
| | 5 | □ | **MNS0330L-DIN** | 22.7 | 27.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 2 |
| | 5 | ● | **MNS0330L-DIN-C** | 22.7 | 27.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 1 |
| | 8 | □ | **MNS0330-L8C** | 27.0 | 39.6 | 42.6 | 79.6 | 79 | 0.6 | 6 | 1 |
| | 10 | □ | **MNS0330-L10C** | 33.6 | 46.6 | 49.6 | 86.6 | 86 | 0.6 | 6 | 1 |
| | 12 | ● | **MNS0330-L12C** | 40.2 | 53.6 | 56.6 | 93.6 | 93 | 0.6 | 6 | 1 |
| **3.3** | 15 | □ | **MNS0330-L15C** | 50.1 | 63.6 | 66.6 | 103.6 | 103 | 0.6 | 6 | 1 |
| | 20 | ● | **MNS0330-L20C** | 66.6 | 81.6 | 84.6 | 121.6 | 121 | 0.6 | 6 | 1 |
| | 25 | □ | **MNS0330-L25C** | 83.1 | 98.6 | 101.6 | 138.6 | 138 | 0.6 | 6 | 1 |
| | 30 | ● | **MNS0330-L30C** | 99.6 | 116.6 | 119.6 | 156.6 | 156 | 0.6 | 6 | 1 |
| | 5 | ★ | **MNS0330LB** | 17.1 | 39.6 | 39.6 | 87.6 | 87 | 0.6 | 4 | 1 |
| | 10 | □ | **MNS0330X10DB** | 33.6 | 46.6 | 49.6 | 97.6 | 97 | 0.6 | 4 | 1 |
| | 20 | □ | **MNS0330X20DB** | 66.6 | 81.6 | 84.6 | 132.6 | 132 | 0.6 | 4 | 1 |
| | 30 | □ | **MNS0330X30DB** | 99.6 | 116.6 | 119.6 | 167.6 | 167 | 0.6 | 4 | 1 |

Remarque 1) Veuillez nous contacter pour les géométries qui ne seraient pas dans ce catalogue (e.g. différents diamètres et longueurs peuvent être fabriqués sur demande).

**● : Article stocké. ★ : Article standard Japon.**
**□ : Article non stocké - Fabrication sur commande uniquement.**

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | □ | MNS0340S-DIN | 14.5 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 2 |
| | 3 | □ | MNS0340S-DIN-C | 14.5 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 1 |
| | 5 | □ | MNS0340L-DIN | 22.5 | 27.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 2 |
| | 5 | □ | MNS0340L-DIN-C | 22.5 | 27.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 1 |
| | 8 | □ | MNS0340-L8C | 27.8 | 39.6 | 42.6 | 79.6 | 79 | 0.6 | 6 | 1 |
| | 10 | □ | MNS0340-L10C | 34.6 | 46.6 | 49.6 | 86.6 | 86 | 0.6 | 6 | 1 |
| | 12 | □ | MNS0340-L12C | 41.4 | 53.6 | 56.6 | 93.6 | 93 | 0.6 | 6 | 1 |
| 3.4 | 15 | □ | MNS0340-L15C | 51.6 | 63.6 | 66.6 | 103.6 | 103 | 0.6 | 6 | 1 |
| | 20 | □ | MNS0340-L20C | 68.6 | 81.6 | 84.6 | 121.6 | 121 | 0.6 | 6 | 1 |
| | 25 | □ | MNS0340-L25C | 85.6 | 98.6 | 101.6 | 138.6 | 138 | 0.6 | 6 | 1 |
| | 30 | □ | MNS0340-L30C | 102.6 | 116.6 | 119.6 | 156.6 | 156 | 0.6 | 6 | 1 |
| | 5 | ★ | MNS0340LB | 17.6 | 39.6 | 39.6 | 87.6 | 87 | 0.6 | 4 | 1 |
| | 10 | ★ | MNS0340X10DB | 34.6 | 46.6 | 49.6 | 97.6 | 97 | 0.6 | 4 | 1 |
| | 20 | ★ | MNS0340X20DB | 68.6 | 81.6 | 84.6 | 132.6 | 132 | 0.6 | 4 | 1 |
| | 30 | ★ | MNS0340X30DB | 102.6 | 116.6 | 119.6 | 167.6 | 167 | 0.6 | 4 | 1 |
| | 3 | □ | MNS0350S-DIN | 14.4 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 2 |
| | 3 | □ | MNS0350S-DIN-C | 14.4 | 19.6 | 24.6 | 61.6 | 61 | 0.6 | 6 | 1 |
| | 5 | □ | MNS0350L-DIN | 22.4 | 27.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 2 |
| | 5 | ● | MNS0350L-DIN-C | 22.4 | 27.6 | 28.6 | 65.6 | 65 | 0.6 | 6 | 1 |
| | 8 | □ | MNS0350-L8C | 28.6 | 39.6 | 42.6 | 79.6 | 79 | 0.6 | 6 | 1 |
| | 10 | □ | MNS0350-L10C | 35.6 | 46.6 | 49.6 | 86.6 | 86 | 0.6 | 6 | 1 |
| | 12 | ● | MNS0350-L12C | 42.6 | 53.6 | 56.6 | 93.6 | 93 | 0.6 | 6 | 1 |
| 3.5 | 15 | □ | MNS0350-L15C | 53.1 | 63.6 | 66.6 | 103.6 | 103 | 0.6 | 6 | 1 |
| | 20 | ● | MNS0350-L20C | 70.6 | 81.6 | 84.6 | 121.6 | 121 | 0.6 | 6 | 1 |
| | 25 | □ | MNS0350-L25C | 88.1 | 98.6 | 101.6 | 138.6 | 138 | 0.6 | 6 | 1 |
| | 30 | ● | MNS0350-L30C | 105.6 | 116.6 | 119.6 | 156.6 | 156 | 0.6 | 6 | 1 |
| | 5 | ★ | MNS0350LB | 18.1 | 39.6 | 39.6 | 87.6 | 87 | 0.6 | 4 | 1 |
| | 10 | □ | MNS0350X10DB | 35.6 | 46.6 | 49.6 | 97.6 | 97 | 0.6 | 4 | 1 |
| | 20 | □ | MNS0350X20DB | 70.6 | 81.6 | 84.6 | 132.6 | 132 | 0.6 | 4 | 1 |
| | 30 | □ | MNS0350X30DB | 105.6 | 116.6 | 119.6 | 167.6 | 167 | 0.6 | 4 | 1 |
| | 3 | □ | MNS0360S-DIN | 14.3 | 19.7 | 24.7 | 61.7 | 61 | 0.7 | 6 | 2 |
| | 3 | □ | MNS0360S-DIN-C | 14.3 | 19.7 | 24.7 | 61.7 | 61 | 0.7 | 6 | 1 |
| | 5 | □ | MNS0360L-DIN | 22.3 | 27.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 2 |
| | 5 | □ | MNS0360L-DIN-C | 22.3 | 27.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 1 |
| | 8 | □ | MNS0360-L8C | 29.5 | 44.7 | 47.7 | 84.7 | 84 | 0.7 | 6 | 1 |
| | 10 | □ | MNS0360-L10C | 36.7 | 52.7 | 55.7 | 92.7 | 92 | 0.7 | 6 | 1 |
| | 12 | □ | MNS0360-L12C | 43.9 | 60.7 | 63.7 | 100.7 | 100 | 0.7 | 6 | 1 |
| 3.6 | 15 | □ | MNS0360-L15C | 54.7 | 72.7 | 75.7 | 112.7 | 112 | 0.7 | 6 | 1 |
| | 20 | □ | MNS0360-L20C | 72.7 | 92.7 | 95.7 | 132.7 | 132 | 0.7 | 6 | 1 |
| | 25 | □ | MNS0360-L25C | 90.7 | 112.7 | 115.7 | 152.7 | 152 | 0.7 | 6 | 1 |
| | 30 | □ | MNS0360-L30C | 108.7 | 132.7 | 135.7 | 172.7 | 172 | 0.7 | 6 | 1 |
| | 5 | ★ | MNS0360LB | 18.7 | 44.7 | 44.7 | 92.7 | 92 | 0.7 | 4 | 1 |
| | 10 | ★ | MNS0360X10DB | 36.7 | 52.7 | 55.7 | 103.7 | 103 | 0.7 | 4 | 1 |
| | 20 | ★ | MNS0360X20DB | 72.7 | 92.7 | 95.7 | 143.7 | 143 | 0.7 | 4 | 1 |
| | 30 | ★ | MNS0360X30DB | 108.7 | 132.7 | 135.7 | 183.7 | 183 | 0.7 | 4 | 1 |

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | □ | MNS0370S-DIN | 14.1 | 19.7 | 24.7 | 61.7 | 61 | 0.7 | 6 | 2 |
| | 3 | □ | MNS0370S-DIN-C | 14.1 | 19.7 | 24.7 | 61.7 | 61 | 0.7 | 6 | 1 |
| | 5 | □ | MNS0370L-DIN | 22.1 | 27.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 2 |
| | 5 | □ | MNS0370L-DIN-C | 22.1 | 27.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 1 |
| | 8 | □ | MNS0370-L8C | 30.3 | 44.7 | 47.7 | 84.7 | 84 | 0.7 | 6 | 1 |
| | 10 | □ | MNS0370-L10C | 37.7 | 52.7 | 55.7 | 92.7 | 92 | 0.7 | 6 | 1 |
| | 12 | □ | MNS0370-L12C | 45.1 | 60.7 | 63.7 | 100.7 | 100 | 0.7 | 6 | 1 |
| 3.7 | 15 | □ | MNS0370-L15C | 56.2 | 72.7 | 75.7 | 112.7 | 112 | 0.7 | 6 | 1 |
| | 20 | □ | MNS0370-L20C | 74.7 | 92.7 | 95.7 | 132.7 | 132 | 0.7 | 6 | 1 |
| | 25 | □ | MNS0370-L25C | 93.2 | 112.7 | 115.7 | 152.7 | 152 | 0.7 | 6 | 1 |
| | 30 | □ | MNS0370-L30C | 111.7 | 132.7 | 135.7 | 172.7 | 172 | 0.7 | 6 | 1 |
| | 5 | ★ | MNS0370LB | 19.2 | 44.7 | 44.7 | 92.7 | 92 | 0.7 | 4 | 1 |
| | 10 | □ | MNS0370X10DB | 37.7 | 52.7 | 55.7 | 103.7 | 103 | 0.7 | 4 | 1 |
| | 20 | □ | MNS0370X20DB | 74.7 | 92.7 | 95.7 | 143.7 | 143 | 0.7 | 4 | 1 |
| | 30 | □ | MNS0370X30DB | 111.7 | 132.7 | 135.7 | 183.7 | 183 | 0.7 | 4 | 1 |
| | 3 | □ | MNS0380S-DIN | 18.0 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 2 |
| | 3 | □ | MNS0380S-DIN-C | 18.0 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 1 |
| | 5 | □ | MNS0380L-DIN | 30.0 | 35.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 2 |
| | 5 | □ | MNS0380L-DIN-C | 30.0 | 35.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 1 |
| | 8 | □ | MNS0380-L8C | 31.1 | 44.7 | 47.7 | 84.7 | 84 | 0.7 | 6 | 1 |
| | 10 | □ | MNS0380-L10C | 38.7 | 52.7 | 55.7 | 92.7 | 92 | 0.7 | 6 | 1 |
| | 12 | □ | MNS0380-L12C | 46.3 | 60.7 | 63.7 | 100.7 | 100 | 0.7 | 6 | 1 |
| 3.8 | 15 | □ | MNS0380-L15C | 57.7 | 72.7 | 75.7 | 112.7 | 112 | 0.7 | 6 | 1 |
| | 20 | □ | MNS0380-L20C | 76.7 | 92.7 | 95.7 | 132.7 | 132 | 0.7 | 6 | 1 |
| | 25 | □ | MNS0380-L25C | 95.7 | 112.7 | 115.7 | 152.7 | 152 | 0.7 | 6 | 1 |
| | 30 | □ | MNS0380-L30C | 114.7 | 132.7 | 135.7 | 172.7 | 172 | 0.7 | 6 | 1 |
| | 5 | ★ | MNS0380LB | 19.7 | 44.7 | 44.7 | 92.7 | 92 | 0.7 | 4 | 1 |
| | 10 | □ | MNS0380X10DB | 38.7 | 52.7 | 55.7 | 103.7 | 103 | 0.7 | 4 | 1 |
| | 20 | □ | MNS0380X20DB | 76.7 | 92.7 | 95.7 | 143.7 | 143 | 0.7 | 4 | 1 |
| | 30 | □ | MNS0380X30DB | 114.7 | 132.7 | 135.7 | 183.7 | 183 | 0.7 | 4 | 1 |
| | 3 | □ | MNS0390S-DIN | 17.9 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 2 |
| | 3 | □ | MNS0390S-DIN-C | 17.9 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 1 |
| | 5 | □ | MNS0390L-DIN | 29.9 | 35.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 2 |
| | 5 | □ | MNS0390L-DIN-C | 29.9 | 35.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 1 |
| | 8 | □ | MNS0390-L8C | 31.9 | 44.7 | 47.7 | 84.7 | 84 | 0.7 | 6 | 1 |
| | 10 | □ | MNS0390-L10C | 39.7 | 52.7 | 55.7 | 92.7 | 92 | 0.7 | 6 | 1 |
| | 12 | □ | MNS0390-L12C | 47.5 | 60.7 | 63.7 | 100.7 | 100 | 0.7 | 6 | 1 |
| 3.9 | 15 | □ | MNS0390-L15C | 59.2 | 72.7 | 75.7 | 112.7 | 112 | 0.7 | 6 | 1 |
| | 20 | □ | MNS0390-L20C | 78.7 | 92.7 | 95.7 | 132.7 | 132 | 0.7 | 6 | 1 |
| | 25 | □ | MNS0390-L25C | 98.2 | 112.7 | 115.7 | 152.7 | 152 | 0.7 | 6 | 1 |
| | 30 | □ | MNS0390-L30C | 117.7 | 132.7 | 135.7 | 172.7 | 172 | 0.7 | 6 | 1 |
| | 5 | ★ | MNS0390LB | 20.2 | 44.7 | 44.7 | 92.7 | 92 | 0.7 | 4 | 1 |
| | 10 | ★ | MNS0390X10DB | 39.7 | 52.7 | 55.7 | 103.7 | 103 | 0.7 | 4 | 1 |
| | 20 | ★ | MNS0390X20DB | 78.7 | 92.7 | 95.7 | 143.7 | 143 | 0.7 | 4 | 1 |
| | 30 | ★ | MNS0390X30DB | 117.7 | 132.7 | 135.7 | 183.7 | 183 | 0.7 | 4 | 1 |

CONDITIONS DE COUPE ➤ M120
MÉTHODE D'UTILISATION ➤ M121
DONNÉES TECHNIQUES ➤ P001

# MNS

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | □ | MNS0400S-DIN | 17.7 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 2 |
| | 3 | □ | MNS0400S-DIN-C | 17.7 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 1 |
| | 5 | □ | MNS0400L-DIN | 29.7 | 35.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 2 |
| | 5 | ● | MNS0400L-DIN-C | 29.7 | 35.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 1 |
| | 8 | □ | MNS0400-L8C | 32.7 | 44.7 | 47.7 | 84.7 | 84 | 0.7 | 6 | 1 |
| | 10 | □ | MNS0400-L10C | 40.7 | 52.7 | 55.7 | 92.7 | 92 | 0.7 | 6 | 1 |
| | 12 | ● | MNS0400-L12C | 48.7 | 60.7 | 63.7 | 100.7 | 100 | 0.7 | 6 | 1 |
| 4.0 | 15 | □ | MNS0400-L15C | 60.7 | 72.7 | 75.7 | 112.7 | 112 | 0.7 | 6 | 1 |
| | 20 | ● | MNS0400-L20C | 80.7 | 92.7 | 95.7 | 132.7 | 132 | 0.7 | 6 | 1 |
| | 25 | ● | MNS0400-L25C | 100.7 | 112.7 | 115.7 | 152.7 | 152 | 0.7 | 6 | 1 |
| | 30 | ● | MNS0400-L30C | 120.7 | 132.7 | 135.7 | 172.7 | 172 | 0.7 | 6 | 1 |
| | 5 | ★ | MNS0400LB | 20.7 | 44.7 | 44.7 | 92.7 | 92 | 0.7 | 4 | 1 |
| | 10 | ★ | MNS0400X10DB | 40.7 | 52.7 | 55.7 | 103.7 | 103 | 0.7 | 4 | 1 |
| | 20 | ★ | MNS0400X20DB | 80.7 | 92.7 | 95.7 | 143.7 | 143 | 0.7 | 4 | 1 |
| | 30 | ★ | MNS0400X30DB | 120.7 | 132.7 | 135.7 | 183.7 | 183 | 0.7 | 4 | 1 |
| | 3 | □ | MNS0410S-DIN | 17.6 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 2 |
| | 3 | □ | MNS0410S-DIN-C | 17.6 | 23.7 | 28.7 | 65.7 | 65 | 0.7 | 6 | 1 |
| | 5 | □ | MNS0410L-DIN | 29.6 | 35.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 2 |
| | 5 | □ | MNS0410L-DIN-C | 29.6 | 35.7 | 36.7 | 73.7 | 73 | 0.7 | 6 | 1 |
| | 8 | □ | MNS0410-L8C | 33.5 | 50.7 | 53.7 | 90.7 | 90 | 0.7 | 6 | 1 |
| | 10 | □ | MNS0410-L10C | 41.7 | 59.7 | 62.7 | 99.7 | 99 | 0.7 | 6 | 1 |
| | 12 | □ | MNS0410-L12C | 49.9 | 68.7 | 71.7 | 108.7 | 108 | 0.7 | 6 | 1 |
| 4.1 | 15 | □ | MNS0410-L15C | 62.2 | 81.7 | 84.7 | 121.7 | 121 | 0.7 | 6 | 1 |
| | 20 | □ | MNS0410-L20C | 82.7 | 104.7 | 107.7 | 144.7 | 144 | 0.7 | 6 | 1 |
| | 25 | □ | MNS0410-L25C | 103.2 | 126.7 | 129.7 | 166.7 | 166 | 0.7 | 6 | 1 |
| | 30 | □ | MNS0410-L30C | 123.7 | 149.7 | 152.7 | 189.7 | 189 | 0.7 | 6 | 1 |
| | 5 | ★ | MNS0410LB | 21.2 | 50.7 | 50.7 | 100.7 | 100 | 0.7 | 5 | 1 |
| | 10 | □ | MNS0410X10DB | 41.7 | 59.7 | 62.7 | 112.7 | 112 | 0.7 | 5 | 1 |
| | 20 | □ | MNS0410X20DB | 82.7 | 104.7 | 107.7 | 157.7 | 157 | 0.7 | 5 | 1 |
| | 30 | □ | MNS0410X30DB | 123.7 | 149.7 | 152.7 | 202.7 | 202 | 0.7 | 5 | 1 |
| | 3 | □ | MNS0420S-DIN | 17.5 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 2 |
| | 3 | □ | MNS0420S-DIN-C | 17.5 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 1 |
| | 5 | □ | MNS0420L-DIN | 29.5 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 2 |
| | 5 | ● | MNS0420L-DIN-C | 29.5 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 1 |
| | 8 | □ | MNS0420-L8C | 34.4 | 50.8 | 53.8 | 90.8 | 90 | 0.8 | 6 | 1 |
| | 10 | □ | MNS0420-L10C | 42.8 | 59.8 | 62.8 | 99.8 | 99 | 0.8 | 6 | 1 |
| | 12 | ● | MNS0420-L12C | 51.2 | 68.8 | 71.8 | 108.8 | 108 | 0.8 | 6 | 1 |
| 4.2 | 15 | □ | MNS0420-L15C | 63.8 | 81.8 | 84.8 | 121.8 | 121 | 0.8 | 6 | 1 |
| | 20 | ● | MNS0420-L20C | 84.8 | 104.8 | 107.8 | 144.8 | 144 | 0.8 | 6 | 1 |
| | 25 | □ | MNS0420-L25C | 105.8 | 126.8 | 129.8 | 166.8 | 166 | 0.8 | 6 | 1 |
| | 30 | ● | MNS0420-L30C | 126.8 | 149.8 | 152.8 | 189.8 | 189 | 0.8 | 6 | 1 |
| | 5 | ★ | MNS0420LB | 21.8 | 50.8 | 50.8 | 100.8 | 100 | 0.8 | 5 | 1 |
| | 10 | □ | MNS0420X10DB | 42.8 | 59.8 | 62.8 | 112.8 | 112 | 0.8 | 5 | 1 |
| | 20 | □ | MNS0420X20DB | 84.8 | 104.8 | 107.8 | 157.8 | 157 | 0.8 | 5 | 1 |
| | 30 | □ | MNS0420X30DB | 126.8 | 149.8 | 152.8 | 202.8 | 202 | 0.8 | 5 | 1 |

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | □ | MNS0430S-DIN | 17.3 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 2 |
| | 3 | □ | MNS0430S-DIN-C | 17.3 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 1 |
| | 5 | □ | MNS0430L-DIN | 29.3 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 2 |
| | 5 | □ | MNS0430L-DIN-C | 29.3 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 1 |
| | 8 | □ | MNS0430-L8C | 35.2 | 50.8 | 53.8 | 90.8 | 90 | 0.8 | 6 | 1 |
| | 10 | □ | MNS0430-L10C | 43.8 | 59.8 | 62.8 | 99.8 | 99 | 0.8 | 6 | 1 |
| | 12 | □ | MNS0430-L12C | 52.4 | 68.8 | 71.8 | 108.8 | 108 | 0.8 | 6 | 1 |
| 4.3 | 15 | □ | MNS0430-L15C | 65.3 | 81.8 | 84.8 | 121.8 | 121 | 0.8 | 6 | 1 |
| | 20 | □ | MNS0430-L20C | 86.8 | 104.8 | 107.8 | 144.8 | 144 | 0.8 | 6 | 1 |
| | 25 | □ | MNS0430-L25C | 108.3 | 126.8 | 129.8 | 166.8 | 166 | 0.8 | 6 | 1 |
| | 30 | □ | MNS0430-L30C | 129.8 | 149.8 | 152.8 | 189.8 | 189 | 0.8 | 6 | 1 |
| | 5 | ★ | MNS0430LB | 22.3 | 50.8 | 50.8 | 100.8 | 100 | 0.8 | 5 | 1 |
| | 10 | □ | MNS0430X10DB | 43.8 | 59.8 | 62.8 | 112.8 | 112 | 0.8 | 5 | 1 |
| | 20 | □ | MNS0430X20DB | 86.8 | 104.8 | 107.8 | 157.8 | 157 | 0.8 | 5 | 1 |
| | 30 | □ | MNS0430X30DB | 129.8 | 149.8 | 152.8 | 202.8 | 202 | 0.8 | 5 | 1 |
| | 3 | □ | MNS0440S-DIN | 17.2 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 2 |
| | 3 | □ | MNS0440S-DIN-C | 17.2 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 1 |
| | 5 | □ | MNS0440L-DIN | 29.2 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 2 |
| | 5 | □ | MNS0440L-DIN-C | 29.2 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 1 |
| | 8 | □ | MNS0440-L8C | 36.0 | 50.8 | 53.8 | 90.8 | 90 | 0.8 | 6 | 1 |
| | 10 | □ | MNS0440-L10C | 44.8 | 59.8 | 62.8 | 99.8 | 99 | 0.8 | 6 | 1 |
| | 12 | □ | MNS0440-L12C | 53.6 | 68.8 | 71.8 | 108.8 | 108 | 0.8 | 6 | 1 |
| 4.4 | 15 | □ | MNS0440-L15C | 66.8 | 81.8 | 84.8 | 121.8 | 121 | 0.8 | 6 | 1 |
| | 20 | □ | MNS0440-L20C | 88.8 | 104.8 | 107.8 | 144.8 | 144 | 0.8 | 6 | 1 |
| | 25 | □ | MNS0440-L25C | 110.8 | 126.8 | 129.8 | 166.8 | 166 | 0.8 | 6 | 1 |
| | 30 | □ | MNS0440-L30C | 132.8 | 149.8 | 152.8 | 189.8 | 189 | 0.8 | 6 | 1 |
| | 5 | ★ | MNS0440LB | 22.8 | 50.8 | 50.8 | 100.8 | 100 | 0.8 | 5 | 1 |
| | 10 | □ | MNS0440X10DB | 44.8 | 59.8 | 62.8 | 112.8 | 112 | 0.8 | 5 | 1 |
| | 20 | □ | MNS0440X20DB | 88.8 | 104.8 | 107.8 | 157.8 | 157 | 0.8 | 5 | 1 |
| | 30 | □ | MNS0440X30DB | 132.8 | 149.8 | 152.8 | 202.8 | 202 | 0.8 | 5 | 1 |
| | 3 | □ | MNS0450S-DIN | 17.1 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 2 |
| | 3 | □ | MNS0450S-DIN-C | 17.1 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 1 |
| | 5 | □ | MNS0450L-DIN | 29.1 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 2 |
| | 5 | ● | MNS0450L-DIN-C | 29.1 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 1 |
| | 8 | □ | MNS0450-L8C | 36.8 | 50.8 | 53.8 | 90.8 | 90 | 0.8 | 6 | 1 |
| | 10 | □ | MNS0450-L10C | 45.8 | 59.8 | 62.8 | 99.8 | 99 | 0.8 | 6 | 1 |
| | 12 | ● | MNS0450-L12C | 54.8 | 68.8 | 71.8 | 108.8 | 108 | 0.8 | 6 | 1 |
| 4.5 | 15 | □ | MNS0450-L15C | 68.3 | 81.8 | 84.8 | 121.8 | 121 | 0.8 | 6 | 1 |
| | 20 | ● | MNS0450-L20C | 90.8 | 104.8 | 107.8 | 144.8 | 144 | 0.8 | 6 | 1 |
| | 25 | □ | MNS0450-L25C | 113.3 | 126.8 | 129.8 | 166.8 | 166 | 0.8 | 6 | 1 |
| | 30 | ● | MNS0450-L30C | 135.8 | 149.8 | 152.8 | 189.8 | 189 | 0.8 | 6 | 1 |
| | 5 | ★ | MNS0450LB | 23.3 | 50.8 | 50.8 | 100.8 | 100 | 0.8 | 5 | 1 |
| | 10 | □ | MNS0450X10DB | 45.8 | 59.8 | 62.8 | 112.8 | 112 | 0.8 | 5 | 1 |
| | 20 | □ | MNS0450X20DB | 90.8 | 104.8 | 107.8 | 157.8 | 157 | 0.8 | 5 | 1 |
| | 30 | □ | MNS0450X30DB | 135.8 | 149.8 | 152.8 | 202.8 | 202 | 0.8 | 5 | 1 |

Remarque 1) Veuillez nous contacter pour les géométries qui ne seraient pas dans ce catalogue (d'autres diamètres et longueurs peuvent être fabriqués sur demande).

**● : Article stocké. ★ : Article standard Japon.**

**□ : Article non stocké - Fabrication sur commande uniquement.**

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.6 | 3 | □ | MNS0460S-DIN | 17.1 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 4 |
| | 3 | □ | MNS0460S-DIN-C | 16.9 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 3 |
| | 5 | □ | MNS0460L-DIN | 28.9 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 4 |
| | 5 | □ | MNS0460L-DIN-C | 28.9 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 3 |
| | 8 | □ | MNS0460-L8C | 37.6 | 55.8 | 58.8 | 95.8 | 95 | 0.8 | 6 | 3 |
| | 10 | □ | MNS0460-L10C | 46.8 | 65.8 | 68.8 | 105.8 | 105 | 0.8 | 6 | 3 |
| | 12 | □ | MNS0460-L12C | 56.0 | 75.8 | 78.8 | 115.8 | 115 | 0.8 | 6 | 3 |
| | 15 | □ | MNS0460-L15C | 69.8 | 90.8 | 93.8 | 130.8 | 130 | 0.8 | 6 | 3 |
| | 20 | □ | MNS0460-L20C | 92.8 | 115.8 | 118.8 | 155.8 | 155 | 0.8 | 6 | 3 |
| | 25 | □ | MNS0460-L25C | 115.8 | 140.8 | 143.8 | 180.8 | 180 | 0.8 | 6 | 3 |
| | 30 | □ | MNS0460-L30C | 138.8 | 165.8 | 168.8 | 205.8 | 205 | 0.8 | 6 | 3 |
| | 5 | ★ | MNS0460LB | 23.8 | 55.8 | 55.8 | 105.8 | 105 | 0.8 | 5 | 3 |
| | 10 | □ | MNS0460X10DB | 46.8 | 65.8 | 68.8 | 118.8 | 118 | 0.8 | 5 | 3 |
| | 20 | □ | MNS0460X20DB | 92.8 | 115.8 | 118.8 | 168.8 | 168 | 0.8 | 5 | 3 |
| | 30 | □ | MNS0460X30DB | 138.8 | 165.8 | 168.8 | 218.8 | 218 | 0.8 | 5 | 3 |
| 4.65 | 3 | □ | MNS0465S-DIN | 16.9 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 4 |
| | 3 | □ | MNS0465S-DIN-C | 16.9 | 23.8 | 28.8 | 65.8 | 65 | 0.8 | 6 | 3 |
| | 5 | □ | MNS0465L-DIN | 28.9 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 4 |
| | 5 | ● | MNS0465L-DIN-C | 28.9 | 35.8 | 36.8 | 73.8 | 73 | 0.8 | 6 | 3 |
| 4.7 | 3 | □ | MNS0470S-DIN | 16.8 | 23.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 4 |
| | 3 | □ | MNS0470S-DIN-C | 16.8 | 23.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 3 |
| | 5 | □ | MNS0470L-DIN | 28.8 | 35.9 | 36.9 | 73.9 | 73 | 0.9 | 6 | 4 |
| | 5 | □ | MNS0470L-DIN-C | 28.8 | 35.9 | 36.9 | 73.9 | 73 | 0.9 | 6 | 3 |
| | 8 | □ | MNS0470-L8C | 38.5 | 55.9 | 58.9 | 95.9 | 95 | 0.9 | 6 | 3 |
| | 10 | □ | MNS0470-L10C | 47.9 | 65.9 | 68.9 | 105.9 | 105 | 0.9 | 6 | 3 |
| | 12 | □ | MNS0470-L12C | 57.3 | 75.9 | 78.9 | 115.9 | 115 | 0.9 | 6 | 3 |
| | 15 | □ | MNS0470-L15C | 71.4 | 90.9 | 93.9 | 130.9 | 130 | 0.9 | 6 | 3 |
| | 20 | □ | MNS0470-L20C | 94.9 | 115.9 | 118.9 | 155.9 | 155 | 0.9 | 6 | 3 |
| | 25 | □ | MNS0470-L25C | 118.4 | 140.9 | 143.9 | 180.9 | 180 | 0.9 | 6 | 3 |
| | 30 | □ | MNS0470-L30C | 141.9 | 165.9 | 168.9 | 205.9 | 205 | 0.9 | 6 | 3 |
| | 5 | ★ | MNS0470LB | 24.4 | 55.9 | 55.9 | 105.9 | 105 | 0.9 | 5 | 3 |
| | 10 | □ | MNS0470X10DB | 47.9 | 65.9 | 68.9 | 118.9 | 118 | 0.9 | 5 | 3 |
| | 20 | □ | MNS0470X20DB | 94.9 | 115.9 | 118.9 | 168.9 | 168 | 0.9 | 5 | 3 |
| | 30 | □ | MNS0470X30DB | 141.9 | 165.9 | 168.9 | 218.9 | 218 | 0.9 | 5 | 3 |
| 4.8 | 3 | □ | MNS0480S-DIN | 20.7 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 4 |
| | 3 | □ | MNS0480S-DIN-C | 20.7 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 3 |
| | 5 | □ | MNS0480L-DIN | 36.7 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 4 |
| | 5 | □ | MNS0480L-DIN-C | 36.7 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 3 |
| | 8 | □ | MNS0480-L8C | 39.3 | 55.9 | 58.9 | 95.9 | 95 | 0.9 | 6 | 3 |
| | 10 | □ | MNS0480-L10C | 48.9 | 65.9 | 68.9 | 105.9 | 105 | 0.9 | 6 | 3 |
| | 12 | □ | MNS0480-L12C | 58.5 | 75.9 | 78.9 | 115.9 | 115 | 0.9 | 6 | 3 |
| | 15 | □ | MNS0480-L15C | 72.9 | 90.9 | 93.9 | 130.9 | 130 | 0.9 | 6 | 3 |
| | 20 | □ | MNS0480-L20C | 96.9 | 115.9 | 118.9 | 155.9 | 155 | 0.9 | 6 | 3 |
| | 25 | □ | MNS0480-L25C | 120.9 | 140.9 | 143.9 | 180.9 | 180 | 0.9 | 6 | 3 |
| | 30 | □ | MNS0480-L30C | 144.9 | 165.9 | 168.9 | 205.9 | 205 | 0.9 | 6 | 3 |
| | 5 | ★ | MNS0480LB | 24.9 | 55.9 | 55.9 | 105.9 | 105 | 0.9 | 5 | 3 |
| | 10 | □ | MNS0480X10DB | 48.9 | 65.9 | 68.9 | 118.9 | 118 | 0.9 | 5 | 3 |
| | 20 | □ | MNS0480X20DB | 96.9 | 115.9 | 118.9 | 168.9 | 168 | 0.9 | 5 | 3 |
| | 30 | □ | MNS0480X30DB | 144.9 | 165.9 | 168.9 | 218.9 | 218 | 0.9 | 5 | 3 |

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.9 | 3 | □ | MNS0490S-DIN | 20.5 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 4 |
| | 3 | □ | MNS0490S-DIN-C | 20.5 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 3 |
| | 5 | □ | MNS0490L-DIN | 36.5 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 4 |
| | 5 | □ | MNS0490L-DIN-C | 36.5 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 3 |
| | 8 | □ | MNS0490-L8C | 40.1 | 55.9 | 58.9 | 95.9 | 95 | 0.9 | 6 | 3 |
| | 10 | □ | MNS0490-L10C | 49.9 | 65.9 | 68.9 | 105.9 | 105 | 0.9 | 6 | 3 |
| | 12 | □ | MNS0490-L12C | 59.7 | 75.9 | 78.9 | 115.9 | 115 | 0.9 | 6 | 3 |
| | 15 | □ | MNS0490-L15C | 74.4 | 90.9 | 93.9 | 130.9 | 130 | 0.9 | 6 | 3 |
| | 20 | □ | MNS0490-L20C | 98.9 | 115.9 | 118.9 | 155.9 | 155 | 0.9 | 6 | 3 |
| | 25 | □ | MNS0490-L25C | 123.4 | 140.9 | 143.9 | 180.9 | 180 | 0.9 | 6 | 3 |
| | 30 | □ | MNS0490-L30C | 147.9 | 165.9 | 168.9 | 205.9 | 205 | 0.9 | 6 | 3 |
| | 5 | ★ | MNS0490LB | 25.4 | 55.9 | 55.9 | 105.9 | 105 | 0.9 | 5 | 3 |
| | 10 | ★ | MNS0490X10DB | 49.9 | 65.9 | 68.9 | 118.9 | 118 | 0.9 | 5 | 3 |
| | 20 | ★ | MNS0490X20DB | 98.9 | 115.9 | 118.9 | 168.9 | 168 | 0.9 | 5 | 3 |
| | 30 | ★ | MNS0490X30DB | 147.9 | 165.9 | 168.9 | 218.9 | 218 | 0.9 | 5 | 3 |
| 5.0 | 3 | □ | MNS0500S-DIN | 20.4 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 4 |
| | 3 | □ | MNS0500S-DIN-C | 20.4 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 3 |
| | 5 | □ | MNS0500L-DIN | 36.4 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 4 |
| | 5 | ● | MNS0500L-DIN-C | 36.4 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 3 |
| | 8 | □ | MNS0500-L8C | 40.9 | 55.9 | 58.9 | 95.9 | 95 | 0.9 | 6 | 3 |
| | 10 | □ | MNS0500-L10C | 50.9 | 65.9 | 68.9 | 105.9 | 105 | 0.9 | 6 | 3 |
| | 12 | ● | MNS0500-L12C | 60.9 | 75.9 | 78.9 | 115.9 | 115 | 0.9 | 6 | 3 |
| | 15 | □ | MNS0500-L15C | 75.9 | 90.9 | 93.9 | 130.9 | 130 | 0.9 | 6 | 3 |
| | 20 | ● | MNS0500-L20C | 100.9 | 115.9 | 118.9 | 155.9 | 155 | 0.9 | 6 | 3 |
| | 25 | □ | MNS0500-L25C | 125.9 | 140.9 | 143.9 | 180.9 | 180 | 0.9 | 6 | 3 |
| | 30 | ● | MNS0500-L30C | 150.9 | 165.9 | 168.9 | 205.9 | 205 | 0.9 | 6 | 3 |
| | 5 | ★ | MNS0500LB | 25.9 | 44.9 | 44.9 | 100.9 | 100 | 0.9 | 6 | 3 |
| | 10 | ★ | MNS0500X10DB | 50.9 | 65.9 | 68.9 | 118.9 | 118 | 0.9 | 5 | 3 |
| | 20 | ★ | MNS0500X20DB | 100.9 | 115.9 | 118.9 | 168.9 | 168 | 0.9 | 5 | 3 |
| | 30 | ★ | MNS0500X30DB | 150.9 | 165.9 | 168.9 | 218.9 | 218 | 0.9 | 5 | 3 |
| 5.1 | 3 | □ | MNS0510S-DIN | 20.3 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 4 |
| | 3 | □ | MNS0510S-DIN-C | 20.3 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 3 |
| | 5 | □ | MNS0510L-DIN | 36.3 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 4 |
| | 5 | ● | MNS0510L-DIN-C | 36.3 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 3 |
| | 8 | □ | MNS0510-L8C | 41.7 | 61.9 | 64.9 | 101.9 | 101 | 0.9 | 6 | 3 |
| | 10 | □ | MNS0510-L10C | 51.9 | 72.9 | 75.9 | 112.9 | 112 | 0.9 | 6 | 3 |
| | 12 | □ | MNS0510-L12C | 62.1 | 83.9 | 86.9 | 123.9 | 123 | 0.9 | 6 | 3 |
| | 15 | □ | MNS0510-L15C | 77.4 | 99.9 | 102.9 | 139.9 | 139 | 0.9 | 6 | 3 |
| | 20 | □ | MNS0510-L20C | 102.9 | 127.9 | 130.9 | 167.9 | 167 | 0.9 | 6 | 3 |
| | 25 | □ | MNS0510-L25C | 128.4 | 154.9 | 157.9 | 194.9 | 194 | 0.9 | 6 | 3 |
| | 30 | □ | MNS0510-L30C | 153.9 | 182.9 | 185.9 | 222.9 | 222 | 0.9 | 6 | 3 |
| | 5 | ★ | MNS0510LB | 26.4 | 44.9 | 44.9 | 100.9 | 100 | 0.9 | 6 | 3 |
| | 10 | ★ | MNS0510X10DB | 51.9 | 72.9 | 75.9 | 127.9 | 127 | 0.9 | 6 | 3 |
| | 20 | ★ | MNS0510X20DB | 102.9 | 127.9 | 130.9 | 182.9 | 182 | 0.9 | 6 | 3 |
| | 30 | ★ | MNS0510X30DB | 153.9 | 182.9 | 185.9 | 237.9 | 237 | 0.9 | 6 | 3 |

CONDITIONS DE COUPE ➤ M120
MÉTHODE D'UTILISATION ➤ M121
DONNÉES TECHNIQUES ➤ P001

# MNS

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | □ | MNS0520S-DIN | 20.1 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 4 |
| | 3 | □ | MNS0520S-DIN-C | 20.1 | 27.9 | 28.9 | 65.9 | 65 | 0.9 | 6 | 3 |
| | 5 | □ | MNS0520L-DIN | 36.1 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 4 |
| | 5 | □ | MNS0520L-DIN-C | 36.1 | 43.9 | 44.9 | 81.9 | 81 | 0.9 | 6 | 3 |
| | 8 | □ | MNS0520-L8C | 42.5 | 61.9 | 64.9 | 101.9 | 101 | 0.9 | 6 | 3 |
| | 10 | □ | MNS0520-L10C | 52.9 | 72.9 | 75.9 | 112.9 | 112 | 0.9 | 6 | 3 |
| | 12 | □ | MNS0520-L12C | 63.3 | 83.9 | 86.9 | 123.9 | 123 | 0.9 | 6 | 3 |
| 5.2 | 15 | □ | MNS0520-L15C | 78.9 | 99.9 | 102.9 | 139.9 | 139 | 0.9 | 6 | 3 |
| | 20 | □ | MNS0520-L20C | 104.9 | 127.9 | 130.9 | 167.9 | 167 | 0.9 | 6 | 3 |
| | 25 | □ | MNS0520-L25C | 130.9 | 154.9 | 157.9 | 194.9 | 194 | 0.9 | 6 | 3 |
| | 30 | □ | MNS0520-L30C | 156.9 | 182.9 | 185.9 | 222.9 | 222 | 0.9 | 6 | 3 |
| | 5 | ★ | MNS0520LB | 26.9 | 44.9 | 44.9 | 100.9 | 100 | 0.9 | 6 | 3 |
| | 10 | □ | MNS0520X10DB | 52.9 | 72.9 | 75.9 | 127.9 | 127 | 0.9 | 6 | 3 |
| | 20 | □ | MNS0520X20DB | 104.9 | 127.9 | 130.9 | 182.9 | 182 | 0.9 | 6 | 3 |
| | 30 | □ | MNS0520X30DB | 156.9 | 182.9 | 185.9 | 237.9 | 237 | 0.9 | 6 | 3 |
| | 3 | □ | MNS0530S-DIN | 20.0 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 4 |
| | 3 | □ | MNS0530S-DIN-C | 20.0 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 3 |
| | 5 | □ | MNS0530L-DIN | 36.0 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 4 |
| | 5 | □ | MNS0530L-DIN-C | 36.0 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 3 |
| | 8 | □ | MNS0530-L8C | 43.4 | 62.0 | 65.0 | 102.0 | 101 | 1.0 | 6 | 3 |
| | 10 | □ | MNS0530-L10C | 54.0 | 73.0 | 76.0 | 113.0 | 112 | 1.0 | 6 | 3 |
| | 12 | □ | MNS0530-L12C | 64.6 | 84.0 | 87.0 | 124.0 | 123 | 1.0 | 6 | 3 |
| 5.3 | 15 | □ | MNS0530-L15C | 80.5 | 100.0 | 103.0 | 140.0 | 139 | 1.0 | 6 | 3 |
| | 20 | □ | MNS0530-L20C | 107.0 | 128.0 | 131.0 | 168.0 | 167 | 1.0 | 6 | 3 |
| | 25 | □ | MNS0530-L25C | 133.5 | 155.0 | 158.0 | 195.0 | 194 | 1.0 | 6 | 3 |
| | 30 | □ | MNS0530-L30C | 160.0 | 183.0 | 186.0 | 223.0 | 222 | 1.0 | 6 | 3 |
| | 5 | ★ | MNS0530LB | 27.5 | 45.0 | 45.0 | 101.0 | 100 | 1.0 | 6 | 3 |
| | 10 | □ | MNS0530X10DB | 54.0 | 73.0 | 76.0 | 128.0 | 127 | 1.0 | 6 | 3 |
| | 20 | □ | MNS0530X20DB | 107.0 | 128.0 | 131.0 | 183.0 | 182 | 1.0 | 6 | 3 |
| | 30 | □ | MNS0530X30DB | 160.0 | 183.0 | 186.0 | 238.0 | 237 | 1.0 | 6 | 3 |
| | 3 | □ | MNS0540S-DIN | 19.9 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 4 |
| | 3 | □ | MNS0540S-DIN-C | 19.9 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 3 |
| | 5 | □ | MNS0540L-DIN | 35.9 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 4 |
| | 5 | □ | MNS0540L-DIN-C | 35.9 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 3 |
| | 8 | □ | MNS0540-L8C | 44.2 | 62.0 | 65.0 | 102.0 | 101 | 1.0 | 6 | 3 |
| | 10 | □ | MNS0540-L10C | 55.0 | 73.0 | 76.0 | 113.0 | 112 | 1.0 | 6 | 3 |
| | 12 | □ | MNS0540-L12C | 65.8 | 84.0 | 87.0 | 124.0 | 123 | 1.0 | 6 | 3 |
| 5.4 | 15 | □ | MNS0540-L15C | 82.0 | 100.0 | 103.0 | 140.0 | 139 | 1.0 | 6 | 3 |
| | 20 | □ | MNS0540-L20C | 109.0 | 128.0 | 131.0 | 168.0 | 167 | 1.0 | 6 | 3 |
| | 25 | □ | MNS0540-L25C | 136.0 | 155.0 | 158.0 | 195.0 | 194 | 1.0 | 6 | 3 |
| | 30 | □ | MNS0540-L30C | 163.0 | 183.0 | 186.0 | 223.0 | 222 | 1.0 | 6 | 3 |
| | 5 | ★ | MNS0540LB | 28.0 | 45.0 | 45.0 | 101.0 | 100 | 1.0 | 6 | 3 |
| | 10 | □ | MNS0540X10DB | 55.0 | 73.0 | 76.0 | 128.0 | 127 | 1.0 | 6 | 3 |
| | 20 | □ | MNS0540X20DB | 109.0 | 128.0 | 131.0 | 183.0 | 182 | 1.0 | 6 | 3 |
| | 30 | □ | MNS0540X30DB | 163.0 | 183.0 | 186.0 | 238.0 | 237 | 1.0 | 6 | 3 |

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | □ | MNS0550S-DIN | 19.8 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 4 |
| | 3 | □ | MNS0550S-DIN-C | 19.8 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 3 |
| | 5 | □ | MNS0550L-DIN | 35.8 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 4 |
| | 5 | ● | MNS0550L-DIN-C | 35.8 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 3 |
| | 8 | □ | MNS0550-L8C | 45.0 | 62.0 | 65.0 | 102.0 | 101 | 1.0 | 6 | 3 |
| | 10 | □ | MNS0550-L10C | 56.0 | 73.0 | 76.0 | 113.0 | 112 | 1.0 | 6 | 3 |
| | 12 | ● | MNS0550-L12C | 67.0 | 84.0 | 87.0 | 124.0 | 123 | 1.0 | 6 | 3 |
| 5.5 | 15 | □ | MNS0550-L15C | 83.5 | 100.0 | 103.0 | 140.0 | 139 | 1.0 | 6 | 3 |
| | 20 | ● | MNS0550-L20C | 111.0 | 128.0 | 131.0 | 168.0 | 167 | 1.0 | 6 | 3 |
| | 25 | □ | MNS0550-L25C | 138.5 | 155.0 | 158.0 | 195.0 | 194 | 1.0 | 6 | 3 |
| | 30 | ● | MNS0550-L30C | 166.0 | 183.0 | 186.0 | 223.0 | 222 | 1.0 | 6 | 3 |
| | 5 | ★ | MNS0550LB | 28.5 | 45.0 | 45.0 | 101.0 | 100 | 1.0 | 6 | 3 |
| | 10 | ★ | MNS0550X10DB | 56.0 | 73.0 | 76.0 | 128.0 | 127 | 1.0 | 6 | 3 |
| | 20 | ★ | MNS0550X20DB | 111.0 | 128.0 | 131.0 | 183.0 | 182 | 1.0 | 6 | 3 |
| | 30 | ★ | MNS0550X30DB | 166.0 | 183.0 | 186.0 | 238.0 | 237 | 1.0 | 6 | 3 |
| | 3 | □ | MNS0555S-DIN | 19.7 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 4 |
| | 3 | □ | MNS0555S-DIN-C | 19.7 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 3 |
| 5.55 | 5 | □ | MNS0555L-DIN | 35.7 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 4 |
| | 5 | ● | MNS0555L-DIN-C | 35.7 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 3 |
| | 3 | □ | MNS0560S-DIN | 19.6 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 4 |
| | 3 | □ | MNS0560S-DIN-C | 19.6 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 3 |
| | 5 | □ | MNS0560L-DIN | 35.6 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 4 |
| | 5 | □ | MNS0560L-DIN-C | 35.6 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 3 |
| | 8 | □ | MNS0560-L8C | 45.8 | 67.0 | 70.0 | 107.0 | 106 | 1.0 | 6 | 3 |
| | 10 | □ | MNS0560-L10C | 57.0 | 79.0 | 82.0 | 119.0 | 118 | 1.0 | 6 | 3 |
| | 12 | □ | MNS0560-L12C | 68.2 | 91.0 | 94.0 | 131.0 | 130 | 1.0 | 6 | 3 |
| 5.6 | 15 | □ | MNS0560-L15C | 85.0 | 109.0 | 112.0 | 149.0 | 148 | 1.0 | 6 | 3 |
| | 20 | □ | MNS0560-L20C | 113.0 | 139.0 | 142.0 | 179.0 | 178 | 1.0 | 6 | 3 |
| | 25 | □ | MNS0560-L25C | 141.0 | 169.0 | 172.0 | 209.0 | 208 | 1.0 | 6 | 3 |
| | 30 | □ | MNS0560-L30C | 169.0 | 199.0 | 202.0 | 239.0 | 238 | 1.0 | 6 | 3 |
| | 5 | ★ | MNS0560LB | 29.0 | 49.0 | 49.0 | 101.0 | 100 | 1.0 | 6 | 3 |
| | 10 | □ | MNS0560X10DB | 57.0 | 79.0 | 82.0 | 134.0 | 133 | 1.0 | 6 | 3 |
| | 20 | □ | MNS0560X20DB | 113.0 | 139.0 | 142.0 | 194.0 | 193 | 1.0 | 6 | 3 |
| | 30 | □ | MNS0560X30DB | 169.0 | 199.0 | 202.0 | 254.0 | 253 | 1.0 | 6 | 3 |
| | 3 | □ | MNS0570S-DIN | 19.5 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 4 |
| | 3 | □ | MNS0570S-DIN-C | 19.5 | 28.0 | 29.0 | 66.0 | 65 | 1.0 | 6 | 3 |
| | 5 | □ | MNS0570L-DIN | 35.5 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 4 |
| | 5 | □ | MNS0570L-DIN-C | 35.5 | 44.0 | 45.0 | 82.0 | 81 | 1.0 | 6 | 3 |
| | 8 | □ | MNS0570-L8C | 46.6 | 67.0 | 70.0 | 107.0 | 106 | 1.0 | 6 | 3 |
| | 10 | □ | MNS0570-L10C | 58.0 | 79.0 | 82.0 | 119.0 | 118 | 1.0 | 6 | 3 |
| | 12 | □ | MNS0570-L12C | 69.4 | 91.0 | 94.0 | 131.0 | 130 | 1.0 | 6 | 3 |
| 5.7 | 15 | □ | MNS0570-L15C | 86.5 | 109.0 | 112.0 | 149.0 | 148 | 1.0 | 6 | 3 |
| | 20 | □ | MNS0570-L20C | 115.0 | 139.0 | 142.0 | 179.0 | 178 | 1.0 | 6 | 3 |
| | 25 | □ | MNS0570-L25C | 143.5 | 169.0 | 172.0 | 209.0 | 208 | 1.0 | 6 | 3 |
| | 30 | □ | MNS0570-L30C | 172.0 | 199.0 | 202.0 | 239.0 | 238 | 1.0 | 6 | 3 |
| | 5 | ★ | MNS0570LB | 29.5 | 49.0 | 49.0 | 101.0 | 100 | 1.0 | 6 | 3 |
| | 10 | □ | MNS0570X10DB | 58.0 | 79.0 | 82.0 | 134.0 | 133 | 1.0 | 6 | 3 |
| | 20 | □ | MNS0570X20DB | 115.0 | 139.0 | 142.0 | 194.0 | 193 | 1.0 | 6 | 3 |
| | 30 | □ | MNS0570X30DB | 172.0 | 199.0 | 202.0 | 254.0 | 253 | 1.0 | 6 | 3 |

Remarque 1) Veuillez nous contacter pour les géométries qui ne seraient pas dans ce catalogue (e.g. différents diamètres et longueurs peuvent être fabriqués sur demande).

**● : Article stocké. ★ : Article standard Japon.**

**□ : Article non stocké - Fabrication sur commande uniquement.**

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.8 | 3 | □ | MNS0580S-DIN | 19.4 | 28.1 | 29.1 | 66.1 | 65 | 1.1 | 6 | 4 |
| | 3 | □ | MNS0580S-DIN-C | 19.4 | 28.1 | 29.1 | 66.1 | 65 | 1.1 | 6 | 3 |
| | 5 | □ | MNS0580L-DIN | 35.4 | 44.1 | 45.1 | 82.1 | 81 | 1.1 | 6 | 4 |
| | 5 | □ | MNS0580L-DIN-C | 35.4 | 44.1 | 45.1 | 82.1 | 81 | 1.1 | 6 | 3 |
| | 8 | □ | MNS0580-L8C | 47.5 | 67.1 | 70.1 | 107.1 | 106 | 1.1 | 6 | 3 |
| | 10 | □ | MNS0580-L10C | 59.1 | 79.1 | 82.1 | 119.1 | 118 | 1.1 | 6 | 3 |
| | 12 | □ | MNS0580-L12C | 70.7 | 91.1 | 94.1 | 131.1 | 130 | 1.1 | 6 | 3 |
| | 15 | □ | MNS0580-L15C | 88.1 | 109.1 | 112.1 | 149.1 | 148 | 1.1 | 6 | 3 |
| | 20 | □ | MNS0580-L20C | 117.1 | 139.1 | 142.1 | 179.1 | 178 | 1.1 | 6 | 3 |
| | 25 | □ | MNS0580-L25C | 146.1 | 169.1 | 172.1 | 209.1 | 208 | 1.1 | 6 | 3 |
| | 30 | □ | MNS0580-L30C | 175.1 | 199.1 | 202.1 | 239.1 | 238 | 1.1 | 6 | 3 |
| | 5 | ★ | MNS0580LB | 30.1 | 49.1 | 49.1 | 101.1 | 100 | 1.1 | 6 | 3 |
| | 10 | □ | MNS0580X10DB | 59.1 | 79.1 | 82.1 | 134.1 | 133 | 1.1 | 6 | 3 |
| | 20 | □ | MNS0580X20DB | 117.1 | 139.1 | 142.1 | 194.1 | 193 | 1.1 | 6 | 3 |
| | 30 | □ | MNS0580X30DB | 175.1 | 199.1 | 202.1 | 254.1 | 253 | 1.1 | 6 | 3 |
| 5.9 | 3 | □ | MNS0590S-DIN | 19.2 | 28.1 | 29.1 | 66.1 | 65 | 1.1 | 6 | 4 |
| | 3 | □ | MNS0590S-DIN-C | 19.2 | 28.1 | 29.1 | 66.1 | 65 | 1.1 | 6 | 3 |
| | 5 | □ | MNS0590L-DIN | 35.2 | 44.1 | 45.1 | 82.1 | 81 | 1.1 | 6 | 4 |
| | 5 | □ | MNS0590L-DIN-C | 35.2 | 44.1 | 45.1 | 82.1 | 81 | 1.1 | 6 | 3 |
| | 8 | □ | MNS0590-L8C | 48.3 | 67.1 | 70.1 | 107.1 | 106 | 1.1 | 6 | 3 |
| | 10 | □ | MNS0590-L10C | 60.1 | 79.1 | 82.1 | 119.1 | 118 | 1.1 | 6 | 3 |
| | 12 | □ | MNS0590-L12C | 71.9 | 91.1 | 94.1 | 131.1 | 130 | 1.1 | 6 | 3 |
| | 15 | □ | MNS0590-L15C | 89.6 | 109.1 | 112.1 | 149.1 | 148 | 1.1 | 6 | 3 |
| | 20 | □ | MNS0590-L20C | 119.1 | 139.1 | 142.1 | 179.1 | 178 | 1.1 | 6 | 3 |
| | 25 | □ | MNS0590-L25C | 148.6 | 169.1 | 172.1 | 209.1 | 208 | 1.1 | 6 | 3 |
| | 30 | □ | MNS0590-L30C | 178.1 | 199.1 | 202.1 | 239.1 | 238 | 1.1 | 6 | 3 |
| | 5 | ★ | MNS0590LB | 30.6 | 49.1 | 49.1 | 101.1 | 100 | 1.1 | 6 | 3 |
| | 10 | □ | MNS0590X10DB | 60.1 | 79.1 | 82.1 | 134.1 | 133 | 1.1 | 6 | 3 |
| | 20 | □ | MNS0590X20DB | 119.1 | 139.1 | 142.1 | 194.1 | 193 | 1.1 | 6 | 3 |
| | 30 | □ | MNS0590X30DB | 178.1 | 199.1 | 202.1 | 254.1 | 253 | 1.1 | 6 | 3 |
| 6.0 | 3 | □ | MNS0600S-DIN | 19.1 | 28.1 | 29.1 | 66.1 | 65 | 1.1 | 6 | 4 |
| | 3 | □ | MNS0600S-DIN-C | 19.1 | 28.1 | 29.1 | 66.1 | 65 | 1.1 | 6 | 3 |
| | 5 | ● | MNS0600L-DIN-C | 35.1 | 44.1 | 45.1 | 82.1 | 81 | 1.1 | 6 | 3 |
| | 8 | □ | MNS0600-L8C | 49.1 | 67.1 | 70.1 | 107.1 | 106 | 1.1 | 6 | 3 |
| | 10 | □ | MNS0600-L10C | 61.1 | 79.1 | 82.1 | 119.1 | 118 | 1.1 | 6 | 3 |
| | 12 | ● | MNS0600-L12C | 73.1 | 91.1 | 94.1 | 131.1 | 130 | 1.1 | 6 | 3 |
| | 15 | □ | MNS0600-L15C | 91.1 | 109.1 | 112.1 | 149.1 | 148 | 1.1 | 6 | 3 |
| | 20 | ● | MNS0600-L20C | 121.1 | 139.1 | 142.1 | 179.1 | 178 | 1.1 | 6 | 3 |
| | 25 | □ | MNS0600-L25C | 151.1 | 169.1 | 172.1 | 209.1 | 208 | 1.1 | 6 | 3 |
| | 30 | ● | MNS0600-L30C | 181.1 | 199.1 | 202.1 | 239.1 | 238 | 1.1 | 6 | 3 |
| | 5 | ★ | MNS0600LB | 31.1 | 49.1 | 49.1 | 101.1 | 100 | 1.1 | 6 | 3 |
| | 10 | ★ | MNS0600X10DB | 61.1 | 79.1 | 82.1 | 134.1 | 133 | 1.1 | 6 | 3 |
| | 20 | ★ | MNS0600X20DB | 121.1 | 139.1 | 142.1 | 194.1 | 193 | 1.1 | 6 | 3 |
| | 30 | ★ | MNS0600X30DB | 181.1 | 199.1 | 202.1 | 254.1 | 253 | 1.1 | 6 | 3 |

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.1 | 3 | □ | MNS0610S-DIN | 25.0 | 34.1 | 42.1 | 79.1 | 78 | 1.1 | 8 | 4 |
| | 3 | □ | MNS0610S-DIN-C | 25.0 | 34.1 | 42.1 | 79.1 | 78 | 1.1 | 8 | 3 |
| | 5 | □ | MNS0610L-DIN | 44.0 | 53.1 | 54.1 | 91.1 | 90 | 1.1 | 8 | 4 |
| | 5 | □ | MNS0610L-DIN-C | 44.0 | 53.1 | 54.1 | 91.1 | 90 | 1.1 | 8 | 3 |
| | 8 | □ | MNS0610-L8C | 49.9 | 73.1 | 76.1 | 113.1 | 112 | 1.1 | 8 | 3 |
| | 10 | □ | MNS0610-L10C | 62.1 | 86.1 | 89.1 | 126.1 | 125 | 1.1 | 8 | 3 |
| | 12 | □ | MNS0610-L12C | 74.3 | 99.1 | 102.1 | 139.1 | 138 | 1.1 | 8 | 3 |
| | 15 | □ | MNS0610-L15C | 92.6 | 118.1 | 121.1 | 158.1 | 157 | 1.1 | 8 | 3 |
| | 20 | □ | MNS0610-L20C | 123.1 | 151.1 | 154.1 | 191.1 | 190 | 1.1 | 8 | 3 |
| | 25 | □ | MNS0610-L25C | 153.6 | 183.1 | 186.1 | 223.1 | 222 | 1.1 | 8 | 3 |
| | 30 | □ | MNS0610-L30C | 184.1 | 216.1 | 219.1 | 256.1 | 255 | 1.1 | 8 | 3 |
| | 5 | ★ | MNS0610LB | 31.6 | 53.1 | 53.1 | 110.1 | 109 | 1.1 | 7 | 3 |
| | 10 | ★ | MNS0610X10DB | 62.1 | 86.1 | 89.1 | 142.1 | 141 | 1.1 | 7 | 3 |
| | 20 | ★ | MNS0610X20DB | 123.1 | 151.1 | 154.1 | 207.1 | 206 | 1.1 | 7 | 3 |
| | 30 | ★ | MNS0610X30DB | 184.1 | 216.1 | 219.1 | 272.1 | 271 | 1.1 | 7 | 3 |
| 6.2 | 3 | □ | MNS0620S-DIN | 24.8 | 34.1 | 42.1 | 79.1 | 78 | 1.1 | 8 | 4 |
| | 3 | □ | MNS0620S-DIN-C | 24.8 | 34.1 | 42.1 | 79.1 | 78 | 1.1 | 8 | 3 |
| | 5 | □ | MNS0620L-DIN | 43.8 | 53.1 | 54.1 | 91.1 | 90 | 1.1 | 8 | 4 |
| | 5 | □ | MNS0620L-DIN-C | 43.8 | 53.1 | 54.1 | 91.1 | 90 | 1.1 | 8 | 3 |
| | 8 | □ | MNS0620-L8C | 50.7 | 73.1 | 76.1 | 113.1 | 112 | 1.1 | 8 | 3 |
| | 10 | □ | MNS0620-L10C | 63.1 | 86.1 | 89.1 | 126.1 | 125 | 1.1 | 8 | 3 |
| | 12 | □ | MNS0620-L12C | 75.5 | 99.1 | 102.1 | 139.1 | 138 | 1.1 | 8 | 3 |
| | 15 | □ | MNS0620-L15C | 94.1 | 118.1 | 121.1 | 158.1 | 157 | 1.1 | 8 | 3 |
| | 20 | □ | MNS0620-L20C | 125.1 | 151.1 | 154.1 | 191.1 | 190 | 1.1 | 8 | 3 |
| | 25 | □ | MNS0620-L25C | 156.1 | 183.1 | 186.1 | 223.1 | 222 | 1.1 | 8 | 3 |
| | 30 | □ | MNS0620-L30C | 187.1 | 216.1 | 219.1 | 256.1 | 255 | 1.1 | 8 | 3 |
| | 5 | ★ | MNS0620LB | 32.1 | 53.1 | 53.1 | 110.1 | 109 | 1.1 | 7 | 3 |
| | 10 | □ | MNS0620X10DB | 63.1 | 86.1 | 89.1 | 142.1 | 141 | 1.1 | 7 | 3 |
| | 20 | □ | MNS0620X20DB | 125.1 | 151.1 | 154.1 | 207.1 | 206 | 1.1 | 7 | 3 |
| | 30 | □ | MNS0620X30DB | 187.1 | 216.1 | 219.1 | 272.1 | 271 | 1.1 | 7 | 3 |
| 6.3 | 3 | □ | MNS0630S-DIN | 24.7 | 34.1 | 42.1 | 79.1 | 78 | 1.1 | 8 | 4 |
| | 3 | □ | MNS0630S-DIN-C | 24.7 | 34.1 | 42.1 | 79.1 | 78 | 1.1 | 8 | 3 |
| | 5 | □ | MNS0630L-DIN | 43.7 | 53.1 | 54.1 | 91.1 | 90 | 1.1 | 8 | 4 |
| | 5 | □ | MNS0630L-DIN-C | 43.7 | 53.1 | 54.1 | 91.1 | 90 | 1.1 | 8 | 3 |
| | 8 | □ | MNS0630-L8C | 51.5 | 73.1 | 76.1 | 113.1 | 112 | 1.1 | 8 | 3 |
| | 10 | □ | MNS0630-L10C | 64.1 | 86.1 | 89.1 | 126.1 | 125 | 1.1 | 8 | 3 |
| | 12 | □ | MNS0630-L12C | 76.7 | 99.1 | 102.1 | 139.1 | 138 | 1.1 | 8 | 3 |
| | 15 | □ | MNS0630-L15C | 95.6 | 118.1 | 121.1 | 158.1 | 157 | 1.1 | 8 | 3 |
| | 20 | □ | MNS0630-L20C | 127.1 | 151.1 | 154.1 | 191.1 | 190 | 1.1 | 8 | 3 |
| | 25 | □ | MNS0630-L25C | 158.6 | 183.1 | 186.1 | 223.1 | 222 | 1.1 | 8 | 3 |
| | 30 | □ | MNS0630-L30C | 190.1 | 216.1 | 219.1 | 256.1 | 255 | 1.1 | 8 | 3 |
| | 5 | ★ | MNS0630LB | 32.6 | 53.1 | 53.1 | 110.1 | 109 | 1.1 | 7 | 3 |
| | 10 | □ | MNS0630X10DB | 64.1 | 86.1 | 89.1 | 142.1 | 141 | 1.1 | 7 | 3 |
| | 20 | □ | MNS0630X20DB | 127.1 | 151.1 | 154.1 | 207.1 | 206 | 1.1 | 7 | 3 |
| | 30 | □ | MNS0630X30DB | 190.1 | 216.1 | 219.1 | 272.1 | 271 | 1.1 | 7 | 3 |

CONDITIONS DE COUPE ➤ M120
MÉTHODE D'UTILISATION ➤ M121
DONNÉES TECHNIQUES ➤ P001

# MNS

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | □ | MNS0640S-DIN | 24.6 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 4 |
| | 3 | □ | MNS0640S-DIN-C | 24.6 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 3 |
| | 5 | □ | MNS0640L-DIN | 43.6 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 4 |
| | 5 | □ | MNS0640L-DIN-C | 43.6 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 3 |
| | 8 | □ | MNS0640-L8C | 52.4 | 73.2 | 76.2 | 113.2 | 112 | 1.2 | 8 | 3 |
| | 10 | □ | MNS0640-L10C | 65.2 | 86.2 | 89.2 | 126.2 | 125 | 1.2 | 8 | 3 |
| | 12 | □ | MNS0640-L12C | 78.0 | 99.2 | 102.2 | 139.2 | 138 | 1.2 | 8 | 3 |
| 6.4 | 15 | □ | MNS0640-L15C | 97.2 | 118.2 | 121.2 | 158.2 | 157 | 1.2 | 8 | 3 |
| | 20 | □ | MNS0640-L20C | 129.2 | 151.2 | 154.2 | 191.2 | 190 | 1.2 | 8 | 3 |
| | 25 | □ | MNS0640-L25C | 161.2 | 183.2 | 186.2 | 223.2 | 222 | 1.2 | 8 | 3 |
| | 30 | □ | MNS0640-L30C | 193.2 | 216.2 | 219.2 | 256.2 | 255 | 1.2 | 8 | 3 |
| | 5 | ★ | MNS0640LB | 33.2 | 53.2 | 53.2 | 110.2 | 109 | 1.2 | 7 | 3 |
| | 10 | □ | MNS0640X10DB | 65.2 | 86.2 | 89.2 | 142.2 | 141 | 1.2 | 7 | 3 |
| | 20 | □ | MNS0640X20DB | 129.2 | 151.2 | 154.2 | 207.2 | 206 | 1.2 | 7 | 3 |
| | 30 | □ | MNS0640X30DB | 193.2 | 216.2 | 219.2 | 272.2 | 271 | 1.2 | 7 | 3 |
| | 3 | □ | MNS0650S-DIN | 24.4 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 4 |
| | 3 | □ | MNS0650S-DIN-C | 24.4 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 3 |
| | 5 | □ | MNS0650L-DIN | 43.4 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 4 |
| | 5 | ● | MNS0650L-DIN-C | 43.4 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 3 |
| | 8 | □ | MNS0650-L8C | 53.2 | 73.2 | 76.2 | 113.2 | 112 | 1.2 | 8 | 3 |
| | 10 | □ | MNS0650-L10C | 66.2 | 86.2 | 89.2 | 126.2 | 125 | 1.2 | 8 | 3 |
| | 12 | ● | MNS0650-L12C | 79.2 | 99.2 | 102.2 | 139.2 | 138 | 1.2 | 8 | 3 |
| 6.5 | 15 | □ | MNS0650-L15C | 98.7 | 118.2 | 121.2 | 158.2 | 157 | 1.2 | 8 | 3 |
| | 20 | ● | MNS0650-L20C | 131.2 | 151.2 | 154.2 | 191.2 | 190 | 1.2 | 8 | 3 |
| | 25 | □ | MNS0650-L25C | 163.7 | 183.2 | 186.2 | 223.2 | 222 | 1.2 | 8 | 3 |
| | 30 | ● | MNS0650-L30C | 196.2 | 216.2 | 219.2 | 256.2 | 255 | 1.2 | 8 | 3 |
| | 5 | ★ | MNS0650LB | 33.7 | 53.2 | 53.2 | 110.2 | 109 | 1.2 | 7 | 3 |
| | 10 | ★ | MNS0650X10DB | 66.2 | 86.2 | 89.2 | 142.2 | 141 | 1.2 | 7 | 3 |
| | 20 | ★ | MNS0650X20DB | 131.2 | 151.2 | 154.2 | 207.2 | 206 | 1.2 | 7 | 3 |
| | 30 | ★ | MNS0650X30DB | 196.2 | 216.2 | 219.2 | 272.2 | 271 | 1.2 | 7 | 3 |
| | 3 | □ | MNS0660S-DIN | 24.3 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 4 |
| | 3 | □ | MNS0660S-DIN-C | 24.3 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 3 |
| | 5 | □ | MNS0660L-DIN | 43.3 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 4 |
| | 5 | □ | MNS0660L-DIN-C | 43.3 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 3 |
| | 8 | □ | MNS0660-L8C | 54.0 | 78.2 | 81.2 | 118.2 | 117 | 1.2 | 8 | 3 |
| | 10 | □ | MNS0660-L10C | 67.2 | 92.2 | 95.2 | 132.2 | 131 | 1.2 | 8 | 3 |
| | 12 | □ | MNS0660-L12C | 80.4 | 106.2 | 109.2 | 146.2 | 145 | 1.2 | 8 | 3 |
| 6.6 | 15 | □ | MNS0660-L15C | 100.2 | 127.2 | 130.2 | 167.2 | 166 | 1.2 | 8 | 3 |
| | 20 | □ | MNS0660-L20C | 133.2 | 162.2 | 165.2 | 202.2 | 201 | 1.2 | 8 | 3 |
| | 25 | □ | MNS0660-L25C | 166.2 | 197.2 | 200.2 | 237.2 | 236 | 1.2 | 8 | 3 |
| | 30 | □ | MNS0660-L30C | 199.2 | 232.2 | 235.2 | 272.2 | 271 | 1.2 | 8 | 3 |
| | 5 | ★ | MNS0660LB | 34.2 | 57.2 | 57.2 | 110.2 | 109 | 1.2 | 7 | 3 |
| | 10 | □ | MNS0660X10DB | 67.2 | 92.2 | 95.2 | 148.2 | 147 | 1.2 | 7 | 3 |
| | 20 | □ | MNS0660X20DB | 133.2 | 162.2 | 165.2 | 218.2 | 217 | 1.2 | 7 | 3 |
| | 30 | □ | MNS0660X30DB | 199.2 | 232.2 | 235.2 | 288.2 | 287 | 1.2 | 7 | 3 |

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | □ | MNS0670S-DIN | 24.2 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 4 |
| | 3 | □ | MNS0670S-DIN-C | 24.2 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 3 |
| | 5 | □ | MNS0670L-DIN | 43.2 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 4 |
| | 5 | □ | MNS0670L-DIN-C | 43.2 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 3 |
| | 8 | □ | MNS0670-L8C | 54.8 | 78.2 | 81.2 | 118.2 | 117 | 1.2 | 8 | 3 |
| | 10 | □ | MNS0670-L10C | 68.2 | 92.2 | 95.2 | 132.2 | 131 | 1.2 | 8 | 3 |
| | 12 | □ | MNS0670-L12C | 81.6 | 106.2 | 109.2 | 146.2 | 145 | 1.2 | 8 | 3 |
| 6.7 | 15 | □ | MNS0670-L15C | 101.7 | 127.2 | 130.2 | 167.2 | 166 | 1.2 | 8 | 3 |
| | 20 | □ | MNS0670-L20C | 135.2 | 162.2 | 165.2 | 202.2 | 201 | 1.2 | 8 | 3 |
| | 25 | □ | MNS0670-L25C | 168.7 | 197.2 | 200.2 | 237.2 | 236 | 1.2 | 8 | 3 |
| | 30 | □ | MNS0670-L30C | 202.2 | 232.2 | 235.2 | 272.2 | 271 | 1.2 | 8 | 3 |
| | 5 | ★ | MNS0670LB | 34.7 | 57.2 | 57.2 | 110.2 | 109 | 1.2 | 7 | 3 |
| | 10 | ★ | MNS0670X10DB | 68.2 | 92.2 | 95.2 | 148.2 | 147 | 1.2 | 7 | 3 |
| | 20 | ★ | MNS0670X20DB | 135.2 | 162.2 | 165.2 | 218.2 | 217 | 1.2 | 7 | 3 |
| | 30 | ★ | MNS0670X30DB | 202.2 | 232.2 | 235.2 | 288.2 | 287 | 1.2 | 7 | 3 |
| | 3 | □ | MNS0680S-DIN | 24.0 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 4 |
| | 3 | □ | MNS0680S-DIN-C | 24.0 | 34.2 | 42.2 | 79.2 | 78 | 1.2 | 8 | 3 |
| | 5 | □ | MNS0680L-DIN | 43.0 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 4 |
| | 5 | ● | MNS0680L-DIN-C | 43.0 | 53.2 | 54.2 | 91.2 | 90 | 1.2 | 8 | 3 |
| | 8 | □ | MNS0680-L8C | 55.6 | 78.2 | 81.2 | 118.2 | 117 | 1.2 | 8 | 3 |
| | 10 | □ | MNS0680-L10C | 69.2 | 92.2 | 95.2 | 132.2 | 131 | 1.2 | 8 | 3 |
| | 12 | ● | MNS0680-L12C | 82.8 | 106.2 | 109.2 | 146.2 | 145 | 1.2 | 8 | 3 |
| 6.8 | 15 | □ | MNS0680-L15C | 103.2 | 127.2 | 130.2 | 167.2 | 166 | 1.2 | 8 | 3 |
| | 20 | ● | MNS0680-L20C | 137.2 | 162.2 | 165.2 | 202.2 | 201 | 1.2 | 8 | 3 |
| | 25 | □ | MNS0680-L25C | 171.2 | 197.2 | 200.2 | 237.2 | 236 | 1.2 | 8 | 3 |
| | 30 | ● | MNS0680-L30C | 205.2 | 232.2 | 235.2 | 272.2 | 271 | 1.2 | 8 | 3 |
| | 5 | ★ | MNS0680LB | 35.2 | 57.2 | 57.2 | 110.2 | 109 | 1.2 | 7 | 3 |
| | 10 | □ | MNS0680X10DB | 69.2 | 92.2 | 95.2 | 148.2 | 147 | 1.2 | 7 | 3 |
| | 20 | □ | MNS0680X20DB | 137.2 | 162.2 | 165.2 | 218.2 | 217 | 1.2 | 7 | 3 |
| | 30 | □ | MNS0680X30DB | 205.2 | 232.2 | 235.2 | 288.2 | 287 | 1.2 | 7 | 3 |
| | 3 | □ | MNS0690S-DIN | 23.9 | 34.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 4 |
| | 3 | □ | MNS0690S-DIN-C | 23.9 | 34.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 3 |
| | 5 | □ | MNS0690L-DIN | 42.9 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 4 |
| | 5 | □ | MNS0690L-DIN-C | 42.9 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 3 |
| | 8 | □ | MNS0690-L8C | 56.5 | 78.3 | 81.3 | 118.3 | 117 | 1.3 | 8 | 3 |
| | 10 | □ | MNS0690-L10C | 70.3 | 92.3 | 95.3 | 132.3 | 131 | 1.3 | 8 | 3 |
| | 12 | □ | MNS0690-L12C | 84.1 | 106.3 | 109.3 | 146.3 | 145 | 1.3 | 8 | 3 |
| 6.9 | 15 | □ | MNS0690-L15C | 104.8 | 127.3 | 130.3 | 167.3 | 166 | 1.3 | 8 | 3 |
| | 20 | □ | MNS0690-L20C | 139.3 | 162.3 | 165.3 | 202.3 | 201 | 1.3 | 8 | 3 |
| | 25 | □ | MNS0690-L25C | 173.8 | 197.3 | 200.3 | 237.3 | 236 | 1.3 | 8 | 3 |
| | 30 | □ | MNS0690-L30C | 208.3 | 232.3 | 235.3 | 272.3 | 271 | 1.3 | 8 | 3 |
| | 5 | ★ | MNS0690LB | 35.8 | 57.3 | 57.3 | 110.3 | 109 | 1.3 | 7 | 3 |
| | 10 | □ | MNS0690X10DB | 70.3 | 92.3 | 95.3 | 148.3 | 147 | 1.3 | 7 | 3 |
| | 20 | □ | MNS0690X20DB | 139.3 | 162.3 | 165.3 | 218.3 | 217 | 1.3 | 7 | 3 |
| | 30 | □ | MNS0690X30DB | 208.3 | 232.3 | 235.3 | 288.3 | 287 | 1.3 | 7 | 3 |

Remarque 1) Veuillez nous contacter pour les géométries qui ne seraient pas dans ce catalogue (e.g. différents diamètres et longueurs peuvent être fabriqués sur demande).

● : Article stocké. ★ : Article standard Japon.
□ : Article non stocké - Fabrication sur commande uniquement.

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | □ | MNS0700S-DIN | 23.8 | 34.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 4 |
| | 3 | □ | MNS0700S-DIN-C | 23.8 | 34.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 3 |
| | 5 | □ | MNS0700L-DIN | 42.8 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 4 |
| | 5 | ● | MNS0700L-DIN-C | 42.8 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 3 |
| | 8 | □ | MNS0700-L8C | 57.3 | 78.3 | 81.3 | 118.3 | 117 | 1.3 | 8 | 3 |
| | 10 | □ | MNS0700-L10C | 71.3 | 92.3 | 95.3 | 132.3 | 131 | 1.3 | 8 | 3 |
| | 12 | ● | MNS0700-L12C | 85.3 | 106.3 | 109.3 | 146.3 | 145 | 1.3 | 8 | 3 |
| 7.0 | 15 | □ | MNS0700-L15C | 106.3 | 127.3 | 130.3 | 167.3 | 166 | 1.3 | 8 | 3 |
| | 20 | ● | MNS0700-L20C | 141.3 | 162.3 | 165.3 | 202.3 | 201 | 1.3 | 8 | 3 |
| | 25 | □ | MNS0700-L25C | 176.3 | 197.3 | 200.3 | 237.3 | 236 | 1.3 | 8 | 3 |
| | 30 | ● | MNS0700-L30C | 211.3 | 232.3 | 235.3 | 272.3 | 271 | 1.3 | 8 | 3 |
| | 5 | ★ | MNS0700LB | 36.3 | 57.3 | 57.3 | 110.3 | 109 | 1.3 | 7 | 3 |
| | 10 | ★ | MNS0700X10DB | 71.3 | 92.3 | 95.3 | 148.3 | 147 | 1.3 | 7 | 3 |
| | 20 | ★ | MNS0700X20DB | 141.3 | 162.3 | 165.3 | 218.3 | 217 | 1.3 | 7 | 3 |
| | 30 | ★ | MNS0700X30DB | 211.3 | 232.3 | 235.3 | 288.3 | 287 | 1.3 | 7 | 3 |
| | 3 | □ | MNS0710S-DIN | 30.6 | 41.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 4 |
| | 3 | □ | MNS0710S-DIN-C | 30.6 | 41.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 3 |
| | 5 | □ | MNS0710L-DIN | 42.6 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 4 |
| | 5 | □ | MNS0710L-DIN-C | 42.6 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 3 |
| | 8 | □ | MNS0710-L8C | 58.1 | 84.3 | 87.3 | 124.3 | 123 | 1.3 | 8 | 3 |
| | 10 | □ | MNS0710-L10C | 72.3 | 99.3 | 102.3 | 139.3 | 138 | 1.3 | 8 | 3 |
| | 12 | □ | MNS0710-L12C | 86.5 | 114.3 | 117.3 | 154.3 | 153 | 1.3 | 8 | 3 |
| 7.1 | 15 | □ | MNS0710-L15C | 107.8 | 136.3 | 139.3 | 176.3 | 175 | 1.3 | 8 | 3 |
| | 20 | □ | MNS0710-L20C | 143.3 | 174.3 | 177.3 | 214.3 | 213 | 1.3 | 8 | 3 |
| | 25 | □ | MNS0710-L25C | 178.8 | 211.3 | 214.3 | 251.3 | 250 | 1.3 | 8 | 3 |
| | 30 | □ | MNS0710-L30C | 214.3 | 249.3 | 252.3 | 289.3 | 288 | 1.3 | 8 | 3 |
| | 5 | ★ | MNS0710LB | 36.8 | 61.3 | 65.3 | 119.3 | 118 | 1.3 | 8 | 3 |
| | 10 | □ | MNS0710X10DB | 72.3 | 99.3 | 102.3 | 156.3 | 155 | 1.3 | 8 | 3 |
| | 20 | □ | MNS0710X20DB | 143.3 | 174.3 | 177.3 | 231.3 | 230 | 1.3 | 8 | 3 |
| | 30 | □ | MNS0710X30DB | 214.3 | 249.3 | 252.3 | 306.3 | 305 | 1.3 | 8 | 3 |
| | 3 | □ | MNS0720S-DIN | 30.5 | 41.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 4 |
| | 3 | □ | MNS0720S-DIN-C | 30.5 | 41.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 3 |
| | 5 | □ | MNS0720L-DIN | 42.5 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 4 |
| | 5 | □ | MNS0720L-DIN-C | 42.5 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 3 |
| | 8 | □ | MNS0720-L8C | 58.9 | 84.3 | 87.3 | 124.3 | 123 | 1.3 | 8 | 3 |
| | 10 | □ | MNS0720-L10C | 73.3 | 99.3 | 102.3 | 139.3 | 138 | 1.3 | 8 | 3 |
| | 12 | □ | MNS0720-L12C | 87.7 | 114.3 | 117.3 | 154.3 | 153 | 1.3 | 8 | 3 |
| 7.2 | 15 | □ | MNS0720-L15C | 109.3 | 136.3 | 139.3 | 176.3 | 175 | 1.3 | 8 | 3 |
| | 20 | □ | MNS0720-L20C | 145.3 | 174.3 | 177.3 | 214.3 | 213 | 1.3 | 8 | 3 |
| | 25 | □ | MNS0720-L25C | 181.3 | 211.3 | 214.3 | 251.3 | 250 | 1.3 | 8 | 3 |
| | 30 | □ | MNS0720-L30C | 217.3 | 249.3 | 252.3 | 289.3 | 288 | 1.3 | 8 | 3 |
| | 5 | ★ | MNS0720LB | 37.3 | 61.3 | 65.3 | 119.3 | 118 | 1.3 | 8 | 3 |
| | 10 | ★ | MNS0720X10DB | 73.3 | 99.3 | 102.3 | 156.3 | 155 | 1.3 | 8 | 3 |
| | 20 | ★ | MNS0720X20DB | 145.3 | 174.3 | 177.3 | 231.3 | 230 | 1.3 | 8 | 3 |
| | 30 | ★ | MNS0720X30DB | 217.3 | 249.3 | 252.3 | 306.3 | 305 | 1.3 | 8 | 3 |

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | □ | MNS0730S-DIN | 30.4 | 41.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 4 |
| | 3 | □ | MNS0730S-DIN-C | 30.4 | 41.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 3 |
| | 5 | □ | MNS0730L-DIN | 42.4 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 4 |
| | 5 | □ | MNS0730L-DIN-C | 42.4 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 3 |
| | 8 | □ | MNS0730-L8C | 59.7 | 84.3 | 87.3 | 124.3 | 123 | 1.3 | 8 | 3 |
| | 10 | □ | MNS0730-L10C | 74.3 | 99.3 | 102.3 | 139.3 | 138 | 1.3 | 8 | 3 |
| | 12 | □ | MNS0730-L12C | 88.9 | 114.3 | 117.3 | 154.3 | 153 | 1.3 | 8 | 3 |
| 7.3 | 15 | □ | MNS0730-L15C | 110.8 | 136.3 | 139.3 | 176.3 | 175 | 1.3 | 8 | 3 |
| | 20 | □ | MNS0730-L20C | 147.3 | 174.3 | 177.3 | 214.3 | 213 | 1.3 | 8 | 3 |
| | 25 | □ | MNS0730-L25C | 183.8 | 211.3 | 214.3 | 251.3 | 250 | 1.3 | 8 | 3 |
| | 30 | □ | MNS0730-L30C | 220.3 | 249.3 | 252.3 | 289.3 | 288 | 1.3 | 8 | 3 |
| | 5 | ★ | MNS0730LB | 37.8 | 61.3 | 65.3 | 119.3 | 118 | 1.3 | 8 | 3 |
| | 10 | □ | MNS0730X10DB | 74.3 | 99.3 | 102.3 | 156.3 | 155 | 1.3 | 8 | 3 |
| | 20 | □ | MNS0730X20DB | 147.3 | 174.3 | 177.3 | 231.3 | 230 | 1.3 | 8 | 3 |
| | 30 | □ | MNS0730X30DB | 220.3 | 249.3 | 252.3 | 306.3 | 305 | 1.3 | 8 | 3 |
| | 3 | □ | MNS0740S-DIN | 30.2 | 41.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 4 |
| | 3 | □ | MNS0740S-DIN-C | 30.2 | 41.3 | 42.3 | 79.3 | 78 | 1.3 | 8 | 3 |
| | 5 | □ | MNS0740L-DIN | 42.2 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 4 |
| | 5 | □ | MNS0740L-DIN-C | 42.2 | 53.3 | 54.3 | 91.3 | 90 | 1.3 | 8 | 3 |
| | 8 | □ | MNS0740-L8C | 60.5 | 84.3 | 87.3 | 124.3 | 123 | 1.3 | 8 | 3 |
| | 10 | □ | MNS0740-L10C | 75.3 | 99.3 | 102.3 | 139.3 | 138 | 1.3 | 8 | 3 |
| | 12 | □ | MNS0740-L12C | 90.1 | 114.3 | 117.3 | 154.3 | 153 | 1.3 | 8 | 3 |
| 7.4 | 15 | □ | MNS0740-L15C | 112.3 | 136.3 | 139.3 | 176.3 | 175 | 1.3 | 8 | 3 |
| | 20 | □ | MNS0740-L20C | 149.3 | 174.3 | 177.3 | 214.3 | 213 | 1.3 | 8 | 3 |
| | 25 | □ | MNS0740-L25C | 186.3 | 211.3 | 214.3 | 251.3 | 250 | 1.3 | 8 | 3 |
| | 30 | □ | MNS0740-L30C | 223.3 | 249.3 | 252.3 | 289.3 | 288 | 1.3 | 8 | 3 |
| | 5 | ★ | MNS0740LB | 38.3 | 61.3 | 65.3 | 119.3 | 118 | 1.3 | 8 | 3 |
| | 10 | □ | MNS0740X10DB | 75.3 | 99.3 | 102.3 | 156.3 | 155 | 1.3 | 8 | 3 |
| | 20 | □ | MNS0740X20DB | 149.3 | 174.3 | 177.3 | 231.3 | 230 | 1.3 | 8 | 3 |
| | 30 | □ | MNS0740X30DB | 223.3 | 249.3 | 252.3 | 306.3 | 305 | 1.3 | 8 | 3 |
| | 3 | □ | MNS0750S-DIN | 30.1 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 4 |
| | 3 | □ | MNS0750S-DIN-C | 30.1 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 3 |
| | 5 | □ | MNS0750L-DIN | 42.1 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 4 |
| | 5 | ● | MNS0750L-DIN-C | 42.1 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 3 |
| | 8 | □ | MNS0750-L8C | 61.4 | 84.4 | 87.4 | 124.4 | 123 | 1.4 | 8 | 3 |
| | 10 | □ | MNS0750-L10C | 76.4 | 99.4 | 102.4 | 139.4 | 138 | 1.4 | 8 | 3 |
| | 12 | ● | MNS0750-L12C | 91.4 | 114.4 | 117.4 | 154.4 | 153 | 1.4 | 8 | 3 |
| 7.5 | 15 | □ | MNS0750-L15C | 113.9 | 136.4 | 139.4 | 176.4 | 175 | 1.4 | 8 | 3 |
| | 20 | ● | MNS0750-L20C | 151.4 | 174.4 | 177.4 | 214.4 | 213 | 1.4 | 8 | 3 |
| | 25 | □ | MNS0750-L25C | 188.9 | 211.4 | 214.4 | 251.4 | 250 | 1.4 | 8 | 3 |
| | 30 | ● | MNS0750-L30C | 226.4 | 249.4 | 252.4 | 289.4 | 288 | 1.4 | 8 | 3 |
| | 5 | ★ | MNS0750LB | 38.9 | 61.4 | 65.4 | 119.4 | 118 | 1.4 | 8 | 3 |
| | 10 | □ | MNS0750X10DB | 76.4 | 99.4 | 102.4 | 156.4 | 155 | 1.4 | 8 | 3 |
| | 20 | □ | MNS0750X20DB | 151.4 | 174.4 | 177.4 | 231.4 | 230 | 1.4 | 8 | 3 |
| | 30 | □ | MNS0750X30DB | 226.4 | 249.4 | 252.4 | 306.4 | 305 | 1.4 | 8 | 3 |

CONDITIONS DE COUPE ➤ M120
MÉTHODE D'UTILISATION ➤ M121
DONNÉES TECHNIQUES ➤ P001

# MNS

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | □ | MNS0760S-DIN | 30.0 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 4 |
| | 3 | □ | MNS0760S-DIN-C | 30.0 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 3 |
| | 5 | □ | MNS0760L-DIN | 42.0 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 4 |
| | 5 | □ | MNS0760L-DIN-C | 42.0 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 3 |
| | 8 | □ | MNS0760-L8C | 62.2 | 89.4 | 92.4 | 129.4 | 128 | 1.4 | 8 | 3 |
| | 10 | □ | MNS0760-L10C | 77.4 | 105.4 | 108.4 | 145.4 | 144 | 1.4 | 8 | 3 |
| | 12 | □ | MNS0760-L12C | 92.6 | 121.4 | 124.4 | 161.4 | 160 | 1.4 | 8 | 3 |
| 7.6 | 15 | □ | MNS0760-L15C | 115.4 | 145.4 | 148.4 | 185.4 | 184 | 1.4 | 8 | 3 |
| | 20 | □ | MNS0760-L20C | 153.4 | 185.4 | 188.4 | 225.4 | 224 | 1.4 | 8 | 3 |
| | 25 | □ | MNS0760-L25C | 191.4 | 225.4 | 228.4 | 265.4 | 264 | 1.4 | 8 | 3 |
| | 30 | □ | MNS0760-L30C | 229.4 | 265.4 | 268.4 | 305.4 | 304 | 1.4 | 8 | 3 |
| | 5 | ★ | MNS0760LB | 39.4 | 65.4 | 65.4 | 119.4 | 118 | 1.4 | 8 | 3 |
| | 10 | □ | MNS0760X10DB | 77.4 | 105.4 | 108.4 | 162.4 | 161 | 1.4 | 8 | 3 |
| | 20 | □ | MNS0760X20DB | 153.4 | 185.4 | 188.4 | 242.4 | 241 | 1.4 | 8 | 3 |
| | 30 | □ | MNS0760X30DB | 229.4 | 265.4 | 268.4 | 322.4 | 321 | 1.4 | 8 | 3 |
| | 3 | □ | MNS0770S-DIN | 29.9 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 4 |
| | 3 | □ | MNS0770S-DIN-C | 29.9 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 3 |
| | 5 | □ | MNS0770L-DIN | 41.9 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 4 |
| | 5 | □ | MNS0770L-DIN-C | 41.9 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 3 |
| | 8 | □ | MNS0770-L8C | 63.0 | 89.4 | 92.4 | 129.4 | 128 | 1.4 | 8 | 3 |
| | 10 | □ | MNS0770-L10C | 78.4 | 105.4 | 108.4 | 145.4 | 144 | 1.4 | 8 | 3 |
| | 12 | □ | MNS0770-L12C | 93.8 | 121.4 | 124.4 | 161.4 | 160 | 1.4 | 8 | 3 |
| 7.7 | 15 | □ | MNS0770-L15C | 116.9 | 145.4 | 148.4 | 185.4 | 184 | 1.4 | 8 | 3 |
| | 20 | □ | MNS0770-L20C | 155.4 | 185.4 | 188.4 | 225.4 | 224 | 1.4 | 8 | 3 |
| | 25 | □ | MNS0770-L25C | 193.9 | 225.4 | 228.4 | 265.4 | 264 | 1.4 | 8 | 3 |
| | 30 | □ | MNS0770-L30C | 232.4 | 265.4 | 268.4 | 305.4 | 304 | 1.4 | 8 | 3 |
| | 5 | ★ | MNS0770LB | 39.9 | 65.4 | 65.4 | 119.4 | 118 | 1.4 | 8 | 3 |
| | 10 | □ | MNS0770X10DB | 78.4 | 105.4 | 108.4 | 162.4 | 161 | 1.4 | 8 | 3 |
| | 20 | □ | MNS0770X20DB | 155.4 | 185.4 | 188.4 | 242.4 | 241 | 1.4 | 8 | 3 |
| | 30 | □ | MNS0770X30DB | 232.4 | 265.4 | 268.4 | 322.4 | 321 | 1.4 | 8 | 3 |
| | 3 | □ | MNS0780S-DIN | 29.7 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 4 |
| | 3 | □ | MNS0780S-DIN-C | 29.7 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 3 |
| | 5 | □ | MNS0780L-DIN | 41.7 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 4 |
| | 5 | □ | MNS0780L-DIN-C | 41.7 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 3 |
| | 8 | □ | MNS0780-L8C | 63.8 | 89.4 | 92.4 | 129.4 | 128 | 1.4 | 8 | 3 |
| | 10 | □ | MNS0780-L10C | 79.4 | 105.4 | 108.4 | 145.4 | 144 | 1.4 | 8 | 3 |
| | 12 | □ | MNS0780-L12C | 95.0 | 121.4 | 124.4 | 161.4 | 160 | 1.4 | 8 | 3 |
| 7.8 | 15 | □ | MNS0780-L15C | 118.4 | 145.4 | 148.4 | 185.4 | 184 | 1.4 | 8 | 3 |
| | 20 | □ | MNS0780-L20C | 157.4 | 185.4 | 188.4 | 225.4 | 224 | 1.4 | 8 | 3 |
| | 25 | □ | MNS0780-L25C | 196.4 | 225.4 | 228.4 | 265.4 | 264 | 1.4 | 8 | 3 |
| | 30 | □ | MNS0780-L30C | 235.4 | 265.4 | 268.4 | 305.4 | 304 | 1.4 | 8 | 3 |
| | 5 | ★ | MNS0780LB | 40.4 | 65.4 | 65.4 | 119.4 | 118 | 1.4 | 8 | 3 |
| | 10 | ★ | MNS0780X10DB | 79.4 | 105.4 | 108.4 | 162.4 | 161 | 1.4 | 8 | 3 |
| | 20 | ★ | MNS0780X20DB | 157.4 | 185.4 | 188.4 | 242.4 | 241 | 1.4 | 8 | 3 |
| | 30 | ★ | MNS0780X30DB | 235.4 | 265.4 | 268.4 | 322.4 | 321 | 1.4 | 8 | 3 |

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | □ | MNS0790S-DIN | 29.6 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 4 |
| | 3 | □ | MNS0790S-DIN-C | 29.6 | 41.4 | 42.4 | 79.4 | 78 | 1.4 | 8 | 3 |
| | 5 | □ | MNS0790L-DIN | 41.6 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 4 |
| | 5 | □ | MNS0790L-DIN-C | 41.6 | 53.4 | 54.4 | 91.4 | 90 | 1.4 | 8 | 3 |
| | 8 | □ | MNS0790-L8C | 64.6 | 89.4 | 92.4 | 129.4 | 128 | 1.4 | 8 | 3 |
| | 10 | □ | MNS0790-L10C | 80.4 | 105.4 | 108.4 | 145.4 | 144 | 1.4 | 8 | 3 |
| | 12 | □ | MNS0790-L12C | 96.2 | 121.4 | 124.4 | 161.4 | 160 | 1.4 | 8 | 3 |
| 7.9 | 15 | □ | MNS0790-L15C | 119.9 | 145.4 | 148.4 | 185.4 | 184 | 1.4 | 8 | 3 |
| | 20 | □ | MNS0790-L20C | 159.4 | 185.4 | 188.4 | 225.4 | 224 | 1.4 | 8 | 3 |
| | 25 | □ | MNS0790-L25C | 198.9 | 225.4 | 228.4 | 265.4 | 264 | 1.4 | 8 | 3 |
| | 30 | □ | MNS0790-L30C | 238.4 | 265.4 | 268.4 | 305.4 | 304 | 1.4 | 8 | 3 |
| | 5 | ★ | MNS0790LB | 40.9 | 65.4 | 65.4 | 119.4 | 118 | 1.4 | 8 | 3 |
| | 10 | □ | MNS0790X10DB | 80.4 | 105.4 | 108.4 | 162.4 | 161 | 1.4 | 8 | 3 |
| | 20 | □ | MNS0790X20DB | 159.4 | 185.4 | 188.4 | 242.4 | 241 | 1.4 | 8 | 3 |
| | 30 | □ | MNS0790X30DB | 238.4 | 265.4 | 268.4 | 322.4 | 321 | 1.4 | 8 | 3 |
| | 3 | □ | MNS0800S-DIN | 29.5 | 41.5 | 42.5 | 79.5 | 78 | 1.5 | 8 | 4 |
| | 3 | □ | MNS0800S-DIN-C | 29.5 | 41.5 | 42.5 | 79.5 | 78 | 1.5 | 8 | 3 |
| | 5 | □ | MNS0800L-DIN | 41.5 | 53.5 | 54.5 | 91.5 | 90 | 1.5 | 8 | 4 |
| | 5 | ● | MNS0800L-DIN-C | 41.5 | 53.5 | 54.5 | 91.5 | 90 | 1.5 | 8 | 3 |
| | 8 | □ | MNS0800-L8C | 65.5 | 89.5 | 92.5 | 129.5 | 128 | 1.5 | 8 | 3 |
| | 10 | □ | MNS0800-L10C | 81.5 | 105.5 | 108.5 | 145.5 | 144 | 1.5 | 8 | 3 |
| | 12 | ● | MNS0800-L12C | 97.5 | 121.5 | 124.5 | 161.5 | 160 | 1.5 | 8 | 3 |
| 8.0 | 15 | □ | MNS0800-L15C | 121.5 | 145.5 | 148.5 | 185.5 | 184 | 1.5 | 8 | 3 |
| | 20 | ● | MNS0800-L20C | 161.5 | 185.5 | 188.5 | 225.5 | 224 | 1.5 | 8 | 3 |
| | 25 | □ | MNS0800-L25C | 201.5 | 225.5 | 228.5 | 265.5 | 264 | 1.5 | 8 | 3 |
| | 30 | ● | MNS0800-L30C | 241.5 | 265.5 | 268.5 | 305.5 | 304 | 1.5 | 8 | 3 |
| | 5 | ★ | MNS0800LB | 41.5 | 65.5 | 65.5 | 119.5 | 118 | 1.5 | 8 | 3 |
| | 10 | ★ | MNS0800X10DB | 81.5 | 105.5 | 108.5 | 162.5 | 161 | 1.5 | 8 | 3 |
| | 20 | ★ | MNS0800X20DB | 161.5 | 185.5 | 188.5 | 242.5 | 241 | 1.5 | 8 | 3 |
| | 30 | ★ | MNS0800X30DB | 241.5 | 265.5 | 268.5 | 322.5 | 321 | 1.5 | 8 | 3 |
| | 3 | □ | MNS0810S-DIN | 34.3 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 4 |
| | 3 | □ | MNS0810S-DIN-C | 34.3 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 3 |
| | 5 | □ | MNS0810L-DIN | 48.3 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 4 |
| | 5 | □ | MNS0810L-DIN-C | 48.3 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 3 |
| | 8 | □ | MNS0810-L8C | 66.3 | 95.5 | 98.5 | 139.5 | 138 | 1.5 | 10 | 3 |
| | 10 | □ | MNS0810-L10C | 82.5 | 112.5 | 115.5 | 156.5 | 155 | 1.5 | 10 | 3 |
| | 12 | □ | MNS0810-L12C | 98.7 | 129.5 | 132.5 | 173.5 | 172 | 1.5 | 10 | 3 |
| 8.1 | 15 | □ | MNS0810-L15C | 123.0 | 154.5 | 157.5 | 198.5 | 197 | 1.5 | 10 | 3 |
| | 20 | □ | MNS0810-L20C | 163.5 | 197.5 | 200.5 | 241.5 | 240 | 1.5 | 10 | 3 |
| | 25 | □ | MNS0810-L25C | 204.0 | 239.5 | 242.5 | 283.5 | 282 | 1.5 | 10 | 3 |
| | 30 | □ | MNS0810-L30C | 244.5 | 281.5 | 284.5 | 325.5 | 324 | 1.5 | 10 | 3 |
| | 5 | ★ | MNS0810LB | 42.0 | 69.5 | 73.5 | 128.5 | 127 | 1.5 | 9 | 3 |
| | 10 | □ | MNS0810X10DB | 82.5 | 112.5 | 115.5 | 170.5 | 169 | 1.5 | 9 | 3 |
| | 20 | □ | MNS0810X20DB | 163.5 | 197.5 | 200.5 | 255.5 | 254 | 1.5 | 9 | 3 |
| | 30 | □ | MNS0810X30DB | 244.5 | 282.5 | 285.5 | 340.5 | 339 | 1.5 | 9 | 3 |

Remarque 1) Veuillez nous contacter pour les géométries qui ne seraient pas dans ce catalogue (e.g. différents diamètres et longueurs peuvent être fabriqués sur demande).

● : Article stocké. ★ : Article standard Japon.
□ : Article non stocké - Fabrication sur commande uniquement.

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.2 | 3 | □ | MNS0820S-DIN | 34.2 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 4 |
| | 3 | □ | MNS0820S-DIN-C | 34.2 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 3 |
| | 5 | □ | MNS0820L-DIN | 48.2 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 4 |
| | 5 | □ | MNS0820L-DIN-C | 48.2 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 3 |
| | 8 | □ | MNS0820-L8C | 67.1 | 95.5 | 98.5 | 139.5 | 138 | 1.5 | 10 | 3 |
| | 5 | ★ | MNS0820LB | 42.5 | 69.5 | 73.5 | 128.5 | 127 | 1.5 | 9 | 3 |
| | 10 | □ | MNS0820X10DB | 83.5 | 112.5 | 115.5 | 170.5 | 169 | 1.5 | 9 | 3 |
| | 20 | □ | MNS0820X20DB | 165.5 | 197.5 | 200.5 | 255.5 | 254 | 1.5 | 9 | 3 |
| | 30 | □ | MNS0820X30DB | 247.5 | 282.5 | 285.5 | 340.5 | 339 | 1.5 | 9 | 3 |
| 8.3 | 3 | □ | MNS0830S-DIN | 34.1 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 4 |
| | 3 | □ | MNS0830S-DIN-C | 34.1 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 3 |
| | 5 | □ | MNS0830L-DIN-C | 48.1 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 3 |
| | 8 | □ | MNS0830-L8C | 67.9 | 95.5 | 98.5 | 139.5 | 138 | 1.5 | 10 | 3 |
| | 10 | □ | MNS0830-L10C | 84.5 | 112.5 | 115.5 | 156.5 | 155 | 1.5 | 10 | 3 |
| | 12 | □ | MNS0830-L12C | 101.1 | 129.5 | 132.5 | 173.5 | 172 | 1.5 | 10 | 3 |
| | 15 | □ | MNS0830-L15C | 126.0 | 154.5 | 157.5 | 198.5 | 197 | 1.5 | 10 | 3 |
| | 20 | □ | MNS0830-L20C | 167.5 | 197.5 | 200.5 | 241.5 | 240 | 1.5 | 10 | 3 |
| | 25 | □ | MNS0830-L25C | 209.0 | 239.5 | 242.5 | 283.5 | 282 | 1.5 | 10 | 3 |
| | 30 | □ | MNS0830-L30C | 250.5 | 281.5 | 284.5 | 325.5 | 324 | 1.5 | 10 | 3 |
| | 5 | ★ | MNS0830LB | 43.0 | 69.5 | 73.5 | 128.5 | 127 | 1.5 | 9 | 3 |
| | 10 | □ | MNS0830X10DB | 84.5 | 112.5 | 115.5 | 170.5 | 169 | 1.5 | 9 | 3 |
| | 20 | □ | MNS0830X20DB | 167.5 | 197.5 | 200.5 | 255.5 | 254 | 1.5 | 9 | 3 |
| | 30 | □ | MNS0830X30DB | 250.5 | 282.5 | 285.5 | 340.5 | 339 | 1.5 | 9 | 3 |
| 8.4 | 3 | □ | MNS0840S-DIN | 33.9 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 4 |
| | 3 | □ | MNS0840S-DIN-C | 33.9 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 3 |
| | 5 | □ | MNS0840L-DIN | 47.9 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 4 |
| | 5 | □ | MNS0840L-DIN-C | 47.9 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 3 |
| | 8 | □ | MNS0840-L8C | 68.7 | 95.5 | 98.5 | 139.5 | 138 | 1.5 | 10 | 3 |
| | 10 | □ | MNS0840-L10C | 85.5 | 112.5 | 115.5 | 156.5 | 155 | 1.5 | 10 | 3 |
| | 12 | □ | MNS0840-L12C | 102.3 | 129.5 | 132.5 | 173.5 | 172 | 1.5 | 10 | 3 |
| | 15 | □ | MNS0840-L15C | 127.5 | 154.5 | 157.5 | 198.5 | 197 | 1.5 | 10 | 3 |
| | 20 | □ | MNS0840-L20C | 169.5 | 197.5 | 200.5 | 241.5 | 240 | 1.5 | 10 | 3 |
| | 25 | □ | MNS0840-L25C | 211.5 | 239.5 | 242.5 | 283.5 | 282 | 1.5 | 10 | 3 |
| | 30 | □ | MNS0840-L30C | 253.5 | 281.5 | 284.5 | 325.5 | 324 | 1.5 | 10 | 3 |
| | 5 | ★ | MNS0840LB | 43.5 | 69.5 | 73.5 | 128.5 | 127 | 1.5 | 9 | 3 |
| | 10 | □ | MNS0840X10DB | 85.5 | 112.5 | 115.5 | 170.5 | 169 | 1.5 | 9 | 3 |
| | 20 | □ | MNS0840X20DB | 169.5 | 197.5 | 200.5 | 255.5 | 254 | 1.5 | 9 | 3 |
| | 30 | □ | MNS0840X30DB | 253.5 | 282.5 | 285.5 | 340.5 | 339 | 1.5 | 9 | 3 |

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.5 | 3 | □ | MNS0850S-DIN | 33.8 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 4 |
| | 3 | □ | MNS0850S-DIN-C | 33.8 | 46.5 | 47.5 | 88.5 | 87 | 1.5 | 10 | 3 |
| | 5 | □ | MNS0850L-DIN | 47.8 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 4 |
| | 5 | ● | MNS0850L-DIN-C | 47.8 | 60.5 | 61.5 | 102.5 | 101 | 1.5 | 10 | 3 |
| | 8 | □ | MNS0850-L8C | 69.5 | 95.5 | 98.5 | 139.5 | 138 | 1.5 | 10 | 3 |
| | 10 | □ | MNS0850-L10C | 86.5 | 112.5 | 115.5 | 156.5 | 155 | 1.5 | 10 | 3 |
| | 12 | ● | MNS0850-L12C | 103.5 | 129.5 | 132.5 | 173.5 | 172 | 1.5 | 10 | 3 |
| | 15 | □ | MNS0850-L15C | 129.0 | 154.5 | 157.5 | 198.5 | 197 | 1.5 | 10 | 3 |
| | 20 | ● | MNS0850-L20C | 171.5 | 197.5 | 200.5 | 241.5 | 240 | 1.5 | 10 | 3 |
| | 25 | □ | MNS0850-L25C | 214.0 | 239.5 | 242.5 | 283.5 | 282 | 1.5 | 10 | 3 |
| | 30 | ● | MNS0850-L30C | 256.5 | 281.5 | 284.5 | 325.5 | 324 | 1.5 | 10 | 3 |
| | 5 | ★ | MNS0850LB | 44.0 | 69.5 | 73.5 | 128.5 | 127 | 1.5 | 9 | 3 |
| | 10 | □ | MNS0850X10DB | 86.5 | 112.5 | 115.5 | 170.5 | 169 | 1.5 | 9 | 3 |
| | 20 | □ | MNS0850X20DB | 171.5 | 197.5 | 200.5 | 255.5 | 254 | 1.5 | 9 | 3 |
| | 30 | □ | MNS0850X30DB | 256.5 | 282.5 | 285.5 | 340.5 | 339 | 1.5 | 9 | 3 |
| 8.6 | 3 | □ | MNS0860S-DIN | 33.7 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 4 |
| | 3 | □ | MNS0860S-DIN-C | 33.7 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 3 |
| | 5 | □ | MNS0860L-DIN-C | 47.7 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 3 |
| | 8 | □ | MNS0860-L8C | 70.4 | 100.6 | 103.6 | 144.6 | 143 | 1.6 | 10 | 3 |
| | 10 | □ | MNS0860-L10C | 87.6 | 118.6 | 121.6 | 162.6 | 161 | 1.6 | 10 | 3 |
| | 12 | □ | MNS0860-L12C | 104.8 | 136.6 | 139.6 | 180.6 | 179 | 1.6 | 10 | 3 |
| | 15 | □ | MNS0860-L15C | 130.6 | 163.6 | 166.6 | 207.6 | 206 | 1.6 | 10 | 3 |
| | 20 | □ | MNS0860-L20C | 173.6 | 208.6 | 211.6 | 252.6 | 251 | 1.6 | 10 | 3 |
| | 25 | □ | MNS0860-L25C | 216.6 | 253.6 | 256.6 | 297.6 | 296 | 1.6 | 10 | 3 |
| | 30 | □ | MNS0860-L30C | 259.6 | 297.6 | 300.6 | 341.6 | 340 | 1.6 | 10 | 3 |
| | 5 | ★ | MNS0860LB | 44.6 | 73.6 | 73.6 | 128.6 | 127 | 1.6 | 9 | 3 |
| | 10 | □ | MNS0860X10DB | 87.6 | 118.6 | 121.6 | 176.6 | 175 | 1.6 | 9 | 3 |
| | 20 | □ | MNS0860X20DB | 173.6 | 208.6 | 211.6 | 266.6 | 265 | 1.6 | 9 | 3 |
| | 30 | □ | MNS0860X30DB | 259.6 | 298.6 | 301.6 | 356.6 | 355 | 1.6 | 9 | 3 |
| 8.7 | 3 | □ | MNS0870S-DIN | 33.5 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 4 |
| | 3 | □ | MNS0870S-DIN-C | 33.5 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 3 |
| | 5 | □ | MNS0870L-DIN | 47.5 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 4 |
| | 5 | □ | MNS0870L-DIN-C | 47.5 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 3 |
| | 8 | □ | MNS0870-L8C | 71.2 | 100.6 | 103.6 | 144.6 | 143 | 1.6 | 10 | 3 |
| | 10 | □ | MNS0870-L10C | 88.6 | 118.6 | 121.6 | 162.6 | 161 | 1.6 | 10 | 3 |
| | 12 | □ | MNS0870-L12C | 106.0 | 136.6 | 139.6 | 180.6 | 179 | 1.6 | 10 | 3 |
| | 15 | □ | MNS0870-L15C | 132.1 | 163.6 | 166.6 | 207.6 | 206 | 1.6 | 10 | 3 |
| | 20 | □ | MNS0870-L20C | 175.6 | 208.6 | 211.6 | 252.6 | 251 | 1.6 | 10 | 3 |
| | 25 | □ | MNS0870-L25C | 219.1 | 253.6 | 256.6 | 297.6 | 296 | 1.6 | 10 | 3 |
| | 30 | □ | MNS0870-L30C | 262.6 | 297.6 | 300.6 | 341.6 | 340 | 1.6 | 10 | 3 |
| | 5 | ★ | MNS0870LB | 45.1 | 73.6 | 73.6 | 128.6 | 127 | 1.6 | 9 | 3 |
| | 10 | □ | MNS0870X10DB | 88.6 | 118.6 | 121.6 | 176.6 | 175 | 1.6 | 9 | 3 |
| | 20 | □ | MNS0870X20DB | 175.6 | 208.6 | 211.6 | 266.6 | 265 | 1.6 | 9 | 3 |
| | 30 | □ | MNS0870X30DB | 262.6 | 298.6 | 301.6 | 356.6 | 355 | 1.6 | 9 | 3 |

CONDITIONS DE COUPE ➤ M120
MÉTHODE D'UTILISATION ➤ M121
DONNÉES TECHNIQUES ➤ P001

# MNS

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | □ | MNS0880S-DIN | 33.4 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 4 |
| | 3 | □ | MNS0880S-DIN-C | 33.4 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 3 |
| | 5 | □ | MNS0880L-DIN | 47.4 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 4 |
| | 5 | □ | MNS0880L-DIN-C | 47.4 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 3 |
| | 8 | □ | MNS0880-L8C | 72.0 | 100.6 | 103.6 | 144.6 | 143 | 1.6 | 10 | 3 |
| | 10 | □ | MNS0880-L10C | 89.6 | 118.6 | 121.6 | 162.6 | 161 | 1.6 | 10 | 3 |
| | 12 | □ | MNS0880-L12C | 107.2 | 136.6 | 139.6 | 180.6 | 179 | 1.6 | 10 | 3 |
| 8.8 | 15 | □ | MNS0880-L15C | 133.6 | 163.6 | 166.6 | 207.6 | 206 | 1.6 | 10 | 3 |
| | 20 | □ | MNS0880-L20C | 177.6 | 208.6 | 211.6 | 252.6 | 251 | 1.6 | 10 | 3 |
| | 25 | □ | MNS0880-L25C | 221.6 | 253.6 | 256.6 | 297.6 | 296 | 1.6 | 10 | 3 |
| | 30 | □ | MNS0880-L30C | 265.6 | 297.6 | 300.6 | 341.6 | 340 | 1.6 | 10 | 3 |
| | 5 | ★ | MNS0880LB | 45.6 | 73.6 | 73.6 | 128.6 | 127 | 1.6 | 9 | 3 |
| | 10 | □ | MNS0880X10DB | 89.6 | 118.6 | 121.6 | 176.6 | 175 | 1.6 | 9 | 3 |
| | 20 | □ | MNS0880X20DB | 177.6 | 208.6 | 211.6 | 266.6 | 265 | 1.6 | 9 | 3 |
| | 30 | □ | MNS0880X30DB | 265.6 | 298.6 | 301.6 | 356.6 | 355 | 1.6 | 9 | 3 |
| | 3 | □ | MNS0890S-DIN | 33.3 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 4 |
| | 3 | □ | MNS0890S-DIN-C | 33.3 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 3 |
| | 5 | □ | MNS0890L-DIN | 47.3 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 4 |
| | 5 | □ | MNS0890L-DIN-C | 47.3 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 3 |
| | 8 | □ | MNS0890-L8C | 72.8 | 100.6 | 103.6 | 144.6 | 143 | 1.6 | 10 | 3 |
| | 10 | □ | MNS0890-L10C | 90.6 | 118.6 | 121.6 | 162.6 | 161 | 1.6 | 10 | 3 |
| | 12 | □ | MNS0890-L12C | 108.4 | 136.6 | 139.6 | 180.6 | 179 | 1.6 | 10 | 3 |
| 8.9 | 15 | □ | MNS0890-L15C | 135.1 | 163.6 | 166.6 | 207.6 | 206 | 1.6 | 10 | 3 |
| | 20 | □ | MNS0890-L20C | 179.6 | 208.6 | 211.6 | 252.6 | 251 | 1.6 | 10 | 3 |
| | 25 | □ | MNS0890-L25C | 224.1 | 253.6 | 256.6 | 297.6 | 296 | 1.6 | 10 | 3 |
| | 30 | □ | MNS0890-L30C | 268.6 | 297.6 | 300.6 | 341.6 | 340 | 1.6 | 10 | 3 |
| | 5 | ★ | MNS0890LB | 46.1 | 73.6 | 73.6 | 128.6 | 127 | 1.6 | 9 | 3 |
| | 10 | □ | MNS0890X10DB | 90.6 | 118.6 | 121.6 | 176.6 | 175 | 1.6 | 9 | 3 |
| | 20 | □ | MNS0890X20DB | 179.6 | 208.6 | 211.6 | 266.6 | 265 | 1.6 | 9 | 3 |
| | 30 | □ | MNS0890X30DB | 268.6 | 298.6 | 301.6 | 356.6 | 355 | 1.6 | 9 | 3 |
| | 3 | □ | MNS0900S-DIN | 33.1 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 4 |
| | 3 | □ | MNS0900S-DIN-C | 33.1 | 46.6 | 47.6 | 88.6 | 87 | 1.6 | 10 | 3 |
| | 5 | □ | MNS0900L-DIN | 47.1 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 4 |
| | 5 | ● | MNS0900L-DIN-C | 47.1 | 60.6 | 61.6 | 102.6 | 101 | 1.6 | 10 | 3 |
| | 8 | □ | MNS0900-L8C | 73.6 | 100.6 | 103.6 | 144.6 | 143 | 1.6 | 10 | 3 |
| | 10 | □ | MNS0900-L10C | 91.6 | 118.6 | 121.6 | 162.6 | 161 | 1.6 | 10 | 3 |
| | 12 | ● | MNS0900-L12C | 109.6 | 136.6 | 139.6 | 180.6 | 179 | 1.6 | 10 | 3 |
| 9.0 | 15 | □ | MNS0900-L15C | 136.6 | 163.6 | 166.6 | 207.6 | 206 | 1.6 | 10 | 3 |
| | 20 | ● | MNS0900-L20C | 181.6 | 208.6 | 211.6 | 252.6 | 251 | 1.6 | 10 | 3 |
| | 25 | □ | MNS0900-L25C | 226.6 | 253.6 | 256.6 | 297.6 | 296 | 1.6 | 10 | 3 |
| | 30 | ● | MNS0900-L30C | 271.6 | 297.6 | 300.6 | 341.6 | 340 | 1.6 | 10 | 3 |
| | 5 | ★ | MNS0900LB | 46.6 | 73.6 | 73.6 | 128.6 | 127 | 1.6 | 9 | 3 |
| | 10 | ★ | MNS0900X10DB | 91.6 | 118.6 | 121.6 | 176.6 | 175 | 1.6 | 9 | 3 |
| | 20 | ★ | MNS0900X20DB | 181.6 | 208.6 | 211.6 | 266.6 | 265 | 1.6 | 9 | 3 |
| | 30 | ★ | MNS0900X30DB | 271.6 | 298.6 | 301.6 | 356.6 | 355 | 1.6 | 9 | 3 |

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | □ | MNS0910S-DIN | 33.0 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 4 |
| | 3 | □ | MNS0910S-DIN-C | 33.0 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 3 |
| | 5 | □ | MNS0910L-DIN | 47.0 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 4 |
| | 5 | □ | MNS0910L-DIN-C | 47.0 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 3 |
| | 8 | □ | MNS0910-L8C | 74.5 | 106.7 | 109.7 | 150.7 | 149 | 1.7 | 10 | 3 |
| | 10 | □ | MNS0910-L10C | 92.7 | 125.7 | 128.7 | 169.7 | 168 | 1.7 | 10 | 3 |
| | 12 | □ | MNS0910-L12C | 110.9 | 144.7 | 147.7 | 188.7 | 187 | 1.7 | 10 | 3 |
| 9.1 | 15 | □ | MNS0910-L15C | 138.2 | 172.7 | 175.7 | 216.7 | 215 | 1.7 | 10 | 3 |
| | 20 | □ | MNS0910-L20C | 183.7 | 220.7 | 223.7 | 264.7 | 263 | 1.7 | 10 | 3 |
| | 25 | □ | MNS0910-L25C | 229.2 | 267.7 | 270.7 | 311.7 | 310 | 1.7 | 10 | 3 |
| | 30 | □ | MNS0910-L30C | 274.7 | 315.7 | 318.7 | 359.7 | 358 | 1.7 | 10 | 3 |
| | 5 | ★ | MNS0910LB | 47.2 | 77.7 | 81.7 | 137.7 | 136 | 1.7 | 10 | 3 |
| | 10 | □ | MNS0910X10DB | 92.7 | 125.7 | 128.7 | 183.7 | 182 | 1.7 | 10 | 3 |
| | 20 | □ | MNS0910X20DB | 183.7 | 220.7 | 223.7 | 278.7 | 277 | 1.7 | 10 | 3 |
| | 30 | □ | MNS0910X30DB | 274.7 | 315.7 | 318.7 | 373.7 | 372 | 1.7 | 10 | 3 |
| | 3 | □ | MNS0920S-DIN | 32.9 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 4 |
| | 3 | □ | MNS0920S-DIN-C | 32.9 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 3 |
| | 5 | □ | MNS0920L-DIN | 46.9 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 4 |
| | 5 | □ | MNS0920L-DIN-C | 46.9 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 3 |
| | 8 | □ | MNS0920-L8C | 75.3 | 106.7 | 109.7 | 150.7 | 149 | 1.7 | 10 | 3 |
| | 10 | □ | MNS0920-L10C | 93.7 | 125.7 | 128.7 | 169.7 | 168 | 1.7 | 10 | 3 |
| | 12 | □ | MNS0920-L12C | 112.1 | 144.7 | 147.7 | 188.7 | 187 | 1.7 | 10 | 3 |
| 9.2 | 15 | □ | MNS0920-L15C | 139.7 | 172.7 | 175.7 | 216.7 | 215 | 1.7 | 10 | 3 |
| | 20 | □ | MNS0920-L20C | 185.7 | 220.7 | 223.7 | 264.7 | 263 | 1.7 | 10 | 3 |
| | 25 | □ | MNS0920-L25C | 231.7 | 267.7 | 270.7 | 311.7 | 310 | 1.7 | 10 | 3 |
| | 30 | □ | MNS0920-L30C | 277.7 | 315.7 | 318.7 | 359.7 | 358 | 1.7 | 10 | 3 |
| | 5 | ★ | MNS0920LB | 47.7 | 77.7 | 81.7 | 137.7 | 136 | 1.7 | 10 | 3 |
| | 10 | □ | MNS0920X10DB | 93.7 | 125.7 | 128.7 | 183.7 | 182 | 1.7 | 10 | 3 |
| | 20 | □ | MNS0920X20DB | 185.7 | 220.7 | 223.7 | 278.7 | 277 | 1.7 | 10 | 3 |
| | 30 | □ | MNS0920X30DB | 277.7 | 315.7 | 318.7 | 373.7 | 372 | 1.7 | 10 | 3 |
| | 3 | □ | MNS0930S-DIN | 32.7 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 4 |
| | 3 | □ | MNS0930S-DIN-C | 32.7 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 3 |
| | 5 | □ | MNS0930L-DIN | 46.7 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 4 |
| | 5 | □ | MNS0930L-DIN-C | 46.7 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 3 |
| | 8 | □ | MNS0930-L8C | 76.1 | 106.7 | 109.7 | 150.7 | 149 | 1.7 | 10 | 3 |
| | 10 | □ | MNS0930-L10C | 94.7 | 125.7 | 128.7 | 169.7 | 168 | 1.7 | 10 | 3 |
| | 12 | □ | MNS0930-L12C | 113.3 | 144.7 | 147.7 | 188.7 | 187 | 1.7 | 10 | 3 |
| 9.3 | 15 | □ | MNS0930-L15C | 141.2 | 172.7 | 175.7 | 216.7 | 215 | 1.7 | 10 | 3 |
| | 20 | □ | MNS0930-L20C | 187.7 | 220.7 | 223.7 | 264.7 | 263 | 1.7 | 10 | 3 |
| | 25 | □ | MNS0930-L25C | 234.2 | 267.7 | 270.7 | 311.7 | 310 | 1.7 | 10 | 3 |
| | 30 | □ | MNS0930-L30C | 280.7 | 315.7 | 318.7 | 359.7 | 358 | 1.7 | 10 | 3 |
| | 5 | ★ | MNS0930LB | 48.2 | 77.7 | 81.7 | 137.7 | 136 | 1.7 | 10 | 3 |
| | 10 | □ | MNS0930X10DB | 94.7 | 125.7 | 128.7 | 183.7 | 182 | 1.7 | 10 | 3 |
| | 20 | □ | MNS0930X20DB | 187.7 | 220.7 | 223.7 | 278.7 | 277 | 1.7 | 10 | 3 |
| | 30 | □ | MNS0930X30DB | 280.7 | 315.7 | 318.7 | 373.7 | 372 | 1.7 | 10 | 3 |

Remarque 1) Veuillez nous contacter pour les géométries qui ne seraient pas dans ce catalogue (e.g. différents diamètres et longueurs peuvent être fabriqués sur demande).

● : Article stocké. ★ : Article standard Japon.
□ : Article non stocké - Fabrication sur commande uniquement.

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | □ | **MNS0940S-DIN** | 32.6 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 4 |
| | 3 | □ | **MNS0940S-DIN-C** | 32.6 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 3 |
| | 5 | □ | **MNS0940L-DIN** | 46.6 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 4 |
| | 5 | □ | **MNS0940L-DIN-C** | 46.6 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 3 |
| | 8 | □ | **MNS0940-L8C** | 76.9 | 106.7 | 109.7 | 150.7 | 149 | 1.7 | 10 | 3 |
| | 10 | □ | **MNS0940-L10C** | 95.7 | 125.7 | 128.7 | 169.7 | 168 | 1.7 | 10 | 3 |
| | 12 | □ | **MNS0940-L12C** | 114.5 | 144.7 | 147.7 | 188.7 | 187 | 1.7 | 10 | 3 |
| **9.4** | 15 | □ | **MNS0940-L15C** | 142.7 | 172.7 | 175.7 | 216.7 | 215 | 1.7 | 10 | 3 |
| | 20 | □ | **MNS0940-L20C** | 189.7 | 220.7 | 223.7 | 264.7 | 263 | 1.7 | 10 | 3 |
| | 25 | □ | **MNS0940-L25C** | 236.7 | 267.7 | 270.7 | 311.7 | 310 | 1.7 | 10 | 3 |
| | 30 | □ | **MNS0940-L30C** | 283.7 | 315.7 | 318.7 | 359.7 | 358 | 1.7 | 10 | 3 |
| | 5 | ★ | **MNS0940LB** | 48.7 | 77.7 | 81.7 | 137.7 | 136 | 1.7 | 10 | 3 |
| | 10 | □ | **MNS0940X10DB** | 95.7 | 125.7 | 128.7 | 183.7 | 182 | 1.7 | 10 | 3 |
| | 20 | □ | **MNS0940X20DB** | 189.7 | 220.7 | 223.7 | 278.7 | 277 | 1.7 | 10 | 3 |
| | 30 | □ | **MNS0940X30DB** | 283.7 | 315.7 | 318.7 | 373.7 | 372 | 1.7 | 10 | 3 |
| | 3 | □ | **MNS0950S-DIN** | 32.5 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 4 |
| | 3 | □ | **MNS0950S-DIN-C** | 32.5 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 3 |
| | 5 | □ | **MNS0950L-DIN** | 46.5 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 4 |
| | 5 | ● | **MNS0950L-DIN-C** | 46.5 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 3 |
| | 8 | □ | **MNS0950-L8C** | 77.7 | 106.7 | 109.7 | 150.7 | 149 | 1.7 | 10 | 3 |
| | 10 | □ | **MNS0950-L10C** | 96.7 | 125.7 | 128.7 | 169.7 | 168 | 1.7 | 10 | 3 |
| | 12 | ● | **MNS0950-L12C** | 115.7 | 144.7 | 147.7 | 188.7 | 187 | 1.7 | 10 | 3 |
| **9.5** | 15 | □ | **MNS0950-L15C** | 144.2 | 172.7 | 175.7 | 216.7 | 215 | 1.7 | 10 | 3 |
| | 20 | ● | **MNS0950-L20C** | 191.7 | 220.7 | 223.7 | 264.7 | 263 | 1.7 | 10 | 3 |
| | 25 | □ | **MNS0950-L25C** | 239.2 | 267.7 | 270.7 | 311.7 | 310 | 1.7 | 10 | 3 |
| | 30 | ● | **MNS0950-L30C** | 286.7 | 315.7 | 318.7 | 359.7 | 358 | 1.7 | 10 | 3 |
| | 5 | ★ | **MNS0950LB** | 49.2 | 77.7 | 81.7 | 137.7 | 136 | 1.7 | 10 | 3 |
| | 10 | □ | **MNS0950X10DB** | 96.7 | 125.7 | 128.7 | 183.7 | 182 | 1.7 | 10 | 3 |
| | 20 | □ | **MNS0950X20DB** | 191.7 | 220.7 | 223.7 | 278.7 | 277 | 1.7 | 10 | 3 |
| | 30 | □ | **MNS0950X30DB** | 286.7 | 315.7 | 318.7 | 373.7 | 372 | 1.7 | 10 | 3 |
| | 3 | □ | **MNS0960S-DIN** | 32.3 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 4 |
| | 3 | □ | **MNS0960S-DIN-C** | 32.3 | 46.7 | 47.7 | 88.7 | 87 | 1.7 | 10 | 3 |
| | 5 | □ | **MNS0960L-DIN** | 46.3 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 4 |
| | 5 | □ | **MNS0960L-DIN-C** | 46.3 | 60.7 | 61.7 | 102.7 | 101 | 1.7 | 10 | 3 |
| | 8 | □ | **MNS0960-L8C** | 78.5 | 111.7 | 114.7 | 155.7 | 154 | 1.7 | 10 | 3 |
| | 10 | □ | **MNS0960-L10C** | 97.7 | 131.7 | 134.7 | 175.7 | 174 | 1.7 | 10 | 3 |
| | 12 | □ | **MNS0960-L12C** | 116.9 | 151.7 | 154.7 | 195.7 | 194 | 1.7 | 10 | 3 |
| **9.6** | 15 | □ | **MNS0960-L15C** | 145.7 | 181.7 | 184.7 | 225.7 | 224 | 1.7 | 10 | 3 |
| | 20 | □ | **MNS0960-L20C** | 193.7 | 231.7 | 234.7 | 275.7 | 274 | 1.7 | 10 | 3 |
| | 25 | □ | **MNS0960-L25C** | 241.7 | 281.7 | 284.7 | 325.7 | 324 | 1.7 | 10 | 3 |
| | 30 | □ | **MNS0960-L30C** | 289.7 | 331.7 | 334.7 | 375.7 | 374 | 1.7 | 10 | 3 |
| | 5 | ★ | **MNS0960LB** | 49.7 | 81.7 | 81.7 | 137.7 | 136 | 1.7 | 10 | 3 |
| | 10 | □ | **MNS0960X10DB** | 97.7 | 131.7 | 134.7 | 189.7 | 188 | 1.7 | 10 | 3 |
| | 20 | □ | **MNS0960X20DB** | 193.7 | 231.7 | 234.7 | 289.7 | 288 | 1.7 | 10 | 3 |
| | 30 | □ | **MNS0960X30DB** | 289.7 | 331.7 | 334.7 | 389.7 | 388 | 1.7 | 10 | 3 |

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | □ | **MNS0970S-DIN** | 32.2 | 46.8 | 47.8 | 88.8 | 87 | 1.8 | 10 | 4 |
| | 3 | □ | **MNS0970S-DIN-C** | 32.2 | 46.8 | 47.8 | 88.8 | 87 | 1.8 | 10 | 3 |
| | 5 | □ | **MNS0970L-DIN** | 46.2 | 60.8 | 61.8 | 102.8 | 101 | 1.8 | 10 | 4 |
| | 5 | □ | **MNS0970L-DIN-C** | 46.2 | 60.8 | 61.8 | 102.8 | 101 | 1.8 | 10 | 3 |
| | 8 | □ | **MNS0970-L8C** | 79.4 | 111.8 | 114.8 | 155.8 | 154 | 1.8 | 10 | 3 |
| | 10 | □ | **MNS0970-L10C** | 98.8 | 131.8 | 134.8 | 175.8 | 174 | 1.8 | 10 | 3 |
| | 12 | □ | **MNS0970-L12C** | 118.2 | 151.8 | 154.8 | 195.8 | 194 | 1.8 | 10 | 3 |
| **9.7** | 15 | □ | **MNS0970-L15C** | 147.3 | 181.8 | 184.8 | 225.8 | 224 | 1.8 | 10 | 3 |
| | 20 | □ | **MNS0970-L20C** | 195.8 | 231.8 | 234.8 | 275.8 | 274 | 1.8 | 10 | 3 |
| | 25 | □ | **MNS0970-L25C** | 244.3 | 281.8 | 284.8 | 325.8 | 324 | 1.8 | 10 | 3 |
| | 30 | □ | **MNS0970-L30C** | 292.8 | 331.8 | 334.8 | 375.8 | 374 | 1.8 | 10 | 3 |
| | 5 | ★ | **MNS0970LB** | 50.3 | 81.8 | 81.8 | 137.8 | 136 | 1.8 | 10 | 3 |
| | 10 | □ | **MNS0970X10DB** | 98.8 | 131.8 | 134.8 | 189.8 | 188 | 1.8 | 10 | 3 |
| | 20 | □ | **MNS0970X20DB** | 195.8 | 231.8 | 234.8 | 289.8 | 288 | 1.8 | 10 | 3 |
| | 30 | □ | **MNS0970X30DB** | 292.8 | 331.8 | 334.8 | 389.8 | 388 | 1.8 | 10 | 3 |
| | 3 | □ | **MNS0980S-DIN** | 32.1 | 46.8 | 47.8 | 88.8 | 87 | 1.8 | 10 | 4 |
| | 3 | □ | **MNS0980S-DIN-C** | 32.1 | 46.8 | 47.8 | 88.8 | 87 | 1.8 | 10 | 3 |
| | 5 | □ | **MNS0980L-DIN** | 46.1 | 60.8 | 61.8 | 102.8 | 101 | 1.8 | 10 | 4 |
| | 5 | □ | **MNS0980L-DIN-C** | 46.1 | 60.8 | 61.8 | 102.8 | 101 | 1.8 | 10 | 3 |
| | 8 | □ | **MNS0980-L8C** | 80.2 | 111.8 | 114.8 | 155.8 | 154 | 1.8 | 10 | 3 |
| | 10 | □ | **MNS0980-L10C** | 99.8 | 131.8 | 134.8 | 175.8 | 174 | 1.8 | 10 | 3 |
| | 12 | □ | **MNS0980-L12C** | 119.4 | 151.8 | 154.8 | 195.8 | 194 | 1.8 | 10 | 3 |
| **9.8** | 15 | □ | **MNS0980-L15C** | 148.8 | 181.8 | 184.8 | 225.8 | 224 | 1.8 | 10 | 3 |
| | 20 | □ | **MNS0980-L20C** | 197.8 | 231.8 | 234.8 | 275.8 | 274 | 1.8 | 10 | 3 |
| | 25 | □ | **MNS0980-L25C** | 246.8 | 281.8 | 284.8 | 325.8 | 324 | 1.8 | 10 | 3 |
| | 30 | □ | **MNS0980-L30C** | 295.8 | 331.8 | 334.8 | 375.8 | 374 | 1.8 | 10 | 3 |
| | 5 | ★ | **MNS0980LB** | 50.8 | 81.8 | 81.8 | 137.8 | 136 | 1.8 | 10 | 3 |
| | 10 | ★ | **MNS0980X10DB** | 99.8 | 131.8 | 134.8 | 189.8 | 188 | 1.8 | 10 | 3 |
| | 20 | ★ | **MNS0980X20DB** | 197.8 | 231.8 | 234.8 | 289.8 | 288 | 1.8 | 10 | 3 |
| | 30 | ★ | **MNS0980X30DB** | 295.8 | 331.8 | 334.8 | 389.8 | 388 | 1.8 | 10 | 3 |
| | 3 | □ | **MNS0990S-DIN** | 32.0 | 46.8 | 47.8 | 88.8 | 87 | 1.8 | 10 | 4 |
| | 3 | □ | **MNS0990S-DIN-C** | 32.0 | 46.8 | 47.8 | 88.8 | 87 | 1.8 | 10 | 3 |
| | 5 | □ | **MNS0990L-DIN** | 46.0 | 60.8 | 61.8 | 102.8 | 101 | 1.8 | 10 | 4 |
| | 5 | □ | **MNS0990L-DIN-C** | 46.0 | 60.8 | 61.8 | 102.8 | 101 | 1.8 | 10 | 3 |
| | 8 | □ | **MNS0990-L8C** | 81.0 | 111.8 | 114.8 | 155.8 | 154 | 1.8 | 10 | 3 |
| | 10 | □ | **MNS0990-L10C** | 100.8 | 131.8 | 134.8 | 175.8 | 174 | 1.8 | 10 | 3 |
| | 12 | □ | **MNS0990-L12C** | 120.6 | 151.8 | 154.8 | 195.8 | 194 | 1.8 | 10 | 3 |
| **9.9** | 15 | □ | **MNS0990-L15C** | 150.3 | 181.8 | 184.8 | 225.8 | 224 | 1.8 | 10 | 3 |
| | 20 | □ | **MNS0990-L20C** | 199.8 | 231.8 | 234.8 | 275.8 | 274 | 1.8 | 10 | 3 |
| | 25 | □ | **MNS0990-L25C** | 249.3 | 281.8 | 284.8 | 325.8 | 324 | 1.8 | 10 | 3 |
| | 30 | □ | **MNS0990-L30C** | 298.8 | 331.8 | 334.8 | 375.8 | 374 | 1.8 | 10 | 3 |
| | 5 | ★ | **MNS0990LB** | 51.3 | 81.8 | 81.8 | 137.8 | 136 | 1.8 | 10 | 3 |
| | 10 | □ | **MNS0990X10DB** | 100.8 | 131.8 | 134.8 | 189.8 | 188 | 1.8 | 10 | 3 |
| | 20 | □ | **MNS0990X20DB** | 199.8 | 231.8 | 234.8 | 289.8 | 288 | 1.8 | 10 | 3 |
| | 30 | □ | **MNS0990X30DB** | 298.8 | 331.8 | 334.8 | 389.8 | 388 | 1.8 | 10 | 3 |

CONDITIONS DE COUPE ➤ M120
MÉTHODE D'UTILISATION ➤ M121
DONNÉES TECHNIQUES ➤ P001

# MNS

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | □ | MNS1000S-DIN | 31.8 | 46.8 | 47.8 | 88.8 | 87 | 1.8 | 10 | 4 |
| | 3 | □ | MNS1000S-DIN-C | 31.8 | 46.8 | 47.8 | 88.8 | 87 | 1.8 | 10 | 3 |
| | 5 | □ | MNS1000L-DIN | 45.8 | 60.8 | 61.8 | 102.8 | 101 | 1.8 | 10 | 4 |
| | 5 | ● | MNS1000L-DIN-C | 45.8 | 60.8 | 61.8 | 102.8 | 101 | 1.8 | 10 | 3 |
| | 8 | □ | MNS1000-L8C | 81.8 | 111.8 | 114.8 | 155.8 | 154 | 1.8 | 10 | 3 |
| | 10 | □ | MNS1000-L10C | 101.8 | 131.8 | 134.8 | 175.8 | 174 | 1.8 | 10 | 3 |
| | 12 | ● | MNS1000-L12C | 121.8 | 151.8 | 154.8 | 195.8 | 194 | 1.8 | 10 | 3 |
| 10.0 | 15 | □ | MNS1000-L15C | 151.8 | 181.8 | 184.8 | 225.8 | 224 | 1.8 | 10 | 3 |
| | 20 | ● | MNS1000-L20C | 201.8 | 231.8 | 234.8 | 275.8 | 274 | 1.8 | 10 | 3 |
| | 25 | □ | MNS1000-L25C | 251.8 | 281.8 | 284.8 | 325.8 | 324 | 1.8 | 10 | 3 |
| | 30 | ● | MNS1000-L30C | 301.8 | 331.8 | 334.8 | 375.8 | 374 | 1.8 | 10 | 3 |
| | 5 | ★ | MNS1000LB | 51.8 | 81.8 | 81.8 | 137.8 | 136 | 1.8 | 10 | 3 |
| | 10 | ★ | MNS1000X10DB | 101.8 | 131.8 | 134.8 | 189.8 | 188 | 1.8 | 10 | 3 |
| | 20 | ★ | MNS1000X20DB | 201.8 | 231.8 | 234.8 | 289.8 | 288 | 1.8 | 10 | 3 |
| | 30 | ★ | MNS1000X30DB | 301.8 | 331.8 | 334.8 | 389.8 | 388 | 1.8 | 10 | 3 |
| | 3 | □ | MNS1010S-DIN | 39.7 | 54.8 | 55.8 | 101.8 | 100 | 1.8 | 12 | 4 |
| | 3 | □ | MNS1010S-DIN-C | 39.7 | 54.8 | 55.8 | 101.8 | 100 | 1.8 | 12 | 3 |
| | 5 | □ | MNS1010L-DIN | 55.7 | 70.8 | 71.8 | 117.8 | 116 | 1.8 | 12 | 4 |
| | 5 | □ | MNS1010L-DIN-C | 55.7 | 70.8 | 71.8 | 117.8 | 116 | 1.8 | 12 | 3 |
| | 8 | □ | MNS1010-L8C | 82.6 | 117.8 | 120.8 | 166.8 | 165 | 1.8 | 12 | 3 |
| | 10 | □ | MNS1010-L10C | 102.8 | 138.8 | 141.8 | 187.8 | 186 | 1.8 | 12 | 3 |
| 10.1 | 12 | □ | MNS1010-L12C | 123.0 | 159.8 | 162.8 | 208.8 | 207 | 1.8 | 12 | 3 |
| | 15 | □ | MNS1010-L15C | 153.3 | 190.8 | 193.8 | 239.8 | 238 | 1.8 | 12 | 3 |
| | 20 | □ | MNS1010-L20C | 203.8 | 243.8 | 246.8 | 292.8 | 291 | 1.8 | 12 | 3 |
| | 25 | □ | MNS1010-L25C | 254.3 | 295.8 | 298.8 | 344.8 | 343 | 1.8 | 12 | 3 |
| | 5 | ★ | MNS1010LB | 52.3 | 85.8 | 89.8 | 150.8 | 149 | 1.8 | 11 | 3 |
| | 10 | □ | MNS1010X10DB | 102.8 | 138.8 | 141.8 | 202.8 | 201 | 1.8 | 11 | 3 |
| | 20 | □ | MNS1010X20DB | 203.8 | 243.8 | 246.8 | 307.8 | 306 | 1.8 | 11 | 3 |
| | 3 | □ | MNS1020S-DIN | 39.6 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 4 |
| | 3 | □ | MNS1020S-DIN-C | 39.6 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 3 |
| | 5 | □ | MNS1020L-DIN | 55.6 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 4 |
| | 5 | □ | MNS1020L-DIN-C | 55.6 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 3 |
| | 8 | □ | MNS1020-L8C | 83.5 | 117.9 | 120.9 | 166.9 | 165 | 1.9 | 12 | 3 |
| | 10 | □ | MNS1020-L10C | 103.9 | 138.9 | 141.9 | 187.9 | 186 | 1.9 | 12 | 3 |
| 10.2 | 12 | □ | MNS1020-L12C | 124.3 | 159.9 | 162.9 | 208.9 | 207 | 1.9 | 12 | 3 |
| | 15 | □ | MNS1020-L15C | 154.9 | 190.9 | 193.9 | 239.9 | 238 | 1.9 | 12 | 3 |
| | 20 | □ | MNS1020-L20C | 205.9 | 243.9 | 246.9 | 292.9 | 291 | 1.9 | 12 | 3 |
| | 25 | □ | MNS1020-L25C | 256.9 | 295.9 | 298.9 | 344.9 | 343 | 1.9 | 12 | 3 |
| | 5 | ★ | MNS1020LB | 52.9 | 85.9 | 89.9 | 150.9 | 149 | 1.9 | 11 | 3 |
| | 10 | □ | MNS1020X10DB | 103.9 | 138.9 | 141.9 | 202.9 | 201 | 1.9 | 11 | 3 |
| | 20 | □ | MNS1020X20DB | 205.9 | 243.9 | 246.9 | 307.9 | 306 | 1.9 | 11 | 3 |
| | 3 | □ | MNS1030S-DIN | 39.4 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 4 |
| | 3 | □ | MNS1030S-DIN-C | 39.4 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 3 |
| | 5 | □ | MNS1030L-DIN | 55.4 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 4 |
| 10.3 | 5 | □ | MNS1030L-DIN-C | 55.4 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 3 |
| | 8 | □ | MNS1030-L8C | 84.3 | 117.9 | 120.9 | 166.9 | 165 | 1.9 | 12 | 3 |
| | 10 | □ | MNS1030-L10C | 104.9 | 138.9 | 141.9 | 187.9 | 186 | 1.9 | 12 | 3 |
| | 12 | □ | MNS1030-L12C | 125.5 | 159.9 | 162.9 | 208.9 | 207 | 1.9 | 12 | 3 |

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 15 | □ | MNS1030-L15C | 156.4 | 190.9 | 193.9 | 239.9 | 238 | 1.9 | 12 | 3 |
| | 20 | □ | MNS1030-L20C | 207.9 | 243.9 | 246.9 | 292.9 | 291 | 1.9 | 12 | 3 |
| | 25 | □ | MNS1030-L25C | 259.4 | 295.9 | 298.9 | 344.9 | 343 | 1.9 | 12 | 3 |
| 10.3 | 5 | ★ | MNS1030LB | 53.4 | 85.9 | 89.9 | 150.9 | 149 | 1.9 | 11 | 3 |
| | 10 | □ | MNS1030X10DB | 104.9 | 138.9 | 141.9 | 202.9 | 201 | 1.9 | 11 | 3 |
| | 20 | □ | MNS1030X20DB | 207.9 | 243.9 | 246.9 | 307.9 | 306 | 1.9 | 11 | 3 |
| | 3 | □ | MNS1040S-DIN | 39.3 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 4 |
| | 3 | □ | MNS1040S-DIN-C | 39.3 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 3 |
| | 5 | □ | MNS1040L-DIN | 55.3 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 4 |
| | 5 | □ | MNS1040L-DIN-C | 55.3 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 3 |
| | 8 | □ | MNS1040-L8C | 85.1 | 117.9 | 120.9 | 166.9 | 165 | 1.9 | 12 | 3 |
| | 10 | □ | MNS1040-L10C | 105.9 | 138.9 | 141.9 | 187.9 | 186 | 1.9 | 12 | 3 |
| 10.4 | 12 | □ | MNS1040-L12C | 126.7 | 159.9 | 162.9 | 208.9 | 207 | 1.9 | 12 | 3 |
| | 15 | □ | MNS1040-L15C | 157.9 | 190.9 | 193.9 | 239.9 | 238 | 1.9 | 12 | 3 |
| | 20 | □ | MNS1040-L20C | 209.9 | 243.9 | 246.9 | 292.9 | 291 | 1.9 | 12 | 3 |
| | 25 | □ | MNS1040-L25C | 261.9 | 295.9 | 298.9 | 344.9 | 343 | 1.9 | 12 | 3 |
| | 5 | ★ | MNS1040LB | 53.9 | 85.9 | 89.9 | 150.9 | 149 | 1.9 | 11 | 3 |
| | 10 | □ | MNS1040X10DB | 105.9 | 138.9 | 141.9 | 202.9 | 201 | 1.9 | 11 | 3 |
| | 20 | □ | MNS1040X20DB | 209.9 | 243.9 | 246.9 | 307.9 | 306 | 1.9 | 11 | 3 |
| | 3 | □ | MNS1050S-DIN | 39.2 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 4 |
| | 3 | □ | MNS1050S-DIN-C | 39.2 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 3 |
| | 5 | □ | MNS1050L-DIN | 55.2 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 4 |
| | 5 | ● | MNS1050L-DIN-C | 55.2 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 3 |
| | 8 | □ | MNS1050-L8C | 85.9 | 117.9 | 120.9 | 166.9 | 165 | 1.9 | 12 | 3 |
| | 10 | □ | MNS1050-L10C | 106.9 | 138.9 | 141.9 | 187.9 | 186 | 1.9 | 12 | 3 |
| 10.5 | 12 | ● | MNS1050-L12C | 127.9 | 159.9 | 162.9 | 208.9 | 207 | 1.9 | 12 | 3 |
| | 15 | □ | MNS1050-L15C | 159.4 | 190.9 | 193.9 | 239.9 | 238 | 1.9 | 12 | 3 |
| | 20 | ● | MNS1050-L20C | 211.9 | 243.9 | 246.9 | 292.9 | 291 | 1.9 | 12 | 3 |
| | 25 | □ | MNS1050-L25C | 264.4 | 295.9 | 298.9 | 344.9 | 343 | 1.9 | 12 | 3 |
| | 5 | ★ | MNS1050LB | 54.4 | 85.9 | 89.9 | 150.9 | 149 | 1.9 | 11 | 3 |
| | 10 | ★ | MNS1050X10DB | 106.9 | 138.9 | 141.9 | 202.9 | 201 | 1.9 | 11 | 3 |
| | 20 | ★ | MNS1050X20DB | 211.9 | 243.9 | 246.9 | 307.9 | 306 | 1.9 | 11 | 3 |
| | 3 | □ | MNS1060S-DIN | 39.0 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 4 |
| | 3 | □ | MNS1060S-DIN-C | 39.0 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 3 |
| | 5 | □ | MNS1060L-DIN | 55.0 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 4 |
| | 5 | □ | MNS1060L-DIN-C | 55.0 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 3 |
| | 8 | □ | MNS1060-L8C | 86.7 | 122.9 | 125.9 | 171.9 | 170 | 1.9 | 12 | 3 |
| | 10 | □ | MNS1060-L10C | 107.9 | 144.9 | 147.9 | 193.9 | 192 | 1.9 | 12 | 3 |
| 10.6 | 12 | □ | MNS1060-L12C | 129.1 | 166.9 | 169.9 | 215.9 | 214 | 1.9 | 12 | 3 |
| | 15 | □ | MNS1060-L15C | 160.9 | 199.9 | 202.9 | 248.9 | 247 | 1.9 | 12 | 3 |
| | 20 | □ | MNS1060-L20C | 213.9 | 254.9 | 257.9 | 303.9 | 302 | 1.9 | 12 | 3 |
| | 25 | □ | MNS1060-L25C | 266.9 | 309.9 | 312.9 | 358.9 | 357 | 1.9 | 12 | 3 |
| | 5 | ★ | MNS1060LB | 54.9 | 89.9 | 89.9 | 150.9 | 149 | 1.9 | 11 | 3 |
| | 10 | □ | MNS1060X10DB | 107.9 | 144.9 | 147.9 | 208.9 | 207 | 1.9 | 11 | 3 |
| | 20 | □ | MNS1060X20DB | 213.9 | 254.9 | 257.9 | 318.9 | 317 | 1.9 | 11 | 3 |

Remarque 1) Veuillez nous contacter pour les géométries qui ne seraient pas dans ce catalogue (e.g. différents diamètres et longueurs peuvent être fabriqués sur demande).

**● : Article stocké. ★ : Article standard Japon.**

**□ : Article non stocké - Fabrication sur commande uniquement.**

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | □ | MNS1070S-DIN | 38.9 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 4 |
| | 3 | □ | MNS1070S-DIN-C | 38.9 | 54.9 | 55.9 | 101.9 | 100 | 1.9 | 12 | 3 |
| | 5 | □ | MNS1070L-DIN | 54.9 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 4 |
| | 5 | □ | MNS1070L-DIN-C | 54.9 | 70.9 | 71.9 | 117.9 | 116 | 1.9 | 12 | 3 |
| | 8 | □ | MNS1070-L8C | 87.5 | 122.9 | 125.9 | 171.9 | 170 | 1.9 | 12 | 3 |
| | 10 | □ | MNS1070-L10C | 108.9 | 144.9 | 147.9 | 193.9 | 192 | 1.9 | 12 | 3 |
| 10.7 | 12 | □ | MNS1070-L12C | 130.3 | 166.9 | 169.9 | 215.9 | 214 | 1.9 | 12 | 3 |
| | 15 | □ | MNS1070-L15C | 162.4 | 199.9 | 202.9 | 248.9 | 247 | 1.9 | 12 | 3 |
| | 20 | □ | MNS1070-L20C | 215.9 | 254.9 | 257.9 | 303.9 | 302 | 1.9 | 12 | 3 |
| | 25 | □ | MNS1070-L25C | 269.4 | 309.9 | 312.9 | 358.9 | 357 | 1.9 | 12 | 3 |
| | 5 | ★ | MNS1070LB | 55.4 | 89.9 | 89.9 | 150.9 | 149 | 1.9 | 11 | 3 |
| | 10 | □ | MNS1070X10DB | 108.9 | 144.9 | 147.9 | 208.9 | 207 | 1.9 | 11 | 3 |
| | 20 | □ | MNS1070X20DB | 215.9 | 254.9 | 257.9 | 318.9 | 317 | 1.9 | 11 | 3 |
| | 3 | □ | MNS1080S-DIN | 38.8 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 4 |
| | 3 | □ | MNS1080S-DIN-C | 38.8 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 3 |
| | 5 | □ | MNS1080L-DIN | 54.8 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 4 |
| | 5 | □ | MNS1080L-DIN-C | 54.8 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 3 |
| | 8 | □ | MNS1080-L8C | 88.4 | 123.0 | 126.0 | 172.0 | 170 | 2.0 | 12 | 3 |
| | 10 | □ | MNS1080-L10C | 110.0 | 145.0 | 148.0 | 194.0 | 192 | 2.0 | 12 | 3 |
| 10.8 | 12 | □ | MNS1080-L12C | 131.6 | 167.0 | 170.0 | 216.0 | 214 | 2.0 | 12 | 3 |
| | 15 | □ | MNS1080-L15C | 164.0 | 200.0 | 203.0 | 249.0 | 247 | 2.0 | 12 | 3 |
| | 20 | □ | MNS1080-L20C | 218.0 | 255.0 | 258.0 | 304.0 | 302 | 2.0 | 12 | 3 |
| | 25 | □ | MNS1080-L25C | 272.0 | 310.0 | 313.0 | 359.0 | 357 | 2.0 | 12 | 3 |
| | 5 | ★ | MNS1080LB | 56.0 | 90.0 | 90.0 | 151.0 | 149 | 2.0 | 11 | 3 |
| | 10 | □ | MNS1080X10DB | 110.0 | 145.0 | 148.0 | 209.0 | 207 | 2.0 | 11 | 3 |
| | 20 | □ | MNS1080X20DB | 218.0 | 255.0 | 258.0 | 319.0 | 317 | 2.0 | 11 | 3 |
| | 3 | □ | MNS1090S-DIN | 38.6 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 4 |
| | 3 | □ | MNS1090S-DIN-C | 38.6 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 3 |
| | 5 | □ | MNS1090L-DIN | 54.6 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 4 |
| | 5 | □ | MNS1090L-DIN-C | 54.6 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 3 |
| | 8 | □ | MNS1090-L8C | 89.2 | 123.0 | 126.0 | 172.0 | 170 | 2.0 | 12 | 3 |
| | 10 | □ | MNS1090-L10C | 111.0 | 145.0 | 148.0 | 194.0 | 192 | 2.0 | 12 | 3 |
| 10.9 | 12 | □ | MNS1090-L12C | 132.8 | 167.0 | 170.0 | 216.0 | 214 | 2.0 | 12 | 3 |
| | 15 | □ | MNS1090-L15C | 165.5 | 200.0 | 203.0 | 249.0 | 247 | 2.0 | 12 | 3 |
| | 20 | □ | MNS1090-L20C | 220.0 | 255.0 | 258.0 | 304.0 | 302 | 2.0 | 12 | 3 |
| | 25 | □ | MNS1090-L25C | 274.5 | 310.0 | 313.0 | 359.0 | 357 | 2.0 | 12 | 3 |
| | 5 | ★ | MNS1090LB | 56.5 | 90.0 | 90.0 | 151.0 | 149 | 2.0 | 11 | 3 |
| | 10 | □ | MNS1090X10DB | 111.0 | 145.0 | 148.0 | 209.0 | 207 | 2.0 | 11 | 3 |
| | 20 | □ | MNS1090X20DB | 220.0 | 255.0 | 258.0 | 319.0 | 317 | 2.0 | 11 | 3 |
| | 3 | □ | MNS1100S-DIN | 38.5 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 4 |
| | 3 | □ | MNS1100S-DIN-C | 38.5 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 3 |
| | 5 | □ | MNS1100L-DIN | 54.5 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 4 |
| 11.0 | 5 | ● | MNS1100L-DIN-C | 54.5 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 3 |
| | 8 | □ | MNS1100-L8C | 90.0 | 123.0 | 126.0 | 172.0 | 170 | 2.0 | 12 | 3 |
| | 10 | □ | MNS1100-L10C | 112.0 | 145.0 | 148.0 | 194.0 | 192 | 2.0 | 12 | 3 |
| | 12 | ● | MNS1100-L12C | 134.0 | 167.0 | 170.0 | 216.0 | 214 | 2.0 | 12 | 3 |

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 15 | □ | MNS1100-L15C | 167.0 | 200.0 | 203.0 | 249.0 | 247 | 2.0 | 12 | 3 |
| | 20 | ● | MNS1100-L20C | 222.0 | 255.0 | 258.0 | 304.0 | 302 | 2.0 | 12 | 3 |
| | 25 | □ | MNS1100-L25C | 277.0 | 310.0 | 313.0 | 359.0 | 357 | 2.0 | 12 | 3 |
| 11.0 | 5 | ★ | MNS1100LB | 57.0 | 90.0 | 90.0 | 151.0 | 149 | 2.0 | 11 | 3 |
| | 10 | ★ | MNS1100X10DB | 112.0 | 145.0 | 148.0 | 209.0 | 207 | 2.0 | 11 | 3 |
| | 20 | ★ | MNS1100X20DB | 222.0 | 255.0 | 258.0 | 319.0 | 317 | 2.0 | 11 | 3 |
| | 3 | □ | MNS1110S-DIN | 38.4 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 4 |
| | 3 | □ | MNS1110S-DIN-C | 38.4 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 3 |
| | 5 | □ | MNS1110L-DIN | 54.4 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 4 |
| | 5 | □ | MNS1110L-DIN-C | 54.4 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 3 |
| | 8 | □ | MNS1110-L8C | 90.8 | 129.0 | 132.0 | 178.0 | 176 | 2.0 | 12 | 3 |
| | 10 | □ | MNS1110-L10C | 113.0 | 152.0 | 155.0 | 201.0 | 199 | 2.0 | 12 | 3 |
| 11.1 | 12 | □ | MNS1110-L12C | 135.2 | 175.0 | 178.0 | 224.0 | 222 | 2.0 | 12 | 3 |
| | 15 | □ | MNS1110-L15C | 168.5 | 209.0 | 212.0 | 258.0 | 256 | 2.0 | 12 | 3 |
| | 20 | □ | MNS1110-L20C | 224.0 | 267.0 | 270.0 | 316.0 | 314 | 2.0 | 12 | 3 |
| | 25 | □ | MNS1110-L25C | 279.5 | 324.0 | 327.0 | 373.0 | 371 | 2.0 | 12 | 3 |
| | 5 | ★ | MNS1110LB | 57.5 | 94.0 | 98.0 | 160.0 | 158 | 2.0 | 12 | 3 |
| | 10 | □ | MNS1110X10DB | 113.0 | 152.0 | 155.0 | 217.0 | 215 | 2.0 | 12 | 3 |
| | 20 | □ | MNS1110X20DB | 224.0 | 267.0 | 270.0 | 332.0 | 330 | 2.0 | 12 | 3 |
| | 3 | □ | MNS1120S-DIN | 38.2 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 4 |
| | 3 | □ | MNS1120S-DIN-C | 38.2 | 55.0 | 56.0 | 102.0 | 100 | 2.0 | 12 | 3 |
| | 5 | □ | MNS1120L-DIN | 54.2 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 4 |
| | 5 | □ | MNS1120L-DIN-C | 54.2 | 71.0 | 72.0 | 118.0 | 116 | 2.0 | 12 | 3 |
| | 8 | □ | MNS1120-L8C | 91.6 | 129.0 | 132.0 | 178.0 | 176 | 2.0 | 12 | 3 |
| | 10 | □ | MNS1120-L10C | 114.0 | 152.0 | 155.0 | 201.0 | 199 | 2.0 | 12 | 3 |
| 11.2 | 12 | □ | MNS1120-L12C | 136.4 | 175.0 | 178.0 | 224.0 | 222 | 2.0 | 12 | 3 |
| | 15 | □ | MNS1120-L15C | 170.0 | 209.0 | 212.0 | 258.0 | 256 | 2.0 | 12 | 3 |
| | 20 | □ | MNS1120-L20C | 226.0 | 267.0 | 270.0 | 316.0 | 314 | 2.0 | 12 | 3 |
| | 25 | □ | MNS1120-L25C | 282.0 | 324.0 | 327.0 | 373.0 | 371 | 2.0 | 12 | 3 |
| | 5 | ★ | MNS1120LB | 58.0 | 94.0 | 98.0 | 160.0 | 158 | 2.0 | 12 | 3 |
| | 10 | □ | MNS1120X10DB | 114.0 | 152.0 | 155.0 | 217.0 | 215 | 2.0 | 12 | 3 |
| | 20 | □ | MNS1120X20DB | 226.0 | 267.0 | 270.0 | 332.0 | 330 | 2.0 | 12 | 3 |
| | 3 | □ | MNS1130S-DIN | 38.1 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 4 |
| | 3 | □ | MNS1130S-DIN-C | 38.1 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 3 |
| | 5 | □ | MNS1130L-DIN | 54.1 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 4 |
| | 5 | □ | MNS1130L-DIN-C | 54.1 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 3 |
| | 8 | □ | MNS1130-L8C | 92.5 | 129.1 | 132.1 | 178.1 | 176 | 2.1 | 12 | 3 |
| | 10 | □ | MNS1130-L10C | 115.1 | 152.1 | 155.1 | 201.1 | 199 | 2.1 | 12 | 3 |
| 11.3 | 12 | □ | MNS1130-L12C | 137.7 | 175.1 | 178.1 | 224.1 | 222 | 2.1 | 12 | 3 |
| | 15 | □ | MNS1130-L15C | 171.6 | 209.1 | 212.1 | 258.1 | 256 | 2.1 | 12 | 3 |
| | 20 | □ | MNS1130-L20C | 228.1 | 267.1 | 270.1 | 316.1 | 314 | 2.1 | 12 | 3 |
| | 25 | □ | MNS1130-L25C | 284.6 | 324.1 | 327.1 | 373.1 | 371 | 2.1 | 12 | 3 |
| | 5 | ★ | MNS1130LB | 58.6 | 94.1 | 98.1 | 160.1 | 158 | 2.1 | 12 | 3 |
| | 10 | □ | MNS1130X10DB | 115.1 | 152.1 | 155.1 | 217.1 | 215 | 2.1 | 12 | 3 |
| | 20 | □ | MNS1130X20DB | 228.1 | 267.1 | 270.1 | 332.1 | 330 | 2.1 | 12 | 3 |

CONDITIONS DE COUPE ➤ M120
MÉTHODE D'UTILISATION ➤ M121
DONNÉES TECHNIQUES ➤ P001

# MNS

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | □ | MNS1140S-DIN | 38.0 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 4 |
| | 3 | □ | MNS1140S-DIN-C | 38.0 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 3 |
| | 5 | □ | MNS1140L-DIN | 54.0 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 4 |
| | 5 | □ | MNS1140L-DIN-C | 54.0 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 3 |
| | 8 | □ | MNS1140-L8C | 93.3 | 129.1 | 132.1 | 178.1 | 176 | 2.1 | 12 | 3 |
| | 10 | □ | MNS1140-L10C | 116.1 | 152.1 | 155.1 | 201.1 | 199 | 2.1 | 12 | 3 |
| 11.4 | 12 | □ | MNS1140-L12C | 138.9 | 175.1 | 178.1 | 224.1 | 222 | 2.1 | 12 | 3 |
| | 15 | □ | MNS1140-L15C | 173.1 | 209.1 | 212.1 | 258.1 | 256 | 2.1 | 12 | 3 |
| | 20 | □ | MNS1140-L20C | 230.1 | 267.1 | 270.1 | 316.1 | 314 | 2.1 | 12 | 3 |
| | 25 | □ | MNS1140-L25C | 287.1 | 324.1 | 327.1 | 373.1 | 371 | 2.1 | 12 | 3 |
| | 5 | ★ | MNS1140LB | 59.1 | 94.1 | 98.1 | 160.1 | 158 | 2.1 | 12 | 3 |
| | 10 | □ | MNS1140X10DB | 116.1 | 152.1 | 155.1 | 217.1 | 215 | 2.1 | 12 | 3 |
| | 20 | □ | MNS1140X20DB | 230.1 | 267.1 | 270.1 | 332.1 | 330 | 2.1 | 12 | 3 |
| | 3 | □ | MNS1150S-DIN | 37.8 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 4 |
| | 3 | □ | MNS1150S-DIN-C | 37.8 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 3 |
| | 5 | □ | MNS1150L-DIN | 53.8 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 4 |
| | 5 | ● | MNS1150L-DIN-C | 53.8 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 3 |
| | 8 | □ | MNS1150-L8C | 94.1 | 129.1 | 132.1 | 178.1 | 176 | 2.1 | 12 | 3 |
| | 10 | □ | MNS1150-L10C | 117.1 | 152.1 | 155.1 | 201.1 | 199 | 2.1 | 12 | 3 |
| 11.5 | 12 | ● | MNS1150-L12C | 140.1 | 175.1 | 178.1 | 224.1 | 222 | 2.1 | 12 | 3 |
| | 15 | □ | MNS1150-L15C | 174.6 | 209.1 | 212.1 | 258.1 | 256 | 2.1 | 12 | 3 |
| | 20 | ● | MNS1150-L20C | 232.1 | 267.1 | 270.1 | 316.1 | 314 | 2.1 | 12 | 3 |
| | 25 | □ | MNS1150-L25C | 289.6 | 324.1 | 327.1 | 373.1 | 371 | 2.1 | 12 | 3 |
| | 5 | ★ | MNS1150LB | 59.6 | 94.1 | 98.1 | 160.1 | 158 | 2.1 | 12 | 3 |
| | 10 | □ | MNS1150X10DB | 117.1 | 152.1 | 155.1 | 217.1 | 215 | 2.1 | 12 | 3 |
| | 20 | □ | MNS1150X20DB | 232.1 | 267.1 | 270.1 | 332.1 | 330 | 2.1 | 12 | 3 |
| | 3 | □ | MNS1160S-DIN | 37.7 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 4 |
| | 3 | □ | MNS1160S-DIN-C | 37.7 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 3 |
| | 5 | □ | MNS1160L-DIN | 53.7 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 4 |
| | 5 | □ | MNS1160L-DIN-C | 53.7 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 3 |
| | 8 | □ | MNS1160-L8C | 94.9 | 134.1 | 137.1 | 183.1 | 181 | 2.1 | 12 | 3 |
| | 10 | □ | MNS1160-L10C | 118.1 | 158.1 | 161.1 | 207.1 | 205 | 2.1 | 12 | 3 |
| 11.6 | 12 | □ | MNS1160-L12C | 141.3 | 182.1 | 185.1 | 231.1 | 229 | 2.1 | 12 | 3 |
| | 15 | □ | MNS1160-L15C | 176.1 | 218.1 | 221.1 | 267.1 | 265 | 2.1 | 12 | 3 |
| | 20 | □ | MNS1160-L20C | 234.1 | 278.1 | 281.1 | 327.1 | 325 | 2.1 | 12 | 3 |
| | 25 | □ | MNS1160-L25C | 292.1 | 338.1 | 341.1 | 387.1 | 385 | 2.1 | 12 | 3 |
| | 5 | ★ | MNS1160LB | 60.1 | 98.1 | 98.1 | 160.1 | 158 | 2.1 | 12 | 3 |
| | 10 | □ | MNS1160X10DB | 118.1 | 158.1 | 161.1 | 223.1 | 221 | 2.1 | 12 | 3 |
| | 20 | □ | MNS1160X20DB | 234.1 | 278.1 | 281.1 | 343.1 | 341 | 2.1 | 12 | 3 |
| | 3 | □ | MNS1170S-DIN | 37.6 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 4 |
| | 3 | □ | MNS1170S-DIN-C | 37.6 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 3 |
| | 5 | □ | MNS1170L-DIN | 53.6 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 4 |
| 11.7 | 5 | □ | MNS1170L-DIN-C | 53.6 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 3 |
| | 8 | □ | MNS1170-L8C | 95.7 | 134.1 | 137.1 | 183.1 | 181 | 2.1 | 12 | 3 |
| | 10 | □ | MNS1170-L10C | 119.1 | 158.1 | 161.1 | 207.1 | 205 | 2.1 | 12 | 3 |
| | 12 | □ | MNS1170-L12C | 142.5 | 182.1 | 185.1 | 231.1 | 229 | 2.1 | 12 | 3 |

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 15 | □ | MNS1170-L15C | 177.6 | 218.1 | 221.1 | 267.1 | 265 | 2.1 | 12 | 3 |
| | 20 | □ | MNS1170-L20C | 236.1 | 278.1 | 281.1 | 327.1 | 325 | 2.1 | 12 | 3 |
| | 25 | □ | MNS1170-L25C | 294.6 | 338.1 | 341.1 | 387.1 | 385 | 2.1 | 12 | 3 |
| 11.7 | 5 | ★ | MNS1170LB | 60.6 | 98.1 | 98.1 | 160.1 | 158 | 2.1 | 12 | 3 |
| | 10 | □ | MNS1170X10DB | 119.1 | 158.1 | 161.1 | 223.1 | 221 | 2.1 | 12 | 3 |
| | 20 | □ | MNS1170X20DB | 236.1 | 278.1 | 281.1 | 343.1 | 341 | 2.1 | 12 | 3 |
| | 3 | □ | MNS1180S-DIN | 37.4 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 4 |
| | 3 | □ | MNS1180S-DIN-C | 37.4 | 55.1 | 56.1 | 102.1 | 100 | 2.1 | 12 | 3 |
| | 5 | □ | MNS1180L-DIN | 53.4 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 4 |
| | 5 | □ | MNS1180L-DIN-C | 53.4 | 71.1 | 72.1 | 118.1 | 116 | 2.1 | 12 | 3 |
| | 8 | □ | MNS1180-L8C | 96.5 | 134.1 | 137.1 | 183.1 | 181 | 2.1 | 12 | 3 |
| | 10 | □ | MNS1180-L10C | 120.1 | 158.1 | 161.1 | 207.1 | 205 | 2.1 | 12 | 3 |
| 11.8 | 12 | □ | MNS1180-L12C | 143.7 | 182.1 | 185.1 | 231.1 | 229 | 2.1 | 12 | 3 |
| | 15 | □ | MNS1180-L15C | 179.1 | 218.1 | 221.1 | 267.1 | 265 | 2.1 | 12 | 3 |
| | 20 | □ | MNS1180-L20C | 238.1 | 278.1 | 281.1 | 327.1 | 325 | 2.1 | 12 | 3 |
| | 25 | □ | MNS1180-L25C | 297.1 | 338.1 | 341.1 | 387.1 | 385 | 2.1 | 12 | 3 |
| | 5 | ★ | MNS1180LB | 61.1 | 98.1 | 98.1 | 160.1 | 158 | 2.1 | 12 | 3 |
| | 10 | □ | MNS1180X10DB | 120.1 | 158.1 | 161.1 | 223.1 | 221 | 2.1 | 12 | 3 |
| | 20 | □ | MNS1180X20DB | 238.1 | 278.1 | 281.1 | 343.1 | 341 | 2.1 | 12 | 3 |
| | 3 | □ | MNS1190S-DIN | 37.3 | 55.2 | 56.2 | 102.2 | 100 | 2.2 | 12 | 4 |
| | 3 | □ | MNS1190S-DIN-C | 37.3 | 55.2 | 56.2 | 102.2 | 100 | 2.2 | 12 | 3 |
| | 5 | □ | MNS1190L-DIN | 53.3 | 71.2 | 72.2 | 118.2 | 116 | 2.2 | 12 | 4 |
| | 5 | □ | MNS1190L-DIN-C | 53.3 | 71.2 | 72.2 | 118.2 | 116 | 2.2 | 12 | 3 |
| | 8 | □ | MNS1190-L8C | 97.4 | 134.2 | 137.2 | 183.2 | 181 | 2.2 | 12 | 3 |
| | 10 | □ | MNS1190-L10C | 121.2 | 158.2 | 161.2 | 207.2 | 205 | 2.2 | 12 | 3 |
| 11.9 | 12 | □ | MNS1190-L12C | 145.0 | 182.2 | 185.2 | 231.2 | 229 | 2.2 | 12 | 3 |
| | 15 | □ | MNS1190-L15C | 180.7 | 218.2 | 221.2 | 267.2 | 265 | 2.2 | 12 | 3 |
| | 20 | □ | MNS1190-L20C | 240.2 | 278.2 | 281.2 | 327.2 | 325 | 2.2 | 12 | 3 |
| | 25 | □ | MNS1190-L25C | 299.7 | 338.2 | 341.2 | 387.2 | 385 | 2.2 | 12 | 3 |
| | 5 | ★ | MNS1190LB | 61.7 | 98.2 | 98.2 | 160.2 | 158 | 2.2 | 12 | 3 |
| | 10 | □ | MNS1190X10DB | 121.2 | 158.2 | 161.2 | 223.2 | 221 | 2.2 | 12 | 3 |
| | 20 | □ | MNS1190X20DB | 240.2 | 278.2 | 281.2 | 343.2 | 341 | 2.2 | 12 | 3 |
| | 3 | □ | MNS1200S-DIN | 37.2 | 55.2 | 56.2 | 102.2 | 100 | 2.2 | 12 | 4 |
| | 3 | □ | MNS1200S-DIN-C | 37.2 | 55.2 | 56.2 | 102.2 | 100 | 2.2 | 12 | 3 |
| | 5 | □ | MNS1200L-DIN | 53.2 | 71.2 | 72.2 | 118.2 | 116 | 2.2 | 12 | 4 |
| | 5 | ● | MNS1200L-DIN-C | 53.2 | 71.2 | 72.2 | 118.2 | 116 | 2.2 | 12 | 3 |
| | 8 | □ | MNS1200-L8C | 98.2 | 134.2 | 137.2 | 183.2 | 181 | 2.2 | 12 | 3 |
| | 10 | □ | MNS1200-L10C | 122.2 | 158.2 | 161.2 | 207.2 | 205 | 2.2 | 12 | 3 |
| 12.0 | 12 | ● | MNS1200-L12C | 146.2 | 182.2 | 185.2 | 231.2 | 229 | 2.2 | 12 | 3 |
| | 15 | □ | MNS1200-L15C | 182.2 | 218.2 | 221.2 | 267.2 | 265 | 2.2 | 12 | 3 |
| | 20 | ● | MNS1200-L20C | 242.2 | 278.2 | 281.2 | 327.2 | 325 | 2.2 | 12 | 3 |
| | 25 | □ | MNS1200-L25C | 302.2 | 338.2 | 341.2 | 387.2 | 385 | 2.2 | 12 | 3 |
| | 5 | ★ | MNS1200LB | 62.2 | 98.2 | 98.2 | 160.2 | 158 | 2.2 | 12 | 3 |
| | 10 | ★ | MNS1200X10DB | 122.2 | 158.2 | 161.2 | 223.2 | 221 | 2.2 | 12 | 3 |
| | 20 | ★ | MNS1200X20DB | 242.2 | 278.2 | 281.2 | 343.2 | 341 | 2.2 | 12 | 3 |

Remarque 1) Veuillez nous contacter pour les géométries qui ne seraient pas dans ce catalogue (e.g. différents diamètres et longueurs peuvent être fabriqués sur demande).

● : Article stocké. ★ : Article standard Japon.
□ : Article non stocké - Fabrication sur commande uniquement.

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.1 | 3 | □ | MNS1210S-DIN | 42.1 | 60.2 | 61.2 | 107.2 | 105 | 2.2 | 14 | 4 |
| | 3 | □ | MNS1210S-DIN-C | 42.1 | 60.2 | 61.2 | 107.2 | 105 | 2.2 | 14 | 3 |
| | 5 | □ | MNS1210L-DIN | 59.1 | 77.2 | 78.2 | 124.2 | 122 | 2.2 | 14 | 4 |
| | 5 | □ | MNS1210L-DIN-C | 59.1 | 77.2 | 78.2 | 124.2 | 122 | 2.2 | 14 | 3 |
| | 8 | □ | MNS1210-L8C | 99.0 | 140.2 | 143.2 | 189.2 | 187 | 2.2 | 14 | 3 |
| | 10 | □ | MNS1210-L10C | 123.2 | 165.2 | 168.2 | 214.2 | 212 | 2.2 | 14 | 3 |
| | 12 | □ | MNS1210-L12C | 147.4 | 190.2 | 193.2 | 239.2 | 237 | 2.2 | 14 | 3 |
| | 15 | □ | MNS1210-L15C | 183.7 | 227.2 | 230.2 | 276.2 | 274 | 2.2 | 14 | 3 |
| | 20 | □ | MNS1210-L20C | 244.2 | 290.2 | 293.2 | 339.2 | 337 | 2.2 | 14 | 3 |
| | 5 | ★ | MNS1210LB | 62.7 | 102.2 | 106.2 | 169.2 | 167 | 2.2 | 13 | 3 |
| | 10 | □ | MNS1210X10DB | 123.2 | 165.2 | 168.2 | 231.2 | 229 | 2.2 | 13 | 3 |
| | 20 | □ | MNS1210X20DB | 244.2 | 290.2 | 293.2 | 356.2 | 354 | 2.2 | 13 | 3 |
| 12.2 | 3 | □ | MNS1220S-DIN | 41.9 | 60.2 | 61.2 | 107.2 | 105 | 2.2 | 14 | 4 |
| | 3 | □ | MNS1220S-DIN-C | 41.9 | 60.2 | 61.2 | 107.2 | 105 | 2.2 | 14 | 3 |
| | 5 | □ | MNS1220L-DIN | 58.9 | 77.2 | 78.2 | 124.2 | 122 | 2.2 | 14 | 4 |
| | 5 | □ | MNS1220L-DIN-C | 58.9 | 77.2 | 78.2 | 124.2 | 122 | 2.2 | 14 | 3 |
| | 8 | □ | MNS1220-L8C | 99.8 | 140.2 | 143.2 | 189.2 | 187 | 2.2 | 14 | 3 |
| | 10 | □ | MNS1220-L10C | 124.2 | 165.2 | 168.2 | 214.2 | 212 | 2.2 | 14 | 3 |
| | 12 | □ | MNS1220-L12C | 148.6 | 190.2 | 193.2 | 239.2 | 237 | 2.2 | 14 | 3 |
| | 15 | □ | MNS1220-L15C | 185.2 | 227.2 | 230.2 | 276.2 | 274 | 2.2 | 14 | 3 |
| | 20 | □ | MNS1220-L20C | 246.2 | 290.2 | 293.2 | 339.2 | 337 | 2.2 | 14 | 3 |
| | 5 | ★ | MNS1220LB | 63.2 | 102.2 | 106.2 | 169.2 | 167 | 2.2 | 13 | 3 |
| | 10 | □ | MNS1220X10DB | 124.2 | 165.2 | 168.2 | 231.2 | 229 | 2.2 | 13 | 3 |
| | 20 | □ | MNS1220X20DB | 246.2 | 290.2 | 293.2 | 356.2 | 354 | 2.2 | 13 | 3 |
| 12.3 | 3 | □ | MNS1230S-DIN | 41.8 | 60.2 | 61.2 | 107.2 | 105 | 2.2 | 14 | 4 |
| | 3 | □ | MNS1230S-DIN-C | 41.8 | 60.2 | 61.2 | 107.2 | 105 | 2.2 | 14 | 3 |
| | 5 | □ | MNS1230L-DIN | 58.8 | 77.2 | 78.2 | 124.2 | 122 | 2.2 | 14 | 4 |
| | 5 | □ | MNS1230L-DIN-C | 58.8 | 77.2 | 78.2 | 124.2 | 122 | 2.2 | 14 | 3 |
| | 8 | □ | MNS1230-L8C | 100.6 | 140.2 | 143.2 | 189.2 | 187 | 2.2 | 14 | 3 |
| | 10 | □ | MNS1230-L10C | 125.2 | 165.2 | 168.2 | 214.2 | 212 | 2.2 | 14 | 3 |
| | 12 | □ | MNS1230-L12C | 149.8 | 190.2 | 193.2 | 239.2 | 237 | 2.2 | 14 | 3 |
| | 15 | □ | MNS1230-L15C | 186.7 | 227.2 | 230.2 | 276.2 | 274 | 2.2 | 14 | 3 |
| | 20 | □ | MNS1230-L20C | 248.2 | 290.2 | 293.2 | 339.2 | 337 | 2.2 | 14 | 3 |
| | 5 | ★ | MNS1230LB | 63.7 | 102.2 | 106.2 | 169.2 | 167 | 2.2 | 13 | 3 |
| | 10 | □ | MNS1230X10DB | 125.2 | 165.2 | 168.2 | 231.2 | 229 | 2.2 | 13 | 3 |
| | 20 | □ | MNS1230X20DB | 248.2 | 290.2 | 293.2 | 356.2 | 354 | 2.2 | 13 | 3 |
| 12.4 | 3 | □ | MNS1240S-DIN | 41.7 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 4 |
| | 3 | □ | MNS1240S-DIN-C | 41.7 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 3 |
| | 5 | □ | MNS1240L-DIN | 58.7 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 4 |
| | 5 | □ | MNS1240L-DIN-C | 58.7 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 3 |
| | 8 | □ | MNS1240-L8C | 101.5 | 140.3 | 143.3 | 189.3 | 187 | 2.3 | 14 | 3 |
| | 10 | □ | MNS1240-L10C | 126.3 | 165.3 | 168.3 | 214.3 | 212 | 2.3 | 14 | 3 |
| | 12 | □ | MNS1240-L12C | 151.1 | 190.3 | 193.3 | 239.3 | 237 | 2.3 | 14 | 3 |
| | 15 | □ | MNS1240-L15C | 188.3 | 227.3 | 230.3 | 276.3 | 274 | 2.3 | 14 | 3 |
| | 20 | □ | MNS1240-L20C | 250.3 | 290.3 | 293.3 | 339.3 | 337 | 2.3 | 14 | 3 |
| | 5 | ★ | MNS1240LB | 64.3 | 102.3 | 106.3 | 169.3 | 167 | 2.3 | 13 | 3 |
| | 10 | □ | MNS1240X10DB | 126.3 | 165.3 | 168.3 | 231.3 | 229 | 2.3 | 13 | 3 |
| | 20 | □ | MNS1240X20DB | 250.3 | 290.3 | 293.3 | 356.3 | 354 | 2.3 | 13 | 3 |

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.5 | 3 | □ | MNS1250S-DIN | 41.5 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 4 |
| | 3 | □ | MNS1250S-DIN-C | 41.5 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 3 |
| | 5 | □ | MNS1250L-DIN | 58.5 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 4 |
| | 5 | ● | MNS1250L-DIN-C | 58.5 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 3 |
| | 8 | □ | MNS1250-L8C | 102.3 | 140.3 | 143.3 | 189.3 | 187 | 2.3 | 14 | 3 |
| | 10 | □ | MNS1250-L10C | 127.3 | 165.3 | 168.3 | 214.3 | 212 | 2.3 | 14 | 3 |
| | 12 | ● | MNS1250-L12C | 152.3 | 190.3 | 193.3 | 239.3 | 237 | 2.3 | 14 | 3 |
| | 15 | □ | MNS1250-L15C | 189.8 | 227.3 | 230.3 | 276.3 | 274 | 2.3 | 14 | 3 |
| | 20 | ● | MNS1250-L20C | 252.3 | 290.3 | 293.3 | 339.3 | 337 | 2.3 | 14 | 3 |
| | 5 | ★ | MNS1250LB | 64.8 | 102.3 | 106.3 | 169.3 | 167 | 2.3 | 13 | 3 |
| | 10 | □ | MNS1250X10DB | 127.3 | 165.3 | 168.3 | 231.3 | 229 | 2.3 | 13 | 3 |
| | 20 | □ | MNS1250X20DB | 252.3 | 290.3 | 293.3 | 356.3 | 354 | 2.3 | 13 | 3 |
| 12.6 | 3 | □ | MNS1260S-DIN | 41.4 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 4 |
| | 3 | □ | MNS1260S-DIN-C | 41.4 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 3 |
| | 5 | □ | MNS1260L-DIN | 58.4 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 4 |
| | 5 | □ | MNS1260L-DIN-C | 58.4 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 3 |
| | 8 | □ | MNS1260-L8C | 103.1 | 145.3 | 148.3 | 194.3 | 192 | 2.3 | 14 | 3 |
| | 10 | □ | MNS1260-L10C | 128.3 | 171.3 | 174.3 | 220.3 | 218 | 2.3 | 14 | 3 |
| | 12 | □ | MNS1260-L12C | 153.5 | 197.3 | 200.3 | 246.3 | 244 | 2.3 | 14 | 3 |
| | 15 | □ | MNS1260-L15C | 191.3 | 236.3 | 239.3 | 285.3 | 283 | 2.3 | 14 | 3 |
| | 20 | □ | MNS1260-L20C | 254.3 | 301.3 | 304.3 | 350.3 | 348 | 2.3 | 14 | 3 |
| | 5 | ★ | MNS1260LB | 65.3 | 106.3 | 106.3 | 169.3 | 167 | 2.3 | 13 | 3 |
| | 10 | □ | MNS1260X10DB | 128.3 | 171.3 | 174.3 | 237.3 | 235 | 2.3 | 13 | 3 |
| | 20 | □ | MNS1260X20DB | 254.3 | 301.3 | 304.3 | 367.3 | 365 | 2.3 | 13 | 3 |
| 12.7 | 3 | □ | MNS1270S-DIN | 41.3 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 4 |
| | 3 | □ | MNS1270S-DIN-C | 41.3 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 3 |
| | 5 | □ | MNS1270L-DIN | 58.3 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 4 |
| | 5 | □ | MNS1270L-DIN-C | 58.3 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 3 |
| | 8 | □ | MNS1270-L8C | 103.9 | 145.3 | 148.3 | 194.3 | 192 | 2.3 | 14 | 3 |
| | 10 | □ | MNS1270-L10C | 129.3 | 171.3 | 174.3 | 220.3 | 218 | 2.3 | 14 | 3 |
| | 12 | □ | MNS1270-L12C | 154.7 | 197.3 | 200.3 | 246.3 | 244 | 2.3 | 14 | 3 |
| | 15 | □ | MNS1270-L15C | 192.8 | 236.3 | 239.3 | 285.3 | 283 | 2.3 | 14 | 3 |
| | 20 | □ | MNS1270-L20C | 256.3 | 301.3 | 304.3 | 350.3 | 348 | 2.3 | 14 | 3 |
| | 5 | ★ | MNS1270LB | 65.8 | 106.3 | 106.3 | 169.3 | 167 | 2.3 | 13 | 3 |
| | 10 | □ | MNS1270X10DB | 129.3 | 171.3 | 174.3 | 237.3 | 235 | 2.3 | 13 | 3 |
| | 20 | □ | MNS1270X20DB | 256.3 | 301.3 | 304.3 | 367.3 | 365 | 2.3 | 13 | 3 |
| 12.8 | 3 | □ | MNS1280S-DIN | 41.1 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 4 |
| | 3 | □ | MNS1280S-DIN-C | 41.1 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 3 |
| | 5 | □ | MNS1280L-DIN | 58.1 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 4 |
| | 5 | □ | MNS1280L-DIN-C | 58.1 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 3 |
| | 8 | □ | MNS1280-L8C | 104.7 | 145.3 | 148.3 | 194.3 | 192 | 2.3 | 14 | 3 |
| | 10 | □ | MNS1280-L10C | 130.3 | 171.3 | 174.3 | 220.3 | 218 | 2.3 | 14 | 3 |
| | 12 | □ | MNS1280-L12C | 155.9 | 197.3 | 200.3 | 246.3 | 244 | 2.3 | 14 | 3 |
| | 15 | □ | MNS1280-L15C | 194.3 | 236.3 | 239.3 | 285.3 | 283 | 2.3 | 14 | 3 |
| | 20 | □ | MNS1280-L20C | 258.3 | 301.3 | 304.3 | 350.3 | 348 | 2.3 | 14 | 3 |
| | 5 | ★ | MNS1280LB | 66.3 | 106.3 | 106.3 | 169.3 | 167 | 2.3 | 13 | 3 |
| | 10 | □ | MNS1280X10DB | 130.3 | 171.3 | 174.3 | 237.3 | 235 | 2.3 | 13 | 3 |
| | 20 | □ | MNS1280X20DB | 258.3 | 301.3 | 304.3 | 367.3 | 365 | 2.3 | 13 | 3 |

CONDITIONS DE COUPE ➤ M120
MÉTHODE D'UTILISATION ➤ M121
DONNÉES TECHNIQUES ➤ P001

# MNS

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.9 | 3 | □ | MNS1290S-DIN | 41.0 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 4 |
| | 3 | □ | MNS1290S-DIN-C | 41.0 | 60.3 | 61.3 | 107.3 | 105 | 2.3 | 14 | 3 |
| | 5 | □ | MNS1290L-DIN | 58.0 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 4 |
| | 5 | □ | MNS1290L-DIN-C | 58.0 | 77.3 | 78.3 | 124.3 | 122 | 2.3 | 14 | 3 |
| | 8 | □ | MNS1290-L8C | 105.5 | 145.3 | 148.3 | 194.3 | 192 | 2.3 | 14 | 3 |
| | 10 | □ | MNS1290-L10C | 131.3 | 171.3 | 174.3 | 220.3 | 218 | 2.3 | 14 | 3 |
| | 12 | □ | MNS1290-L12C | 157.1 | 197.3 | 200.3 | 246.3 | 244 | 2.3 | 14 | 3 |
| | 15 | □ | MNS1290-L15C | 195.8 | 236.3 | 239.3 | 285.3 | 283 | 2.3 | 14 | 3 |
| | 20 | □ | MNS1290-L20C | 260.3 | 301.3 | 304.3 | 350.3 | 348 | 2.3 | 14 | 3 |
| | 5 | ★ | MNS1290LB | 66.8 | 106.3 | 106.3 | 169.3 | 167 | 2.3 | 13 | 3 |
| | 10 | □ | MNS1290X10DB | 131.3 | 171.3 | 174.3 | 237.3 | 235 | 2.3 | 13 | 3 |
| | 20 | □ | MNS1290X20DB | 260.3 | 301.3 | 304.3 | 367.3 | 365 | 2.3 | 13 | 3 |
| 13.0 | 3 | □ | MNS1300S-DIN | 40.9 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 4 |
| | 3 | □ | MNS1300S-DIN-C | 40.9 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 3 |
| | 5 | □ | MNS1300L-DIN | 57.9 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 4 |
| | 5 | ● | MNS1300L-DIN-C | 57.9 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 3 |
| | 8 | □ | MNS1300-L8C | 106.4 | 145.4 | 148.4 | 194.4 | 192 | 2.4 | 14 | 3 |
| | 10 | □ | MNS1300-L10C | 132.4 | 171.4 | 174.4 | 220.4 | 218 | 2.4 | 14 | 3 |
| | 12 | ● | MNS1300-L12C | 158.4 | 197.4 | 200.4 | 246.4 | 244 | 2.4 | 14 | 3 |
| | 15 | □ | MNS1300-L15C | 197.4 | 236.4 | 239.4 | 285.4 | 283 | 2.4 | 14 | 3 |
| | 20 | ● | MNS1300-L20C | 262.4 | 301.4 | 304.4 | 350.4 | 348 | 2.4 | 14 | 3 |
| | 5 | ★ | MNS1300LB | 67.4 | 106.4 | 106.4 | 169.4 | 167 | 2.4 | 13 | 3 |
| | 10 | ★ | MNS1300X10DB | 132.4 | 171.4 | 174.4 | 237.4 | 235 | 2.4 | 13 | 3 |
| | 20 | ★ | MNS1300X20DB | 262.4 | 301.4 | 304.4 | 367.4 | 365 | 2.4 | 13 | 3 |
| 13.1 | 3 | □ | MNS1310S-DIN | 40.7 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 4 |
| | 3 | □ | MNS1310S-DIN-C | 40.7 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 3 |
| | 5 | □ | MNS1310L-DIN | 57.7 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 4 |
| | 5 | □ | MNS1310L-DIN-C | 57.7 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 3 |
| | 8 | □ | MNS1310-L8C | 107.2 | 151.4 | 154.4 | 200.4 | 198 | 2.4 | 14 | 3 |
| | 10 | □ | MNS1310-L10C | 133.4 | 178.4 | 181.4 | 227.4 | 225 | 2.4 | 14 | 3 |
| | 12 | □ | MNS1310-L12C | 159.6 | 205.4 | 208.4 | 254.4 | 252 | 2.4 | 14 | 3 |
| | 15 | □ | MNS1310-L15C | 198.9 | 245.4 | 248.4 | 294.4 | 292 | 2.4 | 14 | 3 |
| | 20 | □ | MNS1310-L20C | 264.4 | 313.4 | 316.4 | 362.4 | 360 | 2.4 | 14 | 3 |
| | 5 | ★ | MNS1310LB | 67.9 | 110.4 | 114.4 | 178.4 | 176 | 2.4 | 14 | 3 |
| | 10 | □ | MNS1310X10DB | 133.4 | 178.4 | 181.4 | 245.4 | 243 | 2.4 | 14 | 3 |
| | 20 | □ | MNS1310X20DB | 264.4 | 313.4 | 316.4 | 380.4 | 378 | 2.4 | 14 | 3 |
| 13.2 | 3 | □ | MNS1320S-DIN | 40.6 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 4 |
| | 3 | □ | MNS1320S-DIN-C | 40.6 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 3 |
| | 5 | □ | MNS1320L-DIN | 57.6 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 4 |
| | 5 | □ | MNS1320L-DIN-C | 57.6 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 3 |
| | 8 | □ | MNS1320-L8C | 108.0 | 151.4 | 154.4 | 200.4 | 198 | 2.4 | 14 | 3 |
| | 10 | □ | MNS1320-L10C | 134.4 | 178.4 | 181.4 | 227.4 | 225 | 2.4 | 14 | 3 |
| | 12 | □ | MNS1320-L12C | 160.8 | 205.4 | 208.4 | 254.4 | 252 | 2.4 | 14 | 3 |
| | 15 | □ | MNS1320-L15C | 200.4 | 245.4 | 248.4 | 294.4 | 292 | 2.4 | 14 | 3 |
| | 20 | □ | MNS1320-L20C | 266.4 | 313.4 | 316.4 | 362.4 | 360 | 2.4 | 14 | 3 |
| | 5 | ★ | MNS1320LB | 68.4 | 110.4 | 114.4 | 178.4 | 176 | 2.4 | 14 | 3 |
| | 10 | □ | MNS1320X10DB | 134.4 | 178.4 | 181.4 | 245.4 | 243 | 2.4 | 14 | 3 |
| | 20 | □ | MNS1320X20DB | 266.4 | 313.4 | 316.4 | 380.4 | 378 | 2.4 | 14 | 3 |
| 13.3 | 3 | □ | MNS1330S-DIN | 40.5 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 4 |
| | 3 | □ | MNS1330S-DIN-C | 40.5 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 3 |
| | 5 | □ | MNS1330L-DIN | 57.5 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 4 |
| | 5 | □ | MNS1330L-DIN-C | 57.5 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 3 |
| | 8 | □ | MNS1330-L8C | 108.8 | 151.4 | 154.4 | 200.4 | 198 | 2.4 | 14 | 3 |
| | 10 | □ | MNS1330-L10C | 135.4 | 178.4 | 181.4 | 227.4 | 225 | 2.4 | 14 | 3 |
| | 12 | □ | MNS1330-L12C | 162.0 | 205.4 | 208.4 | 254.4 | 252 | 2.4 | 14 | 3 |
| | 15 | □ | MNS1330-L15C | 201.9 | 245.4 | 248.4 | 294.4 | 292 | 2.4 | 14 | 3 |
| | 20 | □ | MNS1330-L20C | 268.4 | 313.4 | 316.4 | 362.4 | 360 | 2.4 | 14 | 3 |
| | 5 | ★ | MNS1330LB | 68.9 | 110.4 | 114.4 | 178.4 | 176 | 2.4 | 14 | 3 |
| | 10 | □ | MNS1330X10DB | 135.4 | 178.4 | 181.4 | 245.4 | 243 | 2.4 | 14 | 3 |
| | 20 | □ | MNS1330X20DB | 268.4 | 313.4 | 316.4 | 380.4 | 378 | 2.4 | 14 | 3 |
| 13.4 | 3 | □ | MNS1340S-DIN | 40.3 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 4 |
| | 3 | □ | MNS1340S-DIN-C | 40.3 | 60.4 | 61.4 | 107.4 | 105 | 2.4 | 14 | 3 |
| | 5 | □ | MNS1340L-DIN | 57.3 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 4 |
| | 5 | □ | MNS1340L-DIN-C | 57.3 | 77.4 | 78.4 | 124.4 | 122 | 2.4 | 14 | 3 |
| | 8 | □ | MNS1340-L8C | 109.6 | 151.4 | 154.4 | 200.4 | 198 | 2.4 | 14 | 3 |
| | 10 | □ | MNS1340-L10C | 136.4 | 178.4 | 181.4 | 227.4 | 225 | 2.4 | 14 | 3 |
| | 12 | □ | MNS1340-L12C | 163.2 | 205.4 | 208.4 | 254.4 | 252 | 2.4 | 14 | 3 |
| | 15 | □ | MNS1340-L15C | 203.4 | 245.4 | 248.4 | 294.4 | 292 | 2.4 | 14 | 3 |
| | 20 | □ | MNS1340-L20C | 270.4 | 313.4 | 316.4 | 362.4 | 360 | 2.4 | 14 | 3 |
| | 5 | ★ | MNS1340LB | 69.4 | 110.4 | 114.4 | 178.4 | 176 | 2.4 | 14 | 3 |
| | 10 | □ | MNS1340X10DB | 136.4 | 178.4 | 181.4 | 245.4 | 243 | 2.4 | 14 | 3 |
| | 20 | □ | MNS1340X20DB | 270.4 | 313.4 | 316.4 | 380.4 | 378 | 2.4 | 14 | 3 |
| 13.5 | 3 | □ | MNS1350S-DIN | 40.2 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 4 |
| | 3 | □ | MNS1350S-DIN-C | 40.2 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 3 |
| | 5 | □ | MNS1350L-DIN | 57.2 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 4 |
| | 5 | ● | MNS1350L-DIN-C | 57.2 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 3 |
| | 8 | □ | MNS1350-L8C | 110.5 | 151.5 | 154.5 | 200.5 | 198 | 2.5 | 14 | 3 |
| | 10 | □ | MNS1350-L10C | 137.5 | 178.5 | 181.5 | 227.5 | 225 | 2.5 | 14 | 3 |
| | 12 | ● | MNS1350-L12C | 164.5 | 205.5 | 208.5 | 254.5 | 252 | 2.5 | 14 | 3 |
| | 15 | □ | MNS1350-L15C | 205.0 | 245.5 | 248.5 | 294.5 | 292 | 2.5 | 14 | 3 |
| | 20 | ● | MNS1350-L20C | 272.5 | 313.5 | 316.5 | 362.5 | 360 | 2.5 | 14 | 3 |
| | 5 | ★ | MNS1350LB | 70.0 | 110.5 | 114.5 | 178.5 | 176 | 2.5 | 14 | 3 |
| | 10 | □ | MNS1350X10DB | 137.5 | 178.5 | 181.5 | 245.5 | 243 | 2.5 | 14 | 3 |
| | 20 | □ | MNS1350X20DB | 272.5 | 313.5 | 316.5 | 380.5 | 378 | 2.5 | 14 | 3 |
| 13.6 | 3 | □ | MNS1360S-DIN | 40.1 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 4 |
| | 3 | □ | MNS1360S-DIN-C | 40.1 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 3 |
| | 5 | □ | MNS1360L-DIN | 57.1 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 4 |
| | 5 | □ | MNS1360L-DIN-C | 57.1 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 3 |
| | 8 | □ | MNS1360-L8C | 111.3 | 156.5 | 159.5 | 205.5 | 203 | 2.5 | 14 | 3 |
| | 10 | □ | MNS1360-L10C | 138.5 | 184.5 | 187.5 | 233.5 | 231 | 2.5 | 14 | 3 |
| | 12 | □ | MNS1360-L12C | 165.7 | 212.5 | 215.5 | 261.5 | 259 | 2.5 | 14 | 3 |
| | 15 | □ | MNS1360-L15C | 206.5 | 254.5 | 257.5 | 303.5 | 301 | 2.5 | 14 | 3 |
| | 20 | □ | MNS1360-L20C | 274.5 | 324.5 | 327.5 | 373.5 | 371 | 2.5 | 14 | 3 |
| | 5 | ★ | MNS1360LB | 70.5 | 114.5 | 114.5 | 178.5 | 176 | 2.5 | 14 | 3 |
| | 10 | □ | MNS1360X10DB | 138.5 | 184.5 | 187.5 | 251.5 | 249 | 2.5 | 14 | 3 |
| | 20 | □ | MNS1360X20DB | 274.5 | 324.5 | 327.5 | 391.5 | 389 | 2.5 | 14 | 3 |

Remarque 1) Veuillez nous contacter pour les géométries qui ne seraient pas dans ce catalogue (e.g. différents diamètres et longueurs peuvent être fabriqués sur demande).

● : Article stocké. ★ : Article standard Japon.

□ : Article non stocké - Fabrication sur commande uniquement.

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.7 | 3 | □ | MNS1370S-DIN | 39.9 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 4 |
| | 3 | □ | MNS1370S-DIN-C | 39.9 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 3 |
| | 5 | □ | MNS1370L-DIN | 56.9 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 4 |
| | 5 | □ | MNS1370L-DIN-C | 56.9 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 3 |
| | 8 | □ | MNS1370-L8C | 112.1 | 156.5 | 159.5 | 205.5 | 203 | 2.5 | 14 | 3 |
| | 10 | □ | MNS1370-L10C | 139.5 | 184.5 | 187.5 | 233.5 | 231 | 2.5 | 14 | 3 |
| | 12 | □ | MNS1370-L12C | 166.9 | 212.5 | 215.5 | 261.5 | 259 | 2.5 | 14 | 3 |
| | 15 | □ | MNS1370-L15C | 208.0 | 254.5 | 257.5 | 303.5 | 301 | 2.5 | 14 | 3 |
| | 20 | □ | MNS1370-L20C | 276.5 | 324.5 | 327.5 | 373.5 | 371 | 2.5 | 14 | 3 |
| | 5 | ★ | MNS1370LB | 71.0 | 114.5 | 114.5 | 178.5 | 176 | 2.5 | 14 | 3 |
| | 10 | □ | MNS1370X10DB | 139.5 | 184.5 | 187.5 | 251.5 | 249 | 2.5 | 14 | 3 |
| | 20 | □ | MNS1370X20DB | 276.5 | 324.5 | 327.5 | 391.5 | 389 | 2.5 | 14 | 3 |
| 13.8 | 3 | □ | MNS1380S-DIN | 39.8 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 4 |
| | 3 | □ | MNS1380S-DIN-C | 39.8 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 3 |
| | 5 | □ | MNS1380L-DIN | 56.8 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 4 |
| | 5 | □ | MNS1380L-DIN-C | 56.8 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 3 |
| | 8 | □ | MNS1380-L8C | 112.9 | 156.5 | 159.5 | 205.5 | 203 | 2.5 | 14 | 3 |
| | 10 | □ | MNS1380-L10C | 140.5 | 184.5 | 187.5 | 233.5 | 231 | 2.5 | 14 | 3 |
| | 12 | □ | MNS1380-L12C | 168.1 | 212.5 | 215.5 | 261.5 | 259 | 2.5 | 14 | 3 |
| | 15 | □ | MNS1380-L15C | 209.5 | 254.5 | 257.5 | 303.5 | 301 | 2.5 | 14 | 3 |
| | 20 | □ | MNS1380-L20C | 278.5 | 324.5 | 327.5 | 373.5 | 371 | 2.5 | 14 | 3 |
| | 5 | ★ | MNS1380LB | 71.5 | 114.5 | 114.5 | 178.5 | 176 | 2.5 | 14 | 3 |
| | 10 | □ | MNS1380X10DB | 140.5 | 184.5 | 187.5 | 251.5 | 249 | 2.5 | 14 | 3 |
| | 20 | □ | MNS1380X20DB | 278.5 | 324.5 | 327.5 | 391.5 | 389 | 2.5 | 14 | 3 |
| 13.9 | 3 | □ | MNS1390S-DIN | 39.7 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 4 |
| | 3 | □ | MNS1390S-DIN-C | 39.7 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 3 |
| | 5 | □ | MNS1390L-DIN | 56.7 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 4 |
| | 5 | □ | MNS1390L-DIN-C | 56.7 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 3 |
| | 8 | □ | MNS1390-L8C | 113.7 | 156.5 | 159.5 | 205.5 | 203 | 2.5 | 14 | 3 |
| | 10 | □ | MNS1390-L10C | 141.5 | 184.5 | 187.5 | 233.5 | 231 | 2.5 | 14 | 3 |
| | 12 | □ | MNS1390-L12C | 169.3 | 212.5 | 215.5 | 261.5 | 259 | 2.5 | 14 | 3 |
| | 15 | □ | MNS1390-L15C | 211.0 | 254.5 | 257.5 | 303.5 | 301 | 2.5 | 14 | 3 |
| | 20 | □ | MNS1390-L20C | 280.5 | 324.5 | 327.5 | 373.5 | 371 | 2.5 | 14 | 3 |
| | 5 | ★ | MNS1390LB | 72.0 | 114.5 | 114.5 | 178.5 | 176 | 2.5 | 14 | 3 |
| | 10 | □ | MNS1390X10DB | 141.5 | 184.5 | 187.5 | 251.5 | 249 | 2.5 | 14 | 3 |
| | 20 | □ | MNS1390X20DB | 280.5 | 324.5 | 327.5 | 391.5 | 389 | 2.5 | 14 | 3 |
| 14.0 | 3 | □ | MNS1400S-DIN | 39.5 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 4 |
| | 3 | □ | MNS1400S-DIN-C | 39.5 | 60.5 | 61.5 | 107.5 | 105 | 2.5 | 14 | 3 |
| | 5 | □ | MNS1400L-DIN | 56.5 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 4 |
| | 5 | ● | MNS1400L-DIN-C | 56.5 | 77.5 | 78.5 | 124.5 | 122 | 2.5 | 14 | 3 |
| | 8 | □ | MNS1400-L8C | 114.5 | 156.5 | 159.5 | 205.5 | 203 | 2.5 | 14 | 3 |
| | 10 | □ | MNS1400-L10C | 142.5 | 184.5 | 187.5 | 233.5 | 231 | 2.5 | 14 | 3 |
| | 12 | ● | MNS1400-L12C | 170.5 | 212.5 | 215.5 | 261.5 | 259 | 2.5 | 14 | 3 |
| | 15 | □ | MNS1400-L15C | 212.5 | 254.5 | 257.5 | 303.5 | 301 | 2.5 | 14 | 3 |
| | 20 | ● | MNS1400-L20C | 282.5 | 324.5 | 327.5 | 373.5 | 371 | 2.5 | 14 | 3 |
| | 5 | ★ | MNS1400LB | 72.5 | 114.5 | 114.5 | 178.5 | 176 | 2.5 | 14 | 3 |
| | 10 | ★ | MNS1400X10DB | 142.5 | 184.5 | 187.5 | 251.5 | 249 | 2.5 | 14 | 3 |
| | 20 | ★ | MNS1400X20DB | 282.5 | 324.5 | 327.5 | 391.5 | 389 | 2.5 | 14 | 3 |

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.1 | 3 | □ | MNS1410S-DIN | 43.4 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 4 |
| | 3 | □ | MNS1410S-DIN-C | 43.4 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 3 |
| | 5 | □ | MNS1410L-DIN | 61.4 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 4 |
| | 5 | □ | MNS1410L-DIN-C | 61.4 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 3 |
| 14.2 | 3 | □ | MNS1420S-DIN | 43.3 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 4 |
| | 3 | □ | MNS1420S-DIN-C | 43.3 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 3 |
| | 5 | □ | MNS1420L-DIN | 61.3 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 4 |
| | 5 | ● | MNS1420L-DIN-C | 61.3 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 3 |
| 14.3 | 3 | □ | MNS1430S-DIN | 43.2 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 4 |
| | 3 | □ | MNS1430S-DIN-C | 43.2 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 3 |
| | 5 | □ | MNS1430L-DIN | 61.2 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 4 |
| | 5 | □ | MNS1430L-DIN-C | 61.2 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 3 |
| 14.4 | 3 | □ | MNS1440S-DIN | 43.0 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 4 |
| | 3 | □ | MNS1440S-DIN-C | 43.0 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 3 |
| | 5 | □ | MNS1440L-DIN | 61.0 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 4 |
| | 5 | □ | MNS1440L-DIN-C | 61.0 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 3 |
| 14.5 | 3 | □ | MNS1450S-DIN | 42.9 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 4 |
| | 3 | □ | MNS1450S-DIN-C | 42.9 | 64.6 | 65.6 | 114.6 | 112 | 2.6 | 16 | 3 |
| | 5 | □ | MNS1450L-DIN | 60.9 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 4 |
| | 5 | ● | MNS1450L-DIN-C | 60.9 | 82.6 | 83.6 | 132.6 | 130 | 2.6 | 16 | 3 |
| 14.6 | 3 | □ | MNS1460S-DIN | 42.8 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 4 |
| | 3 | □ | MNS1460S-DIN-C | 42.8 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 3 |
| | 5 | □ | MNS1460L-DIN | 60.8 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 4 |
| | 5 | □ | MNS1460L-DIN-C | 60.8 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 3 |
| 14.7 | 3 | □ | MNS1470S-DIN | 42.6 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 4 |
| | 3 | □ | MNS1470S-DIN-C | 42.6 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 3 |
| | 5 | □ | MNS1470L-DIN | 60.6 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 4 |
| | 5 | □ | MNS1470L-DIN-C | 60.6 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 3 |
| 14.8 | 3 | □ | MNS1480S-DIN | 42.5 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 4 |
| | 3 | □ | MNS1480S-DIN-C | 42.5 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 3 |
| | 5 | □ | MNS1480L-DIN | 60.5 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 4 |
| | 5 | □ | MNS1480L-DIN-C | 60.5 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 3 |
| 14.9 | 3 | □ | MNS1490S-DIN | 42.4 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 4 |
| | 3 | □ | MNS1490S-DIN-C | 42.4 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 3 |
| | 5 | □ | MNS1490L-DIN | 60.4 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 4 |
| | 5 | □ | MNS1490L-DIN-C | 60.4 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 3 |
| 15.0 | 3 | □ | MNS1500S-DIN | 42.2 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 4 |
| | 3 | □ | MNS1500S-DIN-C | 42.2 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 3 |
| | 5 | □ | MNS1500L-DIN | 60.2 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 4 |
| | 5 | ● | MNS1500L-DIN-C | 60.2 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 3 |
| 15.1 | 3 | □ | MNS1510S-DIN | 42.1 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 4 |
| | 3 | □ | MNS1510S-DIN-C | 42.1 | 64.7 | 65.7 | 114.7 | 112 | 2.7 | 16 | 3 |
| | 5 | □ | MNS1510L-DIN | 60.1 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 4 |
| | 5 | □ | MNS1510L-DIN-C | 60.1 | 82.7 | 83.7 | 132.7 | 130 | 2.7 | 16 | 3 |
| 15.2 | 3 | □ | MNS1520S-DIN | 42.0 | 64.8 | 65.8 | 114.8 | 112 | 2.8 | 16 | 4 |
| | 3 | □ | MNS1520S-DIN-C | 42.0 | 64.8 | 65.8 | 114.8 | 112 | 2.8 | 16 | 3 |
| | 5 | □ | MNS1520L-DIN | 60.0 | 82.8 | 83.8 | 132.8 | 130 | 2.8 | 16 | 4 |
| | 5 | □ | MNS1520L-DIN-C | 60.0 | 82.8 | 83.8 | 132.8 | 130 | 2.8 | 16 | 3 |

CONDITIONS DE COUPE ➤ M120
MÉTHODE D'UTILISATION ➤ M121
DONNÉES TECHNIQUES ➤ P001

# MNS

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.3 | 3 | □ | MNS1530S-DIN | 41.8 | 64.8 | 65.8 | 114.8 | 112 | 2.8 | 16 | 4 |
| | 3 | □ | MNS1530S-DIN-C | 41.8 | 64.8 | 65.8 | 114.8 | 112 | 2.8 | 16 | 3 |
| | 5 | □ | MNS1530L-DIN | 59.8 | 82.8 | 83.8 | 132.8 | 130 | 2.8 | 16 | 4 |
| | 5 | □ | MNS1530L-DIN-C | 59.8 | 82.8 | 83.8 | 132.8 | 130 | 2.8 | 16 | 3 |
| 15.4 | 3 | □ | MNS1540S-DIN | 41.7 | 64.8 | 65.8 | 114.8 | 112 | 2.8 | 16 | 4 |
| | 3 | □ | MNS1540S-DIN-C | 41.7 | 64.8 | 65.8 | 114.8 | 112 | 2.8 | 16 | 3 |
| | 5 | □ | MNS1540L-DIN | 59.7 | 82.8 | 83.8 | 132.8 | 130 | 2.8 | 16 | 4 |
| | 5 | □ | MNS1540L-DIN-C | 59.7 | 82.8 | 83.8 | 132.8 | 130 | 2.8 | 16 | 3 |
| 15.5 | 3 | □ | MNS1550S-DIN | 41.6 | 64.8 | 65.8 | 114.8 | 112 | 2.8 | 16 | 4 |
| | 3 | □ | MNS1550S-DIN-C | 41.6 | 64.8 | 65.8 | 114.8 | 112 | 2.8 | 16 | 3 |
| | 5 | □ | MNS1550L-DIN | 59.6 | 82.8 | 83.8 | 132.8 | 130 | 2.8 | 16 | 4 |
| | 5 | ● | MNS1550L-DIN-C | 59.6 | 82.8 | 83.8 | 132.8 | 130 | 2.8 | 16 | 3 |
| 15.6 | 3 | □ | MNS1560S-DIN | 41.4 | 64.8 | 65.8 | 114.8 | 112 | 2.8 | 16 | 4 |
| | 3 | □ | MNS1560S-DIN-C | 41.4 | 64.8 | 65.8 | 114.8 | 112 | 2.8 | 16 | 3 |
| | 5 | □ | MNS1560L-DIN | 59.4 | 82.8 | 83.8 | 132.8 | 130 | 2.8 | 16 | 4 |
| | 5 | □ | MNS1560L-DIN-C | 59.4 | 82.8 | 83.8 | 132.8 | 130 | 2.8 | 16 | 3 |
| 15.7 | 3 | □ | MNS1570S-DIN | 41.3 | 64.9 | 65.9 | 114.9 | 112 | 2.9 | 16 | 4 |
| | 3 | □ | MNS1570S-DIN-C | 41.3 | 64.9 | 65.9 | 114.9 | 112 | 2.9 | 16 | 3 |
| | 5 | □ | MNS1570L-DIN | 59.3 | 82.9 | 83.9 | 132.9 | 130 | 2.9 | 16 | 4 |
| | 5 | □ | MNS1570L-DIN-C | 59.3 | 82.9 | 83.9 | 132.9 | 130 | 2.9 | 16 | 3 |
| 15.8 | 3 | □ | MNS1580S-DIN | 41.2 | 64.9 | 65.9 | 114.9 | 112 | 2.9 | 16 | 4 |
| | 3 | □ | MNS1580S-DIN-C | 41.2 | 64.9 | 65.9 | 114.9 | 112 | 2.9 | 16 | 3 |
| | 5 | □ | MNS1580L-DIN | 59.2 | 82.9 | 83.9 | 132.9 | 130 | 2.9 | 16 | 4 |
| | 5 | □ | MNS1580L-DIN-C | 59.2 | 82.9 | 83.9 | 132.9 | 130 | 2.9 | 16 | 3 |
| 15.9 | 3 | □ | MNS1590S-DIN | 41.0 | 64.9 | 65.9 | 114.9 | 112 | 2.9 | 16 | 4 |
| | 3 | □ | MNS1590S-DIN-C | 41.0 | 64.9 | 65.9 | 114.9 | 112 | 2.9 | 16 | 3 |
| | 5 | □ | MNS1590L-DIN | 59.0 | 82.9 | 83.9 | 132.9 | 130 | 2.9 | 16 | 4 |
| | 5 | □ | MNS1590L-DIN-C | 59.0 | 82.9 | 83.9 | 132.9 | 130 | 2.9 | 16 | 3 |
| 16.0 | 3 | □ | MNS1600S-DIN | 40.9 | 64.9 | 65.9 | 114.9 | 112 | 2.9 | 16 | 4 |
| | 3 | □ | MNS1600S-DIN-C | 40.9 | 64.9 | 65.9 | 114.9 | 112 | 2.9 | 16 | 3 |
| | 5 | □ | MNS1600L-DIN | 58.9 | 82.9 | 83.9 | 132.9 | 130 | 2.9 | 16 | 4 |
| | 5 | ● | MNS1600L-DIN-C | 58.9 | 82.9 | 83.9 | 132.9 | 130 | 2.9 | 16 | 3 |
| 16.1 | 3 | □ | MNS1610S-DIN | 48.8 | 72.9 | 73.9 | 122.9 | 120 | 2.9 | 18 | 4 |
| | 3 | □ | MNS1610S-DIN-C | 48.8 | 72.9 | 73.9 | 122.9 | 120 | 2.9 | 18 | 3 |
| | 5 | □ | MNS1610L-DIN | 68.8 | 92.9 | 93.9 | 142.9 | 140 | 2.9 | 18 | 4 |
| | 5 | □ | MNS1610L-DIN-C | 68.8 | 92.9 | 93.9 | 142.9 | 140 | 2.9 | 18 | 3 |
| 16.2 | 3 | □ | MNS1620S-DIN | 48.6 | 72.9 | 73.9 | 122.9 | 120 | 2.9 | 18 | 4 |
| | 3 | □ | MNS1620S-DIN-C | 48.6 | 72.9 | 73.9 | 122.9 | 120 | 2.9 | 18 | 3 |
| | 5 | □ | MNS1620L-DIN | 68.6 | 92.9 | 93.9 | 142.9 | 140 | 2.9 | 18 | 4 |
| | 5 | □ | MNS1620L-DIN-C | 68.6 | 92.9 | 93.9 | 142.9 | 140 | 2.9 | 18 | 3 |
| 16.3 | 3 | □ | MNS1630S-DIN | 48.5 | 73.0 | 74.0 | 123.0 | 120 | 3.0 | 18 | 4 |
| | 3 | □ | MNS1630S-DIN-C | 48.5 | 73.0 | 74.0 | 123.0 | 120 | 3.0 | 18 | 3 |
| | 5 | □ | MNS1630L-DIN | 68.5 | 93.0 | 94.0 | 143.0 | 140 | 3.0 | 18 | 4 |
| | 5 | □ | MNS1630L-DIN-C | 68.5 | 93.0 | 94.0 | 143.0 | 140 | 3.0 | 18 | 3 |
| 16.4 | 3 | □ | MNS1640S-DIN | 48.4 | 73.0 | 74.0 | 123.0 | 120 | 3.0 | 18 | 4 |
| | 3 | □ | MNS1640S-DIN-C | 48.4 | 73.0 | 74.0 | 123.0 | 120 | 3.0 | 18 | 3 |
| | 5 | □ | MNS1640L-DIN | 68.4 | 93.0 | 94.0 | 143.0 | 140 | 3.0 | 18 | 4 |
| | 5 | □ | MNS1640L-DIN-C | 68.4 | 93.0 | 94.0 | 143.0 | 140 | 3.0 | 18 | 3 |
| 16.5 | 3 | □ | MNS1650S-DIN | 48.3 | 73.0 | 74.0 | 123.0 | 120 | 3.0 | 18 | 4 |
| | 3 | □ | MNS1650S-DIN-C | 48.3 | 73.0 | 74.0 | 123.0 | 120 | 3.0 | 18 | 3 |
| | 5 | □ | MNS1650L-DIN | 68.3 | 93.0 | 94.0 | 143.0 | 140 | 3.0 | 18 | 4 |
| | 5 | ● | MNS1650L-DIN-C | 68.3 | 93.0 | 94.0 | 143.0 | 140 | 3.0 | 18 | 3 |
| 16.6 | 3 | □ | MNS1660S-DIN | 48.1 | 73.0 | 74.0 | 123.0 | 120 | 3.0 | 18 | 4 |
| | 3 | □ | MNS1660S-DIN-C | 48.1 | 73.0 | 74.0 | 123.0 | 120 | 3.0 | 18 | 3 |
| | 5 | □ | MNS1660L-DIN | 68.1 | 93.0 | 94.0 | 143.0 | 140 | 3.0 | 18 | 4 |
| | 5 | □ | MNS1660L-DIN-C | 68.1 | 93.0 | 94.0 | 143.0 | 140 | 3.0 | 18 | 3 |
| 16.7 | 3 | □ | MNS1670S-DIN | 48.0 | 73.0 | 74.0 | 123.0 | 120 | 3.0 | 18 | 4 |
| | 3 | □ | MNS1670S-DIN-C | 48.0 | 73.0 | 74.0 | 123.0 | 120 | 3.0 | 18 | 3 |
| | 5 | □ | MNS1670L-DIN | 68.0 | 93.0 | 94.0 | 143.0 | 140 | 3.0 | 18 | 4 |
| | 5 | □ | MNS1670L-DIN-C | 68.0 | 93.0 | 94.0 | 143.0 | 140 | 3.0 | 18 | 3 |
| 16.8 | 3 | □ | MNS1680S-DIN | 47.9 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 4 |
| | 3 | □ | MNS1680S-DIN-C | 47.9 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 3 |
| | 5 | □ | MNS1680L-DIN | 67.9 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 4 |
| | 5 | □ | MNS1680L-DIN-C | 67.9 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 3 |
| 16.9 | 3 | □ | MNS1690S-DIN | 47.7 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 4 |
| | 3 | □ | MNS1690S-DIN-C | 47.7 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 3 |
| | 5 | □ | MNS1690L-DIN | 67.7 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 4 |
| | 5 | □ | MNS1690L-DIN-C | 67.7 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 3 |
| 17.0 | 3 | □ | MNS1700S-DIN | 47.6 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 4 |
| | 3 | □ | MNS1700S-DIN-C | 47.6 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 3 |
| | 5 | □ | MNS1700L-DIN | 67.6 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 4 |
| | 5 | ● | MNS1700L-DIN-C | 67.6 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 3 |
| 17.1 | 3 | □ | MNS1710S-DIN | 47.5 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 4 |
| | 3 | □ | MNS1710S-DIN-C | 47.5 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 3 |
| | 5 | □ | MNS1710L-DIN | 67.5 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 4 |
| | 5 | □ | MNS1710L-DIN-C | 67.5 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 3 |
| 17.2 | 3 | □ | MNS1720S-DIN | 47.3 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 4 |
| | 3 | □ | MNS1720S-DIN-C | 47.3 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 3 |
| | 5 | □ | MNS1720L-DIN | 67.3 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 4 |
| | 5 | □ | MNS1720L-DIN-C | 67.3 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 3 |
| 17.3 | 3 | □ | MNS1730S-DIN | 47.2 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 4 |
| | 3 | □ | MNS1730S-DIN-C | 47.2 | 73.1 | 74.1 | 123.1 | 120 | 3.1 | 18 | 3 |
| | 5 | □ | MNS1730L-DIN | 67.2 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 4 |
| | 5 | □ | MNS1730L-DIN-C | 67.2 | 93.1 | 94.1 | 143.1 | 140 | 3.1 | 18 | 3 |
| 17.4 | 3 | □ | MNS1740S-DIN | 47.1 | 73.2 | 74.2 | 123.2 | 120 | 3.2 | 18 | 4 |
| | 3 | □ | MNS1740S-DIN-C | 47.1 | 73.2 | 74.2 | 123.2 | 120 | 3.2 | 18 | 3 |
| | 5 | □ | MNS1740L-DIN | 67.1 | 93.2 | 94.2 | 143.2 | 140 | 3.2 | 18 | 4 |
| | 5 | □ | MNS1740L-DIN-C | 67.1 | 93.2 | 94.2 | 143.2 | 140 | 3.2 | 18 | 3 |
| 17.5 | 3 | □ | MNS1750S-DIN | 46.9 | 73.2 | 74.2 | 123.2 | 120 | 3.2 | 18 | 4 |
| | 3 | □ | MNS1750S-DIN-C | 46.9 | 73.2 | 74.2 | 123.2 | 120 | 3.2 | 18 | 3 |
| | 5 | □ | MNS1750L-DIN | 66.9 | 93.2 | 94.2 | 143.2 | 140 | 3.2 | 18 | 4 |
| | 5 | ● | MNS1750L-DIN-C | 66.9 | 93.2 | 94.2 | 143.2 | 140 | 3.2 | 18 | 3 |
| 17.6 | 3 | □ | MNS1760S-DIN | 46.8 | 73.2 | 74.2 | 123.2 | 120 | 3.2 | 18 | 4 |
| | 3 | □ | MNS1760S-DIN-C | 46.8 | 73.2 | 74.2 | 123.2 | 120 | 3.2 | 18 | 3 |
| | 5 | □ | MNS1760L-DIN | 66.8 | 93.2 | 94.2 | 143.2 | 140 | 3.2 | 18 | 4 |
| | 5 | □ | MNS1760L-DIN-C | 66.8 | 93.2 | 94.2 | 143.2 | 140 | 3.2 | 18 | 3 |

Remarque 1) Veuillez nous contacter pour les géométries qui ne seraient pas dans ce catalogue (e.g. différents diamètres et longueurs peuvent être fabriqués sur demande).

● : Article stocké. □ : Article non stocké - Fabrication sur commande uniquement.

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.7 | 3 | □ | MNS1770S-DIN | 46.7 | 73.2 | 74.2 | 123.2 | 120 | 3.2 | 18 | 4 |
| | 3 | □ | MNS1770S-DIN-C | 46.7 | 73.2 | 74.2 | 123.2 | 120 | 3.2 | 18 | 3 |
| | 5 | □ | MNS1770L-DIN | 66.7 | 93.2 | 94.2 | 143.2 | 140 | 3.2 | 18 | 4 |
| | 5 | □ | MNS1770L-DIN-C | 66.7 | 93.2 | 94.2 | 143.2 | 140 | 3.2 | 18 | 3 |
| 17.8 | 3 | □ | MNS1780S-DIN | 46.5 | 73.2 | 74.2 | 123.2 | 120 | 3.2 | 18 | 4 |
| | 3 | □ | MNS1780S-DIN-C | 46.5 | 73.2 | 74.2 | 123.2 | 120 | 3.2 | 18 | 3 |
| | 5 | □ | MNS1780L-DIN | 66.5 | 93.2 | 94.2 | 143.2 | 140 | 3.2 | 18 | 4 |
| | 5 | □ | MNS1780L-DIN-C | 66.5 | 93.2 | 94.2 | 143.2 | 140 | 3.2 | 18 | 3 |
| 17.9 | 3 | □ | MNS1790S-DIN | 46.4 | 73.3 | 74.3 | 123.3 | 120 | 3.3 | 18 | 4 |
| | 3 | □ | MNS1790S-DIN-C | 46.4 | 73.3 | 74.3 | 123.3 | 120 | 3.3 | 18 | 3 |
| | 5 | □ | MNS1790L-DIN | 66.4 | 93.3 | 94.3 | 143.3 | 140 | 3.3 | 18 | 4 |
| | 5 | □ | MNS1790L-DIN-C | 66.4 | 93.3 | 94.3 | 143.3 | 140 | 3.3 | 18 | 3 |
| 18.0 | 3 | □ | MNS1800S-DIN | 46.3 | 73.3 | 74.3 | 123.3 | 120 | 3.3 | 18 | 4 |
| | 3 | □ | MNS1800S-DIN-C | 46.3 | 73.3 | 74.3 | 123.3 | 120 | 3.3 | 18 | 3 |
| | 5 | □ | MNS1800L-DIN | 66.3 | 93.3 | 94.3 | 143.3 | 140 | 3.3 | 18 | 4 |
| | 5 | ● | MNS1800L-DIN-C | 66.3 | 93.3 | 94.3 | 143.3 | 140 | 3.3 | 18 | 3 |
| 18.1 | 3 | □ | MNS1810S-DIN | 52.1 | 79.3 | 80.3 | 131.3 | 128 | 3.3 | 20 | 4 |
| | 3 | □ | MNS1810S-DIN-C | 52.1 | 79.3 | 80.3 | 131.3 | 128 | 3.3 | 20 | 3 |
| | 5 | □ | MNS1810L-DIN | 74.1 | 101.3 | 102.3 | 153.3 | 150 | 3.3 | 20 | 4 |
| | 5 | □ | MNS1810L-DIN-C | 74.1 | 101.3 | 102.3 | 153.3 | 150 | 3.3 | 20 | 3 |
| 18.2 | 3 | □ | MNS1820S-DIN | 52.0 | 79.3 | 80.3 | 131.3 | 128 | 3.3 | 20 | 4 |
| | 3 | □ | MNS1820S-DIN-C | 52.0 | 79.3 | 80.3 | 131.3 | 128 | 3.3 | 20 | 3 |
| | 5 | □ | MNS1820L-DIN | 74.0 | 101.3 | 102.3 | 153.3 | 150 | 3.3 | 20 | 4 |
| | 5 | □ | MNS1820L-DIN-C | 74.0 | 101.3 | 102.3 | 153.3 | 150 | 3.3 | 20 | 3 |
| 18.3 | 3 | □ | MNS1830S-DIN | 51.9 | 79.3 | 80.3 | 131.3 | 128 | 3.3 | 20 | 4 |
| | 3 | □ | MNS1830S-DIN-C | 51.9 | 79.3 | 80.3 | 131.3 | 128 | 3.3 | 20 | 3 |
| | 5 | □ | MNS1830L-DIN | 73.9 | 101.3 | 102.3 | 153.3 | 150 | 3.3 | 20 | 4 |
| | 5 | □ | MNS1830L-DIN-C | 73.9 | 101.3 | 102.3 | 153.3 | 150 | 3.3 | 20 | 3 |
| 18.4 | 3 | □ | MNS1840S-DIN | 51.7 | 79.3 | 80.3 | 131.3 | 128 | 3.3 | 20 | 4 |
| | 3 | □ | MNS1840S-DIN-C | 51.7 | 79.3 | 80.3 | 131.3 | 128 | 3.3 | 20 | 3 |
| | 5 | □ | MNS1840L-DIN | 73.7 | 101.3 | 102.3 | 153.3 | 150 | 3.3 | 20 | 4 |
| | 5 | □ | MNS1840L-DIN-C | 73.7 | 101.3 | 102.3 | 153.3 | 150 | 3.3 | 20 | 3 |
| 18.5 | 3 | □ | MNS1850S-DIN | 51.6 | 79.4 | 80.4 | 131.4 | 128 | 3.4 | 20 | 4 |
| | 3 | □ | MNS1850S-DIN-C | 51.6 | 79.4 | 80.4 | 131.4 | 128 | 3.4 | 20 | 3 |
| | 5 | □ | MNS1850L-DIN | 73.6 | 101.4 | 102.4 | 153.4 | 150 | 3.4 | 20 | 4 |
| | 5 | ● | MNS1850L-DIN-C | 73.6 | 101.4 | 102.4 | 153.4 | 150 | 3.4 | 20 | 3 |
| 18.6 | 3 | □ | MNS1860S-DIN | 51.5 | 79.4 | 80.4 | 131.4 | 128 | 3.4 | 20 | 4 |
| | 3 | □ | MNS1860S-DIN-C | 51.5 | 79.4 | 80.4 | 131.4 | 128 | 3.4 | 20 | 3 |
| | 5 | □ | MNS1860L-DIN | 73.5 | 101.4 | 102.4 | 153.4 | 150 | 3.4 | 20 | 4 |
| | 5 | □ | MNS1860L-DIN-C | 73.5 | 101.4 | 102.4 | 153.4 | 150 | 3.4 | 20 | 3 |
| 18.7 | 3 | □ | MNS1870S-DIN | 51.4 | 79.4 | 80.4 | 131.4 | 128 | 3.4 | 20 | 4 |
| | 3 | □ | MNS1870S-DIN-C | 51.4 | 79.4 | 80.4 | 131.4 | 128 | 3.4 | 20 | 3 |
| | 5 | □ | MNS1870L-DIN | 73.4 | 101.4 | 102.4 | 153.4 | 150 | 3.4 | 20 | 4 |
| | 5 | □ | MNS1870L-DIN-C | 73.4 | 101.4 | 102.4 | 153.4 | 150 | 3.4 | 20 | 3 |
| 18.8 | 3 | □ | MNS1880S-DIN | 51.2 | 79.4 | 80.4 | 131.4 | 128 | 3.4 | 20 | 4 |
| | 3 | □ | MNS1880S-DIN-C | 51.2 | 79.4 | 80.4 | 131.4 | 128 | 3.4 | 20 | 3 |
| | 5 | □ | MNS1880L-DIN | 73.2 | 101.4 | 102.4 | 153.4 | 150 | 3.4 | 20 | 4 |
| | 5 | □ | MNS1880L-DIN-C | 73.2 | 101.4 | 102.4 | 153.4 | 150 | 3.4 | 20 | 3 |

| DC (mm) | Rapport (L/D) | TF15 | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.9 | 3 | □ | MNS1890S-DIN | 51.1 | 79.4 | 80.4 | 131.4 | 128 | 3.4 | 20 | 4 |
| | 3 | □ | MNS1890S-DIN-C | 51.1 | 79.4 | 80.4 | 131.4 | 128 | 3.4 | 20 | 3 |
| | 5 | □ | MNS1890L-DIN | 73.1 | 101.4 | 102.4 | 153.4 | 150 | 3.4 | 20 | 4 |
| | 5 | □ | MNS1890L-DIN-C | 73.1 | 101.4 | 102.4 | 153.4 | 150 | 3.4 | 20 | 3 |
| 19.0 | 3 | □ | MNS1900S-DIN | 51.0 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 4 |
| | 3 | □ | MNS1900S-DIN-C | 51.0 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 3 |
| | 5 | □ | MNS1900L-DIN | 73.0 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 4 |
| | 5 | □ | MNS1900L-DIN-C | 73.0 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 3 |
| 19.1 | 3 | □ | MNS1910S-DIN | 50.8 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 4 |
| | 3 | □ | MNS1910S-DIN-C | 50.8 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 3 |
| | 5 | □ | MNS1910L-DIN | 72.8 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 4 |
| | 5 | □ | MNS1910L-DIN-C | 72.8 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 3 |
| 19.2 | 3 | □ | MNS1920S-DIN | 50.7 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 4 |
| | 3 | □ | MNS1920S-DIN-C | 50.7 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 3 |
| | 5 | □ | MNS1920L-DIN | 72.7 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 4 |
| | 5 | □ | MNS1920L-DIN-C | 72.7 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 3 |
| 19.3 | 3 | □ | MNS1930S-DIN | 50.6 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 4 |
| | 5 | □ | MNS1930L-DIN | 72.6 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 4 |
| | 5 | □ | MNS1930L-DIN-C | 72.6 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 3 |
| 19.4 | 3 | □ | MNS1940S-DIN | 50.4 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 4 |
| | 3 | □ | MNS1940S-DIN-C | 50.4 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 3 |
| | 5 | □ | MNS1940L-DIN | 72.4 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 4 |
| | 5 | □ | MNS1940L-DIN-C | 72.4 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 3 |
| 19.5 | 3 | □ | MNS1950S-DIN | 50.3 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 4 |
| | 3 | □ | MNS1950S-DIN-C | 50.3 | 79.5 | 80.5 | 131.5 | 128 | 3.5 | 20 | 3 |
| | 5 | □ | MNS1950L-DIN | 72.3 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 4 |
| | 5 | ● | MNS1950L-DIN-C | 72.3 | 101.5 | 102.5 | 153.5 | 150 | 3.5 | 20 | 3 |
| 19.6 | 3 | □ | MNS1960S-DIN | 50.2 | 79.6 | 80.6 | 131.6 | 128 | 3.6 | 20 | 4 |
| | 3 | □ | MNS1960S-DIN-C | 50.2 | 79.6 | 80.6 | 131.6 | 128 | 3.6 | 20 | 3 |
| | 5 | □ | MNS1960L-DIN | 72.2 | 101.6 | 102.6 | 153.6 | 150 | 3.6 | 20 | 4 |
| | 5 | □ | MNS1960L-DIN-C | 72.2 | 101.6 | 102.6 | 153.6 | 150 | 3.6 | 20 | 3 |
| 19.7 | 3 | □ | MNS1970S-DIN | 50.0 | 79.6 | 80.6 | 131.6 | 128 | 3.6 | 20 | 4 |
| | 3 | □ | MNS1970S-DIN-C | 50.0 | 79.6 | 80.6 | 131.6 | 128 | 3.6 | 20 | 3 |
| | 5 | □ | MNS1970L-DIN | 72.0 | 101.6 | 102.6 | 153.6 | 150 | 3.6 | 20 | 4 |
| | 5 | □ | MNS1970L-DIN-C | 72.0 | 101.6 | 102.6 | 153.6 | 150 | 3.6 | 20 | 3 |
| 19.8 | 3 | □ | MNS1980S-DIN | 49.9 | 79.6 | 80.6 | 131.6 | 128 | 3.6 | 20 | 4 |
| | 3 | □ | MNS1980S-DIN-C | 49.9 | 79.6 | 80.6 | 131.6 | 128 | 3.6 | 20 | 3 |
| | 5 | □ | MNS1980L-DIN | 71.9 | 101.6 | 102.6 | 153.6 | 150 | 3.6 | 20 | 4 |
| | 5 | □ | MNS1980L-DIN-C | 71.9 | 101.6 | 102.6 | 153.6 | 150 | 3.6 | 20 | 3 |
| 19.9 | 3 | □ | MNS1990S-DIN | 49.8 | 79.6 | 80.6 | 131.6 | 128 | 3.6 | 20 | 4 |
| | 3 | □ | MNS1990S-DIN-C | 49.8 | 79.6 | 80.6 | 131.6 | 128 | 3.6 | 20 | 3 |
| | 5 | □ | MNS1990L-DIN | 71.8 | 101.6 | 102.6 | 153.6 | 150 | 3.6 | 20 | 4 |
| | 5 | □ | MNS1990L-DIN-C | 71.8 | 101.6 | 102.6 | 153.6 | 150 | 3.6 | 20 | 3 |
| 20.0 | 3 | □ | MNS2000S-DIN | 49.6 | 79.6 | 80.6 | 131.6 | 128 | 3.6 | 20 | 4 |
| | 3 | □ | MNS2000S-DIN-C | 49.6 | 79.6 | 80.6 | 131.6 | 128 | 3.6 | 20 | 3 |
| | 5 | □ | MNS2000L-DIN | 71.6 | 101.6 | 102.6 | 153.6 | 150 | 3.6 | 20 | 4 |
| | 5 | ● | MNS2000L-DIN-C | 71.6 | 101.6 | 102.6 | 153.6 | 150 | 3.6 | 20 | 3 |

CONDITIONS DE COUPE ➤ M120
MÉTHODE D'UTILISATION ➤ M121
DONNÉES TECHNIQUES ➤ P001

# MNS

## CONDITIONS DE COUPE RECOMMANDÉES

### ■ Rapport L/D = 3, 5, 8 (Forets LB, S-DIN, S-DIN-C, L-DIN, L-DIN-C, L8C)

| Matière | N | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Alliage aluminium (Si<5%) | | | Alliage aluminium (5%≤Si≤10%) | | | Alliage aluminium (Si>10%) | | |
| Diamètre foret **DC** (mm) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | |
| **3.2** | 11900 | 0.1 | (0.11—0.16) | 11900 | 0.15 | (0.16—0.21) | 11900 | 0.15 | (0.16—0.21) |
| **4.0** | 9500 | 0.15 | (0.13—0.20) | 9500 | 0.2 | (0.20—0.27) | 9500 | 0.2 | (0.20—0.27) |
| **5.0** | 7600 | 0.2 | (0.17—0.25) | 7600 | 0.25 | (0.25—0.33) | 7600 | 0.25 | (0.25—0.33) |
| **6.3** | 7500 | 0.25 | (0.21—0.32) | 7500 | 0.35 | (0.32—0.42) | 7500 | 0.35 | (0.32—0.42) |
| **8.0** | 5900 | 0.3 | (0.27—0.40) | 5900 | 0.45 | (0.40—0.53) | 5900 | 0.45 | (0.40—0.53) |
| **10.0** | 4700 | 0.4 | (0.33—0.50) | 4700 | 0.55 | (0.50—0.67) | 4700 | 0.55 | (0.50—0.67) |
| **12.0** | 5300 | 0.5 | (0.40—0.60) | 5300 | 0.7 | (0.60—0.80) | 5300 | 0.7 | (0.60—0.80) |
| **14.0** | 4500 | 0.5 | (0.40—0.60) | 4500 | 0.7 | (0.60—0.80) | 4500 | 0.7 | (0.60—0.80) |
| **16.0** | 4000 | 0.5 | (0.40—0.60) | 4000 | 0.7 | (0.60—0.80) | 4000 | 0.7 | (0.60—0.80) |
| **18.0** | 3500 | 0.5 | (0.40—0.60) | 3500 | 0.7 | (0.60—0.80) | 3500 | 0.7 | (0.60—0.80) |
| **20.0** | 3200 | 0.5 | (0.40—0.60) | 3200 | 0.7 | (0.60—0.80) | 3200 | 0.7 | (0.60—0.80) |

Remarque 1) En utilisant un foret d'une longueur de plus de L/D 10, il est recommandé au préalable de faire un trou pilote.
(Sans trou pilote, le foret peut casser.)
Remarque 2) Pour le perçage de l'avant-trou, les forets MNS, MAE-MB ou MAS-MB Mitsubishi sont recommandés.

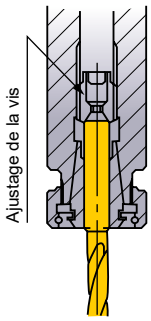
### ■ Rapport L/D = 10, 12, 15, 20, 25, 30 (Forets X10DB, X20DB, X30DB, L10C, L12C, L15C, L20C, L25C, L30C)

| Matière | N | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Alliage aluminium (Si<5%) | | | Alliage aluminium (5%≤Si≤10%) | | | Alliage aluminium (Si>10%) | | |
| Diamètre foret **DC** (mm) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | |
| **3.2** | 8900 | 0.1 | (0.11—0.16) | 8900 | 0.15 | (0.16—0.21) | 8900 | 0.15 | (0.16—0.21) |
| **4.0** | 7100 | 0.15 | (0.13—0.20) | 7100 | 0.2 | (0.20—0.27) | 7100 | 0.2 | (0.20—0.27) |
| **5.0** | 5700 | 0.2 | (0.17—0.25) | 5700 | 0.25 | (0.25—0.33) | 5700 | 0.25 | (0.25—0.33) |
| **6.3** | 6000 | 0.25 | (0.21—0.32) | 6000 | 0.35 | (0.32—0.42) | 6000 | 0.35 | (0.32—0.42) |
| **8.0** | 4700 | 0.3 | (0.27—0.40) | 4700 | 0.45 | (0.40—0.53) | 4700 | 0.45 | (0.40—0.53) |
| **10.0** | 3800 | 0.4 | (0.33—0.50) | 3800 | 0.55 | (0.50—0.67) | 3800 | 0.55 | (0.50—0.67) |
| **12.0** | 4200 | 0.5 | (0.40—0.60) | 4200 | 0.7 | (0.60—0.80) | 4200 | 0.7 | (0.60—0.80) |
| **14.0** | 3600 | 0.5 | (0.40—0.60) | 3600 | 0.7 | (0.60—0.80) | 3600 | 0.7 | (0.60—0.80) |
| **16.0** | 3200 | 0.5 | (0.40—0.60) | 3200 | 0.7 | (0.60—0.80) | 3200 | 0.7 | (0.60—0.80) |
| **18.0** | 2800 | 0.5 | (0.40—0.60) | 2800 | 0.7 | (0.60—0.80) | 2800 | 0.7 | (0.60—0.80) |
| **20.0** | 2500 | 0.5 | (0.40—0.60) | 2500 | 0.7 | (0.60—0.80) | 2500 | 0.7 | (0.60—0.80) |

Remarque 1) En utilisant un foret d'une longueur de plus de L/D 10, il est recommandé au préalable de faire un trou pilote.
(Sans trou pilote, le foret peut casser.)
Remarque 2) Pour le perçage de l'avant-trou, les forets MNS, MAE-MB ou MAS-MB Mitsubishi sont recommandés.

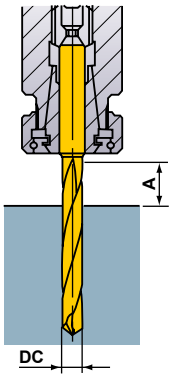
## ■ GUIDE D'UTILISATION POUR LES FORETS MNS (L/D 3, 5, 8)

### Fixation du foret



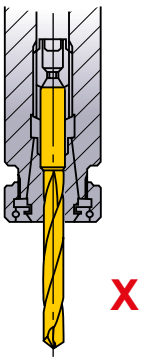

Les attachements de type à pince serrent le foret solidement.

### Longueur du foret




A : ≥ DC x 1.5

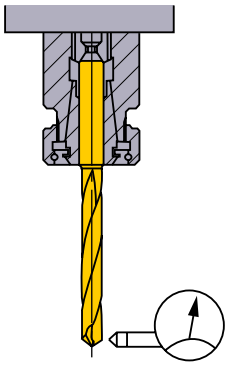
### Installation du foret



X

Ne pas serrer sur les goujures.

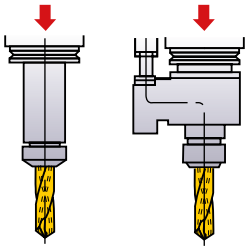
### Tolérance d'installation



Concentricité ≤ 0.03mm

### Méthode d'arrosage (MNS)

Arrosage par la broche | Arrosage par joint tournant



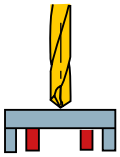
La pression d'arrosage est approximativement.
5 bar—70 bar

### Liquide réfrigérant : manipulation

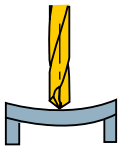
<Type **MNS**>

1) Des particules de saleté ou de poussière dans du liquide de refroidissement ancien peuvent bloquer le trou d'huile et perturber l'efficacité du débit. Il est recommandé de remplacer régulièrement le liquide de refroidissement.
2) Dans le trou d'huile, de petits copeaux peuvent rester coincés en travers. Pour cette raison, utilisez un filtre pour éviter ce problème. En utilisant des forets de petit diamètre, il est recommandé d'utiliser un filtre à maille fine.

### Pièce mince

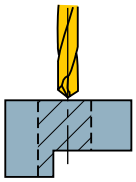


**OK**
Rigidifier le montage



**X**
En cas d'effort et de déformation

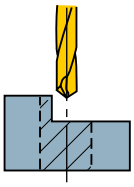
### Coupe interrompue



**Un procédé**

**OK**

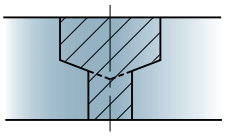
①Diminuer l'avance pour percer une surface interrompue.



**Usinage requis au préalable**

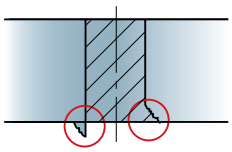
①Utiliser une fraise 2 tailles sur une surface irrégulière avant de percer avec le foret.

### Trous étagés



①Divisez l'usinage en deux processus.
②Percer le plus grand trou en premier.
*Des outils de chanfreinage et de lamage plan peuvent être fabriqués sur demande.

### Bavures et écaillages sur pièces



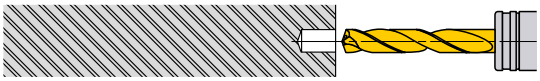
①Diminuez l'avance lorsque vous avez débouché.
②Intégrer un chanfrein.
③Changer l'angle de pointe.

# MNS

## ■ GUIDE D'UTILISATION POUR LES FORETS MNS SUPER LONG (L/D 10, 12, 15, 20, 25, 30)

## TROUS BORGNES

### ■ 1. Perçage du trou pilote

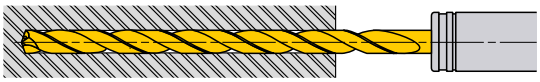


①Utilisation d'un foret avec un angle de pointe plus large (plus obtus) comme la gamme Super Long. Les forets Mitsubishi MNS, MAE-MB ou MAS-MB sont recommandés.
②Utiliser un foret de même diamètre que le foret de centrage.
③Profondeur de perçage : environ 1DC ou plus.
(Adaptez la profondeur du trou pilote à la longueur du foret super long.)

### ■ 2. Introduction du foret long

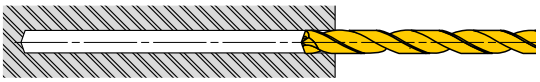
①Introduction dans l'avant-trou à faible vitesse de rotation (vitesse de coupe 20 à 30 m/min, avance 0.2 à 0.3 mm/tour)
②Faire une temporisation avec le foret entre 1 et 3 mm avant le fond de l'avant-trou.

### ■ 3. Perçage profond



①Démarrer le perçage aux vitesses et avances recommandées sans cycle de brise-copeaux (avance continue).

### ■ 4. Retrait du foret

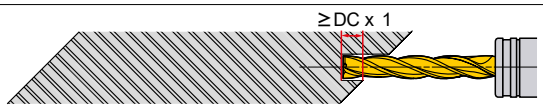


①1—2mm afin la sortie du foret du trou, réduire la vitesse de coupe. (Vitesse de coupe entre 20—30m/min)
②Sortir le foret jusqu'à hauteur de l'avant-trou et modifier l'avance à 3000mm/min.
③Sortie du foret à une vitesse de coupe entre 20—30m/min et à une avance entre 0.2—0.3mm/tour.

## ATTAQUE OBLIQUE ET TROUS DÉBOUCHANTS

●Percer des surfaces inclinées ou irrégulières, ou des trous débouchants

### ■ 1. Faire un méplat

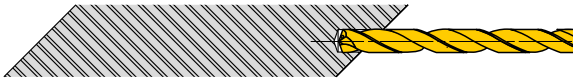



①Pour réaliser un trou profond sur une surface oblique, veuillez réaliser un lamage avec un foret à fond plat de type MFE.
②Vérifier le diamètre du lamage.
③Profondeur de lamage : env. 1x DC.

### ■ 2. Perçage du trou pilote

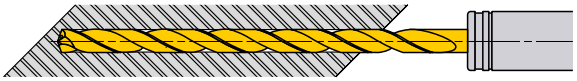
①Utilisation d'un foret avec un angle de pointe plus large (plus obtus) comme la gamme Super Long. Les forets Mitsubishi MNS, MAE-MB ou MAS-MB sont recommandés.
②Utiliser un foret de même diamètre que le foret de centrage.
③Profondeur de perçage : environ 1DC ou plus.
(Adaptez la profondeur du trou pilote à la longueur du foret super long.)

### ■ 3. Introduction du foret long



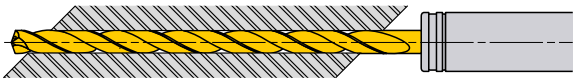
①Introduction dans l'avant-trou à faible vitesse de rotation (vitesse de coupe 20 à 30 m/min, avance 0.2 à 0.3 mm/tour)
②Faire une temporisation avec le foret entre 1 et 3 mm avant le fond de l'avant-trou.

### ■ 4. Perçage profond



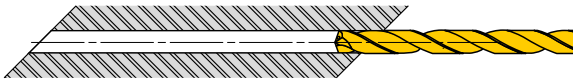
①Démarrer le perçage aux vitesses et avances recommandées sans cycle de brise-copeaux (avance continue).

### ■ 5. Déboucher



①Quand on perce des trous débouchants, l'arête de coupe peut être endommagée.
②Une avance de 0.05mm—0.1mm/tour est recommandée.

### ■ 6. Retrait du foret



①Retirer le foret à la profondeur du point de départ de l'avant-trou avec une avance de 3000 mm/min.
②Ensuite, terminer le trou avec une vitesse de coupe de 20 à 30 m/min et une avance de 0.2 à 0.3 mm/tour.

# Notes

# PERÇAGE (CARBURE MONOBLOC)

# MAE,MAS

- Particulièrement recommandé dans le perçage de l'aluminium et de la fonte.
- Trou de précision.
- Avant-trou pour taraudage par déformation.
- Trous d'arrosage internes hélicoïdaux pour l'usinage à haute vitesse. (Type MAS)

UWC | MAS uniquement | 140° | N

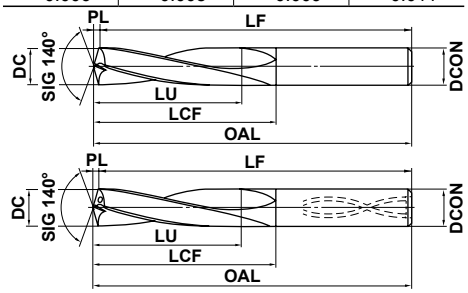
P | M | **K** | **N** | S | H

## MAE (Arrosage extérieur)

## MAS (Arrosage intérieur)

Remarque 1) Les forets MAS supérieur $\phi$> 5.0mm ont une cavité à l'arrière de la queue (arrosage).
Remarque 2) MAE/MAS forets recommandés pour l'utilisation avec attachements de frettage.

| DC=3 | 3<DC≤6 | 6<DC≤10 | 10<DC≤16 |
|---|---|---|---|
| +0.005<br>0 | +0.005<br>0 | +0.005<br>0 | +0.005<br>0 |
| 0<br>−0.006 | 0<br>−0.008 | 0<br>−0.009 | 0<br>−0.011 |




| DC (mm) | Rapport (L/D) | Arrosage (Int./Ext.) | HTi10 | Référence | Dimensions (mm) LU | LCF | OAL | LF | PL | DCON |
|---|---|---|---|---|---|---|---|---|---|---|
| 3.0 | 3 | Ext. | ★ | MAE0300MB | 9.5 | 21.5 | 61.5 | 61 | 0.5 | 3 |
| | 3 | Int. | □ | MAS0300MB | 9.5 | 21.5 | 61.5 | 61 | 0.5 | 3 |
| | 6 | Int. | ● | MAS0300LB | 18.5 | 30.5 | 70.5 | 70 | 0.5 | 3 |
| 3.1 | 3 | Ext. | ★ | MAE0310MB | 9.9 | 24.6 | 64.6 | 64 | 0.6 | 4 |
| | 3 | Int. | □ | MAS0310MB | 9.9 | 24.6 | 64.6 | 64 | 0.6 | 4 |
| | 6 | Int. | ★ | MAS0310LB | 19.2 | 34.6 | 74.6 | 74 | 0.6 | 4 |
| 3.2 | 3 | Ext. | ★ | MAE0320MB | 10.2 | 24.6 | 64.6 | 64 | 0.6 | 4 |
| | 3 | Int. | □ | MAS0320MB | 10.2 | 24.6 | 64.6 | 64 | 0.6 | 4 |
| | 6 | Int. | ★ | MAS0320LB | 19.8 | 34.6 | 74.6 | 74 | 0.6 | 4 |
| 3.3 | 3 | Ext. | ★ | MAE0330MB | 10.5 | 24.6 | 64.6 | 64 | 0.6 | 4 |
| | 3 | Int. | □ | MAS0330MB | 10.5 | 24.6 | 64.6 | 64 | 0.6 | 4 |
| | 6 | Int. | ● | MAS0330LB | 20.4 | 34.6 | 74.6 | 74 | 0.6 | 4 |
| 3.4 | 3 | Ext. | ★ | MAE0340MB | 10.8 | 24.6 | 64.6 | 64 | 0.6 | 4 |
| | 3 | Int. | □ | MAS0340MB | 10.8 | 24.6 | 64.6 | 64 | 0.6 | 4 |
| | 6 | Int. | ★ | MAS0340LB | 21.0 | 34.6 | 74.6 | 74 | 0.6 | 4 |
| 3.5 | 3 | Ext. | ★ | MAE0350MB | 11.1 | 24.6 | 64.6 | 64 | 0.6 | 4 |
| | 3 | Int. | □ | MAS0350MB | 11.1 | 24.6 | 64.6 | 64 | 0.6 | 4 |
| | 6 | Int. | ● | MAS0350LB | 21.6 | 34.6 | 74.6 | 74 | 0.6 | 4 |
| 3.6 | 3 | Ext. | ★ | MAE0360MB | 11.5 | 28.7 | 68.7 | 68 | 0.7 | 4 |
| | 3 | Int. | □ | MAS0360MB | 11.5 | 28.7 | 68.7 | 68 | 0.7 | 4 |
| | 6 | Int. | ★ | MAS0360LB | 22.3 | 40.7 | 80.7 | 80 | 0.7 | 4 |
| 3.65 | 3 | Ext. | ★ | * MAE0365MB | 11.7 | 28.7 | 68.7 | 68 | 0.7 | 4 |
| | 3 | Int. | □ | * MAS0365MB | 11.7 | 28.7 | 68.7 | 68 | 0.7 | 4 |
| | 6 | Int. | ● | * MAS0365LB | 22.6 | 40.7 | 80.7 | 80 | 0.7 | 4 |
| 3.7 | 3 | Ext. | ★ | MAE0370MB | 11.8 | 28.7 | 68.7 | 68 | 0.7 | 4 |
| | 3 | Int. | □ | MAS0370MB | 11.8 | 28.7 | 68.7 | 68 | 0.7 | 4 |
| | 6 | Int. | ★ | MAS0370LB | 22.9 | 40.7 | 80.7 | 80 | 0.7 | 4 |
| 3.8 | 3 | Ext. | ★ | MAE0380MB | 12.1 | 28.7 | 68.7 | 68 | 0.7 | 4 |
| | 3 | Int. | □ | MAS0380MB | 12.1 | 28.7 | 68.7 | 68 | 0.7 | 4 |
| | 6 | Int. | ★ | MAS0380LB | 23.5 | 40.7 | 80.7 | 80 | 0.7 | 4 |
| 3.9 | 3 | Ext. | ★ | MAE0390MB | 12.4 | 28.7 | 68.7 | 68 | 0.7 | 4 |
| | 3 | Int. | □ | MAS0390MB | 12.4 | 28.7 | 68.7 | 68 | 0.7 | 4 |
| | 6 | Int. | ★ | MAS0390LB | 24.1 | 40.7 | 80.7 | 80 | 0.7 | 4 |
| 4.0 | 3 | Ext. | ★ | MAE0400MB | 12.7 | 28.7 | 68.7 | 68 | 0.7 | 4 |
| | 3 | Int. | □ | MAS0400MB | 12.7 | 28.7 | 68.7 | 68 | 0.7 | 4 |
| | 6 | Int. | ● | MAS0400LB | 24.7 | 40.7 | 80.7 | 80 | 0.7 | 4 |
| 4.1 | 3 | Ext. | ★ | MAE0410MB | 13.0 | 31.7 | 71.7 | 71 | 0.7 | 5 |
| | 3 | Int. | □ | MAS0410MB | 13.0 | 31.7 | 71.7 | 71 | 0.7 | 5 |
| | 6 | Int. | ★ | MAS0410LB | 25.3 | 44.7 | 84.7 | 84 | 0.7 | 5 |
| 4.2 | 3 | Ext. | ★ | MAE0420MB | 13.4 | 31.8 | 71.8 | 71 | 0.8 | 5 |
| | 3 | Int. | □ | MAS0420MB | 13.4 | 31.8 | 71.8 | 71 | 0.8 | 5 |
| | 6 | Int. | ● | MAS0420LB | 26.0 | 44.8 | 84.8 | 84 | 0.8 | 5 |
| 4.3 | 3 | Ext. | ★ | MAE0430MB | 13.7 | 31.8 | 71.8 | 71 | 0.8 | 5 |
| | 3 | Int. | □ | MAS0430MB | 13.7 | 31.8 | 71.8 | 71 | 0.8 | 5 |
| | 6 | Int. | ★ | MAS0430LB | 26.6 | 44.8 | 84.8 | 84 | 0.8 | 5 |
| 4.4 | 3 | Ext. | ★ | MAE0440MB | 14.0 | 31.8 | 71.8 | 71 | 0.8 | 5 |
| | 3 | Int. | □ | MAS0440MB | 14.0 | 31.8 | 71.8 | 71 | 0.8 | 5 |
| | 6 | Int. | ★ | MAS0440LB | 27.2 | 44.8 | 84.8 | 84 | 0.8 | 5 |
| 4.5 | 3 | Ext. | ★ | MAE0450MB | 14.3 | 31.8 | 71.8 | 71 | 0.8 | 5 |
| | 3 | Int. | □ | MAS0450MB | 14.3 | 31.8 | 71.8 | 71 | 0.8 | 5 |
| | 6 | Int. | ★ | MAS0450LB | 27.8 | 44.8 | 84.8 | 84 | 0.8 | 5 |
| 4.6 | 3 | Ext. | ★ | * MAE0460MB | 14.6 | 33.8 | 73.8 | 73 | 0.8 | 5 |
| | 3 | Int. | □ | * MAS0460MB | 14.6 | 33.8 | 73.8 | 73 | 0.8 | 5 |
| | 6 | Int. | ● | * MAS0460LB | 28.4 | 48.8 | 88.8 | 88 | 0.8 | 5 |
| 4.7 | 3 | Ext. | ★ | MAE0470MB | 15.0 | 33.9 | 73.9 | 73 | 0.9 | 5 |
| | 3 | Int. | □ | MAS0470MB | 15.0 | 33.9 | 73.9 | 73 | 0.9 | 5 |
| | 6 | Int. | ★ | MAS0470LB | 29.1 | 48.9 | 88.9 | 88 | 0.9 | 5 |
| 4.8 | 3 | Ext. | ★ | MAE0480MB | 15.3 | 33.9 | 73.9 | 73 | 0.9 | 5 |
| | 3 | Int. | □ | MAS0480MB | 15.3 | 33.9 | 73.9 | 73 | 0.9 | 5 |
| | 6 | Int. | ★ | MAS0480LB | 29.7 | 48.9 | 88.9 | 88 | 0.9 | 5 |
| 4.9 | 3 | Ext. | ★ | MAE0490MB | 15.6 | 33.9 | 73.9 | 73 | 0.9 | 5 |
| | 3 | Int. | □ | MAS0490MB | 15.6 | 33.9 | 73.9 | 73 | 0.9 | 5 |
| | 6 | Int. | ★ | MAS0490LB | 30.3 | 48.9 | 88.9 | 88 | 0.9 | 5 |
| 5.0 | 3 | Ext. | ★ | MAE0500MB | 15.9 | 33.9 | 73.9 | 73 | 0.9 | 5 |
| | 3 | Int. | ● | MAS0500MB | 15.9 | 33.9 | 73.9 | 73 | 0.9 | 5 |
| | 6 | Int. | ● | MAS0500LB | 30.9 | 48.9 | 88.9 | 88 | 0.9 | 5 |
| 5.1 | 3 | Ext. | ★ | MAE0510MB | 16.2 | 36.9 | 76.9 | 76 | 0.9 | 6 |
| | 3 | Int. | □ | MAS0510MB | 16.2 | 36.9 | 76.9 | 76 | 0.9 | 6 |
| | 6 | Int. | ★ | MAS0510LB | 31.5 | 52.9 | 92.9 | 92 | 0.9 | 6 |
| 5.2 | 3 | Ext. | ★ | MAE0520MB | 16.5 | 36.9 | 76.9 | 76 | 0.9 | 6 |
| | 3 | Int. | □ | MAS0520MB | 16.5 | 36.9 | 76.9 | 76 | 0.9 | 6 |
| | 6 | Int. | ● | MAS0520LB | 32.1 | 52.9 | 92.9 | 92 | 0.9 | 6 |
| 5.3 | 3 | Ext. | ★ | MAE0530MB | 16.9 | 37.0 | 77.0 | 76 | 1.0 | 6 |
| | 3 | Int. | □ | MAS0530MB | 16.9 | 37.0 | 77.0 | 76 | 1.0 | 6 |
| | 6 | Int. | ★ | MAS0530LB | 32.8 | 53.0 | 93.0 | 92 | 1.0 | 6 |
| 5.4 | 3 | Ext. | ★ | MAE0540MB | 17.2 | 37.0 | 77.0 | 76 | 1.0 | 6 |
| | 3 | Int. | □ | MAS0540MB | 17.2 | 37.0 | 77.0 | 76 | 1.0 | 6 |
| | 6 | Int. | ★ | MAS0540LB | 33.4 | 53.0 | 93.0 | 92 | 1.0 | 6 |

★ : Diamètre pour taraudage par déformation.

● : Article stocké. ★ : Article standard Japon.
□ : Article non stocké - Fabrication sur commande uniquement.

| DC (mm) | Rapport (L/D) | Arrosage (Int./Ext.) | HTi10 | Référence | Dimensions (mm) LU | LCF | OAL | LF | PL | DCON |
|---|---|---|---|---|---|---|---|---|---|---|
| 5.5 | 3 | Ext. | ★ | * MAE0550MB | 17.5 | 37.0 | 77.0 | 76 | 1.0 | 6 |
| | 3 | Int. | ★ | * MAS0550MB | 17.5 | 37.0 | 77.0 | 76 | 1.0 | 6 |
| | 6 | Int. | ● | * MAS0550LB | 34.0 | 53.0 | 93.0 | 92 | 1.0 | 6 |
| 5.6 | 3 | Ext. | ★ | MAE0560MB | 17.8 | 40.0 | 80.0 | 79 | 1.0 | 6 |
| | 3 | Int. | □ | MAS0560MB | 17.8 | 40.0 | 80.0 | 79 | 1.0 | 6 |
| | 6 | Int. | ★ | MAS0560LB | 34.6 | 58.0 | 98.0 | 97 | 1.0 | 6 |
| 5.7 | 3 | Ext. | ★ | MAE0570MB | 18.1 | 40.0 | 80.0 | 79 | 1.0 | 6 |
| | 3 | Int. | □ | MAS0570MB | 18.1 | 40.0 | 80.0 | 79 | 1.0 | 6 |
| | 6 | Int. | ★ | MAS0570LB | 35.2 | 58.0 | 98.0 | 97 | 1.0 | 6 |
| 5.8 | 3 | Ext. | ★ | MAE0580MB | 18.5 | 40.1 | 80.1 | 79 | 1.1 | 6 |
| | 3 | Int. | □ | MAS0580MB | 18.5 | 40.1 | 80.1 | 79 | 1.1 | 6 |
| | 6 | Int. | ★ | MAS0580LB | 35.9 | 58.1 | 98.1 | 97 | 1.1 | 6 |
| 5.9 | 3 | Ext. | ★ | MAE0590MB | 18.8 | 40.1 | 80.1 | 79 | 1.1 | 6 |
| | 3 | Int. | □ | MAS0590MB | 18.8 | 40.1 | 80.1 | 79 | 1.1 | 6 |
| | 6 | Int. | ★ | MAS0590LB | 36.5 | 58.1 | 98.1 | 97 | 1.1 | 6 |
| 6.0 | 3 | Ext. | ★ | MAE0600MB | 19.1 | 40.1 | 80.1 | 79 | 1.1 | 6 |
| | 3 | Int. | ● | MAS0600MB | 19.1 | 40.1 | 80.1 | 79 | 1.1 | 6 |
| | 6 | Int. | ● | MAS0600LB | 37.1 | 58.1 | 98.1 | 97 | 1.1 | 6 |
| 6.1 | 3 | Ext. | ★ | MAE0610MB | 19.4 | 43.1 | 85.1 | 84 | 1.1 | 7 |
| | 3 | Int. | □ | MAS0610MB | 19.4 | 43.1 | 85.1 | 84 | 1.1 | 7 |
| | 6 | Int. | ★ | MAS0610LB | 37.7 | 63.1 | 105.1 | 104 | 1.1 | 7 |
| 6.2 | 3 | Ext. | ★ | MAE0620MB | 19.7 | 43.1 | 85.1 | 84 | 1.1 | 7 |
| | 3 | Int. | □ | MAS0620MB | 19.7 | 43.1 | 85.1 | 84 | 1.1 | 7 |
| | 6 | Int. | ★ | MAS0620LB | 38.3 | 63.1 | 105.1 | 104 | 1.1 | 7 |
| 6.3 | 3 | Ext. | ★ | MAE0630MB | 20.0 | 43.1 | 85.1 | 84 | 1.1 | 7 |
| | 3 | Int. | □ | MAS0630MB | 20.0 | 43.1 | 85.1 | 84 | 1.1 | 7 |
| | 6 | Int. | ★ | MAS0630LB | 38.9 | 63.1 | 105.1 | 104 | 1.1 | 7 |
| 6.4 | 3 | Ext. | ★ | MAE0640MB | 20.4 | 43.2 | 85.2 | 84 | 1.2 | 7 |
| | 3 | Int. | □ | MAS0640MB | 20.4 | 43.2 | 85.2 | 84 | 1.2 | 7 |
| | 6 | Int. | ★ | MAS0640LB | 39.6 | 63.2 | 105.2 | 104 | 1.2 | 7 |
| 6.5 | 3 | Ext. | ★ | MAE0650MB | 20.7 | 43.2 | 85.2 | 84 | 1.2 | 7 |
| | 3 | Int. | ★ | MAS0650MB | 20.7 | 43.2 | 85.2 | 84 | 1.2 | 7 |
| | 6 | Int. | ● | MAS0650LB | 40.2 | 63.2 | 105.2 | 104 | 1.2 | 7 |
| 6.6 | 3 | Ext. | ★ | MAE0660MB | 21.0 | 43.2 | 85.2 | 84 | 1.2 | 7 |
| | 3 | Int. | □ | MAS0660MB | 21.0 | 43.2 | 85.2 | 84 | 1.2 | 7 |
| | 6 | Int. | ★ | MAS0660LB | 40.8 | 66.2 | 108.2 | 107 | 1.2 | 7 |
| 6.7 | 3 | Ext. | ★ | MAE0670MB | 21.3 | 43.2 | 85.2 | 84 | 1.2 | 7 |
| | 3 | Int. | □ | MAS0670MB | 21.3 | 43.2 | 85.2 | 84 | 1.2 | 7 |
| | 6 | Int. | ● | MAS0670LB | 41.4 | 66.2 | 108.2 | 107 | 1.2 | 7 |
| 6.8 | 3 | Ext. | ★ | MAE0680MB | 21.6 | 43.2 | 85.2 | 84 | 1.2 | 7 |
| | 3 | Int. | ★ | MAS0680MB | 21.6 | 43.2 | 85.2 | 84 | 1.2 | 7 |
| | 6 | Int. | ● | MAS0680LB | 42.0 | 66.2 | 108.2 | 107 | 1.2 | 7 |
| 6.9 | 3 | Ext. | ★ | MAE0690MB | 22.0 | 43.3 | 85.3 | 84 | 1.3 | 7 |
| | 3 | Int. | □ | MAS0690MB | 22.0 | 43.3 | 85.3 | 84 | 1.3 | 7 |
| | 6 | Int. | ★ | MAS0690LB | 42.7 | 66.3 | 108.3 | 107 | 1.3 | 7 |
| 7.0 | 3 | Ext. | ★ | MAE0700MB | 22.3 | 43.3 | 85.3 | 84 | 1.3 | 7 |
| | 3 | Int. | ★ | MAS0700MB | 22.3 | 43.3 | 85.3 | 84 | 1.3 | 7 |
| | 6 | Int. | ● | MAS0700LB | 43.3 | 66.3 | 108.3 | 107 | 1.3 | 7 |
| 7.1 | 3 | Ext. | ★ | MAE0710MB | 22.6 | 49.3 | 91.3 | 90 | 1.3 | 8 |
| | 3 | Int. | □ | MAS0710MB | 22.6 | 49.3 | 91.3 | 90 | 1.3 | 8 |
| | 6 | Int. | ★ | MAS0710LB | 43.9 | 69.3 | 111.3 | 110 | 1.3 | 8 |
| 7.2 | 3 | Ext. | ★ | MAE0720MB | 22.9 | 49.3 | 91.3 | 90 | 1.3 | 8 |
| | 3 | Int. | □ | MAS0720MB | 22.9 | 49.3 | 91.3 | 90 | 1.3 | 8 |
| | 6 | Int. | ★ | MAS0720LB | 44.5 | 69.3 | 111.3 | 110 | 1.3 | 8 |
| 7.3 | 3 | Ext. | ★ | MAE0730MB | 23.2 | 49.3 | 91.3 | 90 | 1.3 | 8 |
| | 3 | Int. | □ | MAS0730MB | 23.2 | 49.3 | 91.3 | 90 | 1.3 | 8 |
| | 6 | Int. | ★ | MAS0730LB | 45.1 | 69.3 | 111.3 | 110 | 1.3 | 8 |
| 7.35 | 3 | Ext. | ★ | * MAE0735MB | 23.4 | 49.3 | 91.3 | 90 | 1.3 | 8 |
| | 3 | Int. | ★ | * MAS0735MB | 23.4 | 49.3 | 91.3 | 90 | 1.3 | 8 |
| | 6 | Int. | ● | * MAS0735LB | 45.4 | 69.3 | 111.3 | 110 | 1.3 | 8 |
| 7.4 | 3 | Ext. | ★ | MAE0740MB | 23.5 | 49.3 | 91.3 | 90 | 1.3 | 8 |
| | 3 | Int. | □ | MAS0740MB | 23.5 | 49.3 | 91.3 | 90 | 1.3 | 8 |
| | 6 | Int. | ★ | MAS0740LB | 45.7 | 69.3 | 111.3 | 110 | 1.3 | 8 |
| 7.5 | 3 | Ext. | ★ | MAE0750MB | 23.9 | 49.4 | 91.4 | 90 | 1.4 | 8 |
| | 3 | Int. | □ | MAS0750MB | 23.9 | 49.4 | 91.4 | 90 | 1.4 | 8 |
| | 6 | Int. | ★ | MAS0750LB | 46.4 | 69.4 | 111.4 | 110 | 1.4 | 8 |
| 7.6 | 3 | Ext. | ★ | MAE0760MB | 24.2 | 49.4 | 91.4 | 90 | 1.4 | 8 |
| | 3 | Int. | □ | MAS0760MB | 24.2 | 49.4 | 91.4 | 90 | 1.4 | 8 |
| | 6 | Int. | ★ | MAS0760LB | 47.0 | 73.4 | 115.4 | 114 | 1.4 | 8 |
| 7.7 | 3 | Ext. | ★ | MAE0770MB | 24.5 | 49.4 | 91.4 | 90 | 1.4 | 8 |
| | 3 | Int. | □ | MAS0770MB | 24.5 | 49.4 | 91.4 | 90 | 1.4 | 8 |
| | 6 | Int. | ★ | MAS0770LB | 47.6 | 73.4 | 115.4 | 114 | 1.4 | 8 |
| 7.8 | 3 | Ext. | ★ | MAE0780MB | 24.8 | 49.4 | 91.4 | 90 | 1.4 | 8 |
| | 3 | Int. | □ | MAS0780MB | 24.8 | 49.4 | 91.4 | 90 | 1.4 | 8 |
| | 6 | Int. | ★ | MAS0780LB | 48.2 | 73.4 | 115.4 | 114 | 1.4 | 8 |
| 7.9 | 3 | Ext. | ★ | MAE0790MB | 25.1 | 49.4 | 91.4 | 90 | 1.4 | 8 |
| | 3 | Int. | □ | MAS0790MB | 25.1 | 49.4 | 91.4 | 90 | 1.4 | 8 |
| | 6 | Int. | ★ | MAS0790LB | 48.8 | 73.4 | 115.4 | 114 | 1.4 | 8 |
| 8.0 | 3 | Ext. | ★ | MAE0800MB | 25.5 | 49.5 | 91.5 | 90 | 1.5 | 8 |
| | 3 | Int. | ● | MAS0800MB | 25.5 | 49.5 | 91.5 | 90 | 1.5 | 8 |
| | 6 | Int. | ● | MAS0800LB | 49.5 | 73.5 | 115.5 | 114 | 1.5 | 8 |
| 8.1 | 3 | Ext. | ★ | MAE0810MB | 25.8 | 51.5 | 95.5 | 94 | 1.5 | 9 |
| | 3 | Int. | □ | MAS0810MB | 25.8 | 51.5 | 95.5 | 94 | 1.5 | 9 |
| | 6 | Int. | ★ | MAS0810LB | 50.1 | 76.5 | 120.5 | 119 | 1.5 | 9 |
| 8.2 | 3 | Ext. | ★ | MAE0820MB | 26.1 | 51.5 | 95.5 | 94 | 1.5 | 9 |
| | 3 | Int. | □ | MAS0820MB | 26.1 | 51.5 | 95.5 | 94 | 1.5 | 9 |
| | 6 | Int. | ★ | MAS0820LB | 50.7 | 76.5 | 120.5 | 119 | 1.5 | 9 |
| 8.3 | 3 | Ext. | ★ | MAE0830MB | 26.4 | 51.5 | 95.5 | 94 | 1.5 | 9 |
| | 3 | Int. | □ | MAS0830MB | 26.4 | 51.5 | 95.5 | 94 | 1.5 | 9 |
| | 6 | Int. | ★ | MAS0830LB | 51.3 | 76.5 | 120.5 | 119 | 1.5 | 9 |
| 8.4 | 3 | Ext. | ★ | MAE0840MB | 26.7 | 51.5 | 95.5 | 94 | 1.5 | 9 |
| | 3 | Int. | □ | MAS0840MB | 26.7 | 51.5 | 95.5 | 94 | 1.5 | 9 |
| | 6 | Int. | ★ | MAS0840LB | 51.9 | 76.5 | 120.5 | 119 | 1.5 | 9 |
| 8.5 | 3 | Ext. | ★ | MAE0850MB | 27.0 | 51.5 | 95.5 | 94 | 1.5 | 9 |
| | 3 | Int. | ● | MAS0850MB | 27.0 | 51.5 | 95.5 | 94 | 1.5 | 9 |
| | 6 | Int. | ★ | MAS0850LB | 52.5 | 76.5 | 120.5 | 119 | 1.5 | 9 |

★ : Diamètre pour taraudage par déformation.

CONDITIONS DE COUPE ➤ M129
DONNÉES TECHNIQUES ➤ P001

# MAE,MAS

| DC (mm) | Rapport (L/D) | Arrosage (Int./Ext.) | HTi10 | Référence | Dimensions (mm) LU | LCF | OAL | LF | PL | DCON |
|---|---|---|---|---|---|---|---|---|---|---|
| 8.6 | 3 | Ext. | ★ | MAE0860MB | 27.4 | 51.6 | 95.6 | 94 | 1.6 | 9 |
| | 3 | Int. | □ | MAS0860MB | 27.4 | 51.6 | 95.6 | 94 | 1.6 | 9 |
| | 6 | Int. | ★ | MAS0860LB | 53.2 | 78.6 | 122.6 | 121 | 1.6 | 9 |
| 8.7 | 3 | Ext. | ★ | MAE0870MB | 27.7 | 51.6 | 95.6 | 94 | 1.6 | 9 |
| | 3 | Int. | □ | MAS0870MB | 27.7 | 51.6 | 95.6 | 94 | 1.6 | 9 |
| | 6 | Int. | ★ | MAS0870LB | 53.8 | 78.6 | 122.6 | 121 | 1.6 | 9 |
| 8.8 | 3 | Ext. | ★ | MAE0880MB | 28.0 | 51.6 | 95.6 | 94 | 1.6 | 9 |
| | 3 | Int. | □ | MAS0880MB | 28.0 | 51.6 | 95.6 | 94 | 1.6 | 9 |
| | 6 | Int. | ★ | MAS0880LB | 54.4 | 78.6 | 122.6 | 121 | 1.6 | 9 |
| 8.9 | 3 | Ext. | ★ | MAE0890MB | 28.3 | 51.6 | 95.6 | 94 | 1.6 | 9 |
| | 3 | Int. | □ | MAS0890MB | 28.3 | 51.6 | 95.6 | 94 | 1.6 | 9 |
| | 6 | Int. | ★ | MAS0890LB | 55.0 | 78.6 | 122.6 | 121 | 1.6 | 9 |
| 9.0 | 3 | Ext. | ★ | MAE0900MB | 28.6 | 51.6 | 95.6 | 94 | 1.6 | 9 |
| | 3 | Int. | ★ | MAS0900MB | 28.6 | 51.6 | 95.6 | 94 | 1.6 | 9 |
| | 6 | Int. | ● | MAS0900LB | 55.6 | 78.6 | 122.6 | 121 | 1.6 | 9 |
| 9.1 | 3 | Ext. | ★ | MAE0910MB | 29.0 | 54.7 | 98.7 | 97 | 1.7 | 10 |
| | 3 | Int. | □ | MAS0910MB | 29.0 | 54.7 | 98.7 | 97 | 1.7 | 10 |
| | 6 | Int. | ★ | MAS0910LB | 56.3 | 82.7 | 126.7 | 125 | 1.7 | 10 |
| 9.2 | 3 | Ext. | ★ | MAE0920MB | 29.3 | 54.7 | 98.7 | 97 | 1.7 | 10 |
| | 3 | Int. | □ | MAS0920MB | 29.3 | 54.7 | 98.7 | 97 | 1.7 | 10 |
| | 6 | Int. | ★ | MAS0920LB | 56.9 | 82.7 | 126.7 | 125 | 1.7 | 10 |
| 9.21 | 3 | Ext. | ★ | * MAE0921MB | 29.3 | 54.7 | 98.7 | 97 | 1.7 | 10 |
| | 3 | Int. | ★ | * MAS0921MB | 29.3 | 54.7 | 98.7 | 97 | 1.7 | 10 |
| | 6 | Int. | ★ | * MAS0921LB | 57.0 | 82.7 | 126.7 | 125 | 1.7 | 10 |
| 9.3 | 3 | Ext. | ★ | MAE0930MB | 29.6 | 54.7 | 98.7 | 97 | 1.7 | 10 |
| | 3 | Int. | □ | MAS0930MB | 29.6 | 54.7 | 98.7 | 97 | 1.7 | 10 |
| | 6 | Int. | ★ | MAS0930LB | 57.5 | 82.7 | 126.7 | 125 | 1.7 | 10 |
| 9.4 | 3 | Ext. | ★ | MAE0940MB | 29.9 | 54.7 | 98.7 | 97 | 1.7 | 10 |
| | 3 | Int. | □ | MAS0940MB | 29.9 | 54.7 | 98.7 | 97 | 1.7 | 10 |
| | 6 | Int. | ★ | MAS0940LB | 58.1 | 82.7 | 126.7 | 125 | 1.7 | 10 |
| 9.5 | 3 | Ext. | ★ | MAE0950MB | 30.2 | 54.7 | 98.7 | 97 | 1.7 | 10 |
| | 3 | Int. | ★ | MAS0950MB | 30.2 | 54.7 | 98.7 | 97 | 1.7 | 10 |
| | 6 | Int. | ● | MAS0950LB | 58.7 | 82.7 | 126.7 | 125 | 1.7 | 10 |
| 9.6 | 3 | Ext. | ★ | MAE0960MB | 30.5 | 54.7 | 98.7 | 97 | 1.7 | 10 |
| | 3 | Int. | □ | MAS0960MB | 30.5 | 54.7 | 98.7 | 97 | 1.7 | 10 |
| | 6 | Int. | ★ | MAS0960LB | 59.3 | 82.7 | 126.7 | 125 | 1.7 | 10 |
| 9.7 | 3 | Ext. | ★ | MAE0970MB | 30.9 | 54.8 | 98.8 | 97 | 1.8 | 10 |
| | 3 | Int. | □ | MAS0970MB | 30.9 | 54.8 | 98.8 | 97 | 1.8 | 10 |
| | 6 | Int. | ★ | MAS0970LB | 60.0 | 82.8 | 126.8 | 125 | 1.8 | 10 |
| 9.8 | 3 | Ext. | ★ | MAE0980MB | 31.2 | 54.8 | 98.8 | 97 | 1.8 | 10 |
| | 3 | Int. | □ | MAS0980MB | 31.2 | 54.8 | 98.8 | 97 | 1.8 | 10 |
| | 6 | Int. | ★ | MAS0980LB | 60.6 | 82.8 | 126.8 | 125 | 1.8 | 10 |
| 9.9 | 3 | Ext. | ★ | MAE0990MB | 31.5 | 54.8 | 98.8 | 97 | 1.8 | 10 |
| | 3 | Int. | □ | MAS0990MB | 31.5 | 54.8 | 98.8 | 97 | 1.8 | 10 |
| | 6 | Int. | ★ | MAS0990LB | 61.2 | 82.8 | 126.8 | 125 | 1.8 | 10 |
| 10.0 | 3 | Ext. | ★ | MAE1000MB | 31.8 | 54.8 | 98.8 | 97 | 1.8 | 10 |
| | 3 | Int. | ● | MAS1000MB | 31.8 | 54.8 | 98.8 | 97 | 1.8 | 10 |
| | 6 | Int. | ● | MAS1000LB | 61.8 | 82.8 | 126.8 | 125 | 1.8 | 10 |
| 10.1 | 3 | Ext. | □ | MAE1010MB | 32.1 | 56.8 | 102.8 | 101 | 1.8 | 11 |
| | 3 | Int. | □ | MAS1010MB | 32.1 | 56.8 | 102.8 | 101 | 1.8 | 11 |
| | 6 | Int. | □ | MAS1010LB | 62.4 | 90.8 | 136.8 | 135 | 1.8 | 11 |
| 10.2 | 3 | Ext. | □ | MAE1020MB | 32.5 | 56.9 | 102.9 | 101 | 1.9 | 11 |
| | 3 | Int. | □ | MAS1020MB | 32.5 | 56.9 | 102.9 | 101 | 1.9 | 11 |
| | 6 | Int. | □ | MAS1020LB | 63.1 | 90.9 | 136.9 | 135 | 1.9 | 11 |
| 10.3 | 3 | Ext. | ★ | MAE1030MB | 32.8 | 56.9 | 102.9 | 101 | 1.9 | 11 |
| | 3 | Int. | ★ | MAS1030MB | 32.8 | 56.9 | 102.9 | 101 | 1.9 | 11 |
| | 6 | Int. | ● | MAS1030LB | 63.7 | 90.9 | 136.9 | 135 | 1.9 | 11 |
| 10.4 | 3 | Ext. | □ | MAE1040MB | 33.1 | 56.9 | 102.9 | 101 | 1.9 | 11 |
| | 3 | Int. | □ | MAS1040MB | 33.1 | 56.9 | 102.9 | 101 | 1.9 | 11 |
| | 6 | Int. | □ | MAS1040LB | 64.3 | 90.9 | 136.9 | 135 | 1.9 | 11 |
| 10.5 | 3 | Ext. | ★ | MAE1050MB | 33.4 | 56.9 | 102.9 | 101 | 1.9 | 11 |
| | 3 | Int. | ★ | MAS1050MB | 33.4 | 56.9 | 102.9 | 101 | 1.9 | 11 |
| | 6 | Int. | ● | MAS1050LB | 64.9 | 90.9 | 136.9 | 135 | 1.9 | 11 |
| 10.6 | 3 | Ext. | □ | MAE1060MB | 33.7 | 56.9 | 102.9 | 101 | 1.9 | 11 |
| | 3 | Int. | □ | MAS1060MB | 33.7 | 56.9 | 102.9 | 101 | 1.9 | 11 |
| | 6 | Int. | □ | MAS1060LB | 65.5 | 90.9 | 136.9 | 135 | 1.9 | 11 |
| 10.7 | 3 | Ext. | □ | MAE1070MB | 34.0 | 56.9 | 102.9 | 101 | 1.9 | 11 |
| | 3 | Int. | □ | MAS1070MB | 34.0 | 56.9 | 102.9 | 101 | 1.9 | 11 |
| | 6 | Int. | □ | MAS1070LB | 66.1 | 90.9 | 136.9 | 135 | 1.9 | 11 |
| 10.8 | 3 | Ext. | □ | MAE1080MB | 34.4 | 57.0 | 103.0 | 101 | 2.0 | 11 |
| | 3 | Int. | □ | MAS1080MB | 34.4 | 57.0 | 103.0 | 101 | 2.0 | 11 |
| | 6 | Int. | □ | MAS1080LB | 66.8 | 91.0 | 137.0 | 135 | 2.0 | 11 |
| 10.9 | 3 | Ext. | □ | MAE1090MB | 34.7 | 57.0 | 103.0 | 101 | 2.0 | 11 |
| | 3 | Int. | □ | MAS1090MB | 34.7 | 57.0 | 103.0 | 101 | 2.0 | 11 |
| | 6 | Int. | □ | MAS1090LB | 67.4 | 91.0 | 137.0 | 135 | 2.0 | 11 |
| 11.0 | 3 | Ext. | ★ | MAE1100MB | 35.0 | 57.0 | 103.0 | 101 | 2.0 | 11 |
| | 3 | Int. | ★ | MAS1100MB | 35.0 | 57.0 | 103.0 | 101 | 2.0 | 11 |
| | 6 | Int. | ● | MAS1100LB | 68.0 | 91.0 | 137.0 | 135 | 2.0 | 11 |
| 11.08 | 3 | Ext. | ★ | * MAE1108MB | 35.2 | 62.0 | 108.0 | 106 | 2.0 | 12 |
| | 3 | Int. | ★ | * MAS1108MB | 35.2 | 62.0 | 108.0 | 106 | 2.0 | 12 |
| | 6 | Int. | ● | * MAS1108LB | 68.5 | 96.0 | 142.0 | 140 | 2.0 | 12 |
| 11.1 | 3 | Ext. | □ | MAE1110MB | 35.3 | 62.0 | 108.0 | 106 | 2.0 | 12 |
| | 3 | Int. | □ | MAS1110MB | 35.3 | 62.0 | 108.0 | 106 | 2.0 | 12 |
| | 6 | Int. | □ | MAS1110LB | 68.6 | 96.0 | 142.0 | 140 | 2.0 | 12 |
| 11.2 | 3 | Ext. | □ | MAE1120MB | 35.6 | 62.0 | 108.0 | 106 | 2.0 | 12 |
| | 3 | Int. | □ | MAS1120MB | 35.6 | 62.0 | 108.0 | 106 | 2.0 | 12 |
| | 6 | Int. | □ | MAS1120LB | 69.2 | 96.0 | 142.0 | 140 | 2.0 | 12 |
| 11.3 | 3 | Ext. | □ | MAE1130MB | 36.0 | 62.1 | 108.1 | 106 | 2.1 | 12 |
| | 3 | Int. | □ | MAS1130MB | 36.0 | 62.1 | 108.1 | 106 | 2.1 | 12 |
| | 6 | Int. | □ | MAS1130LB | 69.9 | 96.1 | 142.1 | 140 | 2.1 | 12 |
| 11.4 | 3 | Ext. | □ | MAE1140MB | 36.3 | 62.1 | 108.1 | 106 | 2.1 | 12 |
| | 3 | Int. | □ | MAS1140MB | 36.3 | 62.1 | 108.1 | 106 | 2.1 | 12 |
| | 6 | Int. | □ | MAS1140LB | 70.5 | 96.1 | 142.1 | 140 | 2.1 | 12 |
| 11.5 | 3 | Ext. | □ | MAE1150MB | 36.6 | 62.1 | 108.1 | 106 | 2.1 | 12 |
| | 3 | Int. | □ | MAS1150MB | 36.6 | 62.1 | 108.1 | 106 | 2.1 | 12 |
| | 6 | Int. | □ | MAS1150LB | 71.1 | 96.1 | 142.1 | 140 | 2.1 | 12 |

★ : Diamètre pour taraudage par déformation.

● : Article stocké. ★ : Article standard Japon.
□ : Article non stocké - Fabrication sur commande uniquement.

| DC (mm) | Rapport (L/D) | Arrosage (Int./Ext.) | HTi10 | Référence | Dimensions (mm) LU | LCF | OAL | LF | PL | DCON |
|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | Ext. | □ | **MAE1160MB** | 36.9 | 62.1 | 108.1 | 106 | 2.1 | 12 |
| **11.6** | 3 | Int. | □ | **MAS1160MB** | 36.9 | 62.1 | 108.1 | 106 | 2.1 | 12 |
| | 6 | Int. | □ | **MAS1160LB** | 71.7 | 96.1 | 142.1 | 140 | 2.1 | 12 |
| | 3 | Ext. | □ | **MAE1170MB** | 37.2 | 62.1 | 108.1 | 106 | 2.1 | 12 |
| **11.7** | 3 | Int. | □ | **MAS1170MB** | 37.2 | 62.1 | 108.1 | 106 | 2.1 | 12 |
| | 6 | Int. | □ | **MAS1170LB** | 72.3 | 96.1 | 142.1 | 140 | 2.1 | 12 |
| | 3 | Ext. | □ | **MAE1180MB** | 37.5 | 62.1 | 108.1 | 106 | 2.1 | 12 |
| **11.8** | 3 | Int. | □ | **MAS1180MB** | 37.5 | 62.1 | 108.1 | 106 | 2.1 | 12 |
| | 6 | Int. | □ | **MAS1180LB** | 72.9 | 96.1 | 142.1 | 140 | 2.1 | 12 |
| | 3 | Ext. | □ | **MAE1190MB** | 37.9 | 62.2 | 108.2 | 106 | 2.2 | 12 |
| **11.9** | 3 | Int. | □ | **MAS1190MB** | 37.9 | 62.2 | 108.2 | 106 | 2.2 | 12 |
| | 6 | Int. | □ | **MAS1190LB** | 73.6 | 96.2 | 142.2 | 140 | 2.2 | 12 |
| | 3 | Ext. | ★ | **MAE1200MB** | 38.2 | 62.2 | 108.2 | 106 | 2.2 | 12 |
| **12.0** | 3 | Int. | ● | **MAS1200MB** | 38.2 | 62.2 | 108.2 | 106 | 2.2 | 12 |
| | 6 | Int. | ● | **MAS1200LB** | 74.2 | 96.2 | 142.2 | 140 | 2.2 | 12 |
| | 3 | Ext. | □ | **MAE1210MB** | 38.5 | 67.2 | 117.2 | 115 | 2.2 | 13 |
| **12.1** | 3 | Int. | □ | **MAS1210MB** | 38.5 | 67.2 | 117.2 | 115 | 2.2 | 13 |
| | 6 | Int. | □ | **MAS1210LB** | 74.8 | 102.2 | 152.2 | 150 | 2.2 | 13 |
| | 3 | Ext. | □ | **MAE1220MB** | 38.8 | 67.2 | 117.2 | 115 | 2.2 | 13 |
| **12.2** | 3 | Int. | □ | **MAS1220MB** | 38.8 | 67.2 | 117.2 | 115 | 2.2 | 13 |
| | 6 | Int. | □ | **MAS1220LB** | 75.4 | 102.2 | 152.2 | 150 | 2.2 | 13 |
| | 3 | Ext. | □ | **MAE1230MB** | 39.1 | 67.2 | 117.2 | 115 | 2.2 | 13 |
| **12.3** | 3 | Int. | □ | **MAS1230MB** | 39.1 | 67.2 | 117.2 | 115 | 2.2 | 13 |
| | 6 | Int. | □ | **MAS1230LB** | 76.0 | 102.2 | 152.2 | 150 | 2.2 | 13 |
| | 3 | Ext. | □ | **MAE1240MB** | 39.5 | 67.3 | 117.3 | 115 | 2.3 | 13 |
| **12.4** | 3 | Int. | □ | **MAS1240MB** | 39.5 | 67.3 | 117.3 | 115 | 2.3 | 13 |
| | 6 | Int. | □ | **MAS1240LB** | 76.7 | 102.3 | 152.3 | 150 | 2.3 | 13 |
| | 3 | Ext. | ★ | **MAE1250MB** | 39.8 | 67.3 | 117.3 | 115 | 2.3 | 13 |
| **12.5** | 3 | Int. | ● | **MAS1250MB** | 39.8 | 67.3 | 117.3 | 115 | 2.3 | 13 |
| | 6 | Int. | ● | **MAS1250LB** | 77.3 | 102.3 | 152.3 | 150 | 2.3 | 13 |
| | 3 | Ext. | □ | **MAE1260MB** | 40.1 | 67.3 | 117.3 | 115 | 2.3 | 13 |
| **12.6** | 3 | Int. | □ | **MAS1260MB** | 40.1 | 67.3 | 117.3 | 115 | 2.3 | 13 |
| | 6 | Int. | □ | **MAS1260LB** | 77.9 | 102.3 | 152.3 | 150 | 2.3 | 13 |
| | 3 | Ext. | □ | **MAE1270MB** | 40.4 | 67.3 | 117.3 | 115 | 2.3 | 13 |
| **12.7** | 3 | Int. | □ | **MAS1270MB** | 40.4 | 67.3 | 117.3 | 115 | 2.3 | 13 |
| | 6 | Int. | □ | **MAS1270LB** | 78.5 | 102.3 | 152.3 | 150 | 2.3 | 13 |
| | 3 | Ext. | □ | **MAE1280MB** | 40.7 | 67.3 | 117.3 | 115 | 2.3 | 13 |
| **12.8** | 3 | Int. | □ | **MAS1280MB** | 40.7 | 67.3 | 117.3 | 115 | 2.3 | 13 |
| | 6 | Int. | □ | **MAS1280LB** | 79.1 | 102.3 | 152.3 | 150 | 2.3 | 13 |
| | 3 | Ext. | □ | **MAE1290MB** | 41.0 | 67.3 | 117.3 | 115 | 2.3 | 13 |
| **12.9** | 3 | Int. | □ | **MAS1290MB** | 41.0 | 67.3 | 117.3 | 115 | 2.3 | 13 |
| | 6 | Int. | □ | **MAS1290LB** | 79.7 | 102.3 | 152.3 | 150 | 2.3 | 13 |
| | 3 | Ext. | ★ | ***MAE1296MB** | 41.3 | 67.4 | 117.4 | 115 | 2.4 | 13 |
| **12.96** | 3 | Int. | ★ | ***MAS1296MB** | 41.3 | 67.4 | 117.4 | 115 | 2.4 | 13 |
| | 6 | Int. | ★ | ***MAS1296LB** | 80.2 | 102.4 | 152.4 | 150 | 2.4 | 13 |
| | 3 | Ext. | ★ | **MAE1300MB** | 41.4 | 67.4 | 117.4 | 115 | 2.4 | 13 |
| **13.0** | 3 | Int. | ★ | **MAS1300MB** | 41.4 | 67.4 | 117.4 | 115 | 2.4 | 13 |
| | 6 | Int. | ● | **MAS1300LB** | 80.4 | 102.4 | 152.4 | 150 | 2.4 | 13 |
| | 3 | Ext. | □ | **MAE1310MB** | 41.7 | 72.4 | 122.4 | 120 | 2.4 | 14 |
| **13.1** | 3 | Int. | □ | **MAS1310MB** | 41.7 | 72.4 | 122.4 | 120 | 2.4 | 14 |
| | 6 | Int. | □ | **MAS1310LB** | 81.0 | 112.4 | 162.4 | 160 | 2.4 | 14 |
| | 3 | Ext. | □ | **MAE1320MB** | 42.0 | 72.4 | 122.4 | 120 | 2.4 | 14 |
| **13.2** | 3 | Int. | □ | **MAS1320MB** | 42.0 | 72.4 | 122.4 | 120 | 2.4 | 14 |
| | 6 | Int. | □ | **MAS1320LB** | 81.6 | 112.4 | 162.4 | 160 | 2.4 | 14 |
| | 3 | Ext. | □ | **MAE1330MB** | 42.3 | 72.4 | 122.4 | 120 | 2.4 | 14 |
| **13.3** | 3 | Int. | □ | **MAS1330MB** | 42.3 | 72.4 | 122.4 | 120 | 2.4 | 14 |
| | 6 | Int. | □ | **MAS1330LB** | 82.2 | 112.4 | 162.4 | 160 | 2.4 | 14 |
| | 3 | Ext. | □ | **MAE1340MB** | 42.6 | 72.4 | 122.4 | 120 | 2.4 | 14 |
| **13.4** | 3 | Int. | □ | **MAS1340MB** | 42.6 | 72.4 | 122.4 | 120 | 2.4 | 14 |
| | 6 | Int. | □ | **MAS1340LB** | 82.8 | 112.4 | 162.4 | 160 | 2.4 | 14 |
| | 3 | Ext. | ★ | **MAE1350MB** | 43.0 | 72.5 | 122.5 | 120 | 2.5 | 14 |
| **13.5** | 3 | Int. | ★ | **MAS1350MB** | 43.0 | 72.5 | 122.5 | 120 | 2.5 | 14 |
| | 6 | Int. | ★ | **MAS1350LB** | 83.5 | 112.5 | 162.5 | 160 | 2.5 | 14 |
| | 3 | Ext. | □ | **MAE1360MB** | 43.3 | 72.5 | 122.5 | 120 | 2.5 | 14 |
| **13.6** | 3 | Int. | □ | **MAS1360MB** | 43.3 | 72.5 | 122.5 | 120 | 2.5 | 14 |
| | 6 | Int. | □ | **MAS1360LB** | 84.1 | 112.5 | 162.5 | 160 | 2.5 | 14 |
| | 3 | Ext. | □ | **MAE1370MB** | 43.6 | 72.5 | 122.5 | 120 | 2.5 | 14 |
| **13.7** | 3 | Int. | □ | **MAS1370MB** | 43.6 | 72.5 | 122.5 | 120 | 2.5 | 14 |
| | 6 | Int. | □ | **MAS1370LB** | 84.7 | 112.5 | 162.5 | 160 | 2.5 | 14 |
| | 3 | Ext. | □ | **MAE1380MB** | 43.9 | 72.5 | 122.5 | 120 | 2.5 | 14 |
| **13.8** | 3 | Int. | □ | **MAS1380MB** | 43.9 | 72.5 | 122.5 | 120 | 2.5 | 14 |
| | 6 | Int. | □ | **MAS1380LB** | 85.3 | 112.5 | 162.5 | 160 | 2.5 | 14 |
| | 3 | Ext. | □ | **MAE1390MB** | 44.2 | 72.5 | 122.5 | 120 | 2.5 | 14 |
| **13.9** | 3 | Int. | □ | **MAS1390MB** | 44.2 | 72.5 | 122.5 | 120 | 2.5 | 14 |
| | 6 | Int. | □ | **MAS1390LB** | 85.9 | 112.5 | 162.5 | 160 | 2.5 | 14 |
| | 3 | Ext. | ★ | **MAE1400MB** | 44.5 | 72.5 | 122.5 | 120 | 2.5 | 14 |
| **14.0** | 3 | Int. | ● | **MAS1400MB** | 44.5 | 72.5 | 122.5 | 120 | 2.5 | 14 |
| | 6 | Int. | ● | **MAS1400LB** | 86.5 | 112.5 | 162.5 | 160 | 2.5 | 14 |
| | 3 | Ext. | □ | **MAE1410MB** | 44.9 | 74.6 | 132.6 | 130 | 2.6 | 15 |
| **14.1** | 3 | Int. | □ | **MAS1410MB** | 44.9 | 74.6 | 132.6 | 130 | 2.6 | 15 |
| | 6 | Int. | □ | **MAS1410LB** | 87.2 | 117.6 | 175.6 | 173 | 2.6 | 15 |
| | 3 | Ext. | □ | **MAE1420MB** | 45.2 | 74.6 | 132.6 | 130 | 2.6 | 15 |
| **14.2** | 3 | Int. | □ | **MAS1420MB** | 45.2 | 74.6 | 132.6 | 130 | 2.6 | 15 |
| | 6 | Int. | □ | **MAS1420LB** | 87.8 | 117.6 | 175.6 | 173 | 2.6 | 15 |
| | 3 | Ext. | □ | **MAE1430MB** | 45.5 | 74.6 | 132.6 | 130 | 2.6 | 15 |
| **14.3** | 3 | Int. | □ | **MAS1430MB** | 45.5 | 74.6 | 132.6 | 130 | 2.6 | 15 |
| | 6 | Int. | □ | **MAS1430LB** | 88.4 | 117.6 | 175.6 | 173 | 2.6 | 15 |
| | 3 | Ext. | □ | **MAE1440MB** | 45.8 | 74.6 | 132.6 | 130 | 2.6 | 15 |
| **14.4** | 3 | Int. | □ | **MAS1440MB** | 45.8 | 74.6 | 132.6 | 130 | 2.6 | 15 |
| | 6 | Int. | □ | **MAS1440LB** | 89.0 | 117.6 | 175.6 | 173 | 2.6 | 15 |
| | 3 | Ext. | □ | **MAE1450MB** | 46.1 | 74.6 | 132.6 | 130 | 2.6 | 15 |
| **14.5** | 3 | Int. | □ | **MAS1450MB** | 46.1 | 74.6 | 132.6 | 130 | 2.6 | 15 |
| | 6 | Int. | □ | **MAS1450LB** | 89.6 | 117.6 | 175.6 | 173 | 2.6 | 15 |
| | 3 | Ext. | □ | **MAE1460MB** | 46.5 | 74.7 | 132.7 | 130 | 2.7 | 15 |
| **14.6** | 3 | Int. | □ | **MAS1460MB** | 46.5 | 74.7 | 132.7 | 130 | 2.7 | 15 |
| | 6 | Int. | □ | **MAS1460LB** | 90.3 | 117.7 | 175.7 | 173 | 2.7 | 15 |

★ : Diamètre pour taraudage par déformation.

CONDITIONS DE COUPE ➤ M129
DONNÉES TECHNIQUES ➤ P001

# MAE,MAS

| DC (mm) | Rapport (L/D) | Arrosage (Int./Ext.) | HTi10 | Référence | Dimensions (mm) LU | LCF | OAL | LF | PL | DCON |
|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | Ext. | □ | **MAE1470MB** | 46.8 | 74.7 | 132.7 | 130 | 2.7 | 15 |
| **14.7** | 3 | Int. | □ | **MAS1470MB** | 46.8 | 74.7 | 132.7 | 130 | 2.7 | 15 |
| | 6 | Int. | □ | **MAS1470LB** | 90.9 | 117.7 | 175.7 | 173 | 2.7 | 15 |
| | 3 | Ext. | □ | **MAE1480MB** | 47.1 | 74.7 | 132.7 | 130 | 2.7 | 15 |
| **14.8** | 3 | Int. | □ | **MAS1480MB** | 47.1 | 74.7 | 132.7 | 130 | 2.7 | 15 |
| | 6 | Int. | □ | **MAS1480LB** | 91.5 | 117.7 | 175.7 | 173 | 2.7 | 15 |
| | 3 | Ext. | □ | **MAE1490MB** | 47.4 | 74.7 | 132.7 | 130 | 2.7 | 15 |
| **14.9** | 3 | Int. | □ | **MAS1490MB** | 47.4 | 74.7 | 132.7 | 130 | 2.7 | 15 |
| | 6 | Int. | □ | **MAS1490LB** | 92.1 | 117.7 | 175.7 | 173 | 2.7 | 15 |
| | 3 | Ext. | ★ | ***MAE1496MB** | 47.6 | 74.7 | 132.7 | 130 | 2.7 | 15 |
| **14.96** | 3 | Int. | ★ | ***MAS1496MB** | 47.6 | 74.7 | 132.7 | 130 | 2.7 | 15 |
| | 6 | Int. | ★ | ***MAS1496LB** | 92.5 | 117.7 | 175.7 | 173 | 2.7 | 15 |
| | 3 | Ext. | ★ | **MAE1500MB** | 47.7 | 74.7 | 132.7 | 130 | 2.7 | 15 |
| **15.0** | 3 | Int. | ★ | **MAS1500MB** | 47.7 | 74.7 | 132.7 | 130 | 2.7 | 15 |
| | 6 | Int. | ● | **MAS1500LB** | 92.7 | 117.7 | 175.7 | 173 | 2.7 | 15 |
| | 3 | Ext. | □ | **MAE1510MB** | 48.0 | 78.7 | 136.7 | 134 | 2.7 | 16 |
| **15.1** | 3 | Int. | □ | **MAS1510MB** | 48.0 | 78.7 | 136.7 | 134 | 2.7 | 16 |
| | 6 | Int. | □ | **MAS1510LB** | 93.3 | 122.7 | 180.7 | 178 | 2.7 | 16 |
| | 3 | Ext. | □ | **MAE1520MB** | 48.4 | 78.8 | 136.8 | 134 | 2.8 | 16 |
| **15.2** | 3 | Int. | □ | **MAS1520MB** | 48.4 | 78.8 | 136.8 | 134 | 2.8 | 16 |
| | 6 | Int. | □ | **MAS1520LB** | 94.0 | 122.8 | 180.8 | 178 | 2.8 | 16 |
| | 3 | Ext. | □ | **MAE1530MB** | 48.7 | 78.8 | 136.8 | 134 | 2.8 | 16 |
| **15.3** | 3 | Int. | □ | **MAS1530MB** | 48.7 | 78.8 | 136.8 | 134 | 2.8 | 16 |
| | 6 | Int. | □ | **MAS1530LB** | 94.6 | 122.8 | 180.8 | 178 | 2.8 | 16 |
| | 3 | Ext. | □ | **MAE1540MB** | 49.0 | 78.8 | 136.8 | 134 | 2.8 | 16 |
| **15.4** | 3 | Int. | □ | **MAS1540MB** | 49.0 | 78.8 | 136.8 | 134 | 2.8 | 16 |
| | 6 | Int. | □ | **MAS1540LB** | 95.2 | 122.8 | 180.8 | 178 | 2.8 | 16 |
| | 3 | Ext. | □ | **MAE1550MB** | 49.3 | 78.8 | 136.8 | 134 | 2.8 | 16 |
| **15.5** | 3 | Int. | □ | **MAS1550MB** | 49.3 | 78.8 | 136.8 | 134 | 2.8 | 16 |
| | 6 | Int. | □ | **MAS1550LB** | 95.8 | 122.8 | 180.8 | 178 | 2.8 | 16 |
| | 3 | Ext. | □ | **MAE1560MB** | 49.6 | 78.8 | 136.8 | 134 | 2.8 | 16 |
| **15.6** | 3 | Int. | □ | **MAS1560MB** | 49.6 | 78.8 | 136.8 | 134 | 2.8 | 16 |
| | 6 | Int. | □ | **MAS1560LB** | 96.4 | 122.8 | 180.8 | 178 | 2.8 | 16 |
| | 3 | Ext. | □ | **MAE1570MB** | 50.0 | 78.9 | 136.9 | 134 | 2.9 | 16 |
| **15.7** | 3 | Int. | □ | **MAS1570MB** | 50.0 | 78.9 | 136.9 | 134 | 2.9 | 16 |
| | 6 | Int. | □ | **MAS1570LB** | 97.1 | 122.9 | 180.9 | 178 | 2.9 | 16 |
| | 3 | Ext. | □ | **MAE1580MB** | 50.3 | 78.9 | 136.9 | 134 | 2.9 | 16 |
| **15.8** | 3 | Int. | □ | **MAS1580MB** | 50.3 | 78.9 | 136.9 | 134 | 2.9 | 16 |
| | 6 | Int. | □ | **MAS1580LB** | 97.7 | 122.9 | 180.9 | 178 | 2.9 | 16 |
| | 3 | Ext. | □ | **MAE1590MB** | 50.6 | 78.9 | 136.9 | 134 | 2.9 | 16 |
| **15.9** | 3 | Int. | □ | **MAS1590MB** | 50.6 | 78.9 | 136.9 | 134 | 2.9 | 16 |
| | 6 | Int. | □ | **MAS1590LB** | 98.3 | 122.9 | 180.9 | 178 | 2.9 | 16 |
| | 3 | Ext. | ★ | **MAE1600MB** | 50.9 | 78.9 | 136.9 | 134 | 2.9 | 16 |
| **16.0** | 3 | Int. | ★ | **MAS1600MB** | 50.9 | 78.9 | 136.9 | 134 | 2.9 | 16 |
| | 6 | Int. | ● | **MAS1600LB** | 98.9 | 122.9 | 180.9 | 178 | 2.9 | 16 |

* : Diamètre pour taraudage par déformation.

● : Article stocké. ★ : Article standard Japon.
□ : Article non stocké - Fabrication sur commande uniquement.

## CONDITIONS DE COUPE RECOMMANDÉES

| Type | | Matière | Diamètre foret ϕ3.0—ϕ6.0 | | Diamètre foret ϕ6.1—ϕ10.0 | | Diamètre foret ϕ10.1—ϕ16.0 | |
|---|---|---|---|---|---|---|---|---|
| | | | Vitesse de coupe (m/min) | Avance (mm/tour) | Vitesse de coupe (m/min) | Avance (mm/tour) | Vitesse de coupe (m/min) | Avance (mm/tour) |
| MAE | N | Alliage aluminium | 90 (40—140) | 0.15 (0.05—0.3) | 100 (50—150) | 0.2 (0.1—0.3) | 120 (60—170) | 0.25 (0.1—0.4) |
| | | Alliage en fonte d'aluminium | 100 (60—150) | 0.12 (0.05—0.25) | 110 (70—160) | 0.15 (0.05—0.25) | 130 (80—180) | 0.2 (0.1—0.3) |
| | K | Fonte grise | 40 (20—60) | 0.15 (0.1—0.2) | 60 (40—80) | 0.2 (0.1—0.3) | 80 (60—100) | 0.3 (0.2—0.4) |
| | | Fonte ductile | 30 (20—40) | 0.1 (0.05—0.15) | 40 (20—60) | 0.12 (0.05—0.2) | 60 (40—80) | 0.2 (0.1—0.3) |
| MAS | N | Alliage aluminium | 100 (60—150) | 0.15 (0.05—0.3) | 120 (80—170) | 0.2 (0.1—0.3) | 150 (100—200) | 0.25 (0.1—0.4) |
| | | Alliage en fonte d'aluminium | 120 (80—170) | 0.12 (0.05—0.25) | 150 (100—180) | 0.15 (0.05—0.25) | 160 (120—200) | 0.2 (0.1—0.3) |
| | K | Fonte grise | 60 (40—80) | 0.15 (0.1—0.2) | 80 (60—110) | 0.2 (0.1—0.3) | 100 (70—130) | 0.3 (0.2—0.4) |
| | | Fonte ductile | 45 (30—60) | 0.1 (0.05—0.15) | 60 (40—80) | 0.12 (0.05—0.2) | 80 (60—100) | 0.2 (0.1—0.3) |

### ■ DIAMÈTRES DES TROUS AVANT TARAUDAGE

| Taille foret | Taraudage | | | Taraudage par déformation | | |
|---|---|---|---|---|---|---|
| | Diamétre foret (DC) | Tolérance diam. Trou | | Diamétre foret (DC) | Tolérance diam. Trou | |
| | | min | max | | min | max |
| **M4x0.7** | **3.3** | 3.242 | 3.422 | **3.65** | 3.65 | 3.70 |
| **M5x0.8** | **4.2** | 4.134 | 4.334 | **4.60** | 4.59 | 4.66 |
| **M6x1.0** | **5.0** | 4.917 | 5.153 | **5.50** | 5.48 | 5.57 |
| **M8x1.25** | **6.8** | 6.647 | 6.912 | **7.35** | 7.34 | 7.41 |
| **M10x1.5** | **8.5** | 8.376 | 8.676 | **9.21** | 9.18 | 9.28 |
| **M12x1.75** | **10.3** | 10.106 | 10.441 | **11.08** | 11.05 | 11.15 |
| **M14x2** | **12.0** | 11.835 | 12.210 | **12.96** | 12.92 | 13.04 |
| **M16x2** | **14.0** | 13.835 | 14.210 | **14.96** | 14.92 | 15.04 |

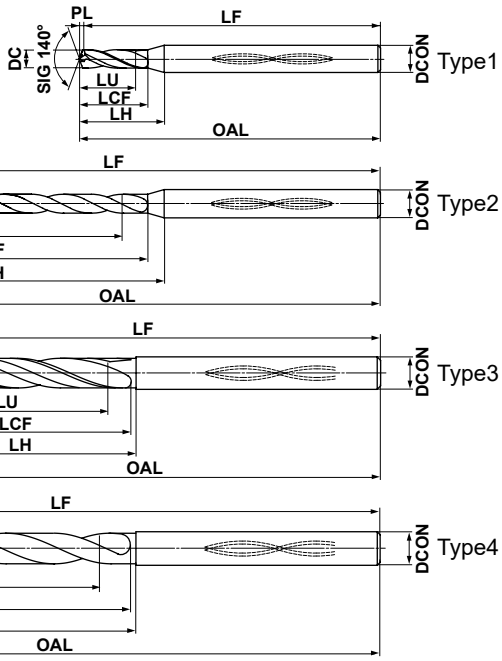
# PERÇAGE (CARBURE MONOBLOC)

# MHS

- Résistance élevée au flambage et double listel spécifique.
- Perçage sans cycle de débourrage, durée de vie élevée, pour l'acier traité et trempé, 35HRC-55HRC.

P M K N S H

Arrosage intérieur




| DC≤3 | 3<DC≤6 | 6<DC≤10 | 10<DC≤12 |
|---|---|---|---|
| + 0.010 − 0.002 | + 0.010 − 0.002 | + 0.010 − 0.005 | + 0.010 − 0.008 |
| DCON=3 | 3<DCON≤6 | 6<DCON≤10 | 10<DCON≤12 |
| 0 − 0.006 | 0 − 0.008 | 0 − 0.009 | 0 − 0.011 |

- Les forets MHS sont recommandés pour l'utilisation avec attachements de frettage.
- Utilisez le foret le plus court dans le même diamètre comme foret pilote.

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | ★ | MHS0095L006B | 3.0 | 6.2 | 10.0 | 60.2 | 60 | 0.17 | 3 | 1 |
| | 6 | ★ | MHS0095L009B | 5.9 | 9.2 | 13.0 | 60.2 | 60 | 0.17 | 3 | 2 |
| 0.95 | 13 | ★ | MHS0095L015B | 12.5 | 15.2 | 19.0 | 60.2 | 60 | 0.17 | 3 | 2 |
| | 23 | ★ | MHS0095L025B | 22.0 | 25.2 | 29.0 | 60.2 | 60 | 0.17 | 3 | 2 |
| | 30 | ★ | MHS0095L035B | 28.7 | 35.2 | 39.0 | 80.2 | 80 | 0.17 | 3 | 2 |
| | 3 | ● | MHS0100L006B | 3.2 | 6.2 | 9.9 | 60.2 | 60 | 0.2 | 3 | 1 |
| | 6 | ● | MHS0100L009B | 6.2 | 9.2 | 12.9 | 60.2 | 60 | 0.2 | 3 | 2 |
| 1.00 | 12 | ★ | MHS0100L015B | 12.2 | 15.2 | 18.9 | 60.2 | 60 | 0.2 | 3 | 2 |
| | 22 | ● | MHS0100L025B | 22.2 | 25.2 | 28.9 | 60.2 | 60 | 0.2 | 3 | 2 |
| | 30 | ● | MHS0100L035B | 30.2 | 35.2 | 38.9 | 80.2 | 80 | 0.2 | 3 | 2 |
| | 2 | ● | MHS0110L006B | 2.4 | 6.2 | 9.7 | 60.2 | 60 | 0.2 | 3 | 1 |
| | 5 | ★ | MHS0110L009B | 5.7 | 9.2 | 12.7 | 60.2 | 60 | 0.2 | 3 | 2 |
| 1.10 | 11 | ● | MHS0110L015B | 12.3 | 15.2 | 18.7 | 60.2 | 60 | 0.2 | 3 | 2 |
| | 20 | ● | MHS0110L025B | 22.2 | 25.2 | 28.7 | 60.2 | 60 | 0.2 | 3 | 2 |
| | 29 | ● | MHS0110L035B | 32.1 | 35.2 | 38.7 | 80.2 | 80 | 0.2 | 3 | 2 |
| | 2 | ● | MHS0120L006B | 2.6 | 6.2 | 9.6 | 60.2 | 60 | 0.2 | 3 | 1 |
| | 5 | ★ | MHS0120L009B | 6.2 | 9.2 | 12.6 | 60.2 | 60 | 0.2 | 3 | 2 |
| 1.20 | 10 | ● | MHS0120L015B | 12.2 | 15.2 | 18.6 | 60.2 | 60 | 0.2 | 3 | 2 |
| | 18 | ● | MHS0120L025B | 21.8 | 25.2 | 28.6 | 60.2 | 60 | 0.2 | 3 | 2 |
| | 26 | ● | MHS0120L035B | 31.4 | 35.2 | 38.6 | 80.2 | 80 | 0.2 | 3 | 2 |
| | 2 | ● | MHS0130L007B | 2.8 | 7.2 | 10.4 | 60.2 | 60 | 0.2 | 3 | 1 |
| | 5 | ★ | MHS0130L011B | 6.8 | 11.3 | 14.5 | 60.3 | 60 | 0.3 | 3 | 2 |
| 1.30 | 12 | ● | MHS0130L020B | 15.9 | 20.3 | 23.5 | 60.3 | 60 | 0.3 | 3 | 2 |
| | 20 | ● | MHS0130L030B | 26.3 | 30.3 | 33.5 | 80.3 | 80 | 0.3 | 3 | 2 |
| | 30 | ● | MHS0130L045B | 39.3 | 45.3 | 48.5 | 80.3 | 80 | 0.3 | 3 | 2 |
| | 2 | ● | MHS0140L007B | 3.1 | 7.3 | 10.3 | 60.3 | 60 | 0.3 | 3 | 1 |
| | 5 | ★ | MHS0140L011B | 7.3 | 11.3 | 14.3 | 60.3 | 60 | 0.3 | 3 | 2 |
| 1.40 | 11 | ● | MHS0140L020B | 15.7 | 20.3 | 23.3 | 60.3 | 60 | 0.3 | 3 | 2 |
| | 18 | ★ | MHS0140L030B | 25.5 | 30.3 | 33.3 | 80.3 | 80 | 0.3 | 3 | 2 |
| | 29 | ★ | MHS0140L045B | 40.9 | 45.3 | 48.3 | 80.3 | 80 | 0.3 | 3 | 2 |
| | 3 | ● | MHS0145L008B | 4.7 | 8.3 | 11.2 | 60.3 | 60 | 0.3 | 3 | 1 |
| | 6 | ★ | MHS0145L013B | 9.0 | 13.3 | 16.2 | 60.3 | 60 | 0.3 | 3 | 2 |
| 1.45 | 11 | ★ | MHS0145L020B | 16.3 | 20.3 | 23.2 | 60.3 | 60 | 0.3 | 3 | 2 |
| | 21 | ● | MHS0145L035B | 30.8 | 35.3 | 38.2 | 80.3 | 80 | 0.3 | 3 | 2 |
| | 30 | ★ | MHS0145L055B | 43.8 | 55.3 | 58.2 | 100.3 | 100 | 0.3 | 3 | 2 |
| | 2 | ● | MHS0150L008B | 3.3 | 8.3 | 11.1 | 60.3 | 60 | 0.3 | 3 | 1 |
| | 6 | ★ | MHS0150L013B | 9.3 | 13.3 | 16.1 | 60.3 | 60 | 0.3 | 3 | 2 |
| 1.50 | 10 | ● | MHS0150L020B | 15.3 | 20.3 | 23.1 | 60.3 | 60 | 0.3 | 3 | 2 |
| | 20 | ● | MHS0150L035B | 30.3 | 35.3 | 38.1 | 80.3 | 80 | 0.3 | 3 | 2 |
| | 30 | ● | MHS0150L055B | 45.3 | 55.3 | 58.1 | 100.3 | 100 | 0.3 | 3 | 2 |
| | 2 | ● | MHS0160L008B | 3.5 | 8.3 | 10.9 | 60.3 | 60 | 0.3 | 3 | 1 |
| | 5 | ★ | MHS0160L013B | 8.3 | 13.3 | 15.9 | 60.3 | 60 | 0.3 | 3 | 2 |
| 1.60 | 10 | ● | MHS0160L020B | 16.3 | 20.3 | 22.9 | 60.3 | 60 | 0.3 | 3 | 2 |
| | 19 | ● | MHS0160L035B | 30.7 | 35.3 | 37.9 | 80.3 | 80 | 0.3 | 3 | 2 |
| | 30 | ● | MHS0160L055B | 48.3 | 55.3 | 57.9 | 100.3 | 100 | 0.3 | 3 | 2 |
| | 2 | ● | MHS0170L008B | 3.7 | 8.3 | 10.7 | 60.3 | 60 | 0.3 | 3 | 1 |
| | 5 | ★ | MHS0170L013B | 8.9 | 13.4 | 15.8 | 60.4 | 60 | 0.4 | 3 | 2 |
| 1.70 | 9 | ● | MHS0170L020B | 15.7 | 20.4 | 22.8 | 60.4 | 60 | 0.4 | 3 | 2 |
| | 18 | ● | MHS0170L035B | 31.0 | 35.4 | 37.8 | 80.4 | 80 | 0.4 | 3 | 2 |
| | 29 | ● | MHS0170L055B | 49.7 | 55.4 | 57.8 | 100.4 | 100 | 0.4 | 3 | 2 |

Remarque 1) Veuillez nous contacter pour les géométries qui ne seraient pas dans ce catalogue (e.g. différents diamètres et longueurs peuvent être fabriqués sur demande).

● : Article stocké. ★ : Article standard Japon.
□ : Article non stocké - Fabrication sur commande uniquement.

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | ● | **MHS0180L010B** | 5.7 | 10.3 | 12.5 | 60.3 | 60 | 0.3 | 3 | 1 |
| | 5 | ★ | **MHS0180L015B** | 9.4 | 15.4 | 17.6 | 60.4 | 60 | 0.4 | 3 | 2 |
| **1.80** | 11 | ● | **MHS0180L025B** | 20.2 | 25.4 | 27.6 | 60.4 | 60 | 0.4 | 3 | 2 |
| | 22 | ● | **MHS0180L045B** | 40.0 | 45.4 | 47.6 | 80.4 | 80 | 0.4 | 3 | 2 |
| | 30 | ● | **MHS0180L065B** | 54.4 | 65.4 | 67.6 | 100.4 | 100 | 0.4 | 3 | 2 |
| | 2 | ● | **MHS0190L010B** | 4.1 | 10.3 | 12.4 | 60.3 | 60 | 0.3 | 3 | 1 |
| | 5 | ★ | **MHS0190L015B** | 9.9 | 15.4 | 17.5 | 60.4 | 60 | 0.4 | 3 | 2 |
| **1.90** | 10 | ● | **MHS0190L025B** | 19.4 | 25.4 | 27.5 | 60.4 | 60 | 0.4 | 3 | 2 |
| | 21 | ● | **MHS0190L045B** | 40.3 | 45.4 | 47.5 | 80.4 | 80 | 0.4 | 3 | 2 |
| | 30 | ● | **MHS0190L065B** | 57.4 | 65.4 | 67.5 | 100.4 | 100 | 0.4 | 3 | 2 |
| | 2 | ● | **MHS0195L010B** | 4.3 | 10.4 | 12.4 | 60.4 | 60 | 0.4 | 3 | 1 |
| | 5 | ★ | **MHS0195L015B** | 10.2 | 15.4 | 17.4 | 60.4 | 60 | 0.4 | 3 | 2 |
| **1.95** | 10 | ★ | **MHS0195L025B** | 19.9 | 25.4 | 27.4 | 60.4 | 60 | 0.4 | 3 | 2 |
| | 20 | ● | **MHS0195L045B** | 39.4 | 45.4 | 47.4 | 80.4 | 80 | 0.4 | 3 | 2 |
| | 30 | ★ | **MHS0195L065B** | 58.9 | 65.4 | 67.4 | 100.4 | 100 | 0.4 | 3 | 2 |
| | 2 | ● | **MHS0200L010B** | 4.4 | 10.4 | 12.3 | 60.4 | 60 | 0.4 | 3 | 1 |
| | 5 | ★ | **MHS0200L015B** | 10.4 | 15.4 | 17.3 | 60.4 | 60 | 0.4 | 3 | 2 |
| **2.00** | 9 | ● | **MHS0200L025B** | 18.4 | 25.4 | 27.3 | 60.4 | 60 | 0.4 | 3 | 2 |
| | 20 | ● | **MHS0200L045B** | 40.4 | 45.4 | 47.3 | 80.4 | 80 | 0.4 | 3 | 2 |
| | 30 | ● | **MHS0200L065B** | 60.4 | 65.4 | 67.3 | 100.4 | 100 | 0.4 | 3 | 2 |
| | 3 | ● | **MHS0210L012B** | 6.7 | 12.4 | 14.1 | 60.4 | 60 | 0.4 | 3 | 1 |
| | 7 | ★ | **MHS0210L020B** | 15.1 | 20.4 | 22.1 | 60.4 | 60 | 0.4 | 3 | 2 |
| **2.10** | 11 | ● | **MHS0210L030B** | 23.5 | 30.4 | 32.1 | 80.4 | 80 | 0.4 | 3 | 2 |
| | 23 | ● | **MHS0210L055B** | 48.7 | 55.4 | 57.1 | 100.4 | 100 | 0.4 | 3 | 2 |
| | 30 | ● | **MHS0210L075B** | 63.4 | 75.4 | 77.1 | 120.4 | 120 | 0.4 | 3 | 2 |
| | 2 | ● | **MHS0220L012B** | 4.8 | 12.4 | 13.9 | 60.4 | 60 | 0.4 | 3 | 1 |
| | 6 | ★ | **MHS0220L020B** | 13.7 | 20.5 | 22.0 | 60.5 | 60 | 0.5 | 3 | 2 |
| **2.20** | 11 | ● | **MHS0220L030B** | 24.7 | 30.5 | 32.0 | 80.5 | 80 | 0.5 | 3 | 2 |
| | 22 | ● | **MHS0220L055B** | 48.9 | 55.5 | 57.0 | 100.5 | 100 | 0.5 | 3 | 2 |
| | 30 | ● | **MHS0220L075B** | 66.5 | 75.5 | 77.0 | 120.5 | 120 | 0.5 | 3 | 2 |
| | 2 | ● | **MHS0230L012B** | 5.0 | 12.4 | 13.7 | 60.4 | 60 | 0.4 | 3 | 1 |
| | 6 | ★ | **MHS0230L020B** | 14.3 | 20.5 | 21.8 | 60.5 | 60 | 0.5 | 3 | 2 |
| **2.30** | 10 | ● | **MHS0230L030B** | 23.5 | 30.5 | 31.8 | 80.5 | 80 | 0.5 | 3 | 2 |
| | 21 | ● | **MHS0230L055B** | 48.8 | 55.5 | 56.8 | 100.5 | 100 | 0.5 | 3 | 2 |
| | 30 | ● | **MHS0230L075B** | 69.5 | 75.5 | 76.8 | 120.5 | 120 | 0.5 | 3 | 2 |
| | 2 | ● | **MHS0240L012B** | 5.2 | 12.4 | 13.5 | 60.4 | 60 | 0.4 | 3 | 1 |
| | 5 | ★ | **MHS0240L020B** | 12.5 | 20.5 | 21.6 | 60.5 | 60 | 0.5 | 3 | 2 |
| **2.40** | 9 | ● | **MHS0240L030B** | 22.1 | 30.5 | 31.6 | 80.5 | 80 | 0.5 | 3 | 2 |
| | 20 | ● | **MHS0240L055B** | 48.5 | 55.5 | 56.6 | 100.5 | 100 | 0.5 | 3 | 2 |
| | 28 | ● | **MHS0240L075B** | 67.7 | 75.5 | 76.6 | 120.5 | 120 | 0.5 | 3 | 2 |
| | 2 | ★ | **MHS0245L013B** | 5.3 | 13.4 | 14.4 | 70.4 | 70 | 0.4 | 4 | 1 |
| | 5 | ★ | **MHS0245L020B** | 12.8 | 20.5 | 21.5 | 70.5 | 70 | 0.5 | 4 | 2 |
| **2.45** | 11 | ★ | **MHS0245L035B** | 27.5 | 35.5 | 36.5 | 90.5 | 90 | 0.5 | 4 | 2 |
| | 24 | ★ | **MHS0245L065B** | 59.3 | 65.5 | 66.5 | 110.5 | 110 | 0.5 | 4 | 2 |
| | 30 | ★ | **MHS0245L090B** | 74.0 | 90.5 | 91.5 | 140.5 | 140 | 0.5 | 4 | 2 |
| | 2 | ● | **MHS0250L013B** | 5.5 | 13.5 | 16.3 | 70.5 | 70 | 0.5 | 4 | 1 |
| | 5 | ★ | **MHS0250L020B** | 13.0 | 20.5 | 23.3 | 70.5 | 70 | 0.5 | 4 | 2 |
| **2.50** | 11 | ● | **MHS0250L035B** | 28.0 | 35.5 | 38.3 | 90.5 | 90 | 0.5 | 4 | 2 |
| | 23 | ● | **MHS0250L065B** | 58.0 | 65.5 | 68.3 | 110.5 | 110 | 0.5 | 4 | 2 |
| | 30 | ● | **MHS0250L090B** | 75.5 | 90.5 | 93.3 | 140.5 | 140 | 0.5 | 4 | 2 |

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2 | ● | **MHS0260L013B** | 5.7 | 13.5 | 16.1 | 70.5 | 70 | 0.5 | 4 | 1 |
| | 5 | ★ | **MHS0260L020B** | 13.5 | 20.5 | 23.1 | 70.5 | 70 | 0.5 | 4 | 2 |
| **2.60** | 10 | ● | **MHS0260L035B** | 26.5 | 35.5 | 38.1 | 90.5 | 90 | 0.5 | 4 | 2 |
| | 22 | ● | **MHS0260L065B** | 57.7 | 65.5 | 68.1 | 110.5 | 110 | 0.5 | 4 | 2 |
| | 30 | ● | **MHS0260L090B** | 78.5 | 90.5 | 93.1 | 140.5 | 140 | 0.5 | 4 | 2 |
| | 2 | ● | **MHS0270L013B** | 5.9 | 13.5 | 15.9 | 70.5 | 70 | 0.5 | 4 | 1 |
| | 4 | ★ | **MHS0270L020B** | 11.4 | 20.6 | 23.0 | 70.6 | 70 | 0.6 | 4 | 2 |
| **2.70** | 10 | ● | **MHS0270L035B** | 27.6 | 35.6 | 38.0 | 90.6 | 90 | 0.6 | 4 | 2 |
| | 21 | ● | **MHS0270L065B** | 57.3 | 65.6 | 68.0 | 110.6 | 110 | 0.6 | 4 | 2 |
| | 30 | ● | **MHS0270L090B** | 81.6 | 90.6 | 93.0 | 140.6 | 140 | 0.6 | 4 | 2 |
| | 2 | ● | **MHS0280L014B** | 6.1 | 14.5 | 16.7 | 70.5 | 70 | 0.5 | 4 | 1 |
| | 4 | ★ | **MHS0280L020B** | 11.8 | 20.6 | 22.8 | 70.6 | 70 | 0.6 | 4 | 2 |
| **2.80** | 9 | ● | **MHS0280L035B** | 25.8 | 35.6 | 37.8 | 90.6 | 90 | 0.6 | 4 | 2 |
| | 20 | ● | **MHS0280L065B** | 56.6 | 65.6 | 67.8 | 110.6 | 110 | 0.6 | 4 | 2 |
| | 29 | ● | **MHS0280L090B** | 81.8 | 90.6 | 92.8 | 140.6 | 140 | 0.6 | 4 | 2 |
| | 2 | ● | **MHS0290L014B** | 6.3 | 14.5 | 16.6 | 70.5 | 70 | 0.5 | 4 | 1 |
| | 4 | ★ | **MHS0290L020B** | 12.2 | 20.6 | 22.7 | 70.6 | 70 | 0.6 | 4 | 2 |
| **2.90** | 9 | ● | **MHS0290L035B** | 26.7 | 35.6 | 37.7 | 90.6 | 90 | 0.6 | 4 | 2 |
| | 19 | ● | **MHS0290L065B** | 55.7 | 65.6 | 67.7 | 110.6 | 110 | 0.6 | 4 | 2 |
| | 28 | ● | **MHS0290L090B** | 81.8 | 90.6 | 92.7 | 140.6 | 140 | 0.6 | 4 | 2 |
| | 2 | ★ | **MHS0295L014B** | 6.4 | 14.5 | 16.5 | 70.5 | 70 | 0.5 | 4 | 1 |
| | 4 | ★ | **MHS0295L020B** | 12.4 | 20.6 | 22.6 | 70.6 | 70 | 0.6 | 4 | 2 |
| **2.95** | 9 | ★ | **MHS0295L035B** | 27.2 | 35.6 | 37.6 | 90.6 | 90 | 0.6 | 4 | 2 |
| | 19 | ● | **MHS0295L065B** | 56.7 | 65.6 | 67.6 | 110.6 | 110 | 0.6 | 4 | 2 |
| | 28 | ★ | **MHS0295L090B** | 83.2 | 90.6 | 92.6 | 140.6 | 140 | 0.6 | 4 | 2 |
| | 4 | ● | **MHS0300L020B** | 12.5 | 19.5 | 20.5 | 70.5 | 70 | 0.5 | 4 | 3 |
| | 10 | ● | **MHS0300L040B** | 30.5 | 39.5 | 40.5 | 90.5 | 90 | 0.5 | 4 | 4 |
| **3.0** | 17 | ● | **MHS0300L060B** | 51.5 | 59.5 | 60.5 | 110.5 | 110 | 0.5 | 4 | 4 |
| | 27 | ● | **MHS0300L090B** | 81.5 | 89.5 | 90.5 | 140.5 | 140 | 0.5 | 4 | 4 |
| | 4 | □ | **MHS0310L020B** | 12.9 | 20.0 | 20.5 | 70.5 | 70 | 0.5 | 4 | 3 |
| | 10 | □ | **MHS0310L040B** | 31.6 | 40.1 | 40.6 | 90.6 | 90 | 0.6 | 4 | 4 |
| **3.1** | 17 | □ | **MHS0310L060B** | 53.3 | 60.1 | 60.6 | 110.6 | 110 | 0.6 | 4 | 4 |
| | 26 | □ | **MHS0310L090B** | 81.2 | 90.1 | 90.6 | 140.6 | 140 | 0.6 | 4 | 4 |
| | 4 | □ | **MHS0320L020B** | 13.4 | 20.1 | 20.6 | 70.6 | 70 | 0.6 | 4 | 3 |
| | 10 | □ | **MHS0320L040B** | 32.6 | 40.1 | 40.6 | 90.6 | 90 | 0.6 | 4 | 4 |
| **3.2** | 16 | □ | **MHS0320L060B** | 51.8 | 60.1 | 60.6 | 110.6 | 110 | 0.6 | 4 | 4 |
| | 25 | □ | **MHS0320L090B** | 80.6 | 90.1 | 90.6 | 140.6 | 140 | 0.6 | 4 | 4 |
| | 3 | □ | **MHS0330L020B** | 10.5 | 20.1 | 20.6 | 70.6 | 70 | 0.6 | 4 | 3 |
| | 9 | □ | **MHS0330L040B** | 30.3 | 40.1 | 40.6 | 90.6 | 90 | 0.6 | 4 | 4 |
| **3.3** | 16 | □ | **MHS0330L060B** | 53.4 | 60.1 | 60.6 | 110.6 | 110 | 0.6 | 4 | 4 |
| | 25 | □ | **MHS0330L090B** | 83.1 | 90.1 | 90.6 | 140.6 | 140 | 0.6 | 4 | 4 |
| | 3 | □ | **MHS0340L020B** | 10.8 | 20.1 | 20.6 | 70.6 | 70 | 0.6 | 4 | 3 |
| | 9 | □ | **MHS0340L040B** | 31.2 | 40.1 | 40.6 | 90.6 | 90 | 0.6 | 4 | 4 |
| **3.4** | 15 | □ | **MHS0340L060B** | 51.6 | 60.1 | 60.6 | 110.6 | 110 | 0.6 | 4 | 4 |
| | 24 | □ | **MHS0340L090B** | 82.2 | 90.1 | 90.6 | 140.6 | 140 | 0.6 | 4 | 4 |
| | 3 | ● | **MHS0350L020B** | 11.1 | 20.1 | 20.6 | 70.6 | 70 | 0.6 | 4 | 3 |
| | 9 | ● | **MHS0350L040B** | 32.1 | 40.1 | 40.6 | 90.6 | 90 | 0.6 | 4 | 4 |
| **3.5** | 14 | ● | **MHS0350L060B** | 49.6 | 60.1 | 60.6 | 110.6 | 110 | 0.6 | 4 | 4 |
| | 23 | ● | **MHS0350L090B** | 81.1 | 90.1 | 90.6 | 140.6 | 140 | 0.6 | 4 | 4 |

CONDITIONS DE COUPE ➤ M138
MÉTHODE D'UTILISATION ➤ M139
DONNÉES TECHNIQUES ➤ P001

# MHS

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.6 | 3 | □ | MHS0360L020B | 11.4 | 20.6 | 20.6 | 70.6 | 70 | 0.6 | 4 | 3 |
| | 9 | □ | MHS0360L040B | 33.1 | 40.7 | 40.7 | 90.7 | 90 | 0.7 | 4 | 4 |
| | 14 | □ | MHS0360L060B | 51.1 | 60.7 | 60.7 | 110.7 | 110 | 0.7 | 4 | 4 |
| | 22 | □ | MHS0360L090B | 79.9 | 90.7 | 90.7 | 140.7 | 140 | 0.7 | 4 | 4 |
| | 30 | □ | MHS0360L120B | 108.7 | 120.7 | 120.7 | 170.7 | 170 | 0.7 | 4 | 4 |
| 3.7 | 3 | □ | MHS0370L020B | 11.7 | 20.6 | 20.6 | 70.6 | 70 | 0.6 | 4 | 3 |
| | 8 | □ | MHS0370L040B | 30.3 | 40.7 | 40.7 | 90.7 | 90 | 0.7 | 4 | 4 |
| | 14 | □ | MHS0370L060B | 52.5 | 60.7 | 60.7 | 110.7 | 110 | 0.7 | 4 | 4 |
| | 22 | □ | MHS0370L090B | 82.1 | 90.7 | 90.7 | 140.7 | 140 | 0.7 | 4 | 4 |
| | 30 | □ | MHS0370L120B | 111.7 | 120.7 | 120.7 | 170.7 | 170 | 0.7 | 4 | 4 |
| 3.8 | 3 | ★ | MHS0380L020B | 12.1 | 20.7 | 20.7 | 70.7 | 70 | 0.7 | 4 | 3 |
| | 8 | ★ | MHS0380L040B | 31.1 | 40.7 | 40.7 | 90.7 | 90 | 0.7 | 4 | 4 |
| | 13 | ★ | MHS0380L060B | 50.1 | 60.7 | 60.7 | 110.7 | 110 | 0.7 | 4 | 4 |
| | 21 | ★ | MHS0380L090B | 80.5 | 90.7 | 90.7 | 140.7 | 140 | 0.7 | 4 | 4 |
| | 29 | ★ | MHS0380L120B | 110.9 | 120.7 | 120.7 | 170.7 | 170 | 0.7 | 4 | 4 |
| 3.9 | 3 | ★ | MHS0390L020B | 12.4 | 20.7 | 20.7 | 70.7 | 70 | 0.7 | 4 | 3 |
| | 8 | ★ | MHS0390L040B | 31.9 | 40.7 | 40.7 | 90.7 | 90 | 0.7 | 4 | 4 |
| | 13 | ★ | MHS0390L060B | 51.4 | 60.7 | 60.7 | 110.7 | 110 | 0.7 | 4 | 4 |
| | 21 | □ | MHS0390L090B | 82.6 | 90.7 | 90.7 | 140.7 | 140 | 0.7 | 4 | 4 |
| | 28 | □ | MHS0390L120B | 109.9 | 120.7 | 120.7 | 170.7 | 170 | 0.7 | 4 | 4 |
| 4.0 | 2 | ● | MHS0400L020B | 8.7 | 20.7 | 20.7 | 70.7 | 70 | 0.7 | 4 | 3 |
| | 7 | ● | MHS0400L040B | 28.7 | 40.7 | 40.7 | 90.7 | 90 | 0.7 | 4 | 4 |
| | 12 | ● | MHS0400L060B | 48.7 | 60.7 | 60.7 | 110.7 | 110 | 0.7 | 4 | 4 |
| | 20 | ● | MHS0400L090B | 80.7 | 90.7 | 90.7 | 140.7 | 140 | 0.7 | 4 | 4 |
| | 27 | ● | MHS0400L120B | 108.7 | 120.7 | 120.7 | 170.7 | 170 | 0.7 | 4 | 4 |
| 4.1 | 2 | □ | MHS0410L020B | 8.9 | 19.2 | 20.7 | 70.7 | 70 | 0.7 | 6 | 3 |
| | 7 | □ | MHS0410L040B | 29.4 | 39.2 | 40.7 | 90.7 | 90 | 0.7 | 6 | 4 |
| | 12 | □ | MHS0410L060B | 49.9 | 59.2 | 60.7 | 110.7 | 110 | 0.7 | 6 | 4 |
| | 19 | □ | MHS0410L090B | 78.6 | 89.2 | 90.7 | 140.7 | 140 | 0.7 | 6 | 4 |
| | 26 | □ | MHS0410L120B | 107.3 | 119.2 | 120.7 | 170.7 | 170 | 0.7 | 6 | 4 |
| 4.2 | 2 | □ | MHS0420L020B | 9.1 | 19.2 | 20.7 | 70.7 | 70 | 0.7 | 6 | 3 |
| | 7 | □ | MHS0420L040B | 30.2 | 39.3 | 40.8 | 90.8 | 90 | 0.8 | 6 | 4 |
| | 11 | □ | MHS0420L060B | 47.0 | 59.3 | 60.8 | 110.8 | 110 | 0.8 | 6 | 4 |
| | 19 | □ | MHS0420L090B | 80.6 | 89.3 | 90.8 | 140.8 | 140 | 0.8 | 6 | 4 |
| | 26 | □ | MHS0420L120B | 110.0 | 119.3 | 120.8 | 170.8 | 170 | 0.8 | 6 | 4 |
| 4.3 | 2 | □ | MHS0430L020B | 9.3 | 19.2 | 20.7 | 70.7 | 70 | 0.7 | 6 | 3 |
| | 6 | □ | MHS0430L040B | 26.6 | 39.3 | 40.8 | 90.8 | 90 | 0.8 | 6 | 4 |
| | 11 | □ | MHS0430L060B | 48.1 | 59.3 | 60.8 | 110.8 | 110 | 0.8 | 6 | 4 |
| | 18 | □ | MHS0430L090B | 78.2 | 89.3 | 90.8 | 140.8 | 140 | 0.8 | 6 | 4 |
| | 25 | □ | MHS0430L120B | 108.3 | 119.3 | 120.8 | 170.8 | 170 | 0.8 | 6 | 4 |
| 4.4 | 2 | ★ | MHS0440L020B | 9.6 | 19.3 | 20.8 | 70.8 | 70 | 0.8 | 6 | 3 |
| | 6 | □ | MHS0440L040B | 27.2 | 39.3 | 40.8 | 90.8 | 90 | 0.8 | 6 | 4 |
| | 11 | □ | MHS0440L060B | 49.2 | 59.3 | 60.8 | 110.8 | 110 | 0.8 | 6 | 4 |
| | 18 | □ | MHS0440L090B | 80.0 | 89.3 | 90.8 | 140.8 | 140 | 0.8 | 6 | 4 |
| | 24 | □ | MHS0440L120B | 106.4 | 119.3 | 120.8 | 170.8 | 170 | 0.8 | 6 | 4 |
| 4.5 | 2 | ● | MHS0450L020B | 9.8 | 19.3 | 20.8 | 70.8 | 70 | 0.8 | 6 | 3 |
| | 6 | ● | MHS0450L040B | 27.8 | 39.3 | 40.8 | 90.8 | 90 | 0.8 | 6 | 4 |
| | 10 | ● | MHS0450L060B | 45.8 | 59.3 | 60.8 | 110.8 | 110 | 0.8 | 6 | 4 |
| | 17 | ● | MHS0450L090B | 77.3 | 89.3 | 90.8 | 140.8 | 140 | 0.8 | 6 | 4 |
| | 24 | ● | MHS0450L120B | 108.8 | 119.3 | 120.8 | 170.8 | 170 | 0.8 | 6 | 4 |
| 4.6 | 2 | □ | MHS0460L020B | 10.0 | 19.8 | 20.8 | 70.8 | 70 | 0.8 | 6 | 3 |
| | 6 | □ | MHS0460L040B | 28.4 | 39.8 | 40.8 | 90.8 | 90 | 0.8 | 6 | 4 |
| | 10 | □ | MHS0460L060B | 46.8 | 59.8 | 60.8 | 110.8 | 110 | 0.8 | 6 | 4 |
| | 17 | □ | MHS0460L090B | 79.0 | 89.8 | 90.8 | 140.8 | 140 | 0.8 | 6 | 4 |
| | 23 | □ | MHS0460L120B | 106.6 | 119.8 | 120.8 | 170.8 | 170 | 0.8 | 6 | 4 |
| | 30 | □ | MHS0460L150B | 138.8 | 149.8 | 150.8 | 200.8 | 200 | 0.8 | 6 | 4 |
| 4.7 | 2 | □ | MHS0470L020B | 10.2 | 19.8 | 20.8 | 70.8 | 70 | 0.8 | 6 | 3 |
| | 6 | □ | MHS0470L040B | 29.1 | 39.9 | 40.9 | 90.9 | 90 | 0.9 | 6 | 4 |
| | 10 | □ | MHS0470L060B | 47.9 | 59.9 | 60.9 | 110.9 | 110 | 0.9 | 6 | 4 |
| | 16 | □ | MHS0470L090B | 76.1 | 89.9 | 90.9 | 140.9 | 140 | 0.9 | 6 | 4 |
| | 23 | □ | MHS0470L120B | 109.0 | 119.9 | 120.9 | 170.9 | 170 | 0.9 | 6 | 4 |
| | 29 | □ | MHS0470L150B | 137.2 | 149.9 | 150.9 | 200.9 | 200 | 0.9 | 6 | 4 |
| 4.8 | 1 | ★ | MHS0480L020B | 5.6 | 19.8 | 20.8 | 70.8 | 70 | 0.8 | 6 | 3 |
| | 6 | ★ | MHS0480L040B | 29.7 | 39.9 | 40.9 | 90.9 | 90 | 0.9 | 6 | 4 |
| | 10 | ★ | MHS0480L060B | 48.9 | 59.9 | 60.9 | 110.9 | 110 | 0.9 | 6 | 4 |
| | 16 | ★ | MHS0480L090B | 77.7 | 89.9 | 90.9 | 140.9 | 140 | 0.9 | 6 | 4 |
| | 22 | ★ | MHS0480L120B | 106.5 | 119.9 | 120.9 | 170.9 | 170 | 0.9 | 6 | 4 |
| | 29 | ★ | MHS0480L150B | 140.1 | 149.9 | 150.9 | 200.9 | 200 | 0.9 | 6 | 4 |
| 4.9 | 1 | □ | MHS0490L020B | 5.7 | 19.8 | 20.8 | 70.8 | 70 | 0.8 | 6 | 3 |
| | 5 | □ | MHS0490L040B | 25.4 | 39.9 | 40.9 | 90.9 | 90 | 0.9 | 6 | 4 |
| | 10 | □ | MHS0490L060B | 49.9 | 59.9 | 60.9 | 110.9 | 110 | 0.9 | 6 | 4 |
| | 16 | □ | MHS0490L090B | 79.3 | 89.9 | 90.9 | 140.9 | 140 | 0.9 | 6 | 4 |
| | 22 | □ | MHS0490L120B | 108.7 | 119.9 | 120.9 | 170.9 | 170 | 0.9 | 6 | 4 |
| | 28 | □ | MHS0490L150B | 138.1 | 149.9 | 150.9 | 200.9 | 200 | 0.9 | 6 | 4 |
| 5.0 | 1 | ● | MHS0500L020B | 5.9 | 19.9 | 20.9 | 70.9 | 70 | 0.9 | 6 | 3 |
| | 5 | ● | MHS0500L040B | 25.9 | 39.9 | 40.9 | 90.9 | 90 | 0.9 | 6 | 4 |
| | 9 | ● | MHS0500L060B | 45.9 | 59.9 | 60.9 | 110.9 | 110 | 0.9 | 6 | 4 |
| | 15 | ● | MHS0500L090B | 75.9 | 89.9 | 90.9 | 140.9 | 140 | 0.9 | 6 | 4 |
| | 21 | ● | MHS0500L120B | 105.9 | 119.9 | 120.9 | 170.9 | 170 | 0.9 | 6 | 4 |
| | 27 | ● | MHS0500L150B | 135.9 | 149.9 | 150.9 | 200.9 | 200 | 0.9 | 6 | 4 |
| 5.1 | 3 | □ | MHS0510L030B | 16.2 | 30.4 | 30.9 | 80.9 | 80 | 0.9 | 6 | 3 |
| | 9 | □ | MHS0510L060B | 46.8 | 60.4 | 60.9 | 110.9 | 110 | 0.9 | 6 | 4 |
| | 15 | □ | MHS0510L090B | 77.4 | 90.4 | 90.9 | 140.9 | 140 | 0.9 | 6 | 4 |
| | 21 | □ | MHS0510L120B | 108.0 | 120.4 | 120.9 | 170.9 | 170 | 0.9 | 6 | 4 |
| | 27 | □ | MHS0510L150B | 138.6 | 150.4 | 150.9 | 200.9 | 200 | 0.9 | 6 | 4 |
| 5.2 | 3 | □ | MHS0520L030B | 16.5 | 30.4 | 30.9 | 80.9 | 80 | 0.9 | 6 | 3 |
| | 9 | □ | MHS0520L060B | 47.7 | 60.4 | 60.9 | 110.9 | 110 | 0.9 | 6 | 4 |
| | 15 | □ | MHS0520L090B | 78.9 | 90.4 | 90.9 | 140.9 | 140 | 0.9 | 6 | 4 |
| | 20 | □ | MHS0520L120B | 104.9 | 120.4 | 120.9 | 170.9 | 170 | 0.9 | 6 | 4 |
| | 26 | □ | MHS0520L150B | 136.1 | 150.4 | 150.9 | 200.9 | 200 | 0.9 | 6 | 4 |
| 5.3 | 3 | □ | MHS0530L030B | 16.8 | 30.4 | 30.9 | 80.9 | 80 | 0.9 | 6 | 3 |
| | 9 | □ | MHS0530L060B | 48.7 | 60.5 | 61.0 | 111.0 | 110 | 1.0 | 6 | 4 |
| | 14 | ★ | MHS0530L090B | 75.2 | 90.5 | 91.0 | 141.0 | 140 | 1.0 | 6 | 4 |
| | 20 | □ | MHS0530L120B | 107.0 | 120.5 | 121.0 | 171.0 | 170 | 1.0 | 6 | 4 |
| | 26 | □ | MHS0530L150B | 138.8 | 150.5 | 151.0 | 201.0 | 200 | 1.0 | 6 | 4 |
| 5.4 | 3 | □ | MHS0540L030B | 17.1 | 30.4 | 30.9 | 80.9 | 80 | 0.9 | 6 | 3 |
| | 9 | □ | MHS0540L060B | 49.6 | 60.5 | 61.0 | 111.0 | 110 | 1.0 | 6 | 4 |
| | 14 | □ | MHS0540L090B | 76.6 | 90.5 | 91.0 | 141.0 | 140 | 1.0 | 6 | 4 |
| | 20 | □ | MHS0540L120B | 109.0 | 120.5 | 121.0 | 171.0 | 170 | 1.0 | 6 | 4 |
| | 25 | □ | MHS0540L150B | 136.0 | 150.5 | 151.0 | 201.0 | 200 | 1.0 | 6 | 4 |

Remarque 1) Veuillez nous contacter pour les géométries qui ne seraient pas dans ce catalogue (e.g. différents diamètres et longueurs peuvent être fabriqués sur demande).

**● : Article stocké. ★ : Article standard Japon.**

**□ : Article non stocké - Fabrication sur commande uniquement.**

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.5 | 3 | ● | MHS0550L030B | 17.4 | 30.4 | 30.9 | 80.9 | 80 | 0.9 | 6 | 3 |
| | 8 | ● | MHS0550L060B | 45.0 | 60.5 | 61.0 | 111.0 | 110 | 1.0 | 6 | 4 |
| | 14 | ● | MHS0550L090B | 78.0 | 90.5 | 91.0 | 141.0 | 140 | 1.0 | 6 | 4 |
| | 19 | ● | MHS0550L120B | 105.5 | 120.5 | 121.0 | 171.0 | 170 | 1.0 | 6 | 4 |
| | 25 | ● | MHS0550L150B | 138.5 | 150.5 | 151.0 | 201.0 | 200 | 1.0 | 6 | 4 |
| 5.6 | 3 | □ | MHS0560L030B | 17.8 | 31.0 | 31.0 | 81.0 | 80 | 1.0 | 6 | 3 |
| | 8 | □ | MHS0560L060B | 45.8 | 61.0 | 61.0 | 111.0 | 110 | 1.0 | 6 | 4 |
| | 14 | □ | MHS0560L090B | 79.4 | 91.0 | 91.0 | 141.0 | 140 | 1.0 | 6 | 4 |
| | 19 | □ | MHS0560L120B | 107.4 | 121.0 | 121.0 | 171.0 | 170 | 1.0 | 6 | 4 |
| | 24 | □ | MHS0560L150B | 135.4 | 151.0 | 151.0 | 201.0 | 200 | 1.0 | 6 | 4 |
| 5.7 | 3 | □ | MHS0570L030B | 18.1 | 31.0 | 31.0 | 81.0 | 80 | 1.0 | 6 | 3 |
| | 8 | □ | MHS0570L060B | 46.6 | 61.0 | 61.0 | 111.0 | 110 | 1.0 | 6 | 4 |
| | 13 | □ | MHS0570L090B | 75.1 | 91.0 | 91.0 | 141.0 | 140 | 1.0 | 6 | 4 |
| | 19 | □ | MHS0570L120B | 109.3 | 121.0 | 121.0 | 171.0 | 170 | 1.0 | 6 | 4 |
| | 24 | □ | MHS0570L150B | 137.8 | 151.0 | 151.0 | 201.0 | 200 | 1.0 | 6 | 4 |
| 5.8 | 3 | ★ | MHS0580L030B | 18.4 | 31.0 | 31.0 | 81.0 | 80 | 1.0 | 6 | 3 |
| | 8 | ★ | MHS0580L060B | 47.5 | 61.1 | 61.1 | 111.1 | 110 | 1.1 | 6 | 4 |
| | 13 | ★ | MHS0580L090B | 76.5 | 91.1 | 91.1 | 141.1 | 140 | 1.1 | 6 | 4 |
| | 18 | ★ | MHS0580L120B | 105.5 | 121.1 | 121.1 | 171.1 | 170 | 1.1 | 6 | 4 |
| | 23 | ★ | MHS0580L150B | 134.5 | 151.1 | 151.1 | 201.1 | 200 | 1.1 | 6 | 4 |
| 5.9 | 3 | □ | MHS0590L030B | 18.7 | 31.0 | 31.0 | 81.0 | 80 | 1.0 | 6 | 3 |
| | 8 | □ | MHS0590L060B | 48.3 | 61.1 | 61.1 | 111.1 | 110 | 1.1 | 6 | 4 |
| | 13 | □ | MHS0590L090B | 77.8 | 91.1 | 91.1 | 141.1 | 140 | 1.1 | 6 | 4 |
| | 18 | □ | MHS0590L120B | 107.3 | 121.1 | 121.1 | 171.1 | 170 | 1.1 | 6 | 4 |
| | 23 | □ | MHS0590L150B | 136.8 | 151.1 | 151.1 | 201.1 | 200 | 1.1 | 6 | 4 |
| 6.0 | 2 | ● | MHS0600L030B | 13.0 | 31.0 | 31.0 | 81.0 | 80 | 1.0 | 6 | 3 |
| | 7 | ● | MHS0600L060B | 43.1 | 61.1 | 61.1 | 111.1 | 110 | 1.1 | 6 | 4 |
| | 12 | ● | MHS0600L090B | 73.1 | 91.1 | 91.1 | 141.1 | 140 | 1.1 | 6 | 4 |
| | 17 | ● | MHS0600L120B | 103.1 | 121.1 | 121.1 | 171.1 | 170 | 1.1 | 6 | 4 |
| | 22 | ● | MHS0600L150B | 133.1 | 151.1 | 151.1 | 201.1 | 200 | 1.1 | 6 | 4 |
| 6.1 | 2 | □ | MHS0610L030B | 13.3 | 29.6 | 31.1 | 81.1 | 80 | 1.1 | 8 | 3 |
| | 7 | □ | MHS0610L060B | 43.8 | 59.6 | 61.1 | 111.1 | 110 | 1.1 | 8 | 4 |
| | 12 | □ | MHS0610L090B | 74.3 | 89.6 | 91.1 | 141.1 | 140 | 1.1 | 8 | 4 |
| | 17 | □ | MHS0610L120B | 104.8 | 119.6 | 121.1 | 171.1 | 170 | 1.1 | 8 | 4 |
| | 22 | □ | MHS0610L150B | 135.3 | 149.6 | 151.1 | 201.1 | 200 | 1.1 | 8 | 4 |
| 6.2 | 2 | □ | MHS0620L030B | 13.5 | 29.6 | 31.1 | 81.1 | 80 | 1.1 | 8 | 3 |
| | 7 | □ | MHS0620L060B | 44.5 | 59.6 | 61.1 | 111.1 | 110 | 1.1 | 8 | 4 |
| | 12 | □ | MHS0620L090B | 75.5 | 89.6 | 91.1 | 141.1 | 140 | 1.1 | 8 | 4 |
| | 17 | □ | MHS0620L120B | 106.5 | 119.6 | 121.1 | 171.1 | 170 | 1.1 | 8 | 4 |
| | 21 | □ | MHS0620L150B | 131.3 | 149.6 | 151.1 | 201.1 | 200 | 1.1 | 8 | 4 |
| 6.3 | 2 | □ | MHS0630L030B | 13.7 | 29.6 | 31.1 | 81.1 | 80 | 1.1 | 8 | 3 |
| | 7 | □ | MHS0630L060B | 45.2 | 59.6 | 61.1 | 111.1 | 110 | 1.1 | 8 | 4 |
| | 12 | □ | MHS0630L090B | 76.7 | 89.6 | 91.1 | 141.1 | 140 | 1.1 | 8 | 4 |
| | 16 | □ | MHS0630L120B | 101.9 | 119.6 | 121.1 | 171.1 | 170 | 1.1 | 8 | 4 |
| | 21 | □ | MHS0630L150B | 133.4 | 149.6 | 151.1 | 201.1 | 200 | 1.1 | 8 | 4 |
| 6.4 | 2 | □ | MHS0640L030B | 13.9 | 29.6 | 31.1 | 81.1 | 80 | 1.1 | 8 | 3 |
| | 7 | □ | MHS0640L060B | 46.0 | 59.7 | 61.2 | 111.2 | 110 | 1.2 | 8 | 4 |
| | 11 | □ | MHS0640L090B | 71.6 | 89.7 | 91.2 | 141.2 | 140 | 1.2 | 8 | 4 |
| | 16 | □ | MHS0640L120B | 103.6 | 119.7 | 121.2 | 171.2 | 170 | 1.2 | 8 | 4 |
| | 21 | □ | MHS0640L150B | 135.6 | 149.7 | 151.2 | 201.2 | 200 | 1.2 | 8 | 4 |

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.5 | 2 | ● | MHS0650L030B | 14.1 | 29.6 | 31.1 | 81.1 | 80 | 1.1 | 8 | 3 |
| | 6 | ● | MHS0650L060B | 40.2 | 59.7 | 61.2 | 111.2 | 110 | 1.2 | 8 | 4 |
| | 11 | ● | MHS0650L090B | 72.7 | 89.7 | 91.2 | 141.2 | 140 | 1.2 | 8 | 4 |
| | 16 | ● | MHS0650L120B | 105.2 | 119.7 | 121.2 | 171.2 | 170 | 1.2 | 8 | 4 |
| | 20 | ● | MHS0650L150B | 131.2 | 149.7 | 151.2 | 201.2 | 200 | 1.2 | 8 | 4 |
| 6.6 | 2 | □ | MHS0660L030B | 14.3 | 30.1 | 31.1 | 81.1 | 80 | 1.1 | 8 | 3 |
| | 6 | □ | MHS0660L060B | 40.8 | 60.2 | 61.2 | 111.2 | 110 | 1.2 | 8 | 4 |
| | 11 | □ | MHS0660L090B | 73.8 | 90.2 | 91.2 | 141.2 | 140 | 1.2 | 8 | 4 |
| | 16 | □ | MHS0660L120B | 106.8 | 120.2 | 121.2 | 171.2 | 170 | 1.2 | 8 | 4 |
| | 20 | □ | MHS0660L150B | 133.2 | 150.2 | 151.2 | 201.2 | 200 | 1.2 | 8 | 4 |
| | 28 | □ | MHS0660L200B | 186.0 | 200.2 | 201.2 | 251.2 | 250 | 1.2 | 8 | 4 |
| 6.7 | 2 | □ | MHS0670L030B | 14.6 | 30.2 | 31.2 | 81.2 | 80 | 1.2 | 8 | 3 |
| | 6 | □ | MHS0670L060B | 41.4 | 60.2 | 61.2 | 111.2 | 110 | 1.2 | 8 | 4 |
| | 11 | □ | MHS0670L090B | 74.9 | 90.2 | 91.2 | 141.2 | 140 | 1.2 | 8 | 4 |
| | 15 | □ | MHS0670L120B | 101.7 | 120.2 | 121.2 | 171.2 | 170 | 1.2 | 8 | 4 |
| | 20 | □ | MHS0670L150B | 135.2 | 150.2 | 151.2 | 201.2 | 200 | 1.2 | 8 | 4 |
| | 27 | □ | MHS0670L200B | 182.1 | 200.2 | 201.2 | 251.2 | 250 | 1.2 | 8 | 4 |
| 6.8 | 2 | ★ | MHS0680L030B | 14.8 | 30.2 | 31.2 | 81.2 | 80 | 1.2 | 8 | 3 |
| | 6 | ★ | MHS0680L060B | 42.0 | 60.2 | 61.2 | 111.2 | 110 | 1.2 | 8 | 4 |
| | 11 | ★ | MHS0680L090B | 76.0 | 90.2 | 91.2 | 141.2 | 140 | 1.2 | 8 | 4 |
| | 15 | ★ | MHS0680L120B | 103.2 | 120.2 | 121.2 | 171.2 | 170 | 1.2 | 8 | 4 |
| | 19 | ★ | MHS0680L150B | 130.4 | 150.2 | 151.2 | 201.2 | 200 | 1.2 | 8 | 4 |
| | 27 | ★ | MHS0680L200B | 184.8 | 200.2 | 201.2 | 251.2 | 250 | 1.2 | 8 | 4 |
| 6.9 | 2 | □ | MHS0690L030B | 15.0 | 30.2 | 31.2 | 81.2 | 80 | 1.2 | 8 | 3 |
| | 6 | □ | MHS0690L060B | 42.7 | 60.3 | 61.3 | 111.3 | 110 | 1.3 | 8 | 4 |
| | 10 | □ | MHS0690L090B | 70.3 | 90.3 | 91.3 | 141.3 | 140 | 1.3 | 8 | 4 |
| | 15 | □ | MHS0690L120B | 104.8 | 120.3 | 121.3 | 171.3 | 170 | 1.3 | 8 | 4 |
| | 19 | □ | MHS0690L150B | 132.4 | 150.3 | 151.3 | 201.3 | 200 | 1.3 | 8 | 4 |
| | 26 | □ | MHS0690L200B | 180.7 | 200.3 | 201.3 | 251.3 | 250 | 1.3 | 8 | 4 |
| 7.0 | 2 | ● | MHS0700L030B | 15.2 | 30.2 | 31.2 | 81.2 | 80 | 1.2 | 8 | 3 |
| | 6 | ● | MHS0700L060B | 43.3 | 60.3 | 61.3 | 111.3 | 110 | 1.3 | 8 | 4 |
| | 10 | ● | MHS0700L090B | 71.3 | 90.3 | 91.3 | 141.3 | 140 | 1.3 | 8 | 4 |
| | 14 | ● | MHS0700L120B | 99.3 | 120.3 | 121.3 | 171.3 | 170 | 1.3 | 8 | 4 |
| | 19 | ● | MHS0700L150B | 134.3 | 150.3 | 151.3 | 201.3 | 200 | 1.3 | 8 | 4 |
| | 26 | ● | MHS0700L200B | 183.3 | 200.3 | 201.3 | 251.3 | 250 | 1.3 | 8 | 4 |
| 7.1 | 2 | □ | MHS0710L030B | 15.4 | 30.7 | 31.2 | 81.2 | 80 | 1.2 | 8 | 3 |
| | 6 | □ | MHS0710L060B | 43.9 | 60.8 | 61.3 | 111.3 | 110 | 1.3 | 8 | 4 |
| | 10 | □ | MHS0710L090B | 72.3 | 90.8 | 91.3 | 141.3 | 140 | 1.3 | 8 | 4 |
| | 14 | □ | MHS0710L120B | 100.7 | 120.8 | 121.3 | 171.3 | 170 | 1.3 | 8 | 4 |
| | 19 | □ | MHS0710L150B | 136.2 | 150.8 | 151.3 | 201.3 | 200 | 1.3 | 8 | 4 |
| | 26 | □ | MHS0710L200B | 185.9 | 200.8 | 201.3 | 251.3 | 250 | 1.3 | 8 | 4 |
| 7.2 | 2 | □ | MHS0720L030B | 15.6 | 30.7 | 31.2 | 81.2 | 80 | 1.2 | 8 | 3 |
| | 6 | □ | MHS0720L060B | 44.5 | 60.8 | 61.3 | 111.3 | 110 | 1.3 | 8 | 4 |
| | 10 | □ | MHS0720L090B | 73.3 | 90.8 | 91.3 | 141.3 | 140 | 1.3 | 8 | 4 |
| | 14 | □ | MHS0720L120B | 102.1 | 120.8 | 121.3 | 171.3 | 170 | 1.3 | 8 | 4 |
| | 18 | □ | MHS0720L150B | 130.9 | 150.8 | 151.3 | 201.3 | 200 | 1.3 | 8 | 4 |
| | 25 | □ | MHS0720L200B | 181.3 | 200.8 | 201.3 | 251.3 | 250 | 1.3 | 8 | 4 |

CONDITIONS DE COUPE ➤ M138
MÉTHODE D'UTILISATION ➤ M139
DONNÉES TECHNIQUES ➤ P001

# MHS

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.3 | 2 | □ | MHS0730L030B | 15.9 | 30.8 | 31.3 | 81.3 | 80 | 1.3 | 8 | 3 |
| | 6 | □ | MHS0730L060B | 45.1 | 60.8 | 61.3 | 111.3 | 110 | 1.3 | 8 | 4 |
| | 10 | □ | MHS0730L090B | 74.3 | 90.8 | 91.3 | 141.3 | 140 | 1.3 | 8 | 4 |
| | 14 | □ | MHS0730L120B | 103.5 | 120.8 | 121.3 | 171.3 | 170 | 1.3 | 8 | 4 |
| | 18 | □ | MHS0730L150B | 132.7 | 150.8 | 151.3 | 201.3 | 200 | 1.3 | 8 | 4 |
| | 25 | □ | MHS0730L200B | 183.8 | 200.8 | 201.3 | 251.3 | 250 | 1.3 | 8 | 4 |
| 7.4 | 1 | □ | MHS0740L030B | 8.7 | 30.8 | 31.3 | 81.3 | 80 | 1.3 | 8 | 3 |
| | 6 | □ | MHS0740L060B | 45.7 | 60.8 | 61.3 | 111.3 | 110 | 1.3 | 8 | 4 |
| | 10 | □ | MHS0740L090B | 75.3 | 90.8 | 91.3 | 141.3 | 140 | 1.3 | 8 | 4 |
| | 14 | □ | MHS0740L120B | 104.9 | 120.8 | 121.3 | 171.3 | 170 | 1.3 | 8 | 4 |
| | 18 | □ | MHS0740L150B | 134.5 | 150.8 | 151.3 | 201.3 | 200 | 1.3 | 8 | 4 |
| | 24 | □ | MHS0740L200B | 178.9 | 200.8 | 201.3 | 251.3 | 250 | 1.3 | 8 | 4 |
| 7.5 | 1 | ● | MHS0750L030B | 8.8 | 30.8 | 31.3 | 81.3 | 80 | 1.3 | 8 | 3 |
| | 5 | ● | MHS0750L060B | 38.9 | 60.9 | 61.4 | 111.4 | 110 | 1.4 | 8 | 4 |
| | 9 | ● | MHS0750L090B | 68.9 | 90.9 | 91.4 | 141.4 | 140 | 1.4 | 8 | 4 |
| | 13 | ● | MHS0750L120B | 98.9 | 120.9 | 121.4 | 171.4 | 170 | 1.4 | 8 | 4 |
| | 17 | ● | MHS0750L150B | 128.9 | 150.9 | 151.4 | 201.4 | 200 | 1.4 | 8 | 4 |
| | 24 | ● | MHS0750L200B | 181.4 | 200.9 | 201.4 | 251.4 | 250 | 1.4 | 8 | 4 |
| 7.6 | 1 | □ | MHS0760L030B | 8.9 | 31.3 | 31.3 | 81.3 | 80 | 1.3 | 8 | 3 |
| | 5 | □ | MHS0760L060B | 39.4 | 61.4 | 61.4 | 111.4 | 110 | 1.4 | 8 | 4 |
| | 9 | □ | MHS0760L090B | 69.8 | 91.4 | 91.4 | 141.4 | 140 | 1.4 | 8 | 4 |
| | 13 | □ | MHS0760L120B | 100.2 | 121.4 | 121.4 | 171.4 | 170 | 1.4 | 8 | 4 |
| | 17 | □ | MHS0760L150B | 130.6 | 151.4 | 151.4 | 201.4 | 200 | 1.4 | 8 | 4 |
| | 24 | □ | MHS0760L200B | 183.8 | 201.4 | 201.4 | 251.4 | 250 | 1.4 | 8 | 4 |
| | 30 | □ | MHS0760L250B | 229.4 | 251.4 | 251.4 | 301.4 | 300 | 1.4 | 8 | 4 |
| 7.7 | 1 | □ | MHS0770L030B | 9.0 | 31.3 | 31.3 | 81.3 | 80 | 1.3 | 8 | 3 |
| | 5 | □ | MHS0770L060B | 39.9 | 61.4 | 61.4 | 111.4 | 110 | 1.4 | 8 | 4 |
| | 9 | □ | MHS0770L090B | 70.7 | 91.4 | 91.4 | 141.4 | 140 | 1.4 | 8 | 4 |
| | 13 | □ | MHS0770L120B | 101.5 | 121.4 | 121.4 | 171.4 | 170 | 1.4 | 8 | 4 |
| | 17 | □ | MHS0770L150B | 132.3 | 151.4 | 151.4 | 201.4 | 200 | 1.4 | 8 | 4 |
| | 23 | □ | MHS0770L200B | 178.5 | 201.4 | 201.4 | 251.4 | 250 | 1.4 | 8 | 4 |
| | 30 | □ | MHS0770L250B | 232.4 | 251.4 | 251.4 | 301.4 | 300 | 1.4 | 8 | 4 |
| 7.8 | 1 | ★ | MHS0780L030B | 9.1 | 31.3 | 31.3 | 81.3 | 80 | 1.3 | 8 | 3 |
| | 5 | ★ | MHS0780L060B | 40.4 | 61.4 | 61.4 | 111.4 | 110 | 1.4 | 8 | 4 |
| | 9 | ★ | MHS0780L090B | 71.6 | 91.4 | 91.4 | 141.4 | 140 | 1.4 | 8 | 4 |
| | 13 | ★ | MHS0780L120B | 102.8 | 121.4 | 121.4 | 171.4 | 170 | 1.4 | 8 | 4 |
| | 17 | ★ | MHS0780L150B | 134.0 | 151.4 | 151.4 | 201.4 | 200 | 1.4 | 8 | 4 |
| | 23 | ★ | MHS0780L200B | 180.8 | 201.4 | 201.4 | 251.4 | 250 | 1.4 | 8 | 4 |
| | 30 | ★ | MHS0780L250B | 235.4 | 251.4 | 251.4 | 301.4 | 300 | 1.4 | 8 | 4 |
| 7.9 | 1 | □ | MHS0790L030B | 9.3 | 31.4 | 31.4 | 81.4 | 80 | 1.4 | 8 | 3 |
| | 5 | □ | MHS0790L060B | 40.9 | 61.4 | 61.4 | 111.4 | 110 | 1.4 | 8 | 4 |
| | 9 | □ | MHS0790L090B | 72.5 | 91.4 | 91.4 | 141.4 | 140 | 1.4 | 8 | 4 |
| | 13 | □ | MHS0790L120B | 104.1 | 121.4 | 121.4 | 171.4 | 170 | 1.4 | 8 | 4 |
| | 16 | □ | MHS0790L150B | 127.8 | 151.4 | 151.4 | 201.4 | 200 | 1.4 | 8 | 4 |
| | 23 | □ | MHS0790L200B | 183.1 | 201.4 | 201.4 | 251.4 | 250 | 1.4 | 8 | 4 |
| | 29 | □ | MHS0790L250B | 230.5 | 251.4 | 251.4 | 301.4 | 300 | 1.4 | 8 | 4 |

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.0 | 1 | ● | MHS0800L030B | 9.4 | 31.4 | 31.4 | 81.4 | 80 | 1.4 | 8 | 3 |
| | 5 | ● | MHS0800L060B | 41.5 | 61.5 | 61.5 | 111.5 | 110 | 1.5 | 8 | 4 |
| | 9 | ● | MHS0800L090B | 73.5 | 91.5 | 91.5 | 141.5 | 140 | 1.5 | 8 | 4 |
| | 12 | ● | MHS0800L120B | 97.5 | 121.5 | 121.5 | 171.5 | 170 | 1.5 | 8 | 4 |
| | 16 | ● | MHS0800L150B | 129.5 | 151.5 | 151.5 | 201.5 | 200 | 1.5 | 8 | 4 |
| | 22 | ● | MHS0800L200B | 177.5 | 201.5 | 201.5 | 251.5 | 250 | 1.5 | 8 | 4 |
| | 29 | ● | MHS0800L250B | 233.5 | 251.5 | 251.5 | 301.5 | 300 | 1.5 | 8 | 4 |
| 8.1 | 2 | □ | MHS0810L040B | 17.6 | 39.9 | 41.4 | 101.4 | 100 | 1.4 | 10 | 3 |
| | 8 | □ | MHS0810L090B | 66.3 | 90.0 | 91.5 | 151.5 | 150 | 1.5 | 10 | 4 |
| | 12 | □ | MHS0810L120B | 98.7 | 120.0 | 121.5 | 181.5 | 180 | 1.5 | 10 | 4 |
| | 16 | □ | MHS0810L150B | 131.1 | 150.0 | 151.5 | 211.5 | 210 | 1.5 | 10 | 4 |
| | 22 | □ | MHS0810L200B | 179.7 | 200.0 | 201.5 | 261.5 | 260 | 1.5 | 10 | 4 |
| | 28 | □ | MHS0810L250B | 228.3 | 250.0 | 251.5 | 311.5 | 310 | 1.5 | 10 | 4 |
| 8.2 | 2 | □ | MHS0820L040B | 17.8 | 39.9 | 41.4 | 101.4 | 100 | 1.4 | 10 | 3 |
| | 8 | □ | MHS0820L090B | 67.1 | 90.0 | 91.5 | 151.5 | 150 | 1.5 | 10 | 4 |
| | 12 | □ | MHS0820L120B | 99.9 | 120.0 | 121.5 | 181.5 | 180 | 1.5 | 10 | 4 |
| | 16 | □ | MHS0820L150B | 132.7 | 150.0 | 151.5 | 211.5 | 210 | 1.5 | 10 | 4 |
| | 22 | □ | MHS0820L200B | 181.9 | 200.0 | 201.5 | 261.5 | 260 | 1.5 | 10 | 4 |
| | 28 | □ | MHS0820L250B | 231.1 | 250.0 | 251.5 | 311.5 | 310 | 1.5 | 10 | 4 |
| 8.3 | 2 | □ | MHS0830L040B | 18.0 | 39.9 | 41.4 | 101.4 | 100 | 1.4 | 10 | 3 |
| | 8 | □ | MHS0830L090B | 67.9 | 90.0 | 91.5 | 151.5 | 150 | 1.5 | 10 | 4 |
| | 12 | □ | MHS0830L120B | 101.1 | 120.0 | 121.5 | 181.5 | 180 | 1.5 | 10 | 4 |
| | 15 | □ | MHS0830L150B | 126.0 | 150.0 | 151.5 | 211.5 | 210 | 1.5 | 10 | 4 |
| | 21 | □ | MHS0830L200B | 175.8 | 200.0 | 201.5 | 261.5 | 260 | 1.5 | 10 | 4 |
| | 27 | □ | MHS0830L250B | 225.6 | 250.0 | 251.5 | 311.5 | 310 | 1.5 | 10 | 4 |
| 8.4 | 2 | □ | MHS0840L040B | 18.2 | 39.9 | 41.4 | 101.4 | 100 | 1.4 | 10 | 3 |
| | 8 | □ | MHS0840L090B | 68.7 | 90.0 | 91.5 | 151.5 | 150 | 1.5 | 10 | 4 |
| | 12 | □ | MHS0840L120B | 102.3 | 120.0 | 121.5 | 181.5 | 180 | 1.5 | 10 | 4 |
| | 15 | □ | MHS0840L150B | 127.5 | 150.0 | 151.5 | 211.5 | 210 | 1.5 | 10 | 4 |
| | 21 | □ | MHS0840L200B | 177.9 | 200.0 | 201.5 | 261.5 | 260 | 1.5 | 10 | 4 |
| | 27 | □ | MHS0840L250B | 228.3 | 250.0 | 251.5 | 311.5 | 310 | 1.5 | 10 | 4 |
| 8.5 | 2 | ● | MHS0850L040B | 18.5 | 40.0 | 41.5 | 101.5 | 100 | 1.5 | 10 | 3 |
| | 8 | ● | MHS0850L090B | 69.5 | 90.0 | 91.5 | 151.5 | 150 | 1.5 | 10 | 4 |
| | 11 | ● | MHS0850L120B | 95.0 | 120.0 | 121.5 | 181.5 | 180 | 1.5 | 10 | 4 |
| | 15 | ● | MHS0850L150B | 129.0 | 150.0 | 151.5 | 211.5 | 210 | 1.5 | 10 | 4 |
| | 21 | ● | MHS0850L200B | 180.0 | 200.0 | 201.5 | 261.5 | 260 | 1.5 | 10 | 4 |
| | 27 | ● | MHS0850L250B | 231.0 | 250.0 | 251.5 | 311.5 | 310 | 1.5 | 10 | 4 |
| 8.6 | 2 | □ | MHS0860L040B | 18.7 | 40.5 | 41.5 | 101.5 | 100 | 1.5 | 10 | 3 |
| | 8 | □ | MHS0860L090B | 70.4 | 90.6 | 91.6 | 151.6 | 150 | 1.6 | 10 | 4 |
| | 11 | □ | MHS0860L120B | 96.2 | 120.6 | 121.6 | 181.6 | 180 | 1.6 | 10 | 4 |
| | 15 | □ | MHS0860L150B | 130.6 | 150.6 | 151.6 | 211.6 | 210 | 1.6 | 10 | 4 |
| | 21 | □ | MHS0860L200B | 182.2 | 200.6 | 201.6 | 261.6 | 260 | 1.6 | 10 | 4 |
| | 26 | □ | MHS0860L250B | 225.2 | 250.6 | 251.6 | 311.6 | 310 | 1.6 | 10 | 4 |
| 8.7 | 2 | □ | MHS0870L040B | 18.9 | 40.5 | 41.5 | 101.5 | 100 | 1.5 | 10 | 3 |
| | 8 | □ | MHS0870L090B | 71.2 | 90.6 | 91.6 | 151.6 | 150 | 1.6 | 10 | 4 |
| | 11 | □ | MHS0870L120B | 97.3 | 120.6 | 121.6 | 181.6 | 180 | 1.6 | 10 | 4 |
| | 15 | □ | MHS0870L150B | 132.1 | 150.6 | 151.6 | 211.6 | 210 | 1.6 | 10 | 4 |
| | 20 | □ | MHS0870L200B | 175.6 | 200.6 | 201.6 | 261.6 | 260 | 1.6 | 10 | 4 |
| | 26 | □ | MHS0870L250B | 227.8 | 250.6 | 251.6 | 311.6 | 310 | 1.6 | 10 | 4 |

Remarque 1) Veuillez nous contacter pour les géométries qui ne seraient pas dans ce catalogue (e.g. différents diamètres et longueurs peuvent être fabriqués sur demande).

**● : Article stocké. ★ : Article standard Japon.**

**□ : Article non stocké - Fabrication sur commande uniquement.**

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.8 | 2 | ★ | **MHS0880L040B** | 19.1 | 40.5 | 41.5 | 101.5 | 100 | 1.5 | 10 | 3 |
| | 8 | ★ | **MHS0880L090B** | 72.0 | 90.6 | 91.6 | 151.6 | 150 | 1.6 | 10 | 4 |
| | 11 | ★ | **MHS0880L120B** | 98.4 | 120.6 | 121.6 | 181.6 | 180 | 1.6 | 10 | 4 |
| | 14 | ★ | **MHS0880L150B** | 124.8 | 150.6 | 151.6 | 211.6 | 210 | 1.6 | 10 | 4 |
| | 20 | ★ | **MHS0880L200B** | 177.6 | 200.6 | 201.6 | 261.6 | 260 | 1.6 | 10 | 4 |
| | 26 | ★ | **MHS0880L250B** | 230.4 | 250.6 | 251.6 | 311.6 | 310 | 1.6 | 10 | 4 |
| 8.9 | 2 | □ | **MHS0890L040B** | 19.3 | 40.5 | 41.5 | 101.5 | 100 | 1.5 | 10 | 3 |
| | 7 | □ | **MHS0890L090B** | 63.9 | 90.6 | 91.6 | 151.6 | 150 | 1.6 | 10 | 4 |
| | 11 | □ | **MHS0890L120B** | 99.5 | 120.6 | 121.6 | 181.6 | 180 | 1.6 | 10 | 4 |
| | 14 | □ | **MHS0890L150B** | 126.2 | 150.6 | 151.6 | 211.6 | 210 | 1.6 | 10 | 4 |
| | 20 | □ | **MHS0890L200B** | 179.6 | 200.6 | 201.6 | 261.6 | 260 | 1.6 | 10 | 4 |
| | 25 | □ | **MHS0890L250B** | 224.1 | 250.6 | 251.6 | 311.6 | 310 | 1.6 | 10 | 4 |
| 9.0 | 2 | ● | **MHS0900L040B** | 19.5 | 40.5 | 41.5 | 101.5 | 100 | 1.5 | 10 | 3 |
| | 7 | ● | **MHS0900L090B** | 64.6 | 90.6 | 91.6 | 151.6 | 150 | 1.6 | 10 | 4 |
| | 11 | ● | **MHS0900L120B** | 100.6 | 120.6 | 121.6 | 181.6 | 180 | 1.6 | 10 | 4 |
| | 14 | ● | **MHS0900L150B** | 127.6 | 150.6 | 151.6 | 211.6 | 210 | 1.6 | 10 | 4 |
| | 20 | ● | **MHS0900L200B** | 181.6 | 200.6 | 201.6 | 261.6 | 260 | 1.6 | 10 | 4 |
| | 25 | ● | **MHS0900L250B** | 226.6 | 250.6 | 251.6 | 311.6 | 310 | 1.6 | 10 | 4 |
| 9.1 | 2 | □ | **MHS0910L040B** | 19.8 | 41.1 | 41.6 | 101.6 | 100 | 1.6 | 10 | 3 |
| | 7 | □ | **MHS0910L090B** | 65.4 | 91.2 | 91.7 | 151.7 | 150 | 1.7 | 10 | 4 |
| | 11 | □ | **MHS0910L120B** | 101.8 | 121.2 | 121.7 | 181.7 | 180 | 1.7 | 10 | 4 |
| | 14 | □ | **MHS0910L150B** | 129.1 | 151.2 | 151.7 | 211.7 | 210 | 1.7 | 10 | 4 |
| | 19 | □ | **MHS0910L200B** | 174.6 | 201.2 | 201.7 | 261.7 | 260 | 1.7 | 10 | 4 |
| | 25 | □ | **MHS0910L250B** | 229.2 | 251.2 | 251.7 | 311.7 | 310 | 1.7 | 10 | 4 |
| | 30 | □ | **MHS0910L300B** | 274.7 | 301.2 | 301.7 | 361.7 | 360 | 1.7 | 10 | 4 |
| 9.2 | 2 | □ | **MHS0920L040B** | 20.0 | 41.1 | 41.6 | 101.6 | 100 | 1.6 | 10 | 3 |
| | 7 | □ | **MHS0920L090B** | 66.1 | 91.2 | 91.7 | 151.7 | 150 | 1.7 | 10 | 4 |
| | 10 | □ | **MHS0920L120B** | 93.7 | 121.2 | 121.7 | 181.7 | 180 | 1.7 | 10 | 4 |
| | 14 | □ | **MHS0920L150B** | 130.5 | 151.2 | 151.7 | 211.7 | 210 | 1.7 | 10 | 4 |
| | 19 | □ | **MHS0920L200B** | 176.5 | 201.2 | 201.7 | 261.7 | 260 | 1.7 | 10 | 4 |
| | 25 | □ | **MHS0920L250B** | 231.7 | 251.2 | 251.7 | 311.7 | 310 | 1.7 | 10 | 4 |
| | 30 | □ | **MHS0920L300B** | 277.7 | 301.2 | 301.7 | 361.7 | 360 | 1.7 | 10 | 4 |
| 9.3 | 2 | □ | **MHS0930L040B** | 20.2 | 41.1 | 41.6 | 101.6 | 100 | 1.6 | 10 | 3 |
| | 7 | □ | **MHS0930L090B** | 66.8 | 91.2 | 91.7 | 151.7 | 150 | 1.7 | 10 | 4 |
| | 10 | □ | **MHS0930L120B** | 94.7 | 121.2 | 121.7 | 181.7 | 180 | 1.7 | 10 | 4 |
| | 14 | □ | **MHS0930L150B** | 131.9 | 151.2 | 151.7 | 211.7 | 210 | 1.7 | 10 | 4 |
| | 19 | □ | **MHS0930L200B** | 178.4 | 201.2 | 201.7 | 261.7 | 260 | 1.7 | 10 | 4 |
| | 24 | □ | **MHS0930L250B** | 224.9 | 251.2 | 251.7 | 311.7 | 310 | 1.7 | 10 | 4 |
| | 30 | □ | **MHS0930L300B** | 280.7 | 301.2 | 301.7 | 361.7 | 360 | 1.7 | 10 | 4 |
| 9.4 | 2 | □ | **MHS0940L040B** | 20.4 | 41.1 | 41.6 | 101.6 | 100 | 1.6 | 10 | 3 |
| | 7 | □ | **MHS0940L090B** | 67.5 | 91.2 | 91.7 | 151.7 | 150 | 1.7 | 10 | 4 |
| | 10 | □ | **MHS0940L120B** | 95.7 | 121.2 | 121.7 | 181.7 | 180 | 1.7 | 10 | 4 |
| | 13 | □ | **MHS0940L150B** | 123.9 | 151.2 | 151.7 | 211.7 | 210 | 1.7 | 10 | 4 |
| | 19 | □ | **MHS0940L200B** | 180.3 | 201.2 | 201.7 | 261.7 | 260 | 1.7 | 10 | 4 |
| | 24 | □ | **MHS0940L250B** | 227.3 | 251.2 | 251.7 | 311.7 | 310 | 1.7 | 10 | 4 |
| | 29 | □ | **MHS0940L300B** | 274.3 | 301.2 | 301.7 | 361.7 | 360 | 1.7 | 10 | 4 |

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.5 | 2 | ★ | **MHS0950L040B** | 20.6 | 41.1 | 41.6 | 101.6 | 100 | 1.6 | 10 | 3 |
| | 7 | ★ | **MHS0950L090B** | 68.2 | 91.2 | 91.7 | 151.7 | 150 | 1.7 | 10 | 4 |
| | 10 | ★ | **MHS0950L120B** | 96.7 | 121.2 | 121.7 | 181.7 | 180 | 1.7 | 10 | 4 |
| | 13 | ★ | **MHS0950L150B** | 125.2 | 151.2 | 151.7 | 211.7 | 210 | 1.7 | 10 | 4 |
| | 18 | ★ | **MHS0950L200B** | 172.7 | 201.2 | 201.7 | 261.7 | 260 | 1.7 | 10 | 4 |
| | 24 | ★ | **MHS0950L250B** | 229.7 | 251.2 | 251.7 | 311.7 | 310 | 1.7 | 10 | 4 |
| | 29 | ★ | **MHS0950L300B** | 277.2 | 301.2 | 301.7 | 361.7 | 360 | 1.7 | 10 | 4 |
| 9.6 | 2 | □ | **MHS0960L040B** | 20.9 | 41.7 | 41.7 | 101.7 | 100 | 1.7 | 10 | 3 |
| | 7 | □ | **MHS0960L090B** | 68.9 | 91.7 | 91.7 | 151.7 | 150 | 1.7 | 10 | 4 |
| | 10 | □ | **MHS0960L120B** | 97.7 | 121.7 | 121.7 | 181.7 | 180 | 1.7 | 10 | 4 |
| | 13 | □ | **MHS0960L150B** | 126.5 | 151.7 | 151.7 | 211.7 | 210 | 1.7 | 10 | 4 |
| | 18 | □ | **MHS0960L200B** | 174.5 | 201.7 | 201.7 | 261.7 | 260 | 1.7 | 10 | 4 |
| | 24 | □ | **MHS0960L250B** | 232.1 | 251.7 | 251.7 | 311.7 | 310 | 1.7 | 10 | 4 |
| | 29 | □ | **MHS0960L300B** | 280.1 | 301.7 | 301.7 | 361.7 | 360 | 1.7 | 10 | 4 |
| 9.7 | 2 | □ | **MHS0970L040B** | 21.1 | 41.7 | 41.7 | 101.7 | 100 | 1.7 | 10 | 3 |
| | 7 | □ | **MHS0970L090B** | 69.7 | 91.8 | 91.8 | 151.8 | 150 | 1.8 | 10 | 4 |
| | 10 | □ | **MHS0970L120B** | 98.8 | 121.8 | 121.8 | 181.8 | 180 | 1.8 | 10 | 4 |
| | 13 | □ | **MHS0970L150B** | 127.9 | 151.8 | 151.8 | 211.8 | 210 | 1.8 | 10 | 4 |
| | 18 | □ | **MHS0970L200B** | 176.4 | 201.8 | 201.8 | 261.8 | 260 | 1.8 | 10 | 4 |
| | 23 | □ | **MHS0970L250B** | 224.9 | 251.8 | 251.8 | 311.8 | 310 | 1.8 | 10 | 4 |
| | 28 | □ | **MHS0970L300B** | 273.4 | 301.8 | 301.8 | 361.8 | 360 | 1.8 | 10 | 4 |
| 9.8 | 2 | ★ | **MHS0980L040B** | 21.3 | 41.7 | 41.7 | 101.7 | 100 | 1.7 | 10 | 3 |
| | 7 | ★ | **MHS0980L090B** | 70.4 | 91.8 | 91.8 | 151.8 | 150 | 1.8 | 10 | 4 |
| | 10 | ★ | **MHS0980L120B** | 99.8 | 121.8 | 121.8 | 181.8 | 180 | 1.8 | 10 | 4 |
| | 13 | ★ | **MHS0980L150B** | 129.2 | 151.8 | 151.8 | 211.8 | 210 | 1.8 | 10 | 4 |
| | 18 | ★ | **MHS0980L200B** | 178.2 | 201.8 | 201.8 | 261.8 | 260 | 1.8 | 10 | 4 |
| | 23 | ★ | **MHS0980L250B** | 227.2 | 251.8 | 251.8 | 311.8 | 310 | 1.8 | 10 | 4 |
| | 28 | ★ | **MHS0980L300B** | 276.2 | 301.8 | 301.8 | 361.8 | 360 | 1.8 | 10 | 4 |
| 9.9 | 2 | □ | **MHS0990L040B** | 21.5 | 41.7 | 41.7 | 101.7 | 100 | 1.7 | 10 | 3 |
| | 7 | □ | **MHS0990L090B** | 71.1 | 91.8 | 91.8 | 151.8 | 150 | 1.8 | 10 | 4 |
| | 10 | □ | **MHS0990L120B** | 100.8 | 121.8 | 121.8 | 181.8 | 180 | 1.8 | 10 | 4 |
| | 13 | □ | **MHS0990L150B** | 130.5 | 151.8 | 151.8 | 211.8 | 210 | 1.8 | 10 | 4 |
| | 18 | □ | **MHS0990L200B** | 180.0 | 201.8 | 201.8 | 261.8 | 260 | 1.8 | 10 | 4 |
| | 23 | □ | **MHS0990L250B** | 229.5 | 251.8 | 251.8 | 311.8 | 310 | 1.8 | 10 | 4 |
| | 28 | □ | **MHS0990L300B** | 279.0 | 301.8 | 301.8 | 361.8 | 360 | 1.8 | 10 | 4 |
| 10.0 | 1 | ● | **MHS1000L040B** | 11.7 | 41.7 | 41.7 | 101.7 | 100 | 1.7 | 10 | 3 |
| | 6 | ● | **MHS1000L090B** | 61.8 | 91.8 | 91.8 | 151.8 | 150 | 1.8 | 10 | 4 |
| | 9 | ● | **MHS1000L120B** | 91.8 | 121.8 | 121.8 | 181.8 | 180 | 1.8 | 10 | 4 |
| | 12 | ● | **MHS1000L150B** | 121.8 | 151.8 | 151.8 | 211.8 | 210 | 1.8 | 10 | 4 |
| | 17 | ● | **MHS1000L200B** | 171.8 | 201.8 | 201.8 | 261.8 | 260 | 1.8 | 10 | 4 |
| | 22 | ● | **MHS1000L250B** | 221.8 | 251.8 | 251.8 | 311.8 | 310 | 1.8 | 10 | 4 |
| | 27 | ● | **MHS1000L300B** | 271.8 | 301.8 | 301.8 | 361.8 | 360 | 1.8 | 10 | 4 |
| 10.1 | 1 | □ | **MHS1010L040B** | 11.8 | 40.2 | 41.7 | 101.7 | 100 | 1.7 | 12 | 3 |
| | 6 | □ | **MHS1010L090B** | 62.4 | 90.3 | 91.8 | 151.8 | 150 | 1.8 | 12 | 4 |
| | 9 | □ | **MHS1010L120B** | 92.7 | 120.3 | 121.8 | 181.8 | 180 | 1.8 | 12 | 4 |
| | 12 | □ | **MHS1010L150B** | 123.0 | 150.3 | 151.8 | 211.8 | 210 | 1.8 | 12 | 4 |
| | 17 | □ | **MHS1010L200B** | 173.5 | 200.3 | 201.8 | 261.8 | 260 | 1.8 | 12 | 4 |
| | 22 | □ | **MHS1010L250B** | 224.0 | 250.3 | 251.8 | 311.8 | 310 | 1.8 | 12 | 4 |
| | 27 | □ | **MHS1010L300B** | 274.5 | 300.3 | 301.8 | 361.8 | 360 | 1.8 | 12 | 4 |

CONDITIONS DE COUPE ➤ M138
MÉTHODE D'UTILISATION ➤ M139
DONNÉES TECHNIQUES ➤ P001

# MHS

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | □ | **MHS1020L040B** | 12.0 | 40.3 | 41.8 | 101.8 | 100 | 1.8 | 12 | 3 |
| | 6 | □ | **MHS1020L090B** | 63.1 | 90.4 | 91.9 | 151.9 | 150 | 1.9 | 12 | 4 |
| | 9 | □ | **MHS1020L120B** | 93.7 | 120.4 | 121.9 | 181.9 | 180 | 1.9 | 12 | 4 |
| **10.2** | 12 | □ | **MHS1020L150B** | 124.3 | 150.4 | 151.9 | 211.9 | 210 | 1.9 | 12 | 4 |
| | 17 | □ | **MHS1020L200B** | 175.3 | 200.4 | 201.9 | 261.9 | 260 | 1.9 | 12 | 4 |
| | 22 | □ | **MHS1020L250B** | 226.3 | 250.4 | 251.9 | 311.9 | 310 | 1.9 | 12 | 4 |
| | 27 | □ | **MHS1020L300B** | 277.3 | 300.4 | 301.9 | 361.9 | 360 | 1.9 | 12 | 4 |
| | 1 | □ | **MHS1030L040B** | 12.1 | 40.3 | 41.8 | 101.8 | 100 | 1.8 | 12 | 3 |
| | 6 | □ | **MHS1030L090B** | 63.7 | 90.4 | 91.9 | 151.9 | 150 | 1.9 | 12 | 4 |
| | 9 | □ | **MHS1030L120B** | 94.6 | 120.4 | 121.9 | 181.9 | 180 | 1.9 | 12 | 4 |
| **10.3** | 12 | □ | **MHS1030L150B** | 125.5 | 150.4 | 151.9 | 211.9 | 210 | 1.9 | 12 | 4 |
| | 17 | □ | **MHS1030L200B** | 177.0 | 200.4 | 201.9 | 261.9 | 260 | 1.9 | 12 | 4 |
| | 22 | □ | **MHS1030L250B** | 228.5 | 250.4 | 251.9 | 311.9 | 310 | 1.9 | 12 | 4 |
| | 26 | □ | **MHS1030L300B** | 269.7 | 300.4 | 301.9 | 361.9 | 360 | 1.9 | 12 | 4 |
| | 1 | □ | **MHS1040L040B** | 12.2 | 40.3 | 41.8 | 101.8 | 100 | 1.8 | 12 | 3 |
| | 6 | □ | **MHS1040L090B** | 64.3 | 90.4 | 91.9 | 151.9 | 150 | 1.9 | 12 | 4 |
| | 9 | □ | **MHS1040L120B** | 95.5 | 120.4 | 121.9 | 181.9 | 180 | 1.9 | 12 | 4 |
| **10.4** | 12 | □ | **MHS1040L150B** | 126.7 | 150.4 | 151.9 | 211.9 | 210 | 1.9 | 12 | 4 |
| | 17 | □ | **MHS1040L200B** | 178.7 | 200.4 | 201.9 | 261.9 | 260 | 1.9 | 12 | 4 |
| | 21 | □ | **MHS1040L250B** | 220.3 | 250.4 | 251.9 | 311.9 | 310 | 1.9 | 12 | 4 |
| | 26 | □ | **MHS1040L300B** | 272.3 | 300.4 | 301.9 | 361.9 | 360 | 1.9 | 12 | 4 |
| | 1 | ★ | **MHS1050L040B** | 12.3 | 40.3 | 41.8 | 101.8 | 100 | 1.8 | 12 | 3 |
| | 6 | ★ | **MHS1050L090B** | 64.9 | 90.4 | 91.9 | 151.9 | 150 | 1.9 | 12 | 4 |
| | 9 | ★ | **MHS1050L120B** | 96.4 | 120.4 | 121.9 | 181.9 | 180 | 1.9 | 12 | 4 |
| **10.5** | 12 | ★ | **MHS1050L150B** | 127.9 | 150.4 | 151.9 | 211.9 | 210 | 1.9 | 12 | 4 |
| | 16 | ★ | **MHS1050L200B** | 169.9 | 200.4 | 201.9 | 261.9 | 260 | 1.9 | 12 | 4 |
| | 21 | ★ | **MHS1050L250B** | 222.4 | 250.4 | 251.9 | 311.9 | 310 | 1.9 | 12 | 4 |
| | 26 | ★ | **MHS1050L300B** | 274.9 | 300.4 | 301.9 | 361.9 | 360 | 1.9 | 12 | 4 |
| | 1 | □ | **MHS1060L040B** | 12.4 | 40.8 | 41.8 | 101.8 | 100 | 1.8 | 12 | 3 |
| | 6 | □ | **MHS1060L090B** | 65.5 | 90.9 | 91.9 | 151.9 | 150 | 1.9 | 12 | 4 |
| | 9 | □ | **MHS1060L120B** | 97.3 | 120.9 | 121.9 | 181.9 | 180 | 1.9 | 12 | 4 |
| **10.6** | 12 | □ | **MHS1060L150B** | 129.1 | 150.9 | 151.9 | 211.9 | 210 | 1.9 | 12 | 4 |
| | 16 | □ | **MHS1060L200B** | 171.5 | 200.9 | 201.9 | 261.9 | 260 | 1.9 | 12 | 4 |
| | 21 | □ | **MHS1060L250B** | 224.5 | 250.9 | 251.9 | 311.9 | 310 | 1.9 | 12 | 4 |
| | 26 | □ | **MHS1060L300B** | 277.5 | 300.9 | 301.9 | 361.9 | 360 | 1.9 | 12 | 4 |
| | 1 | □ | **MHS1070L040B** | 12.5 | 40.8 | 41.8 | 101.8 | 100 | 1.8 | 12 | 3 |
| | 6 | □ | **MHS1070L090B** | 66.1 | 90.9 | 91.9 | 151.9 | 150 | 1.9 | 12 | 4 |
| | 9 | □ | **MHS1070L120B** | 98.2 | 120.9 | 121.9 | 181.9 | 180 | 1.9 | 12 | 4 |
| **10.7** | 11 | □ | **MHS1070L150B** | 119.6 | 150.9 | 151.9 | 211.9 | 210 | 1.9 | 12 | 4 |
| | 16 | □ | **MHS1070L200B** | 173.1 | 200.9 | 201.9 | 261.9 | 260 | 1.9 | 12 | 4 |
| | 21 | □ | **MHS1070L250B** | 226.6 | 250.9 | 251.9 | 311.9 | 310 | 1.9 | 12 | 4 |
| | 25 | □ | **MHS1070L300B** | 269.4 | 300.9 | 301.9 | 361.9 | 360 | 1.9 | 12 | 4 |
| | 1 | ★ | **MHS1080L040B** | 12.7 | 40.9 | 41.9 | 101.9 | 100 | 1.9 | 12 | 3 |
| | 6 | ★ | **MHS1080L090B** | 66.8 | 91.0 | 92.0 | 152.0 | 150 | 2.0 | 12 | 4 |
| | 9 | ★ | **MHS1080L120B** | 99.2 | 121.0 | 122.0 | 182.0 | 180 | 2.0 | 12 | 4 |
| **10.8** | 11 | ★ | **MHS1080L150B** | 120.8 | 151.0 | 152.0 | 212.0 | 210 | 2.0 | 12 | 4 |
| | 16 | ★ | **MHS1080L200B** | 174.8 | 201.0 | 202.0 | 262.0 | 260 | 2.0 | 12 | 4 |
| | 21 | ★ | **MHS1080L250B** | 228.8 | 251.0 | 252.0 | 312.0 | 310 | 2.0 | 12 | 4 |
| | 25 | ★ | **MHS1080L300B** | 272.0 | 301.0 | 302.0 | 362.0 | 360 | 2.0 | 12 | 4 |

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) LU | LCF | LH | OAL | LF | PL | DCON | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | □ | **MHS1090L040B** | 12.8 | 40.9 | 41.9 | 101.9 | 100 | 1.9 | 12 | 3 |
| | 6 | □ | **MHS1090L090B** | 67.4 | 91.0 | 92.0 | 152.0 | 150 | 2.0 | 12 | 4 |
| | 8 | □ | **MHS1090L120B** | 89.2 | 121.0 | 122.0 | 182.0 | 180 | 2.0 | 12 | 4 |
| **10.9** | 11 | □ | **MHS1090L150B** | 121.9 | 151.0 | 152.0 | 212.0 | 210 | 2.0 | 12 | 4 |
| | 16 | □ | **MHS1090L200B** | 176.4 | 201.0 | 202.0 | 262.0 | 260 | 2.0 | 12 | 4 |
| | 20 | □ | **MHS1090L250B** | 220.0 | 251.0 | 252.0 | 312.0 | 310 | 2.0 | 12 | 4 |
| | 25 | □ | **MHS1090L300B** | 274.5 | 301.0 | 302.0 | 362.0 | 360 | 2.0 | 12 | 4 |
| | 1 | ● | **MHS1100L040B** | 12.9 | 40.9 | 41.9 | 101.9 | 100 | 1.9 | 12 | 3 |
| | 6 | ● | **MHS1100L090B** | 68.0 | 91.0 | 92.0 | 152.0 | 150 | 2.0 | 12 | 4 |
| | 8 | ● | **MHS1100L120B** | 90.0 | 121.0 | 122.0 | 182.0 | 180 | 2.0 | 12 | 4 |
| **11.0** | 11 | ● | **MHS1100L150B** | 123.0 | 151.0 | 152.0 | 212.0 | 210 | 2.0 | 12 | 4 |
| | 16 | ● | **MHS1100L200B** | 178.0 | 201.0 | 202.0 | 262.0 | 260 | 2.0 | 12 | 4 |
| | 20 | ● | **MHS1100L250B** | 222.0 | 251.0 | 252.0 | 312.0 | 310 | 2.0 | 12 | 4 |
| | 25 | ● | **MHS1100L300B** | 277.0 | 301.0 | 302.0 | 362.0 | 360 | 2.0 | 12 | 4 |
| | 1 | □ | **MHS1110L040B** | 13.0 | 41.4 | 41.9 | 101.9 | 100 | 1.9 | 12 | 3 |
| | 6 | □ | **MHS1110L090B** | 68.6 | 91.5 | 92.0 | 152.0 | 150 | 2.0 | 12 | 4 |
| | 8 | □ | **MHS1110L120B** | 90.8 | 121.5 | 122.0 | 182.0 | 180 | 2.0 | 12 | 4 |
| **11.1** | 11 | □ | **MHS1110L150B** | 124.1 | 151.5 | 152.0 | 212.0 | 210 | 2.0 | 12 | 4 |
| | 15 | □ | **MHS1110L200B** | 168.5 | 201.5 | 202.0 | 262.0 | 260 | 2.0 | 12 | 4 |
| | 20 | □ | **MHS1110L250B** | 224.0 | 251.5 | 252.0 | 312.0 | 310 | 2.0 | 12 | 4 |
| | 24 | □ | **MHS1110L300B** | 268.4 | 301.5 | 302.0 | 362.0 | 360 | 2.0 | 12 | 4 |
| | 1 | □ | **MHS1120L040B** | 13.1 | 41.4 | 41.9 | 101.9 | 100 | 1.9 | 12 | 3 |
| | 5 | □ | **MHS1120L090B** | 58.0 | 91.5 | 92.0 | 152.0 | 150 | 2.0 | 12 | 4 |
| | 8 | □ | **MHS1120L120B** | 91.6 | 121.5 | 122.0 | 182.0 | 180 | 2.0 | 12 | 4 |
| **11.2** | 11 | □ | **MHS1120L150B** | 125.2 | 151.5 | 152.0 | 212.0 | 210 | 2.0 | 12 | 4 |
| | 15 | □ | **MHS1120L200B** | 170.0 | 201.5 | 202.0 | 262.0 | 260 | 2.0 | 12 | 4 |
| | 20 | □ | **MHS1120L250B** | 226.0 | 251.5 | 252.0 | 312.0 | 310 | 2.0 | 12 | 4 |
| | 24 | □ | **MHS1120L300B** | 270.8 | 301.5 | 302.0 | 362.0 | 360 | 2.0 | 12 | 4 |
| | 1 | □ | **MHS1130L040B** | 13.2 | 41.4 | 41.9 | 101.9 | 100 | 1.9 | 12 | 3 |
| | 5 | □ | **MHS1130L090B** | 58.6 | 91.6 | 92.1 | 152.1 | 150 | 2.1 | 12 | 4 |
| | 8 | □ | **MHS1130L120B** | 92.5 | 121.6 | 122.1 | 182.1 | 180 | 2.1 | 12 | 4 |
| **11.3** | 11 | □ | **MHS1130L150B** | 126.4 | 151.6 | 152.1 | 212.1 | 210 | 2.1 | 12 | 4 |
| | 15 | □ | **MHS1130L200B** | 171.6 | 201.6 | 202.1 | 262.1 | 260 | 2.1 | 12 | 4 |
| | 20 | □ | **MHS1130L250B** | 228.1 | 251.6 | 252.1 | 312.1 | 310 | 2.1 | 12 | 4 |
| | 24 | □ | **MHS1130L300B** | 273.3 | 301.6 | 302.1 | 362.1 | 360 | 2.1 | 12 | 4 |
| | 1 | □ | **MHS1140L040B** | 13.4 | 41.5 | 42.0 | 102.0 | 100 | 2.0 | 12 | 3 |
| | 5 | □ | **MHS1140L090B** | 59.1 | 91.6 | 92.1 | 152.1 | 150 | 2.1 | 12 | 4 |
| | 8 | □ | **MHS1140L120B** | 93.3 | 121.6 | 122.1 | 182.1 | 180 | 2.1 | 12 | 4 |
| **11.4** | 11 | □ | **MHS1140L150B** | 127.5 | 151.6 | 152.1 | 212.1 | 210 | 2.1 | 12 | 4 |
| | 15 | □ | **MHS1140L200B** | 173.1 | 201.6 | 202.1 | 262.1 | 260 | 2.1 | 12 | 4 |
| | 19 | □ | **MHS1140L250B** | 218.7 | 251.6 | 252.1 | 312.1 | 310 | 2.1 | 12 | 4 |
| | 24 | □ | **MHS1140L300B** | 275.7 | 301.6 | 302.1 | 362.1 | 360 | 2.1 | 12 | 4 |
| | 1 | ★ | **MHS1150L040B** | 13.5 | 41.5 | 42.0 | 102.0 | 100 | 2.0 | 12 | 3 |
| | 5 | ★ | **MHS1150L090B** | 59.6 | 91.6 | 92.1 | 152.1 | 150 | 2.1 | 12 | 4 |
| | 8 | ★ | **MHS1150L120B** | 94.1 | 121.6 | 122.1 | 182.1 | 180 | 2.1 | 12 | 4 |
| **11.5** | 10 | ★ | **MHS1150L150B** | 117.1 | 151.6 | 152.1 | 212.1 | 210 | 2.1 | 12 | 4 |
| | 15 | ★ | **MHS1150L200B** | 174.6 | 201.6 | 202.1 | 262.1 | 260 | 2.1 | 12 | 4 |
| | 19 | ★ | **MHS1150L250B** | 220.6 | 251.6 | 252.1 | 312.1 | 310 | 2.1 | 12 | 4 |
| | 24 | ★ | **MHS1150L300B** | 278.1 | 301.6 | 302.1 | 362.1 | 360 | 2.1 | 12 | 4 |

Remarque 1) Veuillez nous contacter pour les géométries qui ne seraient pas dans ce catalogue (e.g. différents diamètres et longueurs peuvent être fabriqués sur demande).

**● : Article stocké. ★ : Article standard Japon.**

**□ : Article non stocké - Fabrication sur commande uniquement.**

| DC (mm) | Rapport (L/D) | VP15TF | Référence | Dimensions (mm) | | | | | | | Type |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | LU | LCF | LH | OAL | LF | PL | DCON | |
| | 1 | □ | **MHS1160L040B** | 13.6 | 42.0 | 42.0 | 102.0 | 100 | 2.0 | 12 | 3 |
| | 5 | □ | **MHS1160L090B** | 60.1 | 92.1 | 92.1 | 152.1 | 150 | 2.1 | 12 | 4 |
| | 8 | □ | **MHS1160L120B** | 94.9 | 122.1 | 122.1 | 182.1 | 180 | 2.1 | 12 | 4 |
| **11.6** | 10 | □ | **MHS1160L150B** | 118.1 | 152.1 | 152.1 | 212.1 | 210 | 2.1 | 12 | 4 |
| | 15 | □ | **MHS1160L200B** | 176.1 | 202.1 | 202.1 | 262.1 | 260 | 2.1 | 12 | 4 |
| | 19 | □ | **MHS1160L250B** | 222.5 | 252.1 | 252.1 | 312.1 | 310 | 2.1 | 12 | 4 |
| | 23 | □ | **MHS1160L300B** | 268.9 | 302.1 | 302.1 | 362.1 | 360 | 2.1 | 12 | 4 |
| | 1 | □ | **MHS1170L040B** | 13.7 | 42.0 | 42.0 | 102.0 | 100 | 2.0 | 12 | 3 |
| | 5 | □ | **MHS1170L090B** | 60.6 | 92.1 | 92.1 | 152.1 | 150 | 2.1 | 12 | 4 |
| | 8 | □ | **MHS1170L120B** | 95.7 | 122.1 | 122.1 | 182.1 | 180 | 2.1 | 12 | 4 |
| **11.7** | 10 | □ | **MHS1170L150B** | 119.1 | 152.1 | 152.1 | 212.1 | 210 | 2.1 | 12 | 4 |
| | 15 | □ | **MHS1170L200B** | 177.6 | 202.1 | 202.1 | 262.1 | 260 | 2.1 | 12 | 4 |
| | 19 | □ | **MHS1170L250B** | 224.4 | 252.1 | 252.1 | 312.1 | 310 | 2.1 | 12 | 4 |
| | 23 | □ | **MHS1170L300B** | 271.2 | 302.1 | 302.1 | 362.1 | 360 | 2.1 | 12 | 4 |
| | 1 | ★ | **MHS1180L040B** | 13.8 | 42.0 | 42.0 | 102.0 | 100 | 2.0 | 12 | 3 |
| | 5 | ★ | **MHS1180L090B** | 61.1 | 92.1 | 92.1 | 152.1 | 150 | 2.1 | 12 | 4 |
| | 8 | ★ | **MHS1180L120B** | 96.5 | 122.1 | 122.1 | 182.1 | 180 | 2.1 | 12 | 4 |
| **11.8** | 10 | ★ | **MHS1180L150B** | 120.1 | 152.1 | 152.1 | 212.1 | 210 | 2.1 | 12 | 4 |
| | 14 | ★ | **MHS1180L200B** | 167.3 | 202.1 | 202.1 | 262.1 | 260 | 2.1 | 12 | 4 |
| | 19 | ★ | **MHS1180L250B** | 226.3 | 252.1 | 252.1 | 312.1 | 310 | 2.1 | 12 | 4 |
| | 23 | ★ | **MHS1180L300B** | 273.5 | 302.1 | 302.1 | 362.1 | 360 | 2.1 | 12 | 4 |
| | 1 | □ | **MHS1190L040B** | 13.9 | 42.0 | 42.0 | 102.0 | 100 | 2.0 | 12 | 3 |
| | 5 | □ | **MHS1190L090B** | 61.7 | 92.2 | 92.2 | 152.2 | 150 | 2.2 | 12 | 4 |
| | 8 | □ | **MHS1190L120B** | 97.4 | 122.2 | 122.2 | 182.2 | 180 | 2.2 | 12 | 4 |
| **11.9** | 10 | □ | **MHS1190L150B** | 121.2 | 152.2 | 152.2 | 212.2 | 210 | 2.2 | 12 | 4 |
| | 14 | □ | **MHS1190L200B** | 168.8 | 202.2 | 202.2 | 262.2 | 260 | 2.2 | 12 | 4 |
| | 19 | □ | **MHS1190L250B** | 228.3 | 252.2 | 252.2 | 312.2 | 310 | 2.2 | 12 | 4 |
| | 23 | □ | **MHS1190L300B** | 275.9 | 302.2 | 302.2 | 362.2 | 360 | 2.2 | 12 | 4 |
| | 1 | ● | **MHS1200L040B** | 14.1 | 42.1 | 42.1 | 102.1 | 100 | 2.1 | 12 | 3 |
| | 5 | ● | **MHS1200L090B** | 62.2 | 92.2 | 92.2 | 152.2 | 150 | 2.2 | 12 | 4 |
| | 7 | ● | **MHS1200L120B** | 86.2 | 122.2 | 122.2 | 182.2 | 180 | 2.2 | 12 | 4 |
| **12.0** | 10 | ● | **MHS1200L150B** | 122.2 | 152.2 | 152.2 | 212.2 | 210 | 2.2 | 12 | 4 |
| | 14 | ● | **MHS1200L200B** | 170.2 | 202.2 | 202.2 | 262.2 | 260 | 2.2 | 12 | 4 |
| | 18 | ● | **MHS1200L250B** | 218.2 | 252.2 | 252.2 | 312.2 | 310 | 2.2 | 12 | 4 |
| | 22 | ● | **MHS1200L300B** | 266.2 | 302.2 | 302.2 | 362.2 | 360 | 2.2 | 12 | 4 |

CONDITIONS DE COUPE ➤ M138
MÉTHODE D'UTILISATION ➤ M139
DONNÉES TECHNIQUES ➤ P001

# MHS

## CONDITIONS DE COUPE RECOMMANDÉES

| Matière | P | | | | M | | | |
|---|---|---|---|---|---|---|---|---|
| | Acier doux (≤180HB), Acier carbone Acier allié (180—280HB)<br>Ck10, Ck45, 42CrMo4 | | | | Aciers inoxydables austénitiques et martensitiques (>200HB)<br>X20CrNi17-2, X30Cr13 | | | |
| Diamètre foret **DC** (mm) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Avance table (mm/min) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Avance table (mm/min) |
| **1.0** | 40 | 12700 | 0.030 (0.020—0.040) | 380 | 20 | 6400 | 0.030 (0.020—0.040) | 190 |
| **1.2** | 50 | 13300 | 0.035 (0.025—0.050) | 465 | 30 | 8000 | 0.035 (0.025—0.050) | 280 |
| **1.6** | 60 | 11900 | 0.050 (0.030—0.065) | 595 | 40 | 8000 | 0.050 (0.030—0.065) | 400 |
| **2.0** | 70 | 11100 | 0.060 (0.040—0.080) | 665 | 50 | 8000 | 0.060 (0.040—0.080) | 480 |
| **2.5** | 80 | 10200 | 0.075 (0.050—0.100) | 765 | 60 | 7600 | 0.075 (0.050—0.100) | 570 |
| **3.2** | 80 | 8000 | 0.100 (0.070—0.130) | 800 | 60 | 6000 | 0.100 (0.070—0.130) | 600 |
| **4.0** | 80 | 6400 | 0.100 (0.090—0.110) | 640 | 60 | 4800 | 0.090 (0.080—0.090) | 430 |
| **5.0** | 80 | 5100 | 0.130 (0.110—0.140) | 665 | 60 | 3800 | 0.110 (0.100—0.120) | 420 |
| **6.3** | 80 | 4000 | 0.160 (0.140—0.180) | 640 | 60 | 3000 | 0.140 (0.130—0.150) | 420 |
| **8.0** | 80 | 3200 | 0.200 (0.180—0.230) | 640 | 60 | 2400 | 0.170 (0.160—0.190) | 410 |
| **10.0** | 80 | 2600 | 0.250 (0.220—0.280) | 650 | 60 | 1900 | 0.220 (0.200—0.230) | 420 |
| **12.0** | 80 | 2100 | 0.300 (0.270—0.340) | 630 | 60 | 1600 | 0.260 (0.240—0.280) | 415 |

| Matière | P | | | | H | | M | |
|---|---|---|---|---|---|---|---|---|
| | Acier pré-traité (35—45HRC), Acier outil (≤350HB)<br>NAK, X36CrMo17, X210Cr12, 55NiCrMoV6 | | | | Acier Traité (40—55HRC), Acier inoxydable (<450HB)<br>X20CrNi17-2, X30Cr13<br>X5CrNiCuNb164, X7CrNiAl17-7 | | | |
| Diamètre foret **DC** (mm) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Avance table (mm/min) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Avance table (mm/min) |
| **1.0** | 20 | 6400 | 0.025 (0.020—0.030) | 160 | 40 | 12700 | 0.020 (0.015—0.025) | 255 |
| **1.2** | 30 | 8000 | 0.030 (0.020—0.035) | 240 | 40 | 10600 | 0.025 (0.020—0.030) | 265 |
| **1.6** | 40 | 8000 | 0.040 (0.030—0.045) | 320 | 50 | 10000 | 0.035 (0.025—0.040) | 350 |
| **2.0** | 50 | 8000 | 0.045 (0.035—0.060) | 360 | 50 | 8000 | 0.040 (0.030—0.050) | 320 |
| **2.5** | 60 | 7600 | 0.060 (0.045—0.075) | 455 | 60 | 7600 | 0.050 (0.040—0.065) | 380 |
| **3.2** | 60 | 6000 | 0.080 (0.060—0.090) | 480 | 60 | 6000 | 0.060 (0.050—0.080) | 360 |
| **4.0** | 60 | 4800 | 0.080 (0.070—0.100) | 385 | 60 | 4800 | 0.080 (0.060—0.100) | 385 |
| **5.0** | 60 | 3800 | 0.110 (0.090—0.130) | 420 | 60 | 3800 | 0.100 (0.080—0.130) | 380 |
| **6.3** | 60 | 3000 | 0.130 (0.110—0.160) | 390 | 60 | 3000 | 0.110 (0.090—0.130) | 330 |
| **8.0** | 60 | 2400 | 0.170 (0.140—0.200) | 410 | 60 | 2400 | 0.140 (0.120—0.160) | 335 |
| **10.0** | 60 | 1900 | 0.210 (0.170—0.250) | 400 | 60 | 1900 | 0.170 (0.140—0.200) | 325 |
| **12.0** | 60 | 1600 | 0.250 (0.210—0.300) | 400 | 60 | 1600 | 0.210 (0.170—0.240) | 335 |

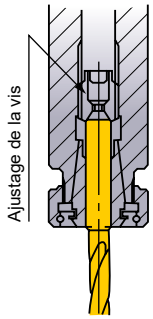
| Matière | H | S | | |
|---|---|---|---|---|
| | Acier Traité (40—55HRC), Alliage réfractaire<br>X40CrMoV51, 55NiCrMoV7, Inconel718 | | | |
| Diamètre foret **DC** (mm) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (min.—max.) (mm/tour) | Avance table (mm/min) |
| **1.0** | 10 | 3200 | 0.015 (0.015—0.020) | 50 |
| **1.2** | 10 | 2700 | 0.020 (0.015—0.025) | 55 |
| **1.6** | 10 | 2000 | 0.025 (0.020—0.030) | 50 |
| **2.0** | 20 | 3200 | 0.035 (0.025—0.040) | 110 |
| **2.5** | 20 | 2600 | 0.040 (0.030—0.050) | 105 |
| **3.2** | 20 | 2000 | 0.050 (0.040—0.070) | 100 |
| **4.0** | 30 | 2400 | 0.070 (0.050—0.080) | 170 |
| **5.0** | 30 | 1900 | 0.080 (0.060—0.100) | 150 |
| **6.3** | 30 | 1500 | 0.090 (0.080—0.110) | 135 |
| **8.0** | 40 | 1600 | 0.120 (0.100—0.130) | 190 |
| **10.0** | 40 | 1300 | 0.150 (0.130—0.170) | 195 |
| **12.0** | 40 | 1100 | 0.180 (0.150—0.200) | 200 |

Remarque 1) En utilisant un foret d'une longueur de plus de L/D 10, il est recommandé au préalable de faire un trou pilote. (Sans trou pilote, le foret peut casser.)

Remarque 2) Utilisez le foret le plus court du même diamètre comme foret pilote.

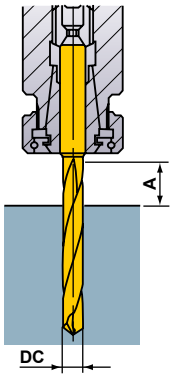
## ■ MÉTHODE D'UTILISATION

### Fixation du foret



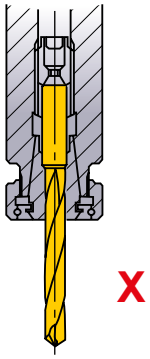

Les attachements de type à pince serrent le foret solidement.

### Longueur du foret




A ≥ DC x 2

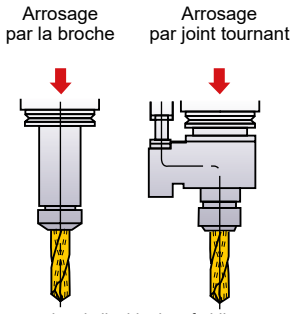
### Installation du foret



X

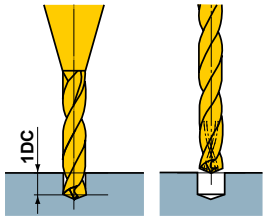
Ne pas serrer sur les goujures.

### Type d'arrosage




La pression du liquide de refroidissement est d'environ.15 bar—70 bar
Pression recommandée du liquide de refroidissement: ≥30 bar

### Installation du foret



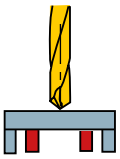

1) Percez un trou pilote correspondant approx. à 1 diamètre DC(DC : diamètre du foret) à l'aide d'un foret MHS le plus court.
2) Utilisez un foret à arrosage interne pour le trou pilote, il servira à vous guider. Selon l'application, procédé à un brise-copeaux

### Liquide réfrigérant : manipulation

1) Les particules de saletés et poussières adhèrent au liquide de refroidissement et empêchent un bon écoulement. Le remplacement régulier du liquide coupe est recommandé.

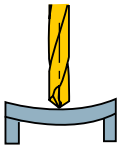
2) De petites particules de copeaux peuvent se coincer dans le trou de lubrification des forets de petit diamètre. Par précaution, utilisez toujours un filtre. Pour les forets de petit diamètre, utilisez un filtre à tamis fin.

### Pièce mince



OK

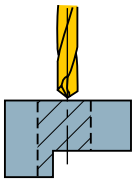
Rigidifier le montage



X

En cas d'effort et de déformation

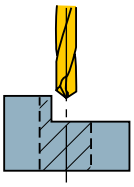
### Coupe interrompue



Un procédé

OK

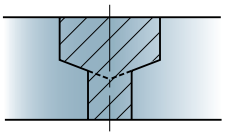
①Diminuer l'avance pour percer une surface interrompue.



Usinage requis au préalable

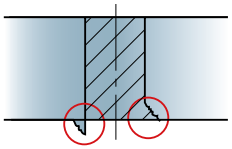
①Utiliser une fraise 2 tailles sur une surface irrégulière avant de percer avec le foret.

### Trous étagés



①Divisez l'usinage en deux opérations.
②Percez le plus grand trou en premier.
*Des outils pour l'usinage du chanfrein et de la surface irrégulière peuvent être fabriqués sur commande.

### Bavures et écaillages sur pièces



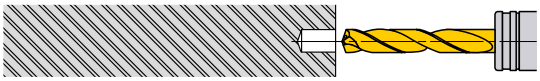
①Réduisez le taux d'avance en cas de trou débouchant.
②Changer l'angle de pointe.

# MHS

## ■ GUIDE OPÉRATIONNEL POUR LE FORET LONG TYPE MHS (L/D ≥ 10)

## TROUS BORGNES

### ■ 1. Perçage du trou pilote

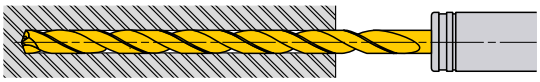


①Utilisez un foret avec une extrémité plus large (plus plate) que celle du foret super-long. Utiliser la goujure la plus courte possible.
②Veillez à percer un avant-trou très précis.
③Profondeur de perçage : environ 1DC ou plus.
(Ajustez la profondeur de l'avant-trou selon la longueur du foret super-long.)

### ■ 2. Introduction du foret long

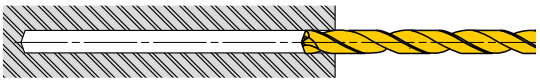
①Insérez le foret dans l'avant-trou à faible vitesse.
(Vitesse de rotation 1000min$^{-1}$, avance 0.2mm－0.3mm/tour)
②Arrêtez le foret long à 0.5mm－1mm du fond de l'avant-trou.

### ■ 3. Perçage profond



①Commencez à percer avec la vitesse et l'avance recommandées, avec un cycle sans débourrage (avance continue).

### ■ 4. Retrait du foret

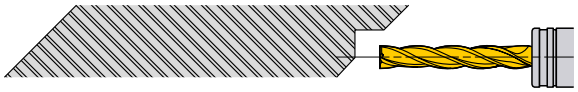


①Après le perçage, diminuez la vitesse de rotation à environ 0.5mm-1mm de l'extrémité du trou. (Vitesse de rotation d'env. 1 000 min$^{-1}$)
②Retirez le foret jusqu'à l'entrée de l'avant-trou, avec une vitesse d'avance de 3000mm/min.
③Enfin, sortez l'outil du trou avec une vitesse de coupe de 20m-30m/min et une vitesse d'avance de 0.2mm-0.3mm/tour.

## ATTAQUE OBLIQUE ET TROUS DÉBOUCHANTS

● Perçage et trous débouchants sur des faces ou des angles irréguliers

### ■ 1. Lamage

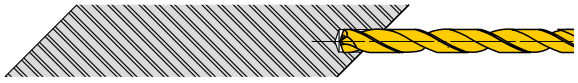


①Usinez à plat sur la face irrégulière à l'aide d'une fraise capable de lamage. Utilisez un diamètre de lamage identique au diamètre du trou profond à percer.

### ■ 2. Perçage du trou pilote

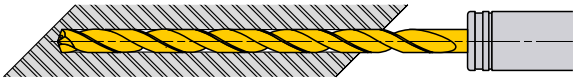
①Utilisez un foret avec une extrémité plus large (plus plate) que celle du foret super-long. Utiliser la goujure la plus courte possible.
②Veillez à percer un avant-trou très précis.
③Profondeur de perçage : environ 1DC ou plus.
(Ajustez la profondeur de l'avant-trou selon la longueur du foret super-long.)

### ■ 3. Introduction du foret long



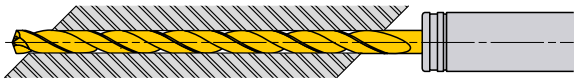
①Insérez le foret dans l'avant-trou à faible vitesse.
(Vitesse de rotation 1000min$^{-1}$, avance 0.2mm－0.3mm/tour)
②Arrêtez le foret long à 0.5mm－1mm du fond de l'avant-trou.

### ■ 4. Perçage profond



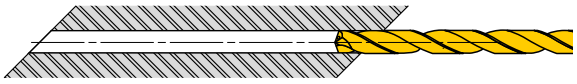
①Commencez à percer avec la vitesse et l'avance recommandées, avec un cycle sans débourrage (avance continue).

### ■ 5. Déboucher



①Lors de la traversée, l'arête de coupe peut être endommagée.
②Diminuez la vitesse d'avance au moment de l'introduction.

### ■ 6. Retrait du foret

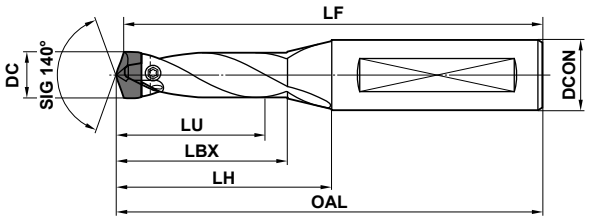


①Enfin, sortez l'outil du trou avec une vitesse de coupe de 20m-30m/min et une vitesse d'avance de 0.2mm-0.3mm/tour.
②Retirez le foret jusqu'à l'entrée de l'avant-trou, avec une vitesse d'avance de 3000mm/min.

# STAW

- Géométrie de l'arête de coupe ondulée pour un bon contrôle copeaux.
- Un système de bridage très stable offre une grande stabilité et fiabilité.

P M K N S H




## ■PORTE-OUTILS

| DC (mm) | Rapport (L/D) | Porte-outil Référence | Stock | LU | LBX | LH | OAL | LF | DCON | F Clé | Embout monobloc DC (mm) | Référence | Stock VP15TF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.0 \| 10.4 | 1.5 | STAWSS1000S16 | ● | 16.8 | 23.8 | 33.8 | 81.8 | 80 | 16 | TIP06F | 10.0 | * STAWN1000TH | ● |
| | | | | | | | | | | | | STAWK1000TG | |
| | 3 | STAWSN1000S16 | ● | 31.8 | 38.8 | 48.8 | 96.8 | 95 | 16 | TIP06F | 10.1 | STAWN1010TH | ● |
| | | | | | | | | | | | | STAWK1010TG | |
| | 5 | STAWMN1000S16 | ● | 51.8 | 58.8 | 68.8 | 116.8 | 115 | 16 | TIP06F | 10.2 | STAWN1020TH | ● |
| | | | | | | | | | | | | STAWK1020TG | |
| | 8 | STAWLN1000S16 | ● | 81.8 | 88.8 | 98.8 | 146.8 | 145 | 16 | TIP06F | 10.3 | STAWN1030TH | ● |
| | | | | | | | | | | | | STAWK1030TG | |
| | | | | | | | | | | | 10.4 | STAWN1040TH | ● |
| | | | | | | | | | | | | STAWK1040TG | |
| 10.5 \| 10.9 | 1.5 | STAWSS1050S16 | ● | 17.7 | 23.9 | 33.9 | 81.9 | 80 | 16 | TIP06F | 10.5 | * STAWN1050TH | ● |
| | | | | | | | | | | | | STAWK1050TG | |
| | 3 | STAWSN1050S16 | ● | 33.4 | 38.9 | 48.9 | 96.9 | 95 | 16 | TIP06F | 10.6 | STAWN1060TH | ● |
| | | | | | | | | | | | | STAWK1060TG | |
| | 5 | STAWMN1050S16 | ● | 54.4 | 58.9 | 68.9 | 116.9 | 115 | 16 | TIP06F | 10.7 | STAWN1070TH | ● |
| | | | | | | | | | | | | STAWK1070TG | |
| | 8 | STAWLN1050S16 | ● | 85.9 | 88.9 | 98.9 | 146.9 | 145 | 16 | TIP06F | 10.8 | STAWN1080TH | ● |
| | | | | | | | | | | | | STAWK1080TG | |
| | | | | | | | | | | | 10.9 | STAWN1090TH | ● |
| | | | | | | | | | | | | STAWK1090TG | |
| 11.0 \| 11.4 | 1.5 | STAWSS1100S16 | ● | 18.5 | 27.0 | 38.0 | 86.0 | 84 | 16 | TIP06F | 11.0 | * STAWN1100TH | ● |
| | | | | | | | | | | | | STAWK1100TG | |
| | 3 | STAWSN1100S16 | ● | 35.0 | 43.0 | 54.0 | 102.0 | 100 | 16 | TIP06F | 11.1 | STAWN1110TH | ● |
| | | | | | | | | | | | | STAWK1110TG | |
| | 5 | STAWMN1100S16 | ● | 57.0 | 68.0 | 79.0 | 127.0 | 125 | 16 | TIP06F | 11.2 | STAWN1120TH | ● |
| | | | | | | | | | | | | STAWK1120TG | |
| | 8 | STAWLN1100S16 | ● | 90.0 | 98.0 | 109.0 | 157.0 | 155 | 16 | TIP06F | 11.3 | STAWN1130TH | ● |
| | | | | | | | | | | | | STAWK1130TG | |
| | | | | | | | | | | | 11.4 | STAWN1140TH | ● |
| | | | | | | | | | | | | STAWK1140TG | |
| 11.5 \| 11.9 | 1.5 | STAWSS1150S16 | ● | 19.4 | 27.1 | 38.1 | 86.1 | 84 | 16 | TIP06F | 11.5 | * STAWN1150TH | ● |
| | | | | | | | | | | | | STAWK1150TG | |
| | 3 | STAWSN1150S16 | ● | 36.6 | 43.1 | 54.1 | 102.1 | 100 | 16 | TIP06F | 11.6 | STAWN1160TH | ● |
| | | | | | | | | | | | | STAWK1160TG | |
| | 5 | STAWMN1150S16 | ● | 59.6 | 68.1 | 79.1 | 127.1 | 125 | 16 | TIP06F | 11.7 | STAWN1170TH | ● |
| | | | | | | | | | | | | STAWK1170TG | |
| | 8 | STAWLN1150S16 | ● | 94.1 | 98.1 | 109.1 | 157.1 | 155 | 16 | TIP06F | 11.8 | STAWN1180TH | ● |
| | | | | | | | | | | | | STAWK1180TG | |
| | | | | | | | | | | | 11.9 | STAWN1190TH | ● |
| | | | | | | | | | | | | STAWK1190TG | |
| 12.0 \| 12.4 | 1.5 | STAWSS1200S16 | ● | 20.2 | 29.2 | 41.2 | 89.2 | 87 | 16 | TIP06F | 12.0 | * STAWN1200TH | ● |
| | | | | | | | | | | | | STAWK1200TG | |
| | 3 | STAWSN1200S16 | ● | 38.2 | 47.2 | 59.2 | 107.2 | 105 | 16 | TIP06F | 12.1 | STAWN1210TH | ● |
| | | | | | | | | | | | | STAWK1210TG | |
| | 5 | STAWMN1200S16 | ● | 62.2 | 72.2 | 84.2 | 132.2 | 130 | 16 | TIP06F | 12.2 | STAWN1220TH | ● |
| | | | | | | | | | | | | STAWK1220TG | |
| | 8 | STAWLN1200S16 | ● | 98.2 | 107.2 | 119.2 | 167.2 | 165 | 16 | TIP06F | 12.3 | STAWN1230TH | ● |
| | | | | | | | | | | | | STAWK1230TG | |
| | | | | | | | | | | | 12.4 | STAWN1240TH | ● |
| | | | | | | | | | | | | STAWK1240TG | |

Remarque 1) Les dimensions ci-dessus (*) sont données par l'embout installé.
Remarque 2) Veuillez nous contacter pour toute géométrie ne figurant pas dans ce catalogue (autres diamètres ou longueurs).

● : Article stocké. (Remarque) Conditionnée par 1.


DESCRIPTION PLAQUETTE ➤ M144
CONDITIONS DE COUPE ➤ M146
NOTE D'UTILISATION ➤ M147
PIÈCES DÉTACHÉES ➤ N001
DONNÉES TECHNIQUES ➤ P001

# STAW

| DC (mm) | Rapport (L/D) | Porte-outil Référence | Stock | LU | LBX | LH | OAL | LF | DCON | Clé | Embout monobloc DC (mm) | Référence | Stock VP15TF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.5 — 12.9 | 1.5 | **STAWSS1250S16** | ● | 21.1 | 29.3 | 41.3 | 89.3 | 87 | 16 | TIP06F | 12.5 | * **STAWN1250TH** | ● |
| | | | | | | | | | | | | **STAWK1250TG** | |
| | 3 | **STAWSN1250S16** | ● | 39.8 | 47.3 | 59.3 | 107.3 | 105 | 16 | TIP06F | 12.6 | **STAWN1260TH** | ● |
| | | | | | | | | | | | | **STAWK1260TG** | |
| | 5 | **STAWMN1250S16** | ● | 64.8 | 72.3 | 84.3 | 132.3 | 130 | 16 | TIP06F | 12.7 | **STAWN1270TH** | ● |
| | | | | | | | | | | | | **STAWK1270TG** | |
| | 8 | **STAWLN1250S16** | ● | 102.3 | 107.3 | 119.3 | 167.3 | 165 | 16 | TIP06F | 12.8 | **STAWN1280TH** | ● |
| | | | | | | | | | | | | **STAWK1280TG** | |
| | | | | | | | | | | | 12.9 | **STAWN1290TH** | ● |
| | | | | | | | | | | | | **STAWK1290TG** | |
| 13.0 — 13.4 | 1.5 | **STAWSS1300S16** | ● | 21.9 | 32.4 | 45.4 | 93.4 | 91 | 16 | TIP08W | 13.0 | * **STAWN1300TH** | ● |
| | | | | | | | | | | | | **STAWK1300TG** | |
| | 3 | **STAWSN1300S16** | ● | 41.4 | 51.4 | 64.4 | 112.4 | 110 | 16 | TIP08W | 13.1 | **STAWN1310TH** | ● |
| | | | | | | | | | | | | **STAWK1310TG** | |
| | 5 | **STAWMN1300S16** | ● | 67.4 | 76.4 | 89.4 | 137.4 | 135 | 16 | TIP08W | 13.2 | **STAWN1320TH** | ● |
| | | | | | | | | | | | | **STAWK1320TG** | |
| | 8 | **STAWLN1300S16** | ● | 106.4 | 116.4 | 129.4 | 177.4 | 175 | 16 | TIP08W | 13.3 | **STAWN1330TH** | ● |
| | | | | | | | | | | | | **STAWK1330TG** | |
| | | | | | | | | | | | 13.4 | **STAWN1340TH** | ● |
| | | | | | | | | | | | | **STAWK1340TG** | |
| 13.5 — 13.9 | 1.5 | **STAWSS1350S16** | ● | 22.8 | 32.5 | 45.5 | 93.5 | 91 | 16 | TIP08W | 13.5 | * **STAWN1350TH** | ● |
| | | | | | | | | | | | | **STAWK1350TG** | |
| | 3 | **STAWSN1350S16** | ● | 43.0 | 51.5 | 64.5 | 112.5 | 110 | 16 | TIP08W | 13.6 | **STAWN1360TH** | ● |
| | | | | | | | | | | | | **STAWK1360TG** | |
| | 5 | **STAWMN1350S16** | ● | 70.0 | 76.5 | 89.5 | 137.5 | 135 | 16 | TIP08W | 13.7 | **STAWN1370TH** | ● |
| | | | | | | | | | | | | **STAWK1370TG** | |
| | 8 | **STAWLN1350S16** | ● | 110.5 | 116.5 | 129.5 | 177.5 | 175 | 16 | TIP08W | 13.8 | **STAWN1380TH** | ● |
| | | | | | | | | | | | | **STAWK1380TG** | |
| | | | | | | | | | | | 13.9 | **STAWN1390TH** | ● |
| | | | | | | | | | | | | **STAWK1390TG** | |
| 14.0 — 14.4 | 1.5 | **STAWSS1400S16** | ● | 23.5 | 33.5 | 47.5 | 95.5 | 93 | 16 | TIP08W | 14.0 | * **STAWN1400TH** | ● |
| | | | | | | | | | | | | **STAWK1400TG** | |
| | 3 | **STAWSN1400S16** | ● | 44.5 | 55.5 | 69.5 | 117.5 | 115 | 16 | TIP08W | 14.1 | **STAWN1410TH** | ● |
| | | | | | | | | | | | | **STAWK1410TG** | |
| | 5 | **STAWMN1400S16** | ● | 72.5 | 85.5 | 99.5 | 147.5 | 145 | 16 | TIP08W | 14.2 | **STAWN1420TH** | ● |
| | | | | | | | | | | | | **STAWK1420TG** | |
| | 8 | **STAWLN1400S16** | ● | 114.5 | 124.5 | 139.5 | 187.5 | 185 | 16 | TIP08W | 14.3 | **STAWN1430TH** | ● |
| | | | | | | | | | | | | **STAWK1430TG** | |
| | | | | | | | | | | | 14.4 | **STAWN1440TH** | ● |
| | | | | | | | | | | | | **STAWK1440TG** | |
| 14.5 — 14.9 | 1.5 | **STAWSS1450S16** | ● | 24.4 | 33.6 | 47.6 | 95.6 | 93 | 16 | TIP08W | 14.5 | * **STAWN1450TH** | ● |
| | | | | | | | | | | | | **STAWK1450TG** | |
| | 3 | **STAWSN1450S16** | ● | 46.1 | 55.6 | 69.6 | 117.6 | 115 | 16 | TIP08W | 14.6 | **STAWN1460TH** | ● |
| | | | | | | | | | | | | **STAWK1460TG** | |
| | 5 | **STAWMN1450S16** | ● | 75.1 | 85.6 | 99.6 | 147.6 | 145 | 16 | TIP08W | 14.7 | **STAWN1470TH** | ● |
| | | | | | | | | | | | | **STAWK1470TG** | |
| | 8 | **STAWLN1450S16** | ● | 118.6 | 124.6 | 139.6 | 187.6 | 185 | 16 | TIP08W | 14.8 | **STAWN1480TH** | ● |
| | | | | | | | | | | | | **STAWK1480TG** | |
| | | | | | | | | | | | 14.9 | **STAWN1490TH** | ● |
| | | | | | | | | | | | | **STAWK1490TG** | |
| 15.0 — 15.4 | 1.5 | **STAWSS1500S20** | ● | 25.2 | 35.7 | 50.7 | 100.7 | 98 | 20 | TIP08W | 15.0 | * **STAWN1500TH** | ● |
| | | | | | | | | | | | | **STAWK1500TG** | |
| | 3 | **STAWSN1500S20** | ● | 47.7 | 62.7 | 77.7 | 127.7 | 125 | 20 | TIP08W | 15.1 | **STAWN1510TH** | ● |
| | | | | | | | | | | | | **STAWK1510TG** | |
| | 5 | **STAWMN1500S20** | ● | 77.7 | 92.7 | 107.7 | 157.7 | 155 | 20 | TIP08W | 15.2 | **STAWN1520TH** | ● |
| | | | | | | | | | | | | **STAWK1520TG** | |
| | 8 | **STAWLN1500S20** | ● | 122.7 | 132.7 | 150.7 | 200.7 | 198 | 20 | TIP08W | 15.3 | **STAWN1530TH** | ● |
| | | | | | | | | | | | | **STAWK1530TG** | |
| | | | | | | | | | | | 15.4 | **STAWN1540TH** | ● |
| | | | | | | | | | | | | **STAWK1540TG** | |

Remarque 1) Les dimensions ci-dessus (*) sont données par l'embout installé.
Remarque 2) Veuillez nous contacter pour toute géométrie ne figurant pas dans ce catalogue (autres diamètres ou longueurs).

● : **Article stocké. (Remarque) Conditionnée par 1.**

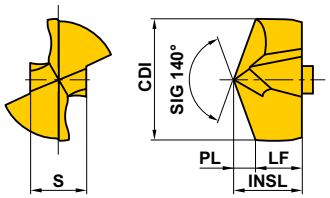
| DC (mm) | Rapport (L/D) | Porte-outil Référence | Stock | Dimensions (mm) LU | LBX | LH | OAL | LF | DCON | W Clé | Embout monobloc DC (mm) | Référence | Stock VP15TF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.5 — 16.4 | 1.5 | **STAWSS1600S20** | ● | 26.1 | 36.8 | 52.8 | 102.8 | 100 | 20 | TIP10W | 15.5 | * **STAWN1550T** | ● |
| | | | | | | | | | | | | **STAWK1550TG** | |
| | | | | | | | | | | | 15.6 | **STAWN1560T** | ● |
| | | | | | | | | | | | | **STAWK1560TG** | |
| | | | | | | | | | | | 15.7 | **STAWN1570T** | ● |
| | | | | | | | | | | | | **STAWK1570TG** | |
| | 3 | **STAWSN1600S20** | ● | 49.3 | 62.8 | 82.8 | 132.8 | 130 | 20 | TIP10W | 15.8 | **STAWN1580T** | ● |
| | | | | | | | | | | | | **STAWK1580TG** | |
| | | | | | | | | | | | 15.9 | **STAWN1590T** | ● |
| | | | | | | | | | | | | **STAWK1590TG** | |
| | 5 | **STAWMN1600S20** | ● | 80.3 | 92.8 | 117.8 | 167.8 | 165 | 20 | TIP10W | 16.0 | **STAWN1600T** | ● |
| | | | | | | | | | | | | **STAWK1600TG** | |
| | | | | | | | | | | | 16.1 | **STAWN1610T** | ● |
| | | | | | | | | | | | | **STAWK1610TG** | |
| | | | | | | | | | | | 16.2 | **STAWN1620T** | ● |
| | | | | | | | | | | | | **STAWK1620TG** | |
| | 8 | **STAWLN1600S20** | ● | 126.8 | 140.8 | 160.8 | 210.8 | 208 | 20 | TIP10W | 16.3 | **STAWN1630T** | ● |
| | | | | | | | | | | | | **STAWK1630TG** | |
| | | | | | | | | | | | 16.4 | **STAWN1640T** | ● |
| | | | | | | | | | | | | **STAWK1640TG** | |
| 16.5 — 17.4 | 1.5 | **STAWSS1700S20** | ● | 27.8 | 39.0 | 56.0 | 106.0 | 103 | 20 | TIP10W | 16.5 | * **STAWN1650T** | ● |
| | | | | | | | | | | | | **STAWK1650TG** | |
| | | | | | | | | | | | 16.6 | **STAWN1660T** | ● |
| | | | | | | | | | | | | **STAWK1660TG** | |
| | | | | | | | | | | | 16.7 | **STAWN1670T** | ● |
| | | | | | | | | | | | | **STAWK1670TG** | |
| | 3 | **STAWSN1700S20** | ● | 52.5 | 64.0 | 88.0 | 138.0 | 135 | 20 | TIP10W | 16.8 | **STAWN1680T** | ● |
| | | | | | | | | | | | | **STAWK1680TG** | |
| | | | | | | | | | | | 16.9 | **STAWN1690T** | ● |
| | | | | | | | | | | | | **STAWK1690TG** | |
| | 5 | **STAWMN1700S20** | ● | 85.5 | 98.0 | 123.0 | 173.0 | 170 | 20 | TIP10W | 17.0 | **STAWN1700T** | ● |
| | | | | | | | | | | | | **STAWK1700TG** | |
| | | | | | | | | | | | 17.1 | **STAWN1710T** | ● |
| | | | | | | | | | | | | **STAWK1710TG** | |
| | | | | | | | | | | | 17.2 | **STAWN1720T** | ● |
| | | | | | | | | | | | | **STAWK1720TG** | |
| | 8 | **STAWLN1700S20** | ● | 135.0 | 149.0 | 169.0 | 219.0 | 216 | 20 | TIP10W | 17.3 | **STAWN1730T** | ● |
| | | | | | | | | | | | | **STAWK1730TG** | |
| | | | | | | | | | | | 17.4 | **STAWN1740T** | ● |
| | | | | | | | | | | | | **STAWK1740TG** | |
| 17.5 — 18.4 | 1.5 | **STAWSS1800S20** | ● | 29.5 | 40.2 | 58.2 | 108.2 | 105 | 20 | TIP10W | 17.5 | * **STAWN1750T** | ● |
| | | | | | | | | | | | | **STAWK1750TG** | |
| | | | | | | | | | | | 17.6 | **STAWN1760T** | ● |
| | | | | | | | | | | | | **STAWK1760TG** | |
| | | | | | | | | | | | 17.7 | **STAWN1770T** | ● |
| | | | | | | | | | | | | **STAWK1770TG** | |
| | 3 | **STAWSN1800S20** | ● | 55.7 | 67.2 | 93.2 | 143.2 | 140 | 20 | TIP10W | 17.8 | **STAWN1780T** | ● |
| | | | | | | | | | | | | **STAWK1780TG** | |
| | | | | | | | | | | | 17.9 | **STAWN1790T** | ● |
| | | | | | | | | | | | | **STAWK1790TG** | |
| | 5 | **STAWMN1800S20** | ● | 90.7 | 103.2 | 128.2 | 178.2 | 175 | 20 | TIP10W | 18.0 | **STAWN1800T** | ● |
| | | | | | | | | | | | | **STAWK1800TG** | |
| | | | | | | | | | | | 18.1 | **STAWN1810T** | ● |
| | | | | | | | | | | | | **STAWK1810TG** | |
| | | | | | | | | | | | 18.2 | **STAWN1820T** | ● |
| | | | | | | | | | | | | **STAWK1820TG** | |
| | 8 | **STAWLN1800S20** | ● | 143.2 | 157.2 | 177.2 | 227.2 | 224 | 20 | TIP10W | 18.3 | **STAWN1830T** | ● |
| | | | | | | | | | | | | **STAWK1830TG** | |
| | | | | | | | | | | | 18.4 | **STAWN1840T** | ● |
| | | | | | | | | | | | | **STAWK1840TG** | |

**DESCRIPTION PLAQUETTE** ➤ **M144**
**CONDITIONS DE COUPE** ➤ **M146**
**NOTE D'UTILISATION** ➤ **M147**

**PIÈCES DÉTACHÉES** ➤ **N001**
**DONNÉES TECHNIQUES** ➤ **P001**

# STAW

## EMBOUT MONOBLOC




| Référence | Revêtu | | Dimensions (mm) | | | | | Corps correspondant |
|---|---|---|---|---|---|---|---|---|
| | VP15TF | | CDI | INSL | LF | PL | S | |
| **STAWN1000TH** | ● | | 10.0 | 5.6 | 3.8 | 1.8 | 4.6 | STAWSS1000S16<br>STAWSN1000S16<br>STAWMN1000S16<br>STAWLN1000S16 |
| **STAWN1010TH** | ● | | 10.1 | 5.6 | 3.8 | 1.8 | 4.6 | |
| **STAWN1020TH** | ● | | 10.2 | 5.7 | 3.8 | 1.9 | 4.6 | |
| **STAWN1030TH** | ● | | 10.3 | 5.7 | 3.8 | 1.9 | 4.6 | |
| **STAWN1040TH** | ● | | 10.4 | 5.7 | 3.8 | 1.9 | 4.6 | |
| **STAWN1050TH** | ● | | 10.5 | 5.9 | 4.0 | 1.9 | 4.8 | STAWSS1050S16<br>STAWSN1050S16<br>STAWMN1050S16<br>STAWLN1050S16 |
| **STAWN1060TH** | ● | | 10.6 | 5.9 | 4.0 | 1.9 | 4.8 | |
| **STAWN1070TH** | ● | | 10.7 | 5.9 | 4.0 | 1.9 | 4.8 | |
| **STAWN1080TH** | ● | | 10.8 | 6.0 | 4.0 | 2.0 | 4.8 | |
| **STAWN1090TH** | ● | | 10.9 | 6.0 | 4.0 | 2.0 | 4.8 | |
| **STAWN1100TH** | ● | | 11.0 | 6.2 | 4.2 | 2.0 | 5.1 | STAWSS1100S16<br>STAWSN1100S16<br>STAWMN1100S16<br>STAWLN1100S16 |
| **STAWN1110TH** | ● | | 11.1 | 6.2 | 4.2 | 2.0 | 5.1 | |
| **STAWN1120TH** | ● | | 11.2 | 6.2 | 4.2 | 2.0 | 5.1 | |
| **STAWN1130TH** | ● | | 11.3 | 6.3 | 4.2 | 2.1 | 5.1 | |
| **STAWN1140TH** | ● | | 11.4 | 6.3 | 4.2 | 2.1 | 5.1 | |
| **STAWN1150TH** | ● | | 11.5 | 6.5 | 4.4 | 2.1 | 5.3 | STAWSS1150S16<br>STAWSN1150S16<br>STAWMN1150S16<br>STAWLN1150S16 |
| **STAWN1160TH** | ● | | 11.6 | 6.5 | 4.4 | 2.1 | 5.3 | |
| **STAWN1170TH** | ● | | 11.7 | 6.5 | 4.4 | 2.1 | 5.3 | |
| **STAWN1180TH** | ● | | 11.8 | 6.5 | 4.4 | 2.1 | 5.3 | |
| **STAWN1190TH** | ● | | 11.9 | 6.6 | 4.4 | 2.2 | 5.3 | |
| **STAWN1200TH** | ● | | 12.0 | 6.8 | 4.6 | 2.2 | 5.5 | STAWSS1200S16<br>STAWSN1200S16<br>STAWMN1200S16<br>STAWLN1200S16 |
| **STAWN1210TH** | ● | | 12.1 | 6.8 | 4.6 | 2.2 | 5.5 | |
| **STAWN1220TH** | ● | | 12.2 | 6.8 | 4.6 | 2.2 | 5.5 | |
| **STAWN1230TH** | ● | | 12.3 | 6.8 | 4.6 | 2.2 | 5.5 | |
| **STAWN1240TH** | ● | | 12.4 | 6.9 | 4.6 | 2.3 | 5.5 | |
| **STAWN1250TH** | ● | | 12.5 | 7.1 | 4.8 | 2.3 | 5.8 | STAWSS1250S16<br>STAWSN1250S16<br>STAWMN1250S16<br>STAWLN1250S16 |
| **STAWN1260TH** | ● | | 12.6 | 7.1 | 4.8 | 2.3 | 5.8 | |
| **STAWN1270TH** | ● | | 12.7 | 7.1 | 4.8 | 2.3 | 5.8 | |
| **STAWN1280TH** | ● | | 12.8 | 7.1 | 4.8 | 2.3 | 5.8 | |
| **STAWN1290TH** | ● | | 12.9 | 7.1 | 4.8 | 2.3 | 5.8 | |
| **STAWN1300TH** | ● | | 13.0 | 7.3 | 4.9 | 2.4 | 6.0 | STAWSS1300S16<br>STAWSN1300S16<br>STAWMN1300S16<br>STAWLN1300S16 |
| **STAWN1310TH** | ● | | 13.1 | 7.3 | 4.9 | 2.4 | 6.0 | |
| **STAWN1320TH** | ● | | 13.2 | 7.3 | 4.9 | 2.4 | 6.0 | |
| **STAWN1330TH** | ● | | 13.3 | 7.3 | 4.9 | 2.4 | 6.0 | |
| **STAWN1340TH** | ● | | 13.4 | 7.3 | 4.9 | 2.4 | 6.0 | |
| **STAWN1350TH** | ● | | 13.5 | 7.6 | 5.1 | 2.5 | 6.2 | STAWSS1350S16<br>STAWSN1350S16<br>STAWMN1350S16<br>STAWLN1350S16 |
| **STAWN1360TH** | ● | | 13.6 | 7.6 | 5.1 | 2.5 | 6.2 | |
| **STAWN1370TH** | ● | | 13.7 | 7.6 | 5.1 | 2.5 | 6.2 | |
| **STAWN1380TH** | ● | | 13.8 | 7.6 | 5.1 | 2.5 | 6.2 | |
| **STAWN1390TH** | ● | | 13.9 | 7.6 | 5.1 | 2.5 | 6.2 | |

**● : Article stocké. (Remarque) Conditionnée par 1.**

| Référence | Revêtu | | Dimensions (mm) | | | | | Corps correspondant |
|---|---|---|---|---|---|---|---|---|
| | VP15TF | | CDI | INSL | LF | PL | S | |
| **STAWN1400TH** | ● | | 14.0 | 7.8 | 5.3 | 2.5 | 6.4 | STAWSS1400S16<br>STAWSN1400S16<br>STAWMN1400S16<br>STAWLN1400S16 |
| **STAWN1410TH** | ● | | 14.1 | 7.9 | 5.3 | 2.6 | 6.4 | |
| **STAWN1420TH** | ● | | 14.2 | 7.9 | 5.3 | 2.6 | 6.4 | |
| **STAWN1430TH** | ● | | 14.3 | 7.9 | 5.3 | 2.6 | 6.4 | |
| **STAWN1440TH** | ● | | 14.4 | 7.9 | 5.3 | 2.6 | 6.4 | |
| **STAWN1450TH** | ● | | 14.5 | 8.1 | 5.5 | 2.6 | 6.7 | STAWSS1450S16<br>STAWSN1450S16<br>STAWMN1450S16<br>STAWLN1450S16 |
| **STAWN1460TH** | ● | | 14.6 | 8.2 | 5.5 | 2.7 | 6.7 | |
| **STAWN1470TH** | ● | | 14.7 | 8.2 | 5.5 | 2.7 | 6.7 | |
| **STAWN1480TH** | ● | | 14.8 | 8.2 | 5.5 | 2.7 | 6.7 | |
| **STAWN1490TH** | ● | | 14.9 | 8.2 | 5.5 | 2.7 | 6.7 | |
| **STAWN1500TH** | ● | | 15.0 | 8.4 | 5.7 | 2.7 | 6.9 | STAWSS1500S20<br>STAWSN1500S20<br>STAWMN1500S20<br>STAWLN1500S20 |
| **STAWN1510TH** | ● | | 15.1 | 8.4 | 5.7 | 2.7 | 6.9 | |
| **STAWN1520TH** | ● | | 15.2 | 8.5 | 5.7 | 2.8 | 6.9 | |
| **STAWN1530TH** | ● | | 15.3 | 8.5 | 5.7 | 2.8 | 6.9 | |
| **STAWN1540TH** | ● | | 15.4 | 8.5 | 5.7 | 2.8 | 6.9 | |
| **STAWN1550T** | ● | | 15.5 | 8.7 | 5.9 | 2.8 | 7.1 | STAWSS1600S20<br>STAWSN1600S20<br>STAWMN1600S20<br>STAWLN1600S20 |
| **STAWN1560T** | ● | | 15.6 | 8.7 | 5.9 | 2.8 | 7.1 | |
| **STAWN1570T** | ● | | 15.7 | 8.8 | 5.9 | 2.9 | 7.1 | |
| **STAWN1580T** | ● | | 15.8 | 8.8 | 5.9 | 2.9 | 7.1 | |
| **STAWN1590T** | ● | | 15.9 | 8.8 | 5.9 | 2.9 | 7.1 | |
| **STAWN1600T** | ● | | 16.0 | 8.8 | 5.9 | 2.9 | 7.1 | |
| **STAWN1610T** | ● | | 16.1 | 8.8 | 5.9 | 2.9 | 7.1 | |
| **STAWN1620T** | ● | | 16.2 | 8.8 | 5.9 | 2.9 | 7.1 | |
| **STAWN1630T** | ● | | 16.3 | 8.9 | 5.9 | 3.0 | 7.1 | |
| **STAWN1640T** | ● | | 16.4 | 8.9 | 5.9 | 3.0 | 7.1 | |
| **STAWN1650T** | ● | | 16.5 | 9.3 | 6.3 | 3.0 | 7.6 | STAWSS1700S20<br>STAWSN1700S20<br>STAWMN1700S20<br>STAWLN1700S20 |
| **STAWN1660T** | ● | | 16.6 | 9.3 | 6.3 | 3.0 | 7.6 | |
| **STAWN1670T** | ● | | 16.7 | 9.3 | 6.3 | 3.0 | 7.6 | |
| **STAWN1680T** | ● | | 16.8 | 9.4 | 6.3 | 3.1 | 7.6 | |
| **STAWN1690T** | ● | | 16.9 | 9.4 | 6.3 | 3.1 | 7.6 | |
| **STAWN1700T** | ● | | 17.0 | 9.4 | 6.3 | 3.1 | 7.6 | |
| **STAWN1710T** | ● | | 17.1 | 9.4 | 6.3 | 3.1 | 7.6 | |
| **STAWN1720T** | ● | | 17.2 | 9.4 | 6.3 | 3.1 | 7.6 | |
| **STAWN1730T** | ● | | 17.3 | 9.4 | 6.3 | 3.1 | 7.6 | |
| **STAWN1740T** | ● | | 17.4 | 9.5 | 6.3 | 3.2 | 7.6 | |
| **STAWN1750T** | ● | | 17.5 | 9.9 | 6.7 | 3.2 | 8.1 | STAWSS1800S20<br>STAWSN1800S20<br>STAWMN1800S20<br>STAWLN1800S20 |
| **STAWN1760T** | ● | | 17.6 | 9.9 | 6.7 | 3.2 | 8.1 | |
| **STAWN1770T** | ● | | 17.7 | 9.9 | 6.7 | 3.2 | 8.1 | |
| **STAWN1780T** | ● | | 17.8 | 9.9 | 6.7 | 3.2 | 8.1 | |
| **STAWN1790T** | ● | | 17.9 | 10.0 | 6.7 | 3.3 | 8.1 | |
| **STAWN1800T** | ● | | 18.0 | 10.0 | 6.7 | 3.3 | 8.1 | |
| **STAWN1810T** | ● | | 18.1 | 10.0 | 6.7 | 3.3 | 8.1 | |
| **STAWN1820T** | ● | | 18.2 | 10.0 | 6.7 | 3.3 | 8.1 | |
| **STAWN1830T** | ● | | 18.3 | 10.0 | 6.7 | 3.3 | 8.1 | |
| **STAWN1840T** | ● | | 18.4 | 10.0 | 6.7 | 3.3 | 8.1 | |

**CONDITIONS DE COUPE** ➤ **M146**
**NOTE D'UTILISATION** ➤ **M147**
**PIÈCES DÉTACHÉES** ➤ **N001**
**DONNÉES TECHNIQUES** ➤ **P001**

# STAW

## ■PRÉPARATION D'ARÊTE

Si une plaquette avec une préparation autre est requise, veuillez commander en utilisant les symboles ci-dessous.

(Référence embout monobloc)

**S T A W N 1 0 0 0 T ○**

- S T A W : Nom produit STAW
- N : **N** : Usage général, **K** : Pour Fonte
- 1 0 0 0 : Diamètre de l'embout
- T : Symbole de préparation
- ○ : Honing (listel)

(Préparation standard)

| Honing | Largeur listel (mm) |
|---|---|
| F | 0 |
| G | 0.02—0.05 |
| H | 0.05—0.10 |
| - (Standard) | 0.10—0.15 |
| K | 0.15—0.20 |
| S | 0.20—0.25 |
| M | 0.25—0.30 |

## CONDITIONS DE COUPE RECOMMANDÉES

| Matière | | Diamètre foret | ϕ10.0—ϕ12.9 | | ϕ13.0—ϕ13.9 | | ϕ14.0—ϕ15.4 | | ϕ15.5—ϕ18.4 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Conditions / Dureté | Vitesse de coupe (m/min) | Avance (mm/tour) | Vitesse de coupe (m/min) | Avance (mm/tour) | Vitesse de coupe (m/min) | Avance (mm/tour) | Vitesse de coupe (m/min) | Avance (mm/tour) |
| P | Acier doux | ≤180HB | 80 (60—100) | 0.20 (0.15—0.25) | 90 (70—110) | 0.25 (0.20—0.30) | 100 (80—120) | 0.30 (0.25—0.35) | 100 (80—120) | 0.35 (0.25—0.40) |
| | Acier carbone Acier allié | 180—280HB | 80 (60—100) | 0.20 (0.15—0.25) | 90 (70—110) | 0.25 (0.20—0.30) | 100 (80—120) | 0.30 (0.25—0.35) | 100 (80—120) | 0.35 (0.25—0.40) |
| | | 280—350HB | 70 (60—90) | 0.20 (0.15—0.25) | 80 (60—100) | 0.25 (0.20—0.30) | 90 (70—110) | 0.25 (0.20—0.30) | 90 (70—110) | 0.30 (0.20—0.35) |
| M | Acier inoxydable | ≤200HB | 40 (30—50) | 0.13 (0.10—0.16) | 50 (40—60) | 0.15 (0.12—0.18) | 60 (50—70) | 0.17 (0.14—0.20) | 60 (50—70) | 0.17 (0.14—0.20) |
| K | Fonte | Résistance à la traction ≤350MPa | 80 (60—100) | 0.20 (0.15—0.25) | 90 (70—110) | 0.25 (0.20—0.30) | 100 (80—120) | 0.30 (0.25—0.35) | 120 (80—140) | 0.45 (0.35—0.55) |
| | Fonte ductile | Résistance à la traction ≤450MPa | 70 (60—90) | 0.20 (0.15—0.25) | 80 (60—100) | 0.25 (0.20—0.30) | 90 (70—110) | 0.30 (0.25—0.35) | 100 (80—120) | 0.35 (0.25—0.40) |

Remarque 1) Lors de perçages d'une longueur inférieure à 1,5x DC, il est possible d'augmenter la vitesse d'avance d'env. 20 %.
Remarque 2) Lors de l'utilisation du foret de type 8x DC, réduire la vitesse de coupe d'env. 20 %.
Remarque 3) Lors de l'utilisation du foret de type 8x DC, il est recommandé de réaliser un trou pilote.
Remarque 4) Pour l'acier inoxydable, veuillez utiliser un liquide de coupe interne. (L'usinage avec micro-pulvérisation et brouillard d'huile n'est pas recommandé).

# MODE D'EMPLOI

## ■INSTALLATION DE L'EMBOUT MONOBLOC

1. Avant d'insérer l'embout dans le corps, vérifiez qu'il n'y ait ni copeaux ni poussière dans la fente de celui-ci. Nettoyez à l'aide d'air comprimé si nécessaire.

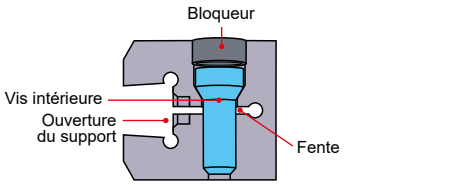
2. Utilisez la clé fournie pour desserrer la vis interne et ouvrir l'extrémité du corps. Insérez ensuite l'embout comme le montre l'illustration 1.
   *Vérifiez que la clé entre bien en contact avec la base de la tête de la vis interne lors du serrage.

3. Après avoir inséré l'embout dans le corps, serrez la vis interne en poussant légèrement la plaquette dans la poche, comme dans l'illustration 2, pour la placer et la fixer correctement.
   *Vérifiez que la clé entre bien en contact avec la base de la tête de la vis interne lors du serrage.

Serrez la vis de serrage en fonction du couple ci-dessous.

| Dia. Foret (mm) | Couple Nm |
|---|---|
| 10 －12.9 | 1 |
| 13 －15.4 | 2 |
| 15.5－18.4 | 2.5 |

4. Veillez à ne laisser aucun écart entre la partie inférieure de l'embout et la fente du corps.



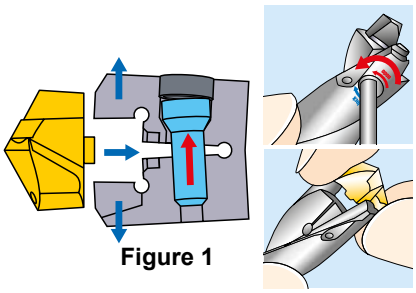



Figure 1

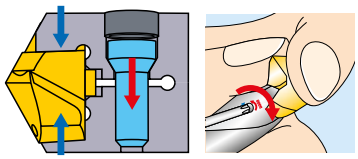
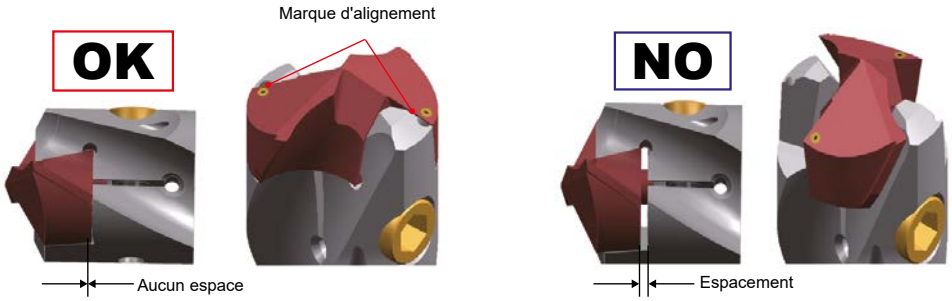


Figure 2




Remarque 1) Si l'embout réversible n'est pas suffisamment ou pas correctement serré, la puissance de perçage peut diminuer et/ou le foret peut se casser. Pour cette raison, lors de l'installation, veillez à ce que les marques d'alignement sur le corps coïncident avec ceux de l'embout. Pour l'usinage, utilisez des dispositifs de sécurité et des lunettes de protection.

# STAW

## PIÈCES DÉTACHÉES

| Corps correspondant | Référence de commande ensemble (Vis intérieure et bloqueur) | Vis intérieure | Bloqueur |
|---|---|---|---|
| **STAWSS/SN/MN/LN1000S16** | WS203107TPS-35LH | WS203107TPS | WS35LH |
| **STAWSS/SN/MN/LN1050S16** | WS203107TPS-35LH | WS203107TPS | WS35LH |
| **STAWSS/SN/MN/LN1100S16** | WS203108TPS-35LH | WS203108TPS | WS35LH |
| **STAWSS/SN/MN/LN1150S16** | WS203108TPS-35LH | WS203108TPS | WS35LH |
| **STAWSS/SN/MN/LN1200S16** | WS203108TPS-35LH | WS203108TPS | WS35LH |
| **STAWSS/SN/MN/LN1250S16** | WS203108TPS-35LH | WS203108TPS | WS35LH |
| **STAWSS/SN/MN/LN1300S16** | WS253909TPS-45LH | WS253909TPS | WS45LH |
| **STAWSS/SN/MN/LN1350S16** | WS253909TPS-45LH | WS253909TPS | WS45LH |
| **STAWSS/SN/MN/LN1400S16** | WS253909TPS-45LH | WS253909TPS | WS45LH |
| **STAWSS/SN/MN/LN1450S16** | WS253909TPS-45LH | WS253909TPS | WS45LH |
| **STAWSS/SN/MN/LN1500S20** | WS253909TPS-45LH | WS253909TPS | WS45LH |
| **STAWSS/SN/MN/LN1600S20** | WS304912TPS-55LH | WS304912TPS | WS55LH |
| **STAWSS/SN/MN/LN1700S20** | WS304912TPS-55LH | WS304912TPS | WS55LH |
| **STAWSS/SN/MN/LN1800S20** | WS304912TPS-55LH | WS304912TPS | WS55LH |

Remarque 1) Les pièces sont conditionnées. S'il vous plait remplacer les pièces détachées suivant le manuel d'instruction.

# Notes

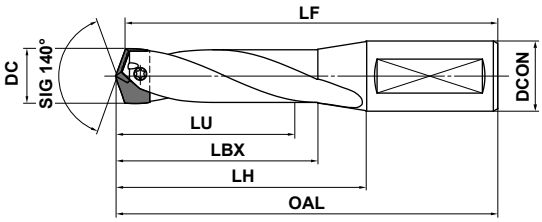
# PERÇAGE (À EMBOUT)

# TAW

- Géométrie de l'arête de coupe ondulée pour un bon contrôle copeaux.
- Géométrie cannelée : précision du placement de l'embout.
- Changement facile de l'embout.

P M K N S H

## (Usage général)




## ■PORTE-OUTILS

| DC (mm) | Rapport (L/D) | Porte-outil Référence | Stock | LU | LBX | LH | OAL | LF | DCON | Vis de serrage | Clé | Plaque | Anti-grippant | DC (mm) | Embout monobloc Référence | Stock VP15TF | Stock VP10H |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.5 — 19.4 | 3 | TAWSN1900S25 | ● | 58.9 | 71.4 | 102.4 | 158.4 | 155.0 | 25 | WS304517T | TKY10T | WPT4405 | MK1KS | 18.5 | *TAWNH1850T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH1850TG | | |
| | | | | | | | | | | | | | | 18.6 | TAWNH1860T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH1860TG | | |
| | | | | | | | | | | | | | | 18.7 | TAWNH1870T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH1870TG | | |
| | | | | | | | | | | | | | | 18.8 | TAWNH1880T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH1880TG | | |
| | 5 | TAWMN1900S25 | ● | 95.9 | 110.4 | 137.4 | 193.4 | 190.0 | 25 | WS304517T | TKY10T | WPT4405 | MK1KS | 18.9 | TAWNH1890T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH1890TG | | |
| | | | | | | | | | | | | | | 19.0 | TAWNH1900T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH1900TG | | |
| | | | | | | | | | | | | | | 19.1 | TAWNH1910T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH1910TG | | |
| | 8 | TAWLN1900S25 | ● | 151.4 | 165.4 | 188.4 | 244.4 | 241.0 | 25 | WS304517T | TKY10T | WPT4405 | MK1KS | 19.2 | TAWNH1920T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH1920TG | | |
| | | | | | | | | | | | | | | 19.3 | TAWNH1930T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH1930TG | | |
| | | | | | | | | | | | | | | 19.4 | TAWNH1940T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH1940TG | | |
| 19.5 — 20.4 | 3 | TAWSN2000S25 | ● | 62.0 | 75.5 | 102.5 | 158.5 | 155.0 | 25 | WS304518T | TKY10T | WPT4405 | MK1KS | 19.5 | *TAWNH1950T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH1950TG | | |
| | | | | | | | | | | | | | | 19.6 | TAWNH1960T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH1960TG | | |
| | | | | | | | | | | | | | | 19.7 | TAWNH1970T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH1970TG | | |
| | | | | | | | | | | | | | | 19.8 | TAWNH1980T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH1980TG | | |
| | 5 | TAWMN2000S25 | ● | 101.0 | 116.5 | 142.5 | 198.5 | 195.0 | 25 | WS304518T | TKY10T | WPT4405 | MK1KS | 19.9 | TAWNH1990T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH1990TG | | |
| | | | | | | | | | | | | | | 20.0 | TAWNH2000T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH2000TG | | |
| | | | | | | | | | | | | | | 20.1 | TAWNH2010T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2010TG | | |
| | | | | | | | | | | | | | | 20.2 | TAWNH2020T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2020TG | | |
| | 8 | TAWLN2000S25 | ● | 159.5 | 173.5 | 196.5 | 252.5 | 249.0 | 25 | WS304518T | TKY10T | WPT4405 | MK1KS | 20.3 | TAWNH2030T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2030TG | | |
| | | | | | | | | | | | | | | 20.4 | TAWNH2040T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2040TG | | |

Remarque 1) Les dimensions ci-dessus (*) sont données par l'embout installé.
Remarque 2) Veuillez nous contacter pour les géométries qui ne seraient pas dans ce catalogue (e.g. différents diamètres et longueurs peuvent être fabriqués sur demande).

**● : Article stocké. □ : Article non stocké - Fabrication sur commande uniquement.**
**(Remarque) Conditionnée par 1.**

| DC (mm) | Rapport (L/D) | Porte-outil Référence | Stock | Dimensions (mm) LU | LBX | LH | OAL | LF | DCON | Vis de serrage | Clé | Plaque | Anti-grippant | Embout monobloc DC (mm) | Référence | Stock VP15TF | Stock VP10H |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.5 — 21.4 | 3 | TAWSN2100S25 | ● | 65.2 | 78.7 | 102.7 | 158.7 | 155.0 | 25 | WS304518T | TKY10T | WPT4405 | MK1KS | 20.5 | *TAWNH2050T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH2050TG | | |
| | | | | | | | | | | | | | | 20.6 | TAWNH2060T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2060TG | | |
| | | | | | | | | | | | | | | 20.7 | TAWNH2070T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2070TG | | |
| | | | | | | | | | | | | | | 20.8 | TAWNH2080T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2080TG | | |
| | 5 | TAWMN2100S25 | ● | 106.2 | 121.7 | 142.7 | 198.7 | 195.0 | 25 | WS304518T | TKY10T | WPT4405 | MK1KS | 20.9 | TAWNH2090T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2090TG | | |
| | | | | | | | | | | | | | | 21.0 | TAWNH2100T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH2100TG | | |
| | | | | | | | | | | | | | | 21.1 | TAWNH2110T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2110TG | | |
| | 8 | TAWLN2100S25 | ● | 167.7 | 181.7 | 205.7 | 261.7 | 258.0 | 25 | WS304518T | TKY10T | WPT4405 | MK1KS | 21.2 | TAWNH2120T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2120TG | | |
| | | | | | | | | | | | | | | 21.3 | TAWNH2130T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2130TG | | |
| | | | | | | | | | | | | | | 21.4 | TAWNH2140T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2140TG | | |
| 21.5 — 22.4 | 3 | TAWSN2200S25 | ● | 68.4 | 83.2 | 108.2 | 164.2 | 160.3 | 25 | WS355520T | TKY15T | WPT4405 | MK1KS | 21.5 | *TAWNH2150T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH2150TG | | |
| | | | | | | | | | | | | | | 21.6 | TAWNH2160T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2160TG | | |
| | | | | | | | | | | | | | | 21.7 | TAWNH2170T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2170TG | | |
| | | | | | | | | | | | | | | 21.8 | TAWNH2180T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2180TG | | |
| | 5 | TAWMN2200S25 | ● | 111.4 | 128.2 | 148.2 | 204.2 | 200.3 | 25 | WS355520T | TKY15T | WPT4405 | MK1KS | 21.9 | TAWNH2190T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2190TG | | |
| | | | | | | | | | | | | | | 22.0 | TAWNH2200T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH2200TG | | |
| | | | | | | | | | | | | | | 22.1 | TAWNH2210T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2210TG | | |
| | 8 | TAWLN2200S25 | ● | 175.9 | 189.9 | 213.9 | 269.9 | 266.0 | 25 | WS355520T | TKY15T | WPT4405 | MK1KS | 22.2 | TAWNH2220T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2220TG | | |
| | | | | | | | | | | | | | | 22.3 | TAWNH2230T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2230TG | | |
| | | | | | | | | | | | | | | 22.4 | TAWNH2240T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2240TG | | |
| 22.5 — 23.4 | 3 | TAWSN2300S25 | ● | 71.6 | 86.4 | 108.4 | 164.4 | 160.3 | 25 | WS355521T | TKY15T | WPT4405 | MK1KS | 22.5 | *TAWNH2250T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH2250TG | | |
| | | | | | | | | | | | | | | 22.6 | TAWNH2260T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2260TG | | |
| | | | | | | | | | | | | | | 22.7 | TAWNH2270T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2270TG | | |
| | | | | | | | | | | | | | | 22.8 | TAWNH2280T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2280TG | | |
| | 5 | TAWMN2300S25 | ● | 116.6 | 133.4 | 158.4 | 214.4 | 210.3 | 25 | WS355521T | TKY15T | WPT4405 | MK1KS | 22.9 | TAWNH2290T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2290TG | | |
| | | | | | | | | | | | | | | 23.0 | TAWNH2300T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH2300TG | | |
| | | | | | | | | | | | | | | 23.1 | TAWNH2310T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2310TG | | |
| | 8 | TAWLN2300S25 | ● | 184.1 | 198.1 | 227.1 | 283.1 | 279.0 | 25 | WS355521T | TKY15T | WPT4405 | MK1KS | 23.2 | TAWNH2320T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2320TG | | |
| | | | | | | | | | | | | | | 23.3 | TAWNH2330T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2330TG | | |
| | | | | | | | | | | | | | | 23.4 | TAWNH2340T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2340TG | | |

DESCRIPTION PLAQUETTE ➤ M155
CONDITIONS DE COUPE ➤ M157
NOTE D'UTILISATION ➤ M158
PIÈCES DÉTACHÉES ➤ N001
DONNÉES TECHNIQUES ➤ P001

# TAW

| DC (mm) | Rapport (L/D) | Porte-outil Référence | Stock | LU | LBX | LH | OAL | LF | DCON | Vis de serrage | Clé | Plaque | Anti-grippant | Embout monobloc DC (mm) | Référence | Stock VP15TF | Stock VP10H |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.5 — 24.4 | 3 | TAWSN2400S32 | ● | 74.8 | 90.6 | 114.6 | 174.6 | 170.3 | 32 | WS355521T | TKY15T | WPT4405 | MK1KS | 23.5 | *TAWNH2350T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH2350TG | | |
| | | | | | | | | | | | | | | 23.6 | TAWNH2360T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2360TG | | |
| | | | | | | | | | | | | | | 23.7 | TAWNH2370T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2370TG | | |
| | | | | | | | | | | | | | | 23.8 | TAWNH2380T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2380TG | | |
| | | | | | | | | | | | | | | 23.9 | TAWNH2390T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2390TG | | |
| | 5 | TAWMN2400S32 | ● | 121.8 | 139.6 | 164.6 | 224.6 | 220.3 | 32 | WS355521T | TKY15T | WPT4405 | MK1KS | 24.0 | TAWNH2400T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH2400TG | | |
| | | | | | | | | | | | | | | 24.1 | TAWNH2410T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2410TG | | |
| | | | | | | | | | | | | | | 24.2 | TAWNH2420T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2420TG | | |
| | 8 | TAWLN2400S32 | ● | 192.3 | 206.6 | 236.6 | 296.6 | 292.3 | 32 | WS355521T | TKY15T | WPT4405 | MK1KS | 24.3 | TAWNH2430T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2430TG | | |
| | | | | | | | | | | | | | | 24.4 | TAWNH2440T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2440TG | | |
| 24.5 — 25.4 | 3 | TAWSN2500S32 | ● | 78.0 | 93.1 | 115.1 | 175.1 | 170.6 | 32 | WS406023T | TKY25T | WPT4405 | MK1KS | 24.5 | *TAWNH2450T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH2450TG | | |
| | | | | | | | | | | | | | | 24.6 | TAWNH2460T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2460TG | | |
| | | | | | | | | | | | | | | 24.7 | TAWNH2470T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2470TG | | |
| | | | | | | | | | | | | | | 24.8 | TAWNH2480T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2480TG | | |
| | | | | | | | | | | | | | | 24.9 | TAWNH2490T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2490TG | | |
| | 5 | TAWMN2500S32 | ● | 127.0 | 145.1 | 170.1 | 230.1 | 225.6 | 32 | WS406023T | TKY25T | WPT4405 | MK1KS | 25.0 | TAWNH2500T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH2500TG | | |
| | | | | | | | | | | | | | | 25.1 | TAWNH2510T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2510TG | | |
| | | | | | | | | | | | | | | 25.2 | TAWNH2520T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2520TG | | |
| | 8 | TAWLN2500S32 | ● | 200.5 | 215.1 | 245.1 | 305.1 | 300.6 | 32 | WS406023T | TKY25T | WPT4405 | MK1KS | 25.3 | TAWNH2530T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2530TG | | |
| | | | | | | | | | | | | | | 25.4 | TAWNH2540T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2540TG | | |
| 25.5 — 26.4 | 3 | TAWSN2600S32 | ● | 81.1 | 97.2 | 120.2 | 180.2 | 175.6 | 32 | WS406024T | TKY25T | WPT4405 | MK1KS | 25.5 | *TAWNH2550T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH2550TG | | |
| | | | | | | | | | | | | | | 25.6 | TAWNH2560T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2560TG | | |
| | | | | | | | | | | | | | | 25.7 | TAWNH2570T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2570TG | | |
| | | | | | | | | | | | | | | 25.8 | TAWNH2580T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2580TG | | |
| | | | | | | | | | | | | | | 25.9 | TAWNH2590T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2590TG | | |
| | 5 | TAWMN2600S32 | ● | 132.1 | 151.2 | 175.2 | 235.2 | 230.6 | 32 | WS406024T | TKY25T | WPT4405 | MK1KS | 26.0 | TAWNH2600T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH2600TG | | |
| | | | | | | | | | | | | | | 26.1 | TAWNH2610T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2610TG | | |
| | | | | | | | | | | | | | | 26.2 | TAWNH2620T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2620TG | | |
| | 8 | TAWLN2600S32 | ● | 208.6 | 223.2 | 253.2 | 313.2 | 308.6 | 32 | WS406024T | TKY25T | WPT4405 | MK1KS | 26.3 | TAWNH2630T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2630TG | | |
| | | | | | | | | | | | | | | 26.4 | TAWNH2640T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2640TG | | |

Remarque 1) Les dimensions ci-dessus (*) sont données par l'embout installé.
Remarque 2) Veuillez nous contacter pour les géométries qui ne seraient pas dans ce catalogue (e.g. différents diamètres et longueurs peuvent être fabriqués sur demande).

**● : Article stocké. □ : Article non stocké - Fabrication sur commande uniquement.**
**(Remarque) Conditionnée par 1.**

| DC (mm) | Rapport (L/D) | Porte-outil Référence | Stock | Dimensions (mm) LU | LBX | LH | OAL | LF | DCON | Vis de serrage | Clé | Plaque | Anti-grippant | Embout monobloc DC (mm) | Référence | Stock VP15TF | Stock VP10H |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.5 — 27.4 | 3 | **TAWSN2700S32** | ● | 84.3 | 99.4 | 120.4 | 180.4 | 175.6 | 32 | WS406024T | TKY25T | WPT4405 | MK1KS | 26.5 | *TAWNH2650T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH2650TG | | |
| | | | | | | | | | | | | | | 26.6 | TAWNH2660T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2660TG | | |
| | | | | | | | | | | | | | | 26.7 | TAWNH2670T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2670TG | | |
| | | | | | | | | | | | | | | 26.8 | TAWNH2680T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2680TG | | |
| | | | | | | | | | | | | | | 26.9 | TAWNH2690T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2690TG | | |
| | 5 | **TAWMN2700S32** | ● | 137.3 | 156.4 | 180.4 | 240.4 | 235.6 | 32 | WS406024T | TKY25T | WPT4405 | MK1KS | 27.0 | TAWNH2700T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH2700TG | | |
| | | | | | | | | | | | | | | 27.1 | TAWNH2710T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2710TG | | |
| | | | | | | | | | | | | | | 27.2 | TAWNH2720T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2720TG | | |
| | 8 | **TAWLN2700S32** | ● | 216.8 | 231.4 | 261.4 | 321.4 | 316.6 | 32 | WS406024T | TKY25T | WPT4405 | MK1KS | 27.3 | TAWNH2730T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2730TG | | |
| | | | | | | | | | | | | | | 27.4 | TAWNH2740T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2740TG | | |
| 27.5 — 28.4 | 3 | **TAWSN2800S32** | ● | 87.5 | 102.2 | 125.2 | 185.2 | 180.2 | 32 | WS508026T | TKY27T | WPT4405 | MK1KS | 27.5 | *TAWNH2750T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH2750TG | | |
| | | | | | | | | | | | | | | 27.6 | TAWNH2760T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2760TG | | |
| | | | | | | | | | | | | | | 27.7 | TAWNH2770T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2770TG | | |
| | | | | | | | | | | | | | | 27.8 | TAWNH2780T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2780TG | | |
| | | | | | | | | | | | | | | 27.9 | TAWNH2790T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2790TG | | |
| | 5 | **TAWMN2800S32** | ● | 142.5 | 162.2 | 185.2 | 245.2 | 240.2 | 32 | WS508026T | TKY27T | WPT4405 | MK1KS | 28.0 | TAWNH2800T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH2800TG | | |
| | | | | | | | | | | | | | | 28.1 | TAWNH2810T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2810TG | | |
| | | | | | | | | | | | | | | 28.2 | TAWNH2820T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2820TG | | |
| | 8 | **TAWLN2800S32** | ● | 225.0 | 239.2 | 269.2 | 329.2 | 324.2 | 32 | WS508026T | TKY27T | WPT4405 | MK1KS | 28.3 | TAWNH2830T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2830TG | | |
| | | | | | | | | | | | | | | 28.4 | TAWNH2840T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2840TG | | |
| 28.5 — 29.4 | 3 | **TAWSN2900S32** | ● | 90.7 | 105.4 | 130.4 | 190.4 | 185.2 | 32 | WS508027T | TKY27T | WPT4405 | MK1KS | 28.5 | *TAWNH2850T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH2850TG | | |
| | | | | | | | | | | | | | | 28.6 | TAWNH2860T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2860TG | | |
| | | | | | | | | | | | | | | 28.7 | TAWNH2870T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2870TG | | |
| | | | | | | | | | | | | | | 28.8 | TAWNH2880T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2880TG | | |
| | | | | | | | | | | | | | | 28.9 | TAWNH2890T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2890TG | | |
| | 5 | **TAWMN2900S32** | ● | 147.7 | 167.4 | 190.4 | 250.4 | 245.2 | 32 | WS508027T | TKY27T | WPT4405 | MK1KS | 29.0 | TAWNH2900T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH2900TG | | |
| | | | | | | | | | | | | | | 29.1 | TAWNH2910T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2910TG | | |
| | | | | | | | | | | | | | | 29.2 | TAWNH2920T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2920TG | | |
| | 8 | **TAWLN2900S32** | ● | 233.2 | 247.4 | 277.4 | 337.4 | 332.2 | 32 | WS508027T | TKY27T | WPT4405 | MK1KS | 29.3 | TAWNH2930T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2930TG | | |
| | | | | | | | | | | | | | | 29.4 | TAWNH2940T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2940TG | | |

DESCRIPTION PLAQUETTE ➤ M155
CONDITIONS DE COUPE ➤ M157
NOTE D'UTILISATION ➤ M158
PIÈCES DÉTACHÉES ➤ N001
DONNÉES TECHNIQUES ➤ P001

# TAW

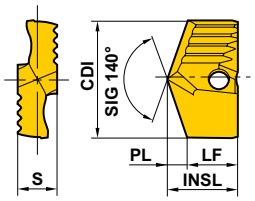
| DC (mm) | Rapport (L/D) | Porte-outil Référence | Stock | LU | LBX | LH | OAL | LF | DCON | Vis de serrage | Clé | Plaque | Anti-grippant | Embout monobloc DC (mm) | Référence | Stock VP15TF | Stock VP10H |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.5 — 30.4 | 3 | TAWSN3000S32 | ● | 93.9 | 109.6 | 130.6 | 190.6 | 185.2 | 32 | WS508027T | TKY27T | WPT4405 | MK1KS | 29.5 | *TAWNH2950T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH2950TG | | |
| | | | | | | | | | | | | | | 29.6 | TAWNH2960T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2960TG | | |
| | | | | | | | | | | | | | | 29.7 | TAWNH2970T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2970TG | | |
| | | | | | | | | | | | | | | 29.8 | TAWNH2980T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2980TG | | |
| | | | | | | | | | | | | | | 29.9 | TAWNH2990T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH2990TG | | |
| | 5 | TAWMN3000S32 | ● | 152.9 | 172.6 | 200.6 | 260.6 | 255.2 | 32 | WS508027T | TKY27T | WPT4405 | MK1KS | 30.0 | TAWNH3000T | ● | □ |
| | | | | | | | | | | | | | | | TAWKH3000TG | | |
| | | | | | | | | | | | | | | 30.1 | TAWNH3010T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH3010TG | | |
| | | | | | | | | | | | | | | 30.2 | TAWNH3020T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH3020TG | | |
| | 8 | TAWLN3000S32 | ● | 241.4 | 255.6 | 290.6 | 350.6 | 345.2 | 32 | WS508027T | TKY27T | WPT4405 | MK1KS | 30.3 | TAWNH3030T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH3030TG | | |
| | | | | | | | | | | | | | | 30.4 | TAWNH3040T | □ | □ |
| | | | | | | | | | | | | | | | TAWKH3040TG | | |

Remarque 1) Les dimensions ci-dessus (*) sont données par l'embout installé.
Remarque 2) Veuillez nous contacter pour les géométries qui ne seraient pas dans ce catalogue (e.g. différents diamètres et longueurs peuvent être fabriqués sur demande).

**● : Article stocké. □ : Article non stocké - Fabrication sur commande uniquement.**
**(Remarque) Conditionnée par 1.**

# EMBOUT MONOBLOC

## Type H




| Référence | Stock | | Dimensions (mm) | | | | | Corps correspondant |
|---|---|---|---|---|---|---|---|---|
| | VP15TF | VP10H | CDI | INSL | LF | PL | S | |
| **TAWNH1850T** | ● | □ | 18.5 | 12.7 | 9.3 | 3.4 | 7.0 | |
| **TAWNH1860T** | ● | □ | 18.6 | 12.7 | 9.3 | 3.4 | 7.0 | |
| **TAWNH1870T** | ● | □ | 18.7 | 12.7 | 9.3 | 3.4 | 7.0 | TAWSN 1900S25 |
| **TAWNH1880T** | ● | □ | 18.8 | 12.7 | 9.3 | 3.4 | 7.0 | |
| **TAWNH1890T** | ● | □ | 18.9 | 12.7 | 9.3 | 3.4 | 7.0 | TAWMN 1900S25 |
| **TAWNH1900T** | ● | □ | 19.0 | 12.7 | 9.2 | 3.5 | 7.0 | |
| **TAWNH1910T** | ● | □ | 19.1 | 12.7 | 9.2 | 3.5 | 7.0 | TAWLN 1900S25 |
| **TAWNH1920T** | ● | □ | 19.2 | 12.7 | 9.2 | 3.5 | 7.0 | |
| **TAWNH1930T** | ● | □ | 19.3 | 12.7 | 9.2 | 3.5 | 7.0 | |
| **TAWNH1940T** | ● | □ | 19.4 | 12.7 | 9.2 | 3.5 | 7.0 | |
| **TAWNH1950T** | ● | □ | 19.5 | 12.6 | 9.1 | 3.5 | 7.0 | |
| **TAWNH1960T** | ● | □ | 19.6 | 12.7 | 9.1 | 3.6 | 7.0 | |
| **TAWNH1970T** | ● | □ | 19.7 | 12.7 | 9.1 | 3.6 | 7.0 | TAWSN 2000S25 |
| **TAWNH1980T** | ● | □ | 19.8 | 12.7 | 9.1 | 3.6 | 7.0 | |
| **TAWNH1990T** | ● | □ | 19.9 | 12.7 | 9.1 | 3.6 | 7.0 | TAWMN 2000S25 |
| **TAWNH2000T** | ● | □ | 20.0 | 12.6 | 9.0 | 3.6 | 7.0 | |
| **TAWNH2010T** | □ | □ | 20.1 | 12.7 | 9.0 | 3.7 | 7.0 | TAWLN 2000S25 |
| **TAWNH2020T** | □ | □ | 20.2 | 12.7 | 9.0 | 3.7 | 7.0 | |
| **TAWNH2030T** | □ | □ | 20.3 | 12.7 | 9.0 | 3.7 | 7.0 | |
| **TAWNH2040T** | □ | □ | 20.4 | 12.7 | 9.0 | 3.7 | 7.0 | |
| **TAWNH2050T** | ● | □ | 20.5 | 12.6 | 8.9 | 3.7 | 7.0 | |
| **TAWNH2060T** | □ | □ | 20.6 | 12.6 | 8.9 | 3.7 | 7.0 | |
| **TAWNH2070T** | □ | □ | 20.7 | 12.7 | 8.9 | 3.8 | 7.0 | TAWSN 2100S25 |
| **TAWNH2080T** | □ | □ | 20.8 | 12.7 | 8.9 | 3.8 | 7.0 | |
| **TAWNH2090T** | □ | □ | 20.9 | 12.7 | 8.9 | 3.8 | 7.0 | TAWMN 2100S25 |
| **TAWNH2100T** | ● | □ | 21.0 | 12.6 | 8.8 | 3.8 | 7.0 | |
| **TAWNH2110T** | □ | □ | 21.1 | 12.6 | 8.8 | 3.8 | 7.0 | TAWLN 2100S25 |
| **TAWNH2120T** | □ | □ | 21.2 | 12.7 | 8.8 | 3.9 | 7.0 | |
| **TAWNH2130T** | □ | □ | 21.3 | 12.7 | 8.8 | 3.9 | 7.0 | |
| **TAWNH2140T** | □ | □ | 21.4 | 12.7 | 8.8 | 3.9 | 7.0 | |
| **TAWNH2150T** | ● | □ | 21.5 | 14.5 | 10.6 | 3.9 | 8.0 | |
| **TAWNH2160T** | □ | □ | 21.6 | 14.5 | 10.6 | 3.9 | 8.0 | |
| **TAWNH2170T** | □ | □ | 21.7 | 14.5 | 10.6 | 3.9 | 8.0 | TAWSN 2200S25 |
| **TAWNH2180T** | □ | □ | 21.8 | 14.6 | 10.6 | 4.0 | 8.0 | |
| **TAWNH2190T** | □ | □ | 21.9 | 14.6 | 10.6 | 4.0 | 8.0 | TAWMN 2200S25 |
| **TAWNH2200T** | ● | □ | 22.0 | 14.5 | 10.5 | 4.0 | 8.0 | |
| **TAWNH2210T** | □ | □ | 22.1 | 14.5 | 10.5 | 4.0 | 8.0 | TAWLN 2200S25 |
| **TAWNH2220T** | □ | □ | 22.2 | 14.5 | 10.5 | 4.0 | 8.0 | |
| **TAWNH2230T** | □ | □ | 22.3 | 14.6 | 10.5 | 4.1 | 8.0 | |
| **TAWNH2240T** | □ | □ | 22.4 | 14.6 | 10.5 | 4.1 | 8.0 | |

| Référence | Stock | | Dimensions (mm) | | | | | Corps correspondant |
|---|---|---|---|---|---|---|---|---|
| | VP15TF | VP10H | CDI | INSL | LF | PL | S | |
| **TAWNH2250T** | ● | □ | 22.5 | 14.5 | 10.4 | 4.1 | 8.0 | |
| **TAWNH2260T** | □ | □ | 22.6 | 14.5 | 10.4 | 4.1 | 8.0 | |
| **TAWNH2270T** | □ | □ | 22.7 | 14.5 | 10.4 | 4.1 | 8.0 | |
| **TAWNH2280T** | □ | □ | 22.8 | 14.5 | 10.4 | 4.1 | 8.0 | TAWSN 2300S25 |
| **TAWNH2290T** | □ | □ | 22.9 | 14.6 | 10.4 | 4.2 | 8.0 | TAWMN 2300S25 |
| **TAWNH2300T** | ● | □ | 23.0 | 14.5 | 10.3 | 4.2 | 8.0 | TAWLN 2300S25 |
| **TAWNH2310T** | □ | □ | 23.1 | 14.5 | 10.3 | 4.2 | 8.0 | |
| **TAWNH2320T** | □ | □ | 23.2 | 14.5 | 10.3 | 4.2 | 8.0 | |
| **TAWNH2330T** | □ | □ | 23.3 | 14.5 | 10.3 | 4.2 | 8.0 | |
| **TAWNH2340T** | □ | □ | 23.4 | 14.6 | 10.3 | 4.3 | 8.0 | |
| **TAWNH2350T** | ● | □ | 23.5 | 14.5 | 10.2 | 4.3 | 8.0 | |
| **TAWNH2360T** | □ | □ | 23.6 | 14.5 | 10.2 | 4.3 | 8.0 | |
| **TAWNH2370T** | □ | □ | 23.7 | 14.5 | 10.2 | 4.3 | 8.0 | TAWSN 2400S32 |
| **TAWNH2380T** | □ | □ | 23.8 | 14.5 | 10.2 | 4.3 | 8.0 | |
| **TAWNH2390T** | □ | □ | 23.9 | 14.5 | 10.2 | 4.3 | 8.0 | TAWMN 2400S32 |
| **TAWNH2400T** | ● | □ | 24.0 | 14.5 | 10.1 | 4.4 | 8.0 | |
| **TAWNH2410T** | □ | □ | 24.1 | 14.5 | 10.1 | 4.4 | 8.0 | TAWLN 2400S32 |
| **TAWNH2420T** | □ | □ | 24.2 | 14.5 | 10.1 | 4.4 | 8.0 | |
| **TAWNH2430T** | □ | □ | 24.3 | 14.5 | 10.1 | 4.4 | 8.0 | |
| **TAWNH2440T** | □ | □ | 24.4 | 14.5 | 10.1 | 4.4 | 8.0 | |
| **TAWNH2450T** | ● | □ | 24.5 | 16.2 | 11.7 | 4.5 | 9.0 | |
| **TAWNH2460T** | □ | □ | 24.6 | 16.2 | 11.7 | 4.5 | 9.0 | |
| **TAWNH2470T** | □ | □ | 24.7 | 16.2 | 11.7 | 4.5 | 9.0 | TAWSN 2500S32 |
| **TAWNH2480T** | □ | □ | 24.8 | 16.2 | 11.7 | 4.5 | 9.0 | |
| **TAWNH2490T** | □ | □ | 24.9 | 16.2 | 11.7 | 4.5 | 9.0 | TAWMN 2500S32 |
| **TAWNH2500T** | ● | □ | 25.0 | 16.1 | 11.6 | 4.5 | 9.0 | |
| **TAWNH2510T** | □ | □ | 25.1 | 16.2 | 11.6 | 4.6 | 9.0 | TAWLN 2500S32 |
| **TAWNH2520T** | □ | □ | 25.2 | 16.2 | 11.6 | 4.6 | 9.0 | |
| **TAWNH2530T** | □ | □ | 25.3 | 16.2 | 11.6 | 4.6 | 9.0 | |
| **TAWNH2540T** | □ | □ | 25.4 | 16.2 | 11.6 | 4.6 | 9.0 | |
| **TAWNH2550T** | ● | □ | 25.5 | 16.1 | 11.5 | 4.6 | 9.0 | |
| **TAWNH2560T** | □ | □ | 25.6 | 16.2 | 11.5 | 4.7 | 9.0 | |
| **TAWNH2570T** | □ | □ | 25.7 | 16.2 | 11.5 | 4.7 | 9.0 | TAWSN 2600S32 |
| **TAWNH2580T** | □ | □ | 25.8 | 16.2 | 11.5 | 4.7 | 9.0 | |
| **TAWNH2590T** | □ | □ | 25.9 | 16.2 | 11.5 | 4.7 | 9.0 | TAWMN 2600S32 |
| **TAWNH2600T** | ● | □ | 26.0 | 16.1 | 11.4 | 4.7 | 9.0 | |
| **TAWNH2610T** | □ | □ | 26.1 | 16.1 | 11.4 | 4.7 | 9.0 | TAWLN 2600S32 |
| **TAWNH2620T** | □ | □ | 26.2 | 16.2 | 11.4 | 4.8 | 9.0 | |
| **TAWNH2630T** | □ | □ | 26.3 | 16.2 | 11.4 | 4.8 | 9.0 | |
| **TAWNH2640T** | □ | □ | 26.4 | 16.2 | 11.4 | 4.8 | 9.0 | |

CONDITIONS DE COUPE ➤ M157
NOTE D'UTILISATION ➤ M158
PIÈCES DÉTACHÉES ➤ N001
DONNÉES TECHNIQUES ➤ P001

# TAW

| Référence | Stock VP15TF | Stock VP10H | Dimensions (mm) CDI | INSL | LF | PL | S | Corps correspondant |
|---|---|---|---|---|---|---|---|---|
| **TAWNH2650T** | ● | □ | 26.5 | 16.1 | 11.3 | 4.8 | 9.0 | |
| **TAWNH2660T** | □ | □ | 26.6 | 16.1 | 11.3 | 4.8 | 9.0 | |
| **TAWNH2670T** | □ | □ | 26.7 | 16.2 | 11.3 | 4.9 | 9.0 | TAWSN 2700S32 |
| **TAWNH2680T** | □ | □ | 26.8 | 16.2 | 11.3 | 4.9 | 9.0 | |
| **TAWNH2690T** | □ | □ | 26.9 | 16.2 | 11.3 | 4.9 | 9.0 | TAWMN 2700S32 |
| **TAWNH2700T** | ● | □ | 27.0 | 16.1 | 11.2 | 4.9 | 9.0 | |
| **TAWNH2710T** | □ | □ | 27.1 | 16.1 | 11.2 | 4.9 | 9.0 | TAWLN 2700S32 |
| **TAWNH2720T** | □ | □ | 27.2 | 16.1 | 11.2 | 4.9 | 9.0 | |
| **TAWNH2730T** | □ | □ | 27.3 | 16.2 | 11.2 | 5.0 | 9.0 | |
| **TAWNH2740T** | □ | □ | 27.4 | 16.2 | 11.2 | 5.0 | 9.0 | |
| **TAWNH2750T** | ● | □ | 27.5 | 17.3 | 12.3 | 5.0 | 10.0 | |
| **TAWNH2760T** | □ | □ | 27.6 | 17.3 | 12.3 | 5.0 | 10.0 | |
| **TAWNH2770T** | □ | □ | 27.7 | 17.3 | 12.3 | 5.0 | 10.0 | TAWSN 2800S32 |
| **TAWNH2780T** | □ | □ | 27.8 | 17.4 | 12.3 | 5.1 | 10.0 | |
| **TAWNH2790T** | □ | □ | 27.9 | 17.4 | 12.3 | 5.1 | 10.0 | TAWMN 2800S32 |
| **TAWNH2800T** | ● | □ | 28.0 | 17.3 | 12.2 | 5.1 | 10.0 | |
| **TAWNH2810T** | □ | □ | 28.1 | 17.3 | 12.2 | 5.1 | 10.0 | TAWLN 2800S32 |
| **TAWNH2820T** | □ | □ | 28.2 | 17.3 | 12.2 | 5.1 | 10.0 | |
| **TAWNH2830T** | □ | □ | 28.3 | 17.4 | 12.2 | 5.2 | 10.0 | |
| **TAWNH2840T** | □ | □ | 28.4 | 17.4 | 12.2 | 5.2 | 10.0 | |

| Référence | Stock VP15TF | Stock VP10H | Dimensions (mm) CDI | INSL | LF | PL | S | Corps correspondant |
|---|---|---|---|---|---|---|---|---|
| **TAWNH2850T** | ● | □ | 28.5 | 17.3 | 12.1 | 5.2 | 10.0 | |
| **TAWNH2860T** | □ | □ | 28.6 | 17.3 | 12.1 | 5.2 | 10.0 | |
| **TAWNH2870T** | □ | □ | 28.7 | 17.3 | 12.1 | 5.2 | 10.0 | TAWSN 2900S32 |
| **TAWNH2880T** | □ | □ | 28.8 | 17.3 | 12.1 | 5.2 | 10.0 | |
| **TAWNH2890T** | □ | □ | 28.9 | 17.4 | 12.1 | 5.3 | 10.0 | TAWMN 2900S32 |
| **TAWNH2900T** | ● | □ | 29.0 | 17.3 | 12.0 | 5.3 | 10.0 | |
| **TAWNH2910T** | □ | □ | 29.1 | 17.3 | 12.0 | 5.3 | 10.0 | TAWLN 2900S32 |
| **TAWNH2920T** | □ | □ | 29.2 | 17.3 | 12.0 | 5.3 | 10.0 | |
| **TAWNH2930T** | □ | □ | 29.3 | 17.3 | 12.0 | 5.3 | 10.0 | |
| **TAWNH2940T** | □ | □ | 29.4 | 17.4 | 12.0 | 5.4 | 10.0 | |
| **TAWNH2950T** | ● | □ | 29.5 | 17.3 | 11.9 | 5.4 | 10.0 | |
| **TAWNH2960T** | □ | □ | 29.6 | 17.3 | 11.9 | 5.4 | 10.0 | |
| **TAWNH2970T** | □ | □ | 29.7 | 17.3 | 11.9 | 5.4 | 10.0 | TAWSN 3000S32 |
| **TAWNH2980T** | □ | □ | 29.8 | 17.3 | 11.9 | 5.4 | 10.0 | |
| **TAWNH2990T** | □ | □ | 29.9 | 17.3 | 11.9 | 5.4 | 10.0 | TAWMN 3000S32 |
| **TAWNH3000T** | ● | □ | 30.0 | 17.3 | 11.8 | 5.5 | 10.0 | |
| **TAWNH3010T** | □ | □ | 30.1 | 17.3 | 11.8 | 5.5 | 10.0 | TAWLN 3000S32 |
| **TAWNH3020T** | □ | □ | 30.2 | 17.3 | 11.8 | 5.5 | 10.0 | |
| **TAWNH3030T** | □ | □ | 30.3 | 17.3 | 11.8 | 5.5 | 10.0 | |
| **TAWNH3040T** | □ | □ | 30.4 | 17.3 | 11.8 | 5.5 | 10.0 | |

● : Article stocké. □ : Article non stocké - Fabrication sur commande uniquement.
(Remarque) Conditionnée par 1.

CONDITIONS DE COUPE ➤ M157
NOTE D'UTILISATION ➤ M158
PIÈCES DÉTACHÉES ➤ N001
DONNÉES TECHNIQUES ➤ P001

## CONDITIONS DE COUPE RECOMMANDÉES

| | Matière | Diamètre foret | ϕ18.5—ϕ21.4 | | ϕ21.5—ϕ24.4 | |
|---|---|---|---|---|---|---|
| | | Conditions / Dureté | Vitesse de coupe (m/min) | Avance (mm/tour) | Vitesse de coupe (m/min) | Avance (mm/tour) |
| P | Acier doux | ≤180HB | 90 (70—110) | 0.25 (0.20—0.30) | 100 (80—120) | 0.30 (0.25—0.35) |
| | Acier carbone Acier allié | 180—280HB | 80 (60—100) | 0.25 (0.20—0.30) | 90 (70—110) | 0.30 (0.25—0.35) |
| | | 280—350HB | 70 (50—90) | 0.20 (0.15—0.25) | 80 (60—100) | 0.25 (0.20—0.30) |
| M | Acier inoxydable | ≤200HB | 60 (50—70) | 0.20 (0.15—0.22) | 60 (50—70) | 0.20 (0.15—0.22) |
| K | Fonte | Résistance à la traction ≤350MPa | 120 (60—140) | 0.25 (0.20—0.30) | 130 (80—150) | 0.35 (0.25—0.40) |
| | Fonte ductile | Résistance à la traction ≤450MPa | 80 (60—90) | 0.25 (0.20—0.30) | 90 (60—100) | 0.30 (0.25—0.35) |

| | Matière | Diamètre foret | ϕ24.5—ϕ27.4 | | ϕ27.5—ϕ30.4 | |
|---|---|---|---|---|---|---|
| | | Conditions / Dureté | Vitesse de coupe (m/min) | Avance (mm/tour) | Vitesse de coupe (m/min) | Avance (mm/tour) |
| P | Acier doux | ≤180HB | 110 (80—120) | 0.30 (0.25—0.35) | 110 (80—120) | 0.30 (0.25—0.35) |
| | Acier carbone Acier allié | 180—280HB | 100 (80—120) | 0.30 (0.25—0.35) | 100 (80—120) | 0.30 (0.25—0.35) |
| | | 280—350HB | 90 (70—110) | 0.25 (0.20—0.30) | 90 (70—110) | 0.25 (0.20—0.30) |
| M | Acier inoxydable | ≤200HB | 70 (60—80) | 0.25 (0.20—0.28) | 70 (60—80) | 0.25 (0.20—0.28) |
| K | Fonte | Résistance à la traction ≤350MPa | 140 (90—160) | 0.35 (0.25—0.40) | 140 (90—160) | 0.40 (0.30—0.45) |
| | Fonte ductile | Résistance à la traction ≤450MPa | 100 (80—110) | 0.30 (0.25—0.35) | 100 (80—110) | 0.30 (0.25—0.35) |

Remarque 1) Pour l'usinage d'aciers de construction et aciers inoxydable, nous recommandons les embouts monobloc avec chanfrein de type H.
Remarque 2) L'utilisation est recommandé uniquement sur une machine de rigidité suffisante. Le système d'arrosage interne est recommandé pour l'usinage d'acier inoxydable. (L'usinage avec micro-pulvérisation et brouillard d'huile ne doivent pas être utilisés)

# TAW

## ■PRÉPARATION D'ARÊTE

Si une plaquette avec une préparation autre est requise, veuillez commander en utilisant les symboles ci-dessous.

(Référence embout monobloc)

T A W N H 1 8 5 0 T ○

- T A W : Nom produit TAW
- N : Usage général
- H : Type H
- 1 8 5 0 : Diamètre de l'embout
- T : Symbole de préparation
- ○ : Honing (listel)

(Préparation standard)

| Honing | Largeur listel (mm) |
|---|---|
| F | 0 |
| G | 0.02—0.05 |
| H | 0.05—0.10 |
| - (Standard) | 0.10—0.15 |
| S | 0.20—0.25 |
| M | 0.25—0.30 |

## MODE D'EMPLOI

### ■INSTALLATION DE L'EMBOUT MONOBLOC

- Déserrer la vis de fixation pour installer l'embout. (Embout type H)
- Ajuster correctement les cannelures de l'embout monobloc et du corps du foret, puis faire coulisser l'embout jusqu'au fond du logement.
- Serrer la vis de fixation en tenant l'embout comme indiqué. (Figure 1)
- Vérifier qu'il n'existe aucun espace entre l'embout et le corps du foret. (Figure 2)

Serrez la vis de serrage en fonction du couple ci-dessous.

| Dia. Foret | Couple |
|---|---|
| ø14—ø15 | 2.0N•m |
| ø16—ø18 | 2.0N•m |
| ø19—ø21 | 3.5N•m |
| ø22—ø24 | 5.5N•m |
| ø25—ø27 | 8.5N•m |
| ø28—ø30 | 12.0N•m |

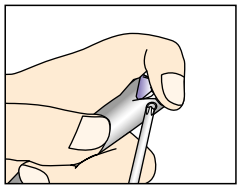


**Figure 1**

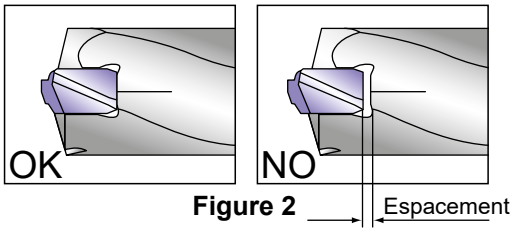



**Figure 2**

## REMPLACEMENT DE L'EMBOUT MONOBLOC

- Nettoyer complètement les cannelures du corps du foret avant d'installer un nouvel embout. Enlever la saleté dans les cannelures du corps en utilisant la plaque de nettoyage fournie.

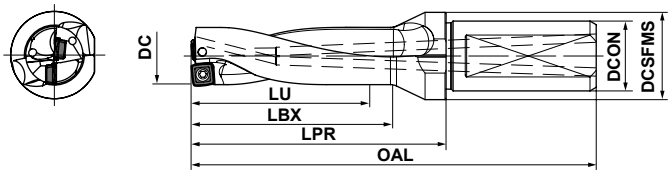
# Notes

# PERÇAGE (À EMBOUT)

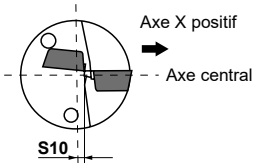
# MVX

- Combinaison idéale de plaquette CVD extérieure et de plaquette PVD intérieure
- Corps d'outil de haute raideur pour un usinage de trous profonds L/D = 6.

P M K N S H




Excentration maximale en tournage




| L/D | Tolérances d'usinage (mm) ø14.0—ø33.0 | ø33.5—ø47.0 | ø48.0—ø63.0 |
|---|---|---|---|
| 2D, 3D | 0 +0.25 | 0 +0.3 | 0 +0.3 |
| 4D, 5D | 0 +0.35 | 0 +0.4 | 0 +0.45 |
| 6D | 0 +0.45 | 0 +0.6 | |

| DC (mm) | Rapport (L/D) | Référence | Stock | Dents | Dimensions (mm) LU | LBX | LPR | OAL | DCON | DCSFMS | S10 (mm) | Plaquette | Vis de fixation | Clé |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NEW 14.0 | 2 | MVX1400X2F20 | ● | 2 | 28 | 35 | 50 | 93 | 20 | 25 | 0.6 | SO○X05 | TPS20-1 | TIP06F |
| | 3 | MVX1400X3F20 | ● | 2 | 42 | 49 | 64 | 107 | 20 | 25 | 0.6 | SO○X05 | TPS20-1 | TIP06F |
| | 4 | MVX1400X4F20 | ● | 2 | 56 | 63 | 78 | 121 | 20 | 25 | 0.6 | SO○X05 | TPS20-1 | TIP06F |
| | 5 | MVX1400X5F20 | ● | 2 | 70 | 77 | 92 | 135 | 20 | 25 | 0.6 | SO○X05 | TPS20-1 | TIP06F |
| NEW 14.5 | 2 | MVX1450X2F20 | ● | 2 | 29 | 36 | 51 | 94 | 20 | 25 | 0.5 | SO○X05 | TPS20-1 | TIP06F |
| | 3 | MVX1450X3F20 | ● | 2 | 43.5 | 50.5 | 65.5 | 108.5 | 20 | 25 | 0.5 | SO○X05 | TPS20-1 | TIP06F |
| | 4 | MVX1450X4F20 | ● | 2 | 58 | 65 | 80 | 123 | 20 | 25 | 0.5 | SO○X05 | TPS20-1 | TIP06F |
| | 5 | MVX1450X5F20 | ● | 2 | 72.5 | 79.5 | 94.5 | 137.5 | 20 | 25 | 0.5 | SO○X05 | TPS20-1 | TIP06F |
| NEW 15.0 | 2 | MVX1500X2F20 | ● | 2 | 30 | 37 | 52 | 95 | 20 | 25 | 0.35 | SO○X05 | TPS20-1 | TIP06F |
| | 3 | MVX1500X3F20 | ● | 2 | 45 | 52 | 67 | 110 | 20 | 25 | 0.35 | SO○X05 | TPS20-1 | TIP06F |
| | 4 | MVX1500X4F20 | ● | 2 | 60 | 67 | 82 | 125 | 20 | 25 | 0.35 | SO○X05 | TPS20-1 | TIP06F |
| | 5 | MVX1500X5F20 | ● | 2 | 75 | 82 | 97 | 140 | 20 | 25 | 0.35 | SO○X05 | TPS20-1 | TIP06F |
| NEW 15.5 | 2 | MVX1550X2F20 | ● | 2 | 31 | 38 | 53 | 96 | 20 | 25 | 0.3 | SO○X05 | TPS20-1 | TIP06F |
| | 3 | MVX1550X3F20 | ● | 2 | 46.5 | 53.5 | 68.5 | 111.5 | 20 | 25 | 0.3 | SO○X05 | TPS20-1 | TIP06F |
| | 4 | MVX1550X4F20 | ● | 2 | 62 | 69 | 84 | 127 | 20 | 25 | 0.3 | SO○X05 | TPS20-1 | TIP06F |
| | 5 | MVX1550X5F20 | ● | 2 | 77.5 | 84.5 | 99.5 | 142.5 | 20 | 25 | 0.3 | SO○X05 | TPS20-1 | TIP06F |
| NEW 16.0 | 2 | MVX1600X2F20 | ● | 2 | 32 | 39 | 54 | 97 | 20 | 25 | 0.25 | SO○X05 | TPS20-1 | TIP06F |
| | 3 | MVX1600X3F20 | ● | 2 | 48 | 55 | 70 | 113 | 20 | 25 | 0.25 | SO○X05 | TPS20-1 | TIP06F |
| | 4 | MVX1600X4F20 | ● | 2 | 64 | 71 | 86 | 129 | 20 | 25 | 0.25 | SO○X05 | TPS20-1 | TIP06F |
| | 5 | MVX1600X5F20 | ● | 2 | 80 | 87 | 102 | 145 | 20 | 25 | 0.25 | SO○X05 | TPS20-1 | TIP06F |
| NEW 16.5 | 2 | MVX1650X2F20 | ● | 2 | 33 | 40 | 55 | 98 | 20 | 25 | 0.25 | SO○X05 | TPS20-1 | TIP06F |
| | 3 | MVX1650X3F20 | ● | 2 | 49.5 | 56.5 | 71.5 | 114.5 | 20 | 25 | 0.25 | SO○X05 | TPS20-1 | TIP06F |
| | 4 | MVX1650X4F20 | ● | 2 | 66 | 73 | 88 | 131 | 20 | 25 | 0.25 | SO○X05 | TPS20-1 | TIP06F |
| | 5 | MVX1650X5F20 | ● | 2 | 82.5 | 89.5 | 104.5 | 147.5 | 20 | 25 | 0.25 | SO○X05 | TPS20-1 | TIP06F |
| 17.0 | 2 | MVX1700X2F20 | ● | 2 | 34 | 41 | 56 | 99 | 20 | 25 | 0.5 | SO○X06 | TPS25 | TIP07F |
| | 3 | MVX1700X3F20 | ● | 2 | 51 | 58 | 73 | 116 | 20 | 25 | 0.5 | SO○X06 | TPS25 | TIP07F |
| | 4 | MVX1700X4F20 | ● | 2 | 68 | 75 | 90 | 133 | 20 | 25 | 0.5 | SO○X06 | TPS25 | TIP07F |
| | 5 | MVX1700X5F20 | ● | 2 | 85 | 92 | 107 | 150 | 20 | 25 | 0.5 | SO○X06 | TPS25 | TIP07F |
| | 6 | MVX1700X6F20 | ● | 2 | 102 | 109 | 124 | 167 | 20 | 25 | 0.5 | SO○X06 | TPS25 | TIP07F |

✱ Couple de serrage (N • m) : TPS20-1=0.6, TPS25=1.0

● : Article stocké.

| DC (mm) | Rapport (L/D) | Référence | Stock | Dents | Dimensions (mm) LU | LBX | LPR | OAL | DCON | DCSFMS | S10 (mm) | Plaquette | Vis de fixation | F W Clé |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2 | **MVX1750X2F25** | ● | 2 | 35 | 42 | 62 | 112 | 25 | 32 | 0.45 | **SO○X06** | TPS25 | TIP07F |
| | 3 | **MVX1750X3F25** | ● | 2 | 52.5 | 59.5 | 79.5 | 129.5 | 25 | 32 | 0.45 | **SO○X06** | TPS25 | TIP07F |
| **17.5** | 4 | **MVX1750X4F25** | ● | 2 | 70 | 77 | 97 | 147 | 25 | 32 | 0.45 | **SO○X06** | TPS25 | TIP07F |
| | 5 | **MVX1750X5F25** | ● | 2 | 87.5 | 94.5 | 114.5 | 164.5 | 25 | 32 | 0.45 | **SO○X06** | TPS25 | TIP07F |
| | 6 | **MVX1750X6F25** | ● | 2 | 105 | 112 | 132 | 182 | 25 | 32 | 0.45 | **SO○X06** | TPS25 | TIP07F |
| | 2 | **MVX1800X2F25** | ● | 2 | 36 | 43 | 63 | 113 | 25 | 32 | 0.4 | **SO○X06** | TPS25 | TIP07F |
| | 3 | **MVX1800X3F25** | ● | 2 | 54 | 61 | 81 | 131 | 25 | 32 | 0.4 | **SO○X06** | TPS25 | TIP07F |
| **18.0** | 4 | **MVX1800X4F25** | ● | 2 | 72 | 79 | 99 | 149 | 25 | 32 | 0.4 | **SO○X06** | TPS25 | TIP07F |
| | 5 | **MVX1800X5F25** | ● | 2 | 90 | 97 | 117 | 167 | 25 | 32 | 0.4 | **SO○X06** | TPS25 | TIP07F |
| | 6 | **MVX1800X6F25** | ● | 2 | 108 | 115 | 135 | 185 | 25 | 32 | 0.4 | **SO○X06** | TPS25 | TIP07F |
| | 2 | **MVX1850X2F25** | ● | 2 | 37 | 44 | 64 | 114 | 25 | 32 | 0.35 | **SO○X06** | TPS25 | TIP07F |
| | 3 | **MVX1850X3F25** | ● | 2 | 55.5 | 62.5 | 82.5 | 132.5 | 25 | 32 | 0.35 | **SO○X06** | TPS25 | TIP07F |
| **18.5** | 4 | **MVX1850X4F25** | ● | 2 | 74 | 81 | 101 | 151 | 25 | 32 | 0.35 | **SO○X06** | TPS25 | TIP07F |
| | 5 | **MVX1850X5F25** | ● | 2 | 92.5 | 99.5 | 119.5 | 169.5 | 25 | 32 | 0.35 | **SO○X06** | TPS25 | TIP07F |
| | 6 | **MVX1850X6F25** | ● | 2 | 111 | 118 | 138 | 188 | 25 | 32 | 0.35 | **SO○X06** | TPS25 | TIP07F |
| | 2 | **MVX1900X2F25** | ● | 2 | 38 | 45 | 65 | 115 | 25 | 32 | 0.3 | **SO○X06** | TPS25 | TIP07F |
| | 3 | **MVX1900X3F25** | ● | 2 | 57 | 64 | 84 | 134 | 25 | 32 | 0.3 | **SO○X06** | TPS25 | TIP07F |
| **19.0** | 4 | **MVX1900X4F25** | ● | 2 | 76 | 83 | 103 | 153 | 25 | 32 | 0.3 | **SO○X06** | TPS25 | TIP07F |
| | 5 | **MVX1900X5F25** | ● | 2 | 95 | 102 | 122 | 172 | 25 | 32 | 0.3 | **SO○X06** | TPS25 | TIP07F |
| | 6 | **MVX1900X6F25** | ● | 2 | 114 | 121 | 141 | 191 | 25 | 32 | 0.3 | **SO○X06** | TPS25 | TIP07F |
| | 2 | **MVX1950X2F25** | ● | 2 | 39 | 46 | 66 | 116 | 25 | 32 | 0.25 | **SO○X06** | TPS25 | TIP07F |
| | 3 | **MVX1950X3F25** | ● | 2 | 58.5 | 65.5 | 85.5 | 135.5 | 25 | 32 | 0.25 | **SO○X06** | TPS25 | TIP07F |
| **19.5** | 4 | **MVX1950X4F25** | ● | 2 | 78 | 85 | 105 | 155 | 25 | 32 | 0.25 | **SO○X06** | TPS25 | TIP07F |
| | 5 | **MVX1950X5F25** | ● | 2 | 97.5 | 104.5 | 124.5 | 174.5 | 25 | 32 | 0.25 | **SO○X06** | TPS25 | TIP07F |
| | 6 | **MVX1950X6F25** | ● | 2 | 117 | 124 | 144 | 194 | 25 | 32 | 0.25 | **SO○X06** | TPS25 | TIP07F |
| | 2 | **MVX2000X2F25** | ● | 2 | 40 | 47 | 67 | 117 | 25 | 32 | 0.6 | **SO○X07** | TPS3 | TIP10W |
| | 3 | **MVX2000X3F25** | ● | 2 | 60 | 67 | 87 | 137 | 25 | 32 | 0.6 | **SO○X07** | TPS3 | TIP10W |
| **20.0** | 4 | **MVX2000X4F25** | ● | 2 | 80 | 87 | 107 | 157 | 25 | 32 | 0.6 | **SO○X07** | TPS3 | TIP10W |
| | 5 | **MVX2000X5F25** | ● | 2 | 100 | 107 | 127 | 177 | 25 | 32 | 0.6 | **SO○X07** | TPS3 | TIP10W |
| | 6 | **MVX2000X6F25** | ● | 2 | 120 | 127 | 147 | 197 | 25 | 32 | 0.6 | **SO○X07** | TPS3 | TIP10W |
| **20.5** | 2 | **MVX2050X2F25** | ● | 2 | 41 | 48 | 68 | 118 | 25 | 32 | 0.55 | **SO○X07** | TPS3 | TIP10W |
| | 3 | **MVX2050X3F25** | ● | 2 | 61.5 | 68.5 | 88.5 | 138.5 | 25 | 32 | 0.55 | **SO○X07** | TPS3 | TIP10W |
| | 2 | **MVX2100X2F25** | ● | 2 | 42 | 49 | 69 | 119 | 25 | 32 | 0.5 | **SO○X07** | TPS3 | TIP10W |
| | 3 | **MVX2100X3F25** | ● | 2 | 63 | 70 | 90 | 140 | 25 | 32 | 0.5 | **SO○X07** | TPS3 | TIP10W |
| **21.0** | 4 | **MVX2100X4F25** | ● | 2 | 84 | 91 | 111 | 161 | 25 | 32 | 0.5 | **SO○X07** | TPS3 | TIP10W |
| | 5 | **MVX2100X5F25** | ● | 2 | 105 | 112 | 132 | 182 | 25 | 32 | 0.5 | **SO○X07** | TPS3 | TIP10W |
| | 6 | **MVX2100X6F25** | ● | 2 | 126 | 133 | 153 | 203 | 25 | 32 | 0.5 | **SO○X07** | TPS3 | TIP10W |
| **21.5** | 2 | **MVX2150X2F25** | ● | 2 | 43 | 50 | 70 | 120 | 25 | 32 | 0.45 | **SO○X07** | TPS3 | TIP10W |
| | 3 | **MVX2150X3F25** | ● | 2 | 64.5 | 71.5 | 91.5 | 141.5 | 25 | 32 | 0.45 | **SO○X07** | TPS3 | TIP10W |
| | 2 | **MVX2200X2F25** | ● | 2 | 44 | 51 | 71 | 121 | 25 | 32 | 0.4 | **SO○X07** | TPS3 | TIP10W |
| | 3 | **MVX2200X3F25** | ● | 2 | 66 | 73 | 93 | 143 | 25 | 32 | 0.4 | **SO○X07** | TPS3 | TIP10W |
| **22.0** | 4 | **MVX2200X4F25** | ● | 2 | 88 | 95 | 115 | 165 | 25 | 32 | 0.4 | **SO○X07** | TPS3 | TIP10W |
| | 5 | **MVX2200X5F25** | ● | 2 | 110 | 117 | 137 | 187 | 25 | 32 | 0.4 | **SO○X07** | TPS3 | TIP10W |
| | 6 | **MVX2200X6F25** | ● | 2 | 132 | 139 | 159 | 209 | 25 | 32 | 0.4 | **SO○X07** | TPS3 | TIP10W |
| **22.5** | 2 | **MVX2250X2F25** | ● | 2 | 45 | 52 | 72 | 122 | 25 | 32 | 0.35 | **SO○X07** | TPS3 | TIP10W |
| | 3 | **MVX2250X3F25** | ● | 2 | 67.5 | 74.5 | 94.5 | 144.5 | 25 | 32 | 0.35 | **SO○X07** | TPS3 | TIP10W |

✶ Couple de serrage (N • m) : TPS25=1.0, TPS3=2.0

DESCRIPTION PLAQUETTE ➤ M168
CONDITIONS DE COUPE ➤ M169
DOUILLE D'EXCENTRATION ➤ M172
NOTE D'UTILISATION ➤ M173
PIÈCES DÉTACHÉES ➤ N001
DONNÉES TECHNIQUES ➤ P001

# PERÇAGE (À EMBOUT)

# MVX

| DC (mm) | Rapport (L/D) | Référence | Stock | Dents | Dimensions (mm) LU | LBX | LPR | OAL | DCON | DCSFMS | S10 (mm) | Plaquette | Vis de fixation | W Clé |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2 | **MVX2300X2F25** | ● | 2 | 46 | 53 | 73 | 123 | 25 | 32 | 0.8 | **SO○X08** | TPS351 | TIP10W |
| | 3 | **MVX2300X3F25** | ● | 2 | 69 | 76 | 96 | 146 | 25 | 32 | 0.8 | **SO○X08** | TPS351 | TIP10W |
| **23.0** | 4 | **MVX2300X4F25** | ● | 2 | 92 | 99 | 119 | 169 | 25 | 32 | 0.8 | **SO○X08** | TPS351 | TIP10W |
| | 5 | **MVX2300X5F25** | ● | 2 | 115 | 122 | 142 | 192 | 25 | 32 | 0.8 | **SO○X08** | TPS351 | TIP10W |
| | 6 | **MVX2300X6F25** | ● | 2 | 138 | 145 | 165 | 215 | 25 | 32 | 0.8 | **SO○X08** | TPS351 | TIP10W |
| **23.5** | 2 | **MVX2350X2F25** | ● | 2 | 47 | 54 | 74 | 124 | 25 | 32 | 0.75 | **SO○X08** | TPS351 | TIP10W |
| | 3 | **MVX2350X3F25** | ● | 2 | 70.5 | 77.5 | 97.5 | 147.5 | 25 | 32 | 0.75 | **SO○X08** | TPS351 | TIP10W |
| | 2 | **MVX2400X2F25** | ● | 2 | 48 | 55 | 75 | 125 | 25 | 32 | 0.7 | **SO○X08** | TPS351 | TIP10W |
| | 3 | **MVX2400X3F25** | ● | 2 | 72 | 79 | 99 | 149 | 25 | 32 | 0.7 | **SO○X08** | TPS351 | TIP10W |
| **24.0** | 4 | **MVX2400X4F25** | ● | 2 | 96 | 103 | 123 | 173 | 25 | 32 | 0.7 | **SO○X08** | TPS351 | TIP10W |
| | 5 | **MVX2400X5F25** | ● | 2 | 120 | 127 | 147 | 197 | 25 | 32 | 0.7 | **SO○X08** | TPS351 | TIP10W |
| | 6 | **MVX2400X6F25** | ● | 2 | 144 | 151 | 171 | 221 | 25 | 32 | 0.7 | **SO○X08** | TPS351 | TIP10W |
| **24.5** | 2 | **MVX2450X2F25** | ● | 2 | 49 | 56 | 76 | 126 | 25 | 32 | 0.65 | **SO○X08** | TPS351 | TIP10W |
| | 3 | **MVX2450X3F25** | ● | 2 | 73.5 | 80.5 | 100.5 | 150.5 | 25 | 32 | 0.65 | **SO○X08** | TPS351 | TIP10W |
| | 2 | **MVX2500X2F25** | ● | 2 | 50 | 57 | 77 | 127 | 25 | 32 | 0.6 | **SO○X08** | TPS351 | TIP10W |
| | 3 | **MVX2500X3F25** | ● | 2 | 75 | 82 | 102 | 152 | 25 | 32 | 0.6 | **SO○X08** | TPS351 | TIP10W |
| **25.0** | 4 | **MVX2500X4F25** | ● | 2 | 100 | 107 | 127 | 177 | 25 | 32 | 0.6 | **SO○X08** | TPS351 | TIP10W |
| | 5 | **MVX2500X5F25** | ● | 2 | 125 | 132 | 152 | 202 | 25 | 32 | 0.6 | **SO○X08** | TPS351 | TIP10W |
| | 6 | **MVX2500X6F25** | ● | 2 | 150 | 157 | 177 | 227 | 25 | 32 | 0.6 | **SO○X08** | TPS351 | TIP10W |
| **25.5** | 2 | **MVX2550X2F25** | ● | 2 | 51 | 58 | 78 | 128 | 25 | 32 | 0.6 | **SO○X08** | TPS351 | TIP10W |
| | 3 | **MVX2550X3F25** | ● | 2 | 76.5 | 83.5 | 103.5 | 153.5 | 25 | 32 | 0.6 | **SO○X08** | TPS351 | TIP10W |
| | 2 | **MVX2600X2F32** | ● | 2 | 52 | 59 | 79 | 134 | 32 | 42 | 0.5 | **SO○X08** | TPS351 | TIP10W |
| | 3 | **MVX2600X3F32** | ● | 2 | 78 | 85 | 105 | 160 | 32 | 42 | 0.5 | **SO○X08** | TPS351 | TIP10W |
| **26.0** | 4 | **MVX2600X4F32** | ● | 2 | 104 | 111 | 131 | 186 | 32 | 42 | 0.5 | **SO○X08** | TPS351 | TIP10W |
| | 5 | **MVX2600X5F32** | ● | 2 | 130 | 137 | 157 | 212 | 32 | 42 | 0.5 | **SO○X08** | TPS351 | TIP10W |
| | 6 | **MVX2600X6F32** | ● | 2 | 156 | 163 | 183 | 238 | 32 | 42 | 0.5 | **SO○X08** | TPS351 | TIP10W |
| **26.5** | 2 | **MVX2650X2F32** | ● | 2 | 53 | 60 | 80 | 135 | 32 | 42 | 0.5 | **SO○X08** | TPS351 | TIP10W |
| | 3 | **MVX2650X3F32** | ● | 2 | 79.5 | 86.5 | 106.5 | 161.5 | 32 | 42 | 0.5 | **SO○X08** | TPS351 | TIP10W |
| | 2 | **MVX2700X2F32** | ● | 2 | 54 | 61 | 81 | 136 | 32 | 42 | 0.45 | **SO○X08** | TPS351 | TIP10W |
| | 3 | **MVX2700X3F32** | ● | 2 | 81 | 88 | 108 | 163 | 32 | 42 | 0.45 | **SO○X08** | TPS351 | TIP10W |
| **27.0** | 4 | **MVX2700X4F32** | ● | 2 | 108 | 115 | 135 | 190 | 32 | 42 | 0.45 | **SO○X08** | TPS351 | TIP10W |
| | 5 | **MVX2700X5F32** | ● | 2 | 135 | 142 | 162 | 217 | 32 | 42 | 0.45 | **SO○X08** | TPS351 | TIP10W |
| | 6 | **MVX2700X6F32** | ● | 2 | 162 | 169 | 189 | 244 | 32 | 42 | 0.45 | **SO○X08** | TPS351 | TIP10W |
| **27.5** | 2 | **MVX2750X2F32** | ● | 2 | 55 | 62 | 82 | 137 | 32 | 42 | 0.4 | **SO○X08** | TPS351 | TIP10W |
| | 3 | **MVX2750X3F32** | ● | 2 | 82.5 | 89.5 | 109.5 | 164.5 | 32 | 42 | 0.4 | **SO○X08** | TPS351 | TIP10W |
| | 2 | **MVX2800X2F32** | ● | 2 | 56 | 63 | 83 | 138 | 32 | 42 | 0.85 | **SO○X09** | TPS4 | TIP15W |
| | 3 | **MVX2800X3F32** | ● | 2 | 84 | 91 | 111 | 166 | 32 | 42 | 0.85 | **SO○X09** | TPS4 | TIP15W |
| **28.0** | 4 | **MVX2800X4F32** | ● | 2 | 112 | 119 | 139 | 194 | 32 | 42 | 0.85 | **SO○X09** | TPS4 | TIP15W |
| | 5 | **MVX2800X5F32** | ● | 2 | 140 | 147 | 167 | 222 | 32 | 42 | 0.85 | **SO○X09** | TPS4 | TIP15W |
| | 6 | **MVX2800X6F32** | ● | 2 | 168 | 175 | 195 | 250 | 32 | 42 | 0.85 | **SO○X09** | TPS4 | TIP15W |
| **28.5** | 2 | **MVX2850X2F32** | ● | 2 | 57 | 64 | 84 | 139 | 32 | 42 | 0.8 | **SO○X09** | TPS4 | TIP15W |
| | 3 | **MVX2850X3F32** | ● | 2 | 85.5 | 92.5 | 112.5 | 167.5 | 32 | 42 | 0.8 | **SO○X09** | TPS4 | TIP15W |
| | 2 | **MVX2900X2F32** | ● | 2 | 58 | 65 | 85 | 140 | 32 | 42 | 0.75 | **SO○X09** | TPS4 | TIP15W |
| | 3 | **MVX2900X3F32** | ● | 2 | 87 | 94 | 114 | 169 | 32 | 42 | 0.75 | **SO○X09** | TPS4 | TIP15W |
| **29.0** | 4 | **MVX2900X4F32** | ● | 2 | 116 | 123 | 143 | 198 | 32 | 42 | 0.75 | **SO○X09** | TPS4 | TIP15W |
| | 5 | **MVX2900X5F32** | ● | 2 | 145 | 152 | 172 | 227 | 32 | 42 | 0.75 | **SO○X09** | TPS4 | TIP15W |
| | 6 | **MVX2900X6F32** | ● | 2 | 174 | 181 | 201 | 256 | 32 | 42 | 0.75 | **SO○X09** | TPS4 | TIP15W |
| **29.5** | 2 | **MVX2950X2F32** | ● | 2 | 59 | 66 | 86 | 141 | 32 | 42 | 0.7 | **SO○X09** | TPS4 | TIP15W |
| | 3 | **MVX2950X3F32** | ● | 2 | 88.5 | 95.5 | 115.5 | 170.5 | 32 | 42 | 0.7 | **SO○X09** | TPS4 | TIP15W |

∗ Couple de serrage (N • m) : TPS351=2.5, TPS4=3.5

● : Article stocké.

| DC (mm) | Rapport (L/D) | Référence | Stock | Dents | Dimensions (mm) LU | LBX | LPR | OAL | DCON | DCSFMS | S10 (mm) | Plaquette | Vis de fixation | Clé |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2 | **MVX3000X2F32** | ● | 2 | 60 | 67 | 87 | 142 | 32 | 42 | 0.65 | **SO○X09** | TPS4 | TIP15W |
| | 3 | **MVX3000X3F32** | ● | 2 | 90 | 97 | 117 | 172 | 32 | 42 | 0.65 | **SO○X09** | TPS4 | TIP15W |
| **30.0** | 4 | **MVX3000X4F32** | ● | 2 | 120 | 127 | 147 | 202 | 32 | 42 | 0.65 | **SO○X09** | TPS4 | TIP15W |
| | 5 | **MVX3000X5F32** | ● | 2 | 150 | 157 | 177 | 232 | 32 | 42 | 0.65 | **SO○X09** | TPS4 | TIP15W |
| | 6 | **MVX3000X6F32** | ● | 2 | 180 | 187 | 207 | 262 | 32 | 42 | 0.65 | **SO○X09** | TPS4 | TIP15W |
| **30.5** | 3 | **MVX3050X3F32** | ● | 2 | 91.5 | 98.5 | 118.5 | 173.5 | 32 | 42 | 0.6 | **SO○X09** | TPS4 | TIP15W |
| | 2 | **MVX3100X2F32** | ● | 2 | 62 | 69 | 89 | 144 | 32 | 42 | 0.55 | **SO○X09** | TPS4 | TIP15W |
| | 3 | **MVX3100X3F32** | ● | 2 | 93 | 100 | 120 | 175 | 32 | 42 | 0.55 | **SO○X09** | TPS4 | TIP15W |
| | 4 | **MVX3100X4F32** | ● | 2 | 124 | 131 | 151 | 206 | 32 | 42 | 0.55 | **SO○X09** | TPS4 | TIP15W |
| | 2 | **MVX3100X2F40** | ● | 2 | 62 | 69 | 89 | 154 | 40 | 50 | 0.55 | **SO○X09** | TPS4 | TIP15W |
| **31.0** | 3 | **MVX3100X3F40** | ● | 2 | 93 | 100 | 120 | 185 | 40 | 50 | 0.55 | **SO○X09** | TPS4 | TIP15W |
| | 4 | **MVX3100X4F40** | ● | 2 | 124 | 131 | 151 | 216 | 40 | 50 | 0.55 | **SO○X09** | TPS4 | TIP15W |
| | 5 | **MVX3100X5F40** | ● | 2 | 155 | 162 | 182 | 247 | 40 | 50 | 0.55 | **SO○X09** | TPS4 | TIP15W |
| | 6 | **MVX3100X6F40** | ● | 2 | 186 | 193 | 213 | 278 | 40 | 50 | 0.55 | **SO○X09** | TPS4 | TIP15W |
| **31.5** | 3 | **MVX3150X3F40** | ● | 2 | 94.5 | 101.5 | 121.5 | 186.5 | 40 | 50 | 0.55 | **SO○X09** | TPS4 | TIP15W |
| | 2 | **MVX3200X2F32** | ● | 2 | 64 | 71 | 91 | 146 | 32 | 42 | 0.45 | **SO○X09** | TPS4 | TIP15W |
| | 3 | **MVX3200X3F32** | ● | 2 | 96 | 103 | 123 | 178 | 32 | 42 | 0.45 | **SO○X09** | TPS4 | TIP15W |
| | 4 | **MVX3200X4F32** | ● | 2 | 128 | 135 | 155 | 210 | 32 | 42 | 0.45 | **SO○X09** | TPS4 | TIP15W |
| | 2 | **MVX3200X2F40** | ● | 2 | 64 | 71 | 91 | 156 | 40 | 50 | 0.45 | **SO○X09** | TPS4 | TIP15W |
| **32.0** | 3 | **MVX3200X3F40** | ● | 2 | 96 | 103 | 123 | 188 | 40 | 50 | 0.45 | **SO○X09** | TPS4 | TIP15W |
| | 4 | **MVX3200X4F40** | ● | 2 | 128 | 135 | 155 | 220 | 40 | 50 | 0.45 | **SO○X09** | TPS4 | TIP15W |
| | 5 | **MVX3200X5F40** | ● | 2 | 160 | 167 | 187 | 252 | 40 | 50 | 0.45 | **SO○X09** | TPS4 | TIP15W |
| | 6 | **MVX3200X6F40** | ● | 2 | 192 | 199 | 219 | 284 | 40 | 50 | 0.45 | **SO○X09** | TPS4 | TIP15W |
| **32.5** | 3 | **MVX3250X3F40** | ● | 2 | 97.5 | 104.5 | 124.5 | 189.5 | 40 | 50 | 0.45 | **SO○X09** | TPS4 | TIP15W |
| | 2 | **MVX3300X2F32** | ● | 2 | 66 | 73 | 93 | 148 | 32 | 42 | 0.4 | **SO○X09** | TPS4 | TIP15W |
| | 3 | **MVX3300X3F32** | ● | 2 | 99 | 106 | 126 | 181 | 32 | 42 | 0.4 | **SO○X09** | TPS4 | TIP15W |
| | 4 | **MVX3300X4F32** | ● | 2 | 132 | 139 | 159 | 214 | 32 | 42 | 0.4 | **SO○X09** | TPS4 | TIP15W |
| | 2 | **MVX3300X2F40** | ● | 2 | 66 | 73 | 93 | 158 | 40 | 50 | 0.4 | **SO○X09** | TPS4 | TIP15W |
| **33.0** | 3 | **MVX3300X3F40** | ● | 2 | 99 | 106 | 126 | 191 | 40 | 50 | 0.4 | **SO○X09** | TPS4 | TIP15W |
| | 4 | **MVX3300X4F40** | ● | 2 | 132 | 139 | 159 | 224 | 40 | 50 | 0.4 | **SO○X09** | TPS4 | TIP15W |
| | 5 | **MVX3300X5F40** | ● | 2 | 165 | 172 | 192 | 257 | 40 | 50 | 0.4 | **SO○X09** | TPS4 | TIP15W |
| | 6 | **MVX3300X6F40** | ● | 2 | 198 | 205 | 225 | 290 | 40 | 50 | 0.4 | **SO○X09** | TPS4 | TIP15W |
| **33.5** | 3 | **MVX3350X3F40** | ● | 2 | 100.5 | 107.5 | 127.5 | 192.5 | 40 | 50 | 1.15 | **SO○X11** | TPS43 | TIP15W |
| | 2 | **MVX3400X2F40** | ● | 2 | 68 | 75 | 105 | 170 | 40 | 50 | 1.11 | **SO○X11** | TPS43 | TIP15W |
| | 3 | **MVX3400X3F40** | ● | 2 | 102 | 109 | 139 | 204 | 40 | 50 | 1.11 | **SO○X11** | TPS43 | TIP15W |
| **34.0** | 4 | **MVX3400X4F40** | ● | 2 | 136 | 143 | 173 | 238 | 40 | 50 | 1.11 | **SO○X11** | TPS43 | TIP15W |
| | 5 | **MVX3400X5F40** | ● | 2 | 170 | 177 | 207 | 272 | 40 | 50 | 1.11 | **SO○X11** | TPS43 | TIP15W |
| | 6 | **MVX3400X6F40** | ● | 2 | 204 | 211 | 241 | 306 | 40 | 50 | 1.1 | **SO○X11** | TPS43 | TIP15W |
| **34.5** | 3 | **MVX3450X3F40** | ● | 2 | 103.5 | 110.5 | 140.5 | 205.5 | 40 | 50 | 1.08 | **SO○X11** | TPS43 | TIP15W |
| | 2 | **MVX3500X2F40** | ● | 2 | 70 | 77 | 107 | 172 | 40 | 50 | 1.03 | **SO○X11** | TPS43 | TIP15W |
| | 3 | **MVX3500X3F40** | ● | 2 | 105 | 112 | 142 | 207 | 40 | 50 | 1.03 | **SO○X11** | TPS43 | TIP15W |
| **35.0** | 4 | **MVX3500X4F40** | ● | 2 | 140 | 147 | 177 | 242 | 40 | 50 | 1.03 | **SO○X11** | TPS43 | TIP15W |
| | 5 | **MVX3500X5F40** | ● | 2 | 175 | 182 | 212 | 277 | 40 | 50 | 1.03 | **SO○X11** | TPS43 | TIP15W |
| | 6 | **MVX3500X6F40** | ● | 2 | 210 | 217 | 247 | 312 | 40 | 50 | 1.02 | **SO○X11** | TPS43 | TIP15W |
| **35.5** | 3 | **MVX3550X3F40** | ● | 2 | 106.5 | 113.5 | 143.5 | 208.5 | 40 | 50 | 0.99 | **SO○X11** | TPS43 | TIP15W |
| | 2 | **MVX3600X2F40** | ● | 2 | 72 | 79 | 109 | 174 | 40 | 50 | 0.95 | **SO○X11** | TPS43 | TIP15W |
| | 3 | **MVX3600X3F40** | ● | 2 | 108 | 115 | 145 | 210 | 40 | 50 | 0.95 | **SO○X11** | TPS43 | TIP15W |
| **36.0** | 4 | **MVX3600X4F40** | ● | 2 | 144 | 151 | 181 | 246 | 40 | 50 | 0.95 | **SO○X11** | TPS43 | TIP15W |
| | 5 | **MVX3600X5F40** | ● | 2 | 180 | 187 | 217 | 282 | 40 | 50 | 0.95 | **SO○X11** | TPS43 | TIP15W |
| | 6 | **MVX3600X6F40** | ● | 2 | 216 | 223 | 253 | 318 | 40 | 50 | 0.94 | **SO○X11** | TPS43 | TIP15W |

∗ Couple de serrage (N • m) : TPS4=3.5, TPS43=3.5


| | | | |
|---|---|---|---|
| **DESCRIPTION PLAQUETTE** | **➤ M168** | **NOTE D'UTILISATION** | **➤ M173** |
| **CONDITIONS DE COUPE** | **➤ M169** | **PIÈCES DÉTACHÉES** | **➤ N001** |
| **DOUILLE D'EXCENTRATION** | **➤ M172** | **DONNÉES TECHNIQUES** | **➤ P001** |

# PERÇAGE (À EMBOUT)

# MVX

| DC (mm) | Rapport (L/D) | Référence | Stock | Dents | Dimensions (mm) LU | LBX | LPR | OAL | DCON | DCSFMS | S10 (mm) | Plaquette | Vis de fixation | Clé |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 37.0 | 2 | MVX3700X2F40 | ● | 2 | 74 | 81 | 111 | 176 | 40 | 50 | 0.87 | SO○X11 | TPS43 | TIP15W |
| | 3 | MVX3700X3F40 | ● | 2 | 111 | 118 | 148 | 213 | 40 | 50 | 0.87 | SO○X11 | TPS43 | TIP15W |
| | 4 | MVX3700X4F40 | ● | 2 | 148 | 155 | 185 | 250 | 40 | 50 | 0.87 | SO○X11 | TPS43 | TIP15W |
| | 5 | MVX3700X5F40 | ● | 2 | 185 | 192 | 222 | 287 | 40 | 50 | 0.87 | SO○X11 | TPS43 | TIP15W |
| | 6 | MVX3700X6F40 | ● | 2 | 222 | 229 | 259 | 324 | 40 | 50 | 0.86 | SO○X11 | TPS43 | TIP15W |
| 38.0 | 2 | MVX3800X2F40 | ● | 2 | 76 | 83 | 113 | 178 | 40 | 50 | 0.79 | SO○X11 | TPS43 | TIP15W |
| | 3 | MVX3800X3F40 | ● | 2 | 114 | 121 | 151 | 216 | 40 | 50 | 0.79 | SO○X11 | TPS43 | TIP15W |
| | 4 | MVX3800X4F40 | ● | 2 | 152 | 159 | 189 | 254 | 40 | 50 | 0.79 | SO○X11 | TPS43 | TIP15W |
| | 5 | MVX3800X5F40 | ● | 2 | 190 | 197 | 227 | 292 | 40 | 50 | 0.79 | SO○X11 | TPS43 | TIP15W |
| | 6 | MVX3800X6F40 | ● | 2 | 228 | 235 | 265 | 330 | 40 | 50 | 0.78 | SO○X11 | TPS43 | TIP15W |
| 39.0 | 2 | MVX3900X2F40 | ● | 2 | 78 | 85 | 115 | 180 | 40 | 50 | 0.71 | SO○X11 | TPS43 | TIP15W |
| | 3 | MVX3900X3F40 | ● | 2 | 117 | 124 | 154 | 219 | 40 | 50 | 0.71 | SO○X11 | TPS43 | TIP15W |
| | 4 | MVX3900X4F40 | ● | 2 | 156 | 163 | 193 | 258 | 40 | 50 | 0.71 | SO○X11 | TPS43 | TIP15W |
| | 5 | MVX3900X5F40 | ● | 2 | 195 | 202 | 232 | 297 | 40 | 50 | 0.71 | SO○X11 | TPS43 | TIP15W |
| | 6 | MVX3900X6F40 | ● | 2 | 234 | 241 | 271 | 336 | 40 | 50 | 0.7 | SO○X11 | TPS43 | TIP15W |
| 40.0 | 2 | MVX4000X2F40 | ● | 2 | 80 | 87 | 117 | 182 | 40 | 50 | 1.46 | SO○X13 | TPS43 | TIP15W |
| | 3 | MVX4000X3F40 | ● | 2 | 120 | 127 | 157 | 222 | 40 | 50 | 1.46 | SO○X13 | TPS43 | TIP15W |
| | 4 | MVX4000X4F40 | ● | 2 | 160 | 167 | 197 | 262 | 40 | 50 | 1.46 | SO○X13 | TPS43 | TIP15W |
| | 5 | MVX4000X5F40 | ● | 2 | 200 | 207 | 237 | 302 | 40 | 50 | 1.46 | SO○X13 | TPS43 | TIP15W |
| | 6 | MVX4000X6F40 | ● | 2 | 240 | 247 | 277 | 342 | 40 | 50 | 1.45 | SO○X13 | TPS43 | TIP15W |
| 41.0 | 2 | MVX4100X2F40 | ● | 2 | 82 | 89 | 119 | 184 | 40 | 50 | 1.36 | SO○X13 | TPS43 | TIP15W |
| | 3 | MVX4100X3F40 | ● | 2 | 123 | 130 | 160 | 225 | 40 | 50 | 1.36 | SO○X13 | TPS43 | TIP15W |
| | 4 | MVX4100X4F40 | ● | 2 | 164 | 171 | 201 | 266 | 40 | 50 | 1.36 | SO○X13 | TPS43 | TIP15W |
| | 5 | MVX4100X5F40 | ● | 2 | 205 | 212 | 242 | 307 | 40 | 50 | 1.36 | SO○X13 | TPS43 | TIP15W |
| | 6 | MVX4100X6F40 | ● | 2 | 246 | 253 | 283 | 348 | 40 | 50 | 1.35 | SO○X13 | TPS43 | TIP15W |
| 42.0 | 2 | MVX4200X2F40 | ● | 2 | 84 | 91 | 121 | 186 | 40 | 50 | 1.27 | SO○X13 | TPS43 | TIP15W |
| | 3 | MVX4200X3F40 | ● | 2 | 126 | 133 | 163 | 228 | 40 | 50 | 1.27 | SO○X13 | TPS43 | TIP15W |
| | 4 | MVX4200X4F40 | ● | 2 | 168 | 175 | 205 | 270 | 40 | 63 | 1.27 | SO○X13 | TPS43 | TIP15W |
| | 5 | MVX4200X5F40 | ● | 2 | 210 | 217 | 247 | 312 | 40 | 63 | 1.27 | SO○X13 | TPS43 | TIP15W |
| | 6 | MVX4200X6F40 | ● | 2 | 252 | 259 | 289 | 354 | 40 | 63 | 1.27 | SO○X13 | TPS43 | TIP15W |
| | 4 | MVX4200X4F50 | ★ | 2 | 168 | 175 | 205 | 280 | 50 | 63 | 1.27 | SO○X13 | TPS43 | TIP15W |
| | 5 | MVX4200X5F50 | ★ | 2 | 210 | 217 | 247 | 322 | 50 | 63 | 1.27 | SO○X13 | TPS43 | TIP15W |
| | 6 | MVX4200X6F50 | ★ | 2 | 252 | 259 | 289 | 364 | 50 | 63 | 1.26 | SO○X13 | TPS43 | TIP15W |
| 43.0 | 2 | MVX4300X2F40 | ● | 2 | 86 | 93 | 123 | 188 | 40 | 50 | 1.18 | SO○X13 | TPS43 | TIP15W |
| | 3 | MVX4300X3F40 | ● | 2 | 129 | 136 | 166 | 231 | 40 | 50 | 1.18 | SO○X13 | TPS43 | TIP15W |
| | 4 | MVX4300X4F40 | ● | 2 | 172 | 179 | 209 | 274 | 40 | 63 | 1.18 | SO○X13 | TPS43 | TIP15W |
| | 5 | MVX4300X5F40 | ● | 2 | 215 | 222 | 252 | 317 | 40 | 63 | 1.18 | SO○X13 | TPS43 | TIP15W |
| | 6 | MVX4300X6F40 | ● | 2 | 258 | 265 | 295 | 360 | 40 | 63 | 1.17 | SO○X13 | TPS43 | TIP15W |
| | 4 | MVX4300X4F50 | ★ | 2 | 172 | 179 | 209 | 284 | 50 | 63 | 1.18 | SO○X13 | TPS43 | TIP15W |
| | 5 | MVX4300X5F50 | ★ | 2 | 215 | 222 | 252 | 327 | 50 | 63 | 1.18 | SO○X13 | TPS43 | TIP15W |
| | 6 | MVX4300X6F50 | ★ | 2 | 258 | 265 | 295 | 370 | 50 | 63 | 1.17 | SO○X13 | TPS43 | TIP15W |
| 44.0 | 2 | MVX4400X2F40 | ● | 2 | 88 | 95 | 125 | 190 | 40 | 50 | 1.08 | SO○X13 | TPS43 | TIP15W |
| | 3 | MVX4400X3F40 | ● | 2 | 132 | 139 | 169 | 234 | 40 | 50 | 1.08 | SO○X13 | TPS43 | TIP15W |
| | 4 | MVX4400X4F40 | ● | 2 | 176 | 183 | 213 | 278 | 40 | 63 | 1.08 | SO○X13 | TPS43 | TIP15W |
| | 5 | MVX4400X5F40 | ● | 2 | 220 | 227 | 257 | 322 | 40 | 63 | 1.08 | SO○X13 | TPS43 | TIP15W |
| | 4 | MVX4400X4F50 | ★ | 2 | 176 | 183 | 213 | 288 | 50 | 63 | 1.08 | SO○X13 | TPS43 | TIP15W |
| | 5 | MVX4400X5F50 | ★ | 2 | 220 | 227 | 257 | 332 | 50 | 63 | 1.08 | SO○X13 | TPS43 | TIP15W |

⋆ Couple de serrage (N • m) : TPS43=3.5

● : Article stocké. ★ : Article standard Japon.

| DC (mm) | Rapport (L/D) | Référence | Stock | Dents | Dimensions (mm) LU | LBX | LPR | OAL | DCON | DCSFMS | S10 (mm) | Plaquette | Vis de fixation | W D Clé |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 45.0 | 2 | **MVX4500X2F40** | ● | 2 | 90 | 97 | 127 | 192 | 40 | 50 | 0.99 | **SO○X13** | TPS43 | TIP15W |
| | 3 | **MVX4500X3F40** | ● | 2 | 135 | 142 | 172 | 237 | 40 | 50 | 0.99 | **SO○X13** | TPS43 | TIP15W |
| | 4 | **MVX4500X4F40** | ● | 2 | 180 | 187 | 217 | 282 | 40 | 63 | 0.99 | **SO○X13** | TPS43 | TIP15W |
| | 5 | **MVX4500X5F40** | ● | 2 | 225 | 232 | 262 | 327 | 40 | 63 | 0.99 | **SO○X13** | TPS43 | TIP15W |
| | 4 | **MVX4500X4F50** | ★ | 2 | 180 | 187 | 217 | 292 | 50 | 63 | 0.99 | **SO○X13** | TPS43 | TIP15W |
| | 5 | **MVX4500X5F50** | ★ | 2 | 225 | 232 | 262 | 337 | 50 | 63 | 0.99 | **SO○X13** | TPS43 | TIP15W |
| 46.0 | 2 | **MVX4600X2F40** | ● | 2 | 92 | 99 | 129 | 194 | 40 | 50 | 0.89 | **SO○X13** | TPS43 | TIP15W |
| | 3 | **MVX4600X3F40** | ● | 2 | 138 | 145 | 175 | 240 | 40 | 50 | 0.89 | **SO○X13** | TPS43 | TIP15W |
| | 4 | **MVX4600X4F40** | ● | 2 | 184 | 191 | 221 | 286 | 40 | 63 | 0.89 | **SO○X13** | TPS43 | TIP15W |
| | 5 | **MVX4600X5F40** | ● | 2 | 230 | 237 | 267 | 332 | 40 | 63 | 0.89 | **SO○X13** | TPS43 | TIP15W |
| | 4 | **MVX4600X4F50** | ★ | 2 | 184 | 191 | 221 | 296 | 50 | 63 | 0.89 | **SO○X13** | TPS43 | TIP15W |
| | 5 | **MVX4600X5F50** | ★ | 2 | 230 | 237 | 267 | 342 | 50 | 63 | 0.89 | **SO○X13** | TPS43 | TIP15W |
| 47.0 | 2 | **MVX4700X2F40** | ● | 2 | 94 | 101 | 141 | 206 | 40 | 63 | 1.9 | **SO○X16** | TPS54 | TIP25D |
| | 3 | **MVX4700X3F40** | ● | 2 | 141 | 148 | 188 | 253 | 40 | 63 | 1.9 | **SO○X16** | TPS54 | TIP25D |
| | 4 | **MVX4700X4F40** | ● | 2 | 188 | 195 | 235 | 300 | 40 | 63 | 1.9 | **SO○X16** | TPS54 | TIP25D |
| | 5 | **MVX4700X5F40** | ● | 2 | 235 | 242 | 282 | 347 | 40 | 63 | 1.9 | **SO○X16** | TPS54 | TIP25D |
| | 4 | **MVX4700X4F50** | ★ | 2 | 188 | 195 | 235 | 310 | 50 | 63 | 1.9 | **SO○X16** | TPS54 | TIP25D |
| | 5 | **MVX4700X5F50** | ★ | 2 | 235 | 242 | 282 | 357 | 50 | 63 | 1.9 | **SO○X16** | TPS54 | TIP25D |
| 48.0 | 2 | **MVX4800X2F40** | ● | 2 | 96 | 103 | 143 | 208 | 40 | 63 | 1.8 | **SO○X16** | TPS54 | TIP25D |
| | 3 | **MVX4800X3F40** | ● | 2 | 144 | 151 | 191 | 256 | 40 | 63 | 1.8 | **SO○X16** | TPS54 | TIP25D |
| | 4 | **MVX4800X4F40** | ● | 2 | 192 | 199 | 239 | 304 | 40 | 63 | 1.8 | **SO○X16** | TPS54 | TIP25D |
| | 5 | **MVX4800X5F40** | ● | 2 | 240 | 247 | 287 | 352 | 40 | 63 | 1.8 | **SO○X16** | TPS54 | TIP25D |
| | 4 | **MVX4800X4F50** | ★ | 2 | 192 | 199 | 239 | 314 | 50 | 63 | 1.8 | **SO○X16** | TPS54 | TIP25D |
| | 5 | **MVX4800X5F50** | ★ | 2 | 240 | 247 | 287 | 362 | 50 | 63 | 1.8 | **SO○X16** | TPS54 | TIP25D |
| 49.0 | 2 | **MVX4900X2F40** | ● | 2 | 98 | 105 | 145 | 210 | 40 | 63 | 1.7 | **SO○X16** | TPS54 | TIP25D |
| | 3 | **MVX4900X3F40** | ● | 2 | 147 | 154 | 194 | 259 | 40 | 63 | 1.7 | **SO○X16** | TPS54 | TIP25D |
| | 4 | **MVX4900X4F40** | ● | 2 | 196 | 203 | 243 | 308 | 40 | 63 | 1.7 | **SO○X16** | TPS54 | TIP25D |
| | 5 | **MVX4900X5F40** | ● | 2 | 245 | 252 | 292 | 357 | 40 | 63 | 1.7 | **SO○X16** | TPS54 | TIP25D |
| | 4 | **MVX4900X4F50** | ★ | 2 | 196 | 203 | 243 | 318 | 50 | 63 | 1.7 | **SO○X16** | TPS54 | TIP25D |
| | 5 | **MVX4900X5F50** | ★ | 2 | 245 | 252 | 292 | 367 | 50 | 63 | 1.7 | **SO○X16** | TPS54 | TIP25D |
| 50.0 | 2 | **MVX5000X2F40** | ● | 2 | 100 | 107 | 147 | 212 | 40 | 63 | 1.6 | **SO○X16** | TPS54 | TIP25D |
| | 3 | **MVX5000X3F40** | ● | 2 | 150 | 157 | 197 | 262 | 40 | 63 | 1.6 | **SO○X16** | TPS54 | TIP25D |
| | 4 | **MVX5000X4F40** | ● | 2 | 200 | 207 | 247 | 312 | 40 | 63 | 1.6 | **SO○X16** | TPS54 | TIP25D |
| | 5 | **MVX5000X5F40** | ● | 2 | 250 | 257 | 297 | 362 | 40 | 63 | 1.6 | **SO○X16** | TPS54 | TIP25D |
| | 4 | **MVX5000X4F50** | ★ | 2 | 200 | 207 | 247 | 322 | 50 | 63 | 1.6 | **SO○X16** | TPS54 | TIP25D |
| | 5 | **MVX5000X5F50** | ★ | 2 | 250 | 257 | 297 | 372 | 50 | 63 | 1.6 | **SO○X16** | TPS54 | TIP25D |
| 51.0 | 2 | **MVX5100X2F40** | ● | 2 | 102 | 109 | 149 | 214 | 40 | 63 | 1.5 | **SO○X16** | TPS54 | TIP25D |
| | 3 | **MVX5100X3F40** | ● | 2 | 153 | 160 | 200 | 265 | 40 | 63 | 1.5 | **SO○X16** | TPS54 | TIP25D |
| | 4 | **MVX5100X4F40** | ● | 2 | 204 | 211 | 251 | 316 | 40 | 63 | 1.5 | **SO○X16** | TPS54 | TIP25D |
| | 5 | **MVX5100X5F40** | ● | 2 | 255 | 262 | 302 | 367 | 40 | 63 | 1.5 | **SO○X16** | TPS54 | TIP25D |
| | 4 | **MVX5100X4F50** | ★ | 2 | 204 | 211 | 251 | 326 | 50 | 63 | 1.5 | **SO○X16** | TPS54 | TIP25D |
| | 5 | **MVX5100X5F50** | ★ | 2 | 255 | 262 | 302 | 377 | 50 | 63 | 1.5 | **SO○X16** | TPS54 | TIP25D |
| 52.0 | 2 | **MVX5200X2F40** | ● | 2 | 104 | 111 | 151 | 216 | 40 | 63 | 1.39 | **SO○X16** | TPS54 | TIP25D |
| | 3 | **MVX5200X3F40** | ● | 2 | 156 | 163 | 203 | 268 | 40 | 63 | 1.39 | **SO○X16** | TPS54 | TIP25D |
| | 4 | **MVX5200X4F40** | ● | 2 | 208 | 215 | 255 | 320 | 40 | 63 | 1.39 | **SO○X16** | TPS54 | TIP25D |
| | 5 | **MVX5200X5F40** | ● | 2 | 260 | 267 | 307 | 372 | 40 | 63 | 1.39 | **SO○X16** | TPS54 | TIP25D |
| | 4 | **MVX5200X4F50** | ★ | 2 | 208 | 215 | 255 | 330 | 50 | 63 | 1.39 | **SO○X16** | TPS54 | TIP25D |
| | 5 | **MVX5200X5F50** | ★ | 2 | 260 | 267 | 307 | 382 | 50 | 63 | 1.39 | **SO○X16** | TPS54 | TIP25D |

★ Couple de serrage (N • m) : TPS43=3.5, TPS54=7.5


| | | | |
|---|---|---|---|
| DESCRIPTION PLAQUETTE | ➤ M168 | NOTE D'UTILISATION | ➤ M173 |
| CONDITIONS DE COUPE | ➤ M169 | PIÈCES DÉTACHÉES | ➤ N001 |
| DOUILLE D'EXCENTRATION | ➤ M172 | DONNÉES TECHNIQUES | ➤ P001 |

# MVX

| DC (mm) | Rapport (L/D) | Référence | Stock | Dents | Dimensions (mm) LU | LBX | LPR | OAL | DCON | DCSFMS | S10 (mm) | Plaquette | Vis de fixation | D Clé |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 53.0 | 2 | **MVX5300X2F40** | ● | 2 | 106 | 113 | 153 | 218 | 40 | 63 | 1.29 | **SO○X16** | TPS54 | TIP25D |
| | 3 | **MVX5300X3F40** | ● | 2 | 159 | 166 | 206 | 271 | 40 | 63 | 1.29 | **SO○X16** | TPS54 | TIP25D |
| | 4 | **MVX5300X4F40** | ● | 2 | 212 | 219 | 259 | 324 | 40 | 63 | 1.29 | **SO○X16** | TPS54 | TIP25D |
| | 5 | **MVX5300X5F40** | ● | 2 | 265 | 272 | 312 | 377 | 40 | 63 | 1.29 | **SO○X16** | TPS54 | TIP25D |
| | 4 | **MVX5300X4F50** | ★ | 2 | 212 | 219 | 259 | 334 | 50 | 63 | 1.29 | **SO○X16** | TPS54 | TIP25D |
| | 5 | **MVX5300X5F50** | ★ | 2 | 265 | 272 | 312 | 387 | 50 | 63 | 1.29 | **SO○X16** | TPS54 | TIP25D |
| 54.0 | 2 | **MVX5400X2F40** | ● | 2 | 108 | 115 | 155 | 220 | 40 | 63 | 1.19 | **SO○X16** | TPS54 | TIP25D |
| | 3 | **MVX5400X3F40** | ● | 2 | 162 | 169 | 209 | 274 | 40 | 63 | 1.19 | **SO○X16** | TPS54 | TIP25D |
| | 4 | **MVX5400X4F40** | ● | 2 | 216 | 223 | 263 | 328 | 40 | 63 | 1.19 | **SO○X16** | TPS54 | TIP25D |
| | 5 | **MVX5400X5F40** | ● | 2 | 270 | 277 | 317 | 382 | 40 | 63 | 1.19 | **SO○X16** | TPS54 | TIP25D |
| | 4 | **MVX5400X4F50** | ★ | 2 | 216 | 223 | 263 | 338 | 50 | 63 | 1.19 | **SO○X16** | TPS54 | TIP25D |
| | 5 | **MVX5400X5F50** | ★ | 2 | 270 | 277 | 317 | 392 | 50 | 63 | 1.19 | **SO○X16** | TPS54 | TIP25D |
| 55.0 | 2 | **MVX5500X2F40** | ● | 2 | 110 | 117 | 157 | 222 | 40 | 63 | 1.08 | **SO○X16** | TPS54 | TIP25D |
| | 3 | **MVX5500X3F40** | ● | 2 | 165 | 172 | 212 | 277 | 40 | 63 | 1.08 | **SO○X16** | TPS54 | TIP25D |
| | 4 | **MVX5500X4F40** | ● | 2 | 220 | 227 | 267 | 332 | 40 | 63 | 1.08 | **SO○X16** | TPS54 | TIP25D |
| | 5 | **MVX5500X5F40** | ● | 2 | 275 | 282 | 322 | 387 | 40 | 63 | 1.08 | **SO○X16** | TPS54 | TIP25D |
| | 4 | **MVX5500X4F50** | ★ | 2 | 220 | 227 | 267 | 342 | 50 | 63 | 1.08 | **SO○X16** | TPS54 | TIP25D |
| | 5 | **MVX5500X5F50** | ● | 2 | 275 | 282 | 322 | 397 | 50 | 63 | 1.08 | **SO○X16** | TPS54 | TIP25D |
| 56.0 | 2 | **MVX5600X2F40** | ● | 2 | 112 | 119 | 159 | 224 | 40 | 63 | 0.98 | **SO○X16** | TPS54 | TIP25D |
| | 3 | **MVX5600X3F40** | ● | 2 | 168 | 175 | 215 | 280 | 40 | 63 | 0.98 | **SO○X16** | TPS54 | TIP25D |
| | 4 | **MVX5600X4F40** | ● | 2 | 224 | 231 | 271 | 336 | 40 | 63 | 0.98 | **SO○X16** | TPS54 | TIP25D |
| | 5 | **MVX5600X5F40** | ● | 2 | 280 | 287 | 327 | 392 | 40 | 63 | 0.98 | **SO○X16** | TPS54 | TIP25D |
| | 4 | **MVX5600X4F50** | ★ | 2 | 224 | 231 | 271 | 346 | 50 | 63 | 0.98 | **SO○X16** | TPS54 | TIP25D |
| | 5 | **MVX5600X5F50** | ★ | 2 | 280 | 287 | 327 | 402 | 50 | 63 | 0.98 | **SO○X16** | TPS54 | TIP25D |
| 57.0 | 2 | **MVX5700X2F40** | ● | 2 | 114 | 121 | 161 | 226 | 40 | 68 | 1.47 | **SO○X18** | TPS54 | TIP25D |
| | 3 | **MVX5700X3F40** | ● | 2 | 171 | 178 | 218 | 283 | 40 | 68 | 1.47 | **SO○X18** | TPS54 | TIP25D |
| | 4 | **MVX5700X4F40** | ● | 2 | 228 | 235 | 275 | 340 | 40 | 68 | 1.47 | **SO○X18** | TPS54 | TIP25D |
| | 5 | **MVX5700X5F40** | ● | 2 | 285 | 292 | 332 | 397 | 40 | 68 | 1.47 | **SO○X18** | TPS54 | TIP25D |
| | 4 | **MVX5700X4F50** | ★ | 2 | 228 | 235 | 275 | 350 | 50 | 68 | 1.47 | **SO○X18** | TPS54 | TIP25D |
| | 5 | **MVX5700X5F50** | ★ | 2 | 285 | 292 | 332 | 407 | 50 | 68 | 1.47 | **SO○X18** | TPS54 | TIP25D |
| 58.0 | 2 | **MVX5800X2F40** | ● | 2 | 116 | 123 | 163 | 228 | 40 | 68 | 1.37 | **SO○X18** | TPS54 | TIP25D |
| | 3 | **MVX5800X3F40** | ● | 2 | 174 | 181 | 221 | 286 | 40 | 68 | 1.37 | **SO○X18** | TPS54 | TIP25D |
| | 4 | **MVX5800X4F40** | ● | 2 | 232 | 239 | 279 | 344 | 40 | 68 | 1.37 | **SO○X18** | TPS54 | TIP25D |
| | 5 | **MVX5800X5F40** | ● | 2 | 290 | 297 | 337 | 402 | 40 | 68 | 1.37 | **SO○X18** | TPS54 | TIP25D |
| | 4 | **MVX5800X4F50** | ★ | 2 | 232 | 239 | 279 | 354 | 50 | 68 | 1.37 | **SO○X18** | TPS54 | TIP25D |
| | 5 | **MVX5800X5F50** | ★ | 2 | 290 | 297 | 337 | 412 | 50 | 68 | 1.37 | **SO○X18** | TPS54 | TIP25D |
| 59.0 | 2 | **MVX5900X2F40** | ● | 2 | 118 | 125 | 165 | 230 | 40 | 68 | 1.26 | **SO○X18** | TPS54 | TIP25D |
| | 3 | **MVX5900X3F40** | ● | 2 | 177 | 184 | 224 | 289 | 40 | 68 | 1.26 | **SO○X18** | TPS54 | TIP25D |
| | 4 | **MVX5900X4F40** | ● | 2 | 236 | 243 | 283 | 348 | 40 | 68 | 1.26 | **SO○X18** | TPS54 | TIP25D |
| | 5 | **MVX5900X5F40** | ● | 2 | 295 | 302 | 342 | 407 | 40 | 68 | 1.26 | **SO○X18** | TPS54 | TIP25D |
| | 4 | **MVX5900X4F50** | ★ | 2 | 236 | 243 | 283 | 358 | 50 | 68 | 1.26 | **SO○X18** | TPS54 | TIP25D |
| | 5 | **MVX5900X5F50** | ★ | 2 | 295 | 302 | 342 | 417 | 50 | 68 | 1.26 | **SO○X18** | TPS54 | TIP25D |
| 60.0 | 2 | **MVX6000X2F40** | ● | 2 | 120 | 127 | 167 | 232 | 40 | 68 | 1.16 | **SO○X18** | TPS54 | TIP25D |
| | 3 | **MVX6000X3F40** | ● | 2 | 180 | 187 | 227 | 292 | 40 | 68 | 1.16 | **SO○X18** | TPS54 | TIP25D |
| | 4 | **MVX6000X4F40** | ● | 2 | 240 | 247 | 287 | 352 | 40 | 68 | 1.16 | **SO○X18** | TPS54 | TIP25D |
| | 5 | **MVX6000X5F40** | ● | 2 | 300 | 307 | 347 | 412 | 40 | 68 | 1.16 | **SO○X18** | TPS54 | TIP25D |
| | 4 | **MVX6000X4F50** | ★ | 2 | 240 | 247 | 287 | 362 | 50 | 68 | 1.16 | **SO○X18** | TPS54 | TIP25D |
| | 5 | **MVX6000X5F50** | ★ | 2 | 300 | 307 | 347 | 422 | 50 | 68 | 1.16 | **SO○X18** | TPS54 | TIP25D |

∗ Couple de serrage (N • m) : TPS54=7.5

● : Article stocké. ★ : Article standard Japon.

| DC (mm) | Rapport (L/D) | Référence | Stock | Dents | Dimensions (mm) LU | LBX | LPR | OAL | DCON | DCSFMS | S10 (mm) | Plaquette | Vis de fixation | Clé |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 61.0 | 2 | **MVX6100X2F40** | ● | 2 | 122 | 129 | 169 | 234 | 40 | 68 | 1.05 | **SO○X18** | TPS54 | TIP25D |
| | 3 | **MVX6100X3F40** | ● | 2 | 183 | 190 | 230 | 295 | 40 | 68 | 1.05 | **SO○X18** | TPS54 | TIP25D |
| | 4 | **MVX6100X4F40** | ● | 2 | 244 | 251 | 291 | 356 | 40 | 68 | 1.05 | **SO○X18** | TPS54 | TIP25D |
| | 5 | **MVX6100X5F40** | ● | 2 | 305 | 312 | 352 | 417 | 40 | 68 | 1.05 | **SO○X18** | TPS54 | TIP25D |
| | 4 | **MVX6100X4F50** | ★ | 2 | 244 | 251 | 291 | 366 | 50 | 68 | 1.05 | **SO○X18** | TPS54 | TIP25D |
| | 5 | **MVX6100X5F50** | ★ | 2 | 305 | 312 | 352 | 427 | 50 | 68 | 1.05 | **SO○X18** | TPS54 | TIP25D |
| 62.0 | 2 | **MVX6200X2F40** | ● | 2 | 124 | 131 | 171 | 236 | 40 | 68 | 0.95 | **SO○X18** | TPS54 | TIP25D |
| | 3 | **MVX6200X3F40** | ● | 2 | 186 | 193 | 233 | 298 | 40 | 68 | 0.95 | **SO○X18** | TPS54 | TIP25D |
| | 4 | **MVX6200X4F40** | ● | 2 | 248 | 255 | 295 | 360 | 40 | 68 | 0.95 | **SO○X18** | TPS54 | TIP25D |
| | 5 | **MVX6200X5F40** | ● | 2 | 310 | 317 | 357 | 422 | 40 | 68 | 0.95 | **SO○X18** | TPS54 | TIP25D |
| | 4 | **MVX6200X4F50** | ★ | 2 | 248 | 255 | 295 | 370 | 50 | 68 | 0.95 | **SO○X18** | TPS54 | TIP25D |
| | 5 | **MVX6200X5F50** | ★ | 2 | 310 | 317 | 357 | 432 | 50 | 68 | 0.95 | **SO○X18** | TPS54 | TIP25D |
| 63.0 | 2 | **MVX6300X2F40** | ● | 2 | 126 | 133 | 173 | 238 | 40 | 68 | 0.85 | **SO○X18** | TPS54 | TIP25D |
| | 3 | **MVX6300X3F40** | ● | 2 | 189 | 196 | 236 | 301 | 40 | 68 | 0.85 | **SO○X18** | TPS54 | TIP25D |
| | 4 | **MVX6300X4F40** | ● | 2 | 252 | 259 | 299 | 364 | 40 | 68 | 0.85 | **SO○X18** | TPS54 | TIP25D |
| | 5 | **MVX6300X5F40** | ● | 2 | 315 | 322 | 362 | 427 | 40 | 68 | 0.85 | **SO○X18** | TPS54 | TIP25D |
| | 4 | **MVX6300X4F50** | ★ | 2 | 252 | 259 | 299 | 374 | 50 | 68 | 0.85 | **SO○X18** | TPS54 | TIP25D |
| | 5 | **MVX6300X5F50** | ★ | 2 | 315 | 322 | 362 | 437 | 50 | 68 | 0.85 | **SO○X18** | TPS54 | TIP25D |

★ Couple de serrage (N • m) : TPS54=7.5

DESCRIPTION PLAQUETTE ➤ M168
CONDITIONS DE COUPE ➤ M169
DOUILLE D'EXCENTRATION ➤ M172
NOTE D'UTILISATION ➤ M173
PIÈCES DÉTACHÉES ➤ N001
DONNÉES TECHNIQUES ➤ P001

# MVX

## PLAQUETTES

| Forme | Diamètre de foret | Référence plaquette | Dimensions (mm) IC | S | RE | Revêtu VP15TF | MC1020 | MC5020 | DP8020 | Carbure TF15 | | Géométrie |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **UM** | ø14.0—ø16.5 | NEW **SOMX052704-UM** | 5.0 | 2.7 | 0.4 | ● | ● | ● | | | | ø14.0—ø16.5 |
| | ø17.0—ø19.5 | **SOMX063005-UM** | 6.0 | 3.0 | 0.5 | ● | ● | ● | | | | |
| | ø20.0—ø22.5 | **SOMX073505-UM** | 7.0 | 3.5 | 0.5 | ● | ● | ● | | | | |
| | ø23.0—ø27.5 | **SOMX084005-UM** | 8.3 | 4.0 | 0.5 | ● | ● | ● | | | | |
| | ø28.0—ø33.0 | **SOMX094506-UM** | 9.7 | 4.5 | 0.6 | ● | ● | ● | | | | |
| | ø33.5—ø39.0 | **SOMX115506-UM** | 11.6 | 5.5 | 0.6 | ● | ● | ● | | | | ø17.0—ø63.0 |
| | ø40.0—ø46.0 | **SOMX136008-UM** | 13.8 | 6.0 | 0.8 | ● | ● | ● | | | | |
| | ø47.0—ø56.0 | **SOMX166508-UM** | 16.5 | 6.5 | 0.8 | ● | ● | ● | | | | |
| Polyvalent Plaquette intérieure et extérieure | ø57.0—ø63.0 | **SOMX187008-UM** | 18.2 | 7.0 | 0.8 | ● | ● | ● | | | | |
| **US** | ø17.0—ø19.5 | **SOMX063005-US** | 6.0 | 3.0 | 0.5 | ● | | | | | | |
| | ø20.0—ø22.5 | **SOMX073505-US** | 7.0 | 3.5 | 0.5 | ● | | | | | | |
| | ø23.0—ø27.5 | **SOMX084005-US** | 8.0 | 4.0 | 0.5 | ● | | | | | | |
| | ø28.0—ø33.0 | **SOMX094506-US** | 9.0 | 4.5 | 0.6 | ● | | | | | | |
| | ø33.5—ø39.0 | **SOMX115506-US** | 11.6 | 5.5 | 0.6 | ● | | | | | | |
| | ø40.0—ø46.0 | **SOMX136008-US** | 13.8 | 6.0 | 0.8 | ● | | | | | | |
| | ø47.0—ø56.0 | **SOMX166508-US** | 16.5 | 6.5 | 0.8 | ● | | | | | | |
| Pour l'acier inoxydable et en plaquette intérieure | ø57.0—ø63.0 | **SOMX187008-US** | 18.2 | 7.0 | 0.8 | ● | | | | | | |
| **UH** | ø17.0—ø19.5 | **SOMX062905-UH** | 6.0 | 2.9 | 0.5 | | | | ● | | | |
| | ø20.0—ø22.5 | **SOMX073405-UH** | 7.0 | 3.4 | 0.5 | | | | ● | | | |
| | ø23.0—ø27.5 | **SOMX083905-UH** | 8.3 | 3.9 | 0.5 | | | | ● | | | |
| | ø28.0—ø33.0 | **SOMX094406-UH** | 9.7 | 4.4 | 0.6 | | | | ● | | | |
| | ø33.5—ø39.0 | **SOMX115406-UH** | 11.6 | 5.4 | 0.6 | | | | ● | | | |
| | ø40.0—ø46.0 | **SOMX135908-UH** | 13.8 | 5.9 | 0.8 | | | | ● | | | |
| | ø47.0—ø56.0 | **SOMX166408-UH** | 16.5 | 6.4 | 0.8 | | | | ● | | | |
| Arête renforcée Plaquette intérieure | ø57.0—ø63.0 | **SOMX186908-UH** | 18.2 | 6.9 | 0.8 | | | | ● | | | |
| **UN** | ø17.0—ø19.5 | **SOGX063005-UN** | 6.0 | 3.0 | 0.5 | | | | | ● | | |
| | ø20.0—ø22.5 | **SOGX073505-UN** | 7.0 | 3.5 | 0.5 | | | | | ● | | |
| | ø23.0—ø27.5 | **SOGX084005-UN** | 8.3 | 4.0 | 0.5 | | | | | ● | | |
| | ø28.0—ø33.0 | **SOGX094506-UN** | 9.7 | 4.5 | 0.6 | | | | | ● | | |
| | ø33.5—ø39.0 | **SOGX115506-UN** | 11.6 | 5.5 | 0.6 | | | | | ● | | |
| | ø40.0—ø46.0 | **SOGX136008-UN** | 13.8 | 6.0 | 0.8 | | | | | ● | | |
| | ø47.0—ø56.0 | **SOGX166508-UN** | 16.5 | 6.5 | 0.8 | | | | | ● | | |
| Alliage d'aluminium Plaquette intérieure et extérieure | ø57.0—ø63.0 | **SOGX187008-UN** | 18.2 | 7.0 | 0.8 | | | | | ● | | |

Remarque 1) Les nuances MC1020 et MC5020 sont exclusivement conçues pour l'utilisation en plaquette extérieure. La nuance DP8020 est exclusivement destinée à une utilisation en plaquette intérieure.

## SÉLECTION DES PLAQUETTES

| | | 1ère recommandation | | En cas d'écaillage de la plaquette extérieure | |
|---|---|---|---|---|---|
| | | Plaquette extérieure | Plaquette intérieure | Plaquette extérieure | Plaquette intérieure |
| **P** | Acier doux, acier allié | MC1020 | VP15TF | VP15TF | VP15TF |
| | | Brise-copeaux UM | Brise-copeaux UM | Brise-copeaux UM | Brise-copeaux UM |
| **M** | Acier inoxydable | MC1020 | VP15TF | VP15TF | VP15TF |
| | | Brise-copeaux UM | Brise-copeaux US | Brise-copeaux UM | Brise-copeaux US |
| **K** | Fonte | MC5020 | VP15TF | VP15TF | VP15TF |
| | | Brise-copeaux UM | Brise-copeaux UM | Brise-copeaux UM | Brise-copeaux UM |

| | | 1ère recommandation | | En cas d'écaillage de la plaquette extérieure | |
|---|---|---|---|---|---|
| | | Plaquette extérieure | Plaquette intérieure | Plaquette extérieure | Plaquette intérieure |
| **H** | Acier traité | MC1020 | DP8020 | VP15TF | DP8020 |
| | | Brise-copeaux UM | Brise-copeaux UH | Brise-copeaux UM | Brise-copeaux UH |
| **N** | Alliage d'aluminium | TF15 | TF15 | | |
| | | Brise-copeaux UN | Brise-copeaux UN | | |

## CONDITIONS DE COUPE RECOMMANDÉES

| | Matière à usiner | Dureté | Vc (m/min) | Brise-copeaux intérieur | ϕ14—ϕ16.5 fr (mm/tr) | | |
|---|---|---|---|---|---|---|---|
| | | | | | L/D=2, 3 | 4 | 5 |
| P | Acier doux (C15, Ck15) | ≤180HB | 200 (180—235) | UM | 0.05 (0.04—0.06) | 0.05 (0.04—0.06) | 0.05 (0.04—0.06) |
| | | | | UH | — | — | — |
| | Acier carbone, Acier allié (Ck45, 41CrMo4) | 180—280HB | 140 (115—180) | UM | 0.08 (0.06—0.14) | 0.08 (0.06—0.09) | 0.08 (0.06—0.09) |
| | | | | UH | — | — | — |
| | Acier carbone, Acier allié (100Cr6) | 280—350HB | 100 (75—140) | UM | 0.08 (0.06—0.14) | 0.08 (0.06—0.09) | 0.08 (0.06—0.09) |
| | | | | UH | — | — | — |
| | Alliage acier outil (X210Cr12) | ≤350HB | 135 (100—170) | UM | 0.08 (0.06—0.14) | 0.08 (0.06—0.09) | 0.08 (0.06—0.09) |
| | | | | UH | — | — | — |
| M | Acier inoxydable austénitique (X5CrNi18-10, X5CrNiMo17-12-2) | ≤200HB | 130 (80—180) | US | — | — | — |
| | | | | UM | 0.06 (0.04—0.08) | 0.05 (0.04—0.06) | 0.05 (0.04—0.06) |
| | Acier inoxydable austénitique (X2CrNiN18-9, X5CrNiMoN17-11-2) | >200HB | 130 (80—180) | US | — | — | — |
| | | | | UM | 0.06 (0.04—0.08) | 0.05 (0.04—0.06) | 0.05 (0.04—0.06) |
| | Acier inoxydable ferritique et martensitique (X12Cr13, X6Cr17) | ≤200HB | 120 (80—165) | US | — | — | — |
| | | | | UM | 0.06 (0.04—0.08) | 0.05 (0.04—0.06) | 0.05 (0.04—0.06) |
| | Acier inoxydable ferritique et martensitique (X17CrNi16-2, X30Cr13) | >200HB | 120 (80—165) | US | — | — | — |
| | | | | UM | 0.06 (0.04—0.08) | 0.05 (0.04—0.06) | 0.05 (0.04—0.06) |
| K | Fonte (GG25, GG30) | ≤350MPa | 160 (130—195) | UM | 0.10 (0.06—0.14) | 0.08 (0.06—0.10) | 0.08 (0.06—0.10) |
| | Fonte ductile (GG40) | ≤450MPa | 100 (80—135) | UM | 0.10 (0.06—0.14) | 0.08 (0.06—0.10) | 0.08 (0.06—0.10) |
| | Fonte ductile (GGG70) | ≤800HB | 100 (70—125) | UM | 0.08 (0.06—0.12) | 0.07 (0.06—0.08) | 0.07 (0.06—0.08) |
| N | Alliage d'aluminium (A6061, A7075) | Si<5% | 200 (100-350) | UN | — | — | — |
| | Alliage d'aluminium (AC4B) | 5%≤Si≤10% | 150 (100-200) | UN | — | — | — |
| | Alliage d'aluminium (ADC12, A390) | Si>10% | 150 (100-200) | UN | — | — | — |
| H | Acier trempé (X40CrMoV51, 55NiCrMoV6) | 38 - 45HRC | 50 (30-80) | UH | — | — | — |

Remarque 1) Réduisez la vitesse de coupe de 30 % en utilisant une plaquette extérieure VP15TF.
Remarque 2) L/D=3 est la profondeur maximale recommandée si l'arrosage externe est utilisé.
Remarque 3) L'arrosage interne dans les goujures est indispensable pour percer de l'acier inoxydable.

NOTE D'UTILISATION ➤ M173
PIÈCES DÉTACHÉES ➤ N001
DONNÉES TECHNIQUES ➤ P001

# MVX

## CONDITIONS DE COUPE RECOMMANDÉES

| | Matière à usiner | Dureté | Vc (m/min) | Brise-copeaux intérieur | ϕ17—ϕ19.5 fr (mm/tr) L/D=2, 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|
| P | Acier doux (C15, Ck15) | ≤180HB | 200 (180—235) | UM | 0.05 (0.04—0.06) | 0.05 (0.04—0.06) | 0.05 (0.04—0.06) | 0.04 (0.04—0.05) |
| | | | | UH | | | | |
| | Acier carbone, Acier allié (Ck45, 41CrMo4) | 180—280HB | 140 (115—180) | UM | 0.08 (0.06—0.14) | 0.08 (0.06—0.09) | 0.08 (0.06—0.09) | 0.05 (0.04—0.06) |
| | | | | UH | | | | |
| | Acier carbone, Acier allié (100Cr6) | 280—350HB | 100 (75—140) | UM | 0.08 (0.06—0.14) | 0.08 (0.06—0.09) | 0.08 (0.06—0.09) | 0.05 (0.04—0.06) |
| | | | | UH | | | | |
| | Alliage acier outil (X210Cr12) | ≤350HB | 135 (100—170) | UM | 0.08 (0.06—0.14) | 0.08 (0.06—0.09) | 0.08 (0.06—0.09) | 0.05 (0.04—0.06) |
| | | | | UH | | | | |
| M | Acier inoxydable austénitique (X5CrNi18-10, X5CrNiMo17-12-2) | ≤200HB | 130 (80—180) | US | 0.08 (0.06—0.12) | 0.06 (0.04—0.08) | 0.06 (0.04—0.08) | 0.05 (0.04—0.06) |
| | | | | UM | 0.06 (0.04—0.08) | 0.05 (0.04—0.06) | 0.05 (0.04—0.06) | 0.04 (0.04—0.05) |
| | Acier inoxydable austénitique (X2CrNiN18-9, X5CrNiMoN17-11-2) | >200HB | 130 (80—180) | US | 0.08 (0.06—0.12) | 0.06 (0.04—0.08) | 0.06 (0.04—0.08) | 0.05 (0.04—0.06) |
| | | | | UM | 0.06 (0.04—0.08) | 0.05 (0.04—0.06) | 0.05 (0.04—0.06) | 0.04 (0.04—0.05) |
| | Acier inoxydable ferritique et martensitique (X12Cr13, X6Cr17) | ≤200HB | 120 (80—165) | US | 0.08 (0.06—0.12) | 0.06 (0.04—0.08) | 0.06 (0.04—0.08) | 0.05 (0.04—0.06) |
| | | | | UM | 0.06 (0.04—0.08) | 0.05 (0.04—0.06) | 0.05 (0.04—0.06) | 0.04 (0.04—0.05) |
| | Acier inoxydable ferritique et martensitique (X17CrNi16-2, X30Cr13) | >200HB | 120 (80—165) | US | 0.08 (0.06—0.12) | 0.06 (0.04—0.08) | 0.06 (0.04—0.08) | 0.05 (0.04—0.06) |
| | | | | UM | 0.06 (0.04—0.08) | 0.05 (0.04—0.06) | 0.05 (0.04—0.06) | 0.04 (0.04—0.05) |
| K | Fonte (GG25, GG30) | ≤350MPa | 160 (130—195) | UM | 0.11 (0.08—0.14) | 0.09 (0.08—0.10) | 0.09 (0.08—0.10) | 0.05 (0.04—0.06) |
| | Fonte ductile (GG40) | ≤450MPa | 100 (80—135) | UM | 0.11 (0.08—0.14) | 0.09 (0.08—0.10) | 0.09 (0.08—0.10) | 0.05 (0.04—0.06) |
| | Fonte ductile (GGG70) | ≤800HB | 100 (70—125) | UM | 0.11 (0.08—0.14) | 0.09 (0.08—0.10) | 0.09 (0.08—0.10) | 0.05 (0.04—0.06) |
| N | Alliage d'aluminium (A6061, A7075) | Si<5% | 200 (100-350) | UN | 0.12 (0.05—0.18) | 0.12 (0.05—0.18) | 0.12 (0.05—0.18) | 0.08 (0.05—0.12) |
| | Alliage d'aluminium (AC4B) | 5%≤Si≤10% | 150 (100-200) | UN | 0.12 (0.05—0.18) | 0.12 (0.05—0.18) | 0.12 (0.05—0.18) | 0.08 (0.05—0.12) |
| | Alliage d'aluminium (ADC12, A390) | Si>10% | 150 (100-200) | UN | 0.12 (0.05—0.18) | 0.12 (0.05—0.18) | 0.12 (0.05—0.18) | 0.08 (0.05—0.12) |
| H | Acier trempé (X40CrMoV51, 55NiCrMoV6) | 38 - 45HRC | 50 (30-80) | UH | 0.08 (0.04—0.12) | 0.06 (0.04—0.09) | — | — |

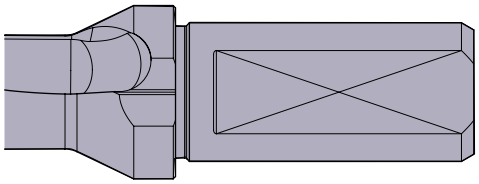
Remarque 1) Réduisez la vitesse de coupe de 30 % en utilisant une plaquette extérieure VP15TF.
Remarque 2) L/D=3 est la profondeur maximale recommandée si l'arrosage externe est utilisé.
Remarque 3) L'arrosage interne dans les goujures est indispensable pour percer de l'acier inoxydable.

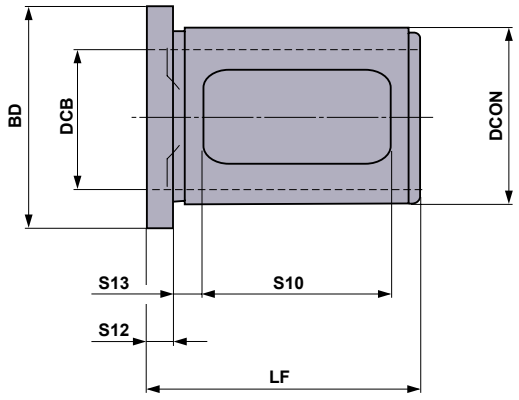
| | ϕ20－ϕ23.5 | | | | ϕ24－ϕ29.5 | | | | ϕ30－ϕ63 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | fr (mm/tr) | | | | fr (mm/tr) | | | | fr (mm/tr) | | | |
| | L/D=2, 3 | 4 | 5 | 6 | L/D=2, 3 | 4 | 5 | 6 | L/D=2, 3 | 4 | 5 | 6 |
| | 0.06 (0.04－0.08) | 0.06 (0.04－0.07) | 0.06 (0.04－0.07) | 0.04 (0.04－0.05) | 0.07 (0.04－0.08) | 0.06 (0.04－0.07) | 0.06 (0.04－0.07) | 0.05 (0.04－0.06) | 0.08 (0.06－0.10) | 0.07 (0.06－0.08) | 0.07 (0.06－0.08) | 0.06 (0.06－0.07) |
| | 0.10 (0.06－0.18) | 0.09 (0.06－0.12) | 0.09 (0.06－0.12) | 0.07 (0.06－0.08) | 0.12 (0.08－0.18) | 0.10 (0.08－0.12) | 0.10 (0.08－0.12) | 0.09 (0.08－0.10) | 0.14 (0.08－0.20) | 0.12 (0.08－0.16) | 0.12 (0.08－0.16) | 0.11 (0.10－0.12) |
| | 0.10 (0.06－0.18) | 0.09 (0.06－0.12) | 0.09 (0.06－0.12) | 0.07 (0.06－0.08) | 0.12 (0.08－0.18) | 0.10 (0.08－0.12) | 0.10 (0.08－0.12) | 0.09 (0.08－0.10) | 0.14 (0.08－0.20) | 0.12 (0.08－0.16) | 0.12 (0.08－0.16) | 0.11 (0.10－0.12) |
| | 0.10 (0.06－0.18) | 0.09 (0.06－0.12) | 0.09 (0.06－0.12) | 0.07 (0.06－0.08) | 0.12 (0.08－0.18) | 0.10 (0.08－0.12) | 0.10 (0.08－0.12) | 0.09 (0.08－0.10) | 0.14 (0.08－0.20) | 0.12 (0.08－0.16) | 0.12 (0.08－0.16) | 0.10 (0.08－0.12) |
| | 0.10 (0.06－0.14) | 0.07 (0.06－0.08) | 0.07 (0.06－0.08) | 0.06 (0.06－0.07) | 0.10 (0.06－0.14) | 0.08 (0.06－0.10) | 0.08 (0.06－0.10) | 0.07 (0.06－0.08) | 0.10 (0.06－0.14) | 0.09 (0.06－0.12) | 0.09 (0.06－0.12) | 0.07 (0.06－0.10) |
| | 0.08 (0.06－0.12) | 0.07 (0.06－0.08) | 0.07 (0.06－0.08) | 0.06 (0.06－0.07) | 0.09 (0.06－0.12) | 0.07 (0.06－0.09) | 0.07 (0.06－0.09) | 0.06 (0.06－0.08) | 0.09 (0.06－0.12) | 0.08 (0.06－0.10) | 0.08 (0.06－0.10) | 0.07 (0.06－0.08) |
| | 0.10 (0.06－0.14) | 0.07 (0.06－0.08) | 0.07 (0.06－0.08) | 0.06 (0.06－0.07) | 0.10 (0.06－0.14) | 0.08 (0.06－0.10) | 0.08 (0.06－0.10) | 0.07 (0.06－0.08) | 0.10 (0.06－0.14) | 0.09 (0.06－0.12) | 0.09 (0.06－0.12) | 0.07 (0.06－0.10) |
| | 0.08 (0.06－0.12) | 0.07 (0.06－0.08) | 0.07 (0.06－0.08) | 0.06 (0.06－0.07) | 0.09 (0.06－0.12) | 0.07 (0.06－0.09) | 0.07 (0.06－0.09) | 0.06 (0.06－0.08) | 0.09 (0.06－0.12) | 0.08 (0.06－0.10) | 0.08 (0.06－0.10) | 0.07 (0.06－0.08) |
| | 0.10 (0.06－0.14) | 0.07 (0.06－0.08) | 0.07 (0.06－0.08) | 0.06 (0.06－0.07) | 0.10 (0.06－0.14) | 0.08 (0.06－0.10) | 0.08 (0.06－0.10) | 0.07 (0.06－0.08) | 0.10 (0.06－0.14) | 0.09 (0.06－0.12) | 0.09 (0.06－0.12) | 0.07 (0.06－0.10) |
| | 0.08 (0.06－0.12) | 0.07 (0.06－0.08) | 0.07 (0.06－0.08) | 0.06 (0.06－0.07) | 0.09 (0.06－0.12) | 0.07 (0.06－0.09) | 0.07 (0.06－0.09) | 0.06 (0.06－0.08) | 0.09 (0.06－0.12) | 0.08 (0.06－0.10) | 0.08 (0.06－0.10) | 0.07 (0.06－0.08) |
| | 0.10 (0.06－0.14) | 0.07 (0.06－0.08) | 0.07 (0.06－0.08) | 0.06 (0.06－0.07) | 0.10 (0.06－0.14) | 0.08 (0.06－0.10) | 0.08 (0.06－0.10) | 0.07 (0.06－0.08) | 0.10 (0.06－0.14) | 0.09 (0.06－0.12) | 0.09 (0.06－0.12) | 0.07 (0.06－0.10) |
| | 0.08 (0.06－0.12) | 0.07 (0.06－0.08) | 0.07 (0.06－0.08) | 0.06 (0.06－0.07) | 0.09 (0.06－0.12) | 0.07 (0.06－0.09) | 0.07 (0.06－0.09) | 0.06 (0.06－0.08) | 0.09 (0.06－0.12) | 0.08 (0.06－0.10) | 0.08 (0.06－0.10) | 0.07 (0.06－0.08) |
| | 0.14 (0.10－0.18) | 0.10 (0.10－0.12) | 0.10 (0.10－0.12) | 0.07 (0.06－0.08) | 0.15 (0.10－0.20) | 0.11 (0.10－0.13) | 0.11 (0.10－0.13) | 0.09 (0.08－0.10) | 0.15 (0.10－0.20) | 0.12 (0.10－0.13) | 0.12 (0.10－0.13) | 0.11 (0.10－0.12) |
| | 0.13 (0.10－0.16) | 0.10 (0.10－0.11) | 0.10 (0.10－0.11) | 0.07 (0.06－0.08) | 0.14 (0.10－0.18) | 0.11 (0.10－0.12) | 0.11 (0.10－0.12) | 0.09 (0.08－0.10) | 0.15 (0.10－0.20) | 0.12 (0.10－0.13) | 0.12 (0.10－0.13) | 0.11 (0.10－0.12) |
| | 0.13 (0.10－0.16) | 0.10 (0.10－0.11) | 0.10 (0.10－0.11) | 0.07 (0.06－0.08) | 0.14 (0.10－0.18) | 0.11 (0.10－0.12) | 0.11 (0.10－0.12) | 0.09 (0.08－0.10) | 0.15 (0.10－0.20) | 0.12 (0.10－0.13) | 0.12 (0.10－0.13) | 0.11 (0.10－0.12) |
| | 0.12 (0.05－0.18) | 0.12 (0.05－0.18) | 0.12 (0.05－0.18) | 0.08 (0.05－0.12) | 0.12 (0.05－0.18) | 0.12 (0.05－0.18) | 0.12 (0.05－0.18) | 0.08 (0.05－0.12) | 0.12 (0.05－0.20) | 0.12 (0.05－0.18) | 0.12 (0.05－0.18) | 0.08 (0.05－0.12) |
| | 0.12 (0.05－0.18) | 0.12 (0.05－0.18) | 0.12 (0.05－0.18) | 0.08 (0.05－0.12) | 0.12 (0.05－0.18) | 0.12 (0.05－0.18) | 0.12 (0.05－0.18) | 0.08 (0.05－0.12) | 0.12 (0.05－0.20) | 0.12 (0.05－0.18) | 0.12 (0.05－0.18) | 0.08 (0.05－0.12) |
| | 0.12 (0.05－0.18) | 0.12 (0.05－0.18) | 0.12 (0.05－0.18) | 0.08 (0.05－0.12) | 0.12 (0.05－0.18) | 0.12 (0.05－0.18) | 0.12 (0.05－0.18) | 0.08 (0.05－0.12) | 0.12 (0.05－0.20) | 0.12 (0.05－0.18) | 0.12 (0.05－0.18) | 0.08 (0.05－0.12) |
| | 0.09 (0.06－0.14) | 0.07 (0.06－0.09) | – | – | 0.09 (0.06－0.14) | 0.07 (0.06－0.09) | – | – | 0.11 (0.06－0.16) | 0.09 (0.06－0.012) | – | – |

NOTE D'UTILISATION ➤ M173
PIÈCES DÉTACHÉES ➤ N001
DONNÉES TECHNIQUES ➤ P001

# DOUILLE D'EXCENTRATION [JFS]

● Douille d'excentration conçue pour élargir les possibilités de perçages avec les forets MVX.
Excentration possible de 0,5mm au diamètre par incrément de 0,1mm.






| Référence ensemble | Référence individuelle | Stock | Dimensions (mm) | | | | | | | ✱Augmentation (**S11**×2) | Type de foret MVX |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **BD** | **DCON** | **DCB** | **LF** | **S10** | **S12** | **S13** | | |
| **JFS-1** | **JFS2520-10** | ● | 33 | 25 | 20 | 43 | 30 | 5 | 5 | 0.1 | MVX1700 X ◌F20 |
| | **JFS2520-20** | ● | 33 | 25 | 20 | 43 | 30 | 5 | 5 | 0.2 | |
| | **JFS2520-30** | ● | 33 | 25 | 20 | 43 | 30 | 5 | 5 | 0.3 | |
| | **JFS2520-40** | ● | 33 | 25 | 20 | 43 | 30 | 5 | 5 | 0.4 | |
| | **JFS2520-50** | ● | 33 | 25 | 20 | 43 | 30 | 5 | 5 | 0.5 | |
| **JFS-2** | **JFS3225-10** | ● | 40 | 32 | 25 | 50 | 34 | 5 | 5 | 0.1 | MVX1750 X ◌F25 ⏐ MVX2550 X ◌F25 |
| | **JFS3225-20** | ● | 40 | 32 | 25 | 50 | 34 | 5 | 5 | 0.2 | |
| | **JFS3225-30** | ● | 40 | 32 | 25 | 50 | 34 | 5 | 5 | 0.3 | |
| | **JFS3225-40** | ● | 40 | 32 | 25 | 50 | 34 | 5 | 5 | 0.4 | |
| | **JFS3225-50** | ● | 40 | 32 | 25 | 50 | 34 | 5 | 5 | 0.5 | |
| **JFS-3** | **JFS4032-10** | ● | 48 | 40 | 32 | 55 | 40 | 5 | 5 | 0.1 | MVX2600 X ◌F32 ⏐ MVX3000 X ◌F32 |
| | **JFS4032-20** | ● | 48 | 40 | 32 | 55 | 40 | 5 | 5 | 0.2 | |
| | **JFS4032-30** | ● | 48 | 40 | 32 | 55 | 40 | 5 | 5 | 0.3 | |
| | **JFS4032-40** | ● | 48 | 40 | 32 | 55 | 40 | 5 | 5 | 0.4 | |
| | **JFS4032-50** | ● | 48 | 40 | 32 | 55 | 40 | 5 | 5 | 0.5 | |
| **JFS-4** | **JFS5040-10** | ★ | 68 | 50 | 40 | 65 | 50 | 5 | 5 | 0.1 | MVX3100 X ◌F40 ⏐ MVX6300 X ◌F40 |
| | **JFS5040-20** | ★ | 68 | 50 | 40 | 65 | 50 | 5 | 5 | 0.2 | |
| | **JFS5040-30** | ★ | 68 | 50 | 40 | 65 | 50 | 5 | 5 | 0.3 | |
| | **JFS5040-40** | ★ | 68 | 50 | 40 | 65 | 50 | 5 | 5 | 0.4 | |
| | **JFS5040-50** | ★ | 68 | 50 | 40 | 65 | 50 | 5 | 5 | 0.5 | |

Les douilles d'excentration ne sont pas disponibles pour queues de ø50 mm.

✱Augmentation: Du diamètre nominal.

## ■ GUIDE DIMENSIONNEL POUR LA DOUILLE JFS

**Requis = Dia. Foret ϕ + Dia. JFS + 0.1mm**

(Ex.) Diamètre requis de 20.3 mm jeu + 0.1

**ø20.3=(MVX2000 X ◌F25+JFS3225-20)+0.1**

Foret dia. 20mm — 0.2mm d'augmentation avec JFS. 20 — Jeu

<Choix outil>
Foret : **MVX2000 X ◌F25**
Douille d'excentration JFS : **JFS3225-20**

Remarque 1) La dimension du trou percé peut varier en fonction des conditions de coupe utilisées; les données ci-dessus ne sont qu'indicatives.

## ■ COMMANDE DE LA DOUILLE D'EXCENTRATION

**●Méthode d'achat N°1**

Les diamètres percés peuvent être plus grands suivant les conditions de coupe utilisées. Il est donc recommandé d'acheter un set. Lors de votre commande, veuillez utiliser la ref. du set (5 douilles/set).

**●Méthode d'achat N°2**

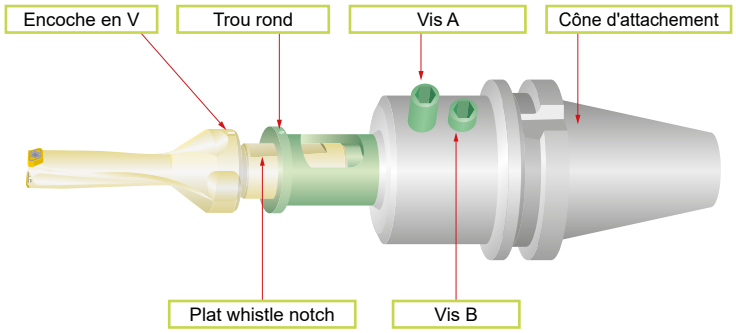
Il est possible de commander les douilles individuellement. Lors de votre commande veuillez indiquer la référence de la douille individuelle.

**● : Article stocké. ★ : Article standard Japon.**

## ■ DOUILLE D, EXCENTRATION - APPLICATION

1. Pour un bon fonctionnement, il faut que le foret, la douille et le porte-foret soient correctement alignés et montés. Pour ce faire, veiller à aligner le repère cylindrique de la douille avec l'encoche en V du foret, de façon à ce que le méplat de la queue du foret apparaisse dans la lumière de la douille et permette de serrer la vis A du porte-foret sur le méplat du foret. (Si le foret ne présente pas de gorge en V, alignez le méplat du foret avec le trou rond de la douille.)

2. Passer la vis A dans le porte-outil directement dans l'ouverture de la douille afin de serrer le foret. Serrer la vis B uniquement à une position qui n'endommage la douille.

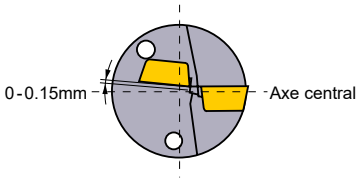



(Remarque)
- Pas de réglage fin pour le diamètre de la douille.
- Ne peut pas être utilisé avec des mandrins à pinces.

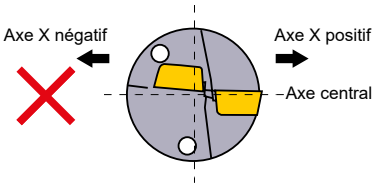
## ■ APPLICATION DU FORET DE TYPE MVX

**●Utilisation sur un tour**

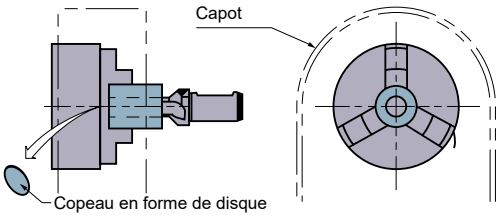
(1) La plaquette extérieure et l'axe X de la machine doivent être parallèles. Le foret est conçu de sorte que le centre de la plaquette intérieure se trouve entre 0 et 0,15 mm plus bas au rapprochement du centre du foret et de celui de la broche de la machine.
*La plaquette intérieure peut se rompre si la hauteur de son centre est supérieure à celle de l'axe X de la machine.




(2) Pour ajuster le diamètre du trou en décalant le foret, réglez dans le sens positif de l'axe X (sens d'expansion du diamètre du trou). Consultez la liste de dimensions du porte-outil pour prendre connaissance du taux d'excentrationt maximal de chaque porte-outil.
*Il est déconseillé d'excentrer sur le sens négatif de l'axe X (diminuant la direction du diamètre du trou) car le porte-outil peut interférer avec le trou.




(3) Lors du perçage de trous débouchants sur un tour, le disque produit par le foret sortant de la pièce peut être éjecté à haute vitesse. Pour diminuer le risque de dommage corporel ou matériel, un capot de protection est vivement conseillé.



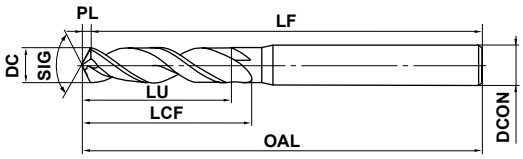
# FORETS VIOLET

# VAPDS

Longueur utile courte, haute précision

DC<2 DC≥2

P M K N S H




*LU = LCF-2DC (max 3×DC)

| 0.5≤DC≤3 | 3<DC≤6 | 6<DC≤10 | 10<DC≤13 |
|---|---|---|---|
| 0 −0.014 | 0 −0.018 | 0 −0.022 | 0 −0.027 |

* Exceptés les forets de diamètre inférieur à ø2.0mm et aux forets ayant un diamètre intermédiaire de 0.1mm ; la tolérance est de 0−0.009mm.

●L'efficacité de perçage et la durée de vie sont augmentées grâce au nouveau développement du revêtement Violet.

| DC (mm) | Référence | Dimensions (mm) LCF | OAL | LF | PL | DCON | Stock |
|---|---|---|---|---|---|---|---|
| 0.50 | VAPDSD0050 | 3.2 | 50.2 | 50 | 0.15 | 3 | ● |
| 0.51 | VAPDSD0051 | 3.2 | 50.2 | 50 | 0.15 | 3 | ★ |
| 0.52 | VAPDSD0052 | 3.2 | 50.2 | 50 | 0.16 | 3 | ★ |
| 0.53 | VAPDSD0053 | 3.2 | 50.2 | 50 | 0.16 | 3 | ★ |
| 0.54 | VAPDSD0054 | 3.2 | 50.2 | 50 | 0.16 | 3 | ★ |
| 0.55 | VAPDSD0055 | 3.2 | 50.2 | 50 | 0.17 | 3 | ★ |
| 0.56 | VAPDSD0056 | 4.2 | 50.2 | 50 | 0.17 | 3 | ★ |
| 0.57 | VAPDSD0057 | 4.2 | 50.2 | 50 | 0.17 | 3 | ★ |
| 0.58 | VAPDSD0058 | 4.2 | 50.2 | 50 | 0.17 | 3 | ★ |
| 0.59 | VAPDSD0059 | 4.2 | 50.2 | 50 | 0.18 | 3 | ★ |
| 0.60 | VAPDSD0060 | 5.2 | 50.2 | 50 | 0.18 | 3 | ★ |
| 0.61 | VAPDSD0061 | 5.2 | 50.2 | 50 | 0.18 | 3 | ★ |
| 0.62 | VAPDSD0062 | 5.2 | 50.2 | 50 | 0.19 | 3 | ★ |
| 0.63 | VAPDSD0063 | 5.2 | 50.2 | 50 | 0.19 | 3 | ★ |
| 0.64 | VAPDSD0064 | 5.2 | 50.2 | 50 | 0.19 | 3 | ★ |
| 0.65 | VAPDSD0065 | 5.2 | 50.2 | 50 | 0.20 | 3 | ★ |
| 0.66 | VAPDSD0066 | 5.2 | 50.2 | 50 | 0.20 | 3 | ★ |
| 0.67 | VAPDSD0067 | 5.2 | 50.2 | 50 | 0.20 | 3 | ★ |
| 0.68 | VAPDSD0068 | 5.2 | 50.2 | 50 | 0.20 | 3 | ★ |
| 0.69 | VAPDSD0069 | 5.2 | 50.2 | 50 | 0.21 | 3 | ★ |
| 0.70 | VAPDSD0070 | 5.2 | 50.2 | 50 | 0.21 | 3 | ★ |
| 0.71 | VAPDSD0071 | 5.2 | 50.2 | 50 | 0.21 | 3 | ★ |
| 0.72 | VAPDSD0072 | 5.2 | 50.2 | 50 | 0.22 | 3 | ★ |
| 0.73 | VAPDSD0073 | 5.2 | 50.2 | 50 | 0.22 | 3 | ★ |
| 0.74 | VAPDSD0074 | 5.2 | 50.2 | 50 | 0.22 | 3 | ★ |
| 0.75 | VAPDSD0075 | 5.2 | 50.2 | 50 | 0.23 | 3 | ★ |
| 0.76 | VAPDSD0076 | 5.2 | 50.2 | 50 | 0.23 | 3 | ★ |
| 0.77 | VAPDSD0077 | 5.2 | 50.2 | 50 | 0.23 | 3 | ★ |
| 0.78 | VAPDSD0078 | 5.2 | 50.2 | 50 | 0.23 | 3 | ★ |
| 0.79 | VAPDSD0079 | 5.2 | 50.2 | 50 | 0.24 | 3 | ★ |
| 0.80 | VAPDSD0080 | 5.2 | 50.2 | 50 | 0.24 | 3 | ★ |
| 0.81 | VAPDSD0081 | 5.2 | 50.2 | 50 | 0.24 | 3 | ★ |
| 0.82 | VAPDSD0082 | 5.3 | 50.3 | 50 | 0.25 | 3 | ★ |

| DC (mm) | Référence | Dimensions (mm) LCF | OAL | LF | PL | DCON | Stock |
|---|---|---|---|---|---|---|---|
| 0.83 | VAPDSD0083 | 5.3 | 50.3 | 50 | 0.25 | 3 | ★ |
| 0.84 | VAPDSD0084 | 5.3 | 50.3 | 50 | 0.25 | 3 | ★ |
| 0.85 | VAPDSD0085 | 5.3 | 50.3 | 50 | 0.26 | 3 | ★ |
| 0.86 | VAPDSD0086 | 6.3 | 50.3 | 50 | 0.26 | 3 | ★ |
| 0.87 | VAPDSD0087 | 6.3 | 50.3 | 50 | 0.26 | 3 | ★ |
| 0.88 | VAPDSD0088 | 6.3 | 50.3 | 50 | 0.26 | 3 | ★ |
| 0.89 | VAPDSD0089 | 6.3 | 50.3 | 50 | 0.27 | 3 | ★ |
| 0.90 | VAPDSD0090 | 6.3 | 50.3 | 50 | 0.27 | 3 | ★ |
| 0.91 | VAPDSD0091 | 6.3 | 50.3 | 50 | 0.27 | 3 | ★ |
| 0.92 | VAPDSD0092 | 6.3 | 50.3 | 50 | 0.28 | 3 | ★ |
| 0.93 | VAPDSD0093 | 6.3 | 50.3 | 50 | 0.28 | 3 | ★ |
| 0.94 | VAPDSD0094 | 6.3 | 50.3 | 50 | 0.28 | 3 | ★ |
| 0.95 | VAPDSD0095 | 6.3 | 50.3 | 50 | 0.29 | 3 | ★ |
| 0.96 | VAPDSD0096 | 6.3 | 50.3 | 50 | 0.29 | 3 | ★ |
| 0.97 | VAPDSD0097 | 6.3 | 50.3 | 50 | 0.29 | 3 | ★ |
| 0.98 | VAPDSD0098 | 6.3 | 50.3 | 50 | 0.29 | 3 | ★ |
| 0.99 | VAPDSD0099 | 6.3 | 50.3 | 50 | 0.30 | 3 | ★ |
| 1.00 | VAPDSD0100 | 6.3 | 50.3 | 50 | 0.3 | 3 | ● |
| 1.01 | VAPDSD0101 | 6.3 | 50.3 | 50 | 0.3 | 3 | ★ |
| 1.02 | VAPDSD0102 | 6.3 | 50.3 | 50 | 0.3 | 3 | ★ |
| 1.03 | VAPDSD0103 | 6.3 | 50.3 | 50 | 0.3 | 3 | ★ |
| 1.04 | VAPDSD0104 | 6.3 | 50.3 | 50 | 0.3 | 3 | ★ |
| 1.05 | VAPDSD0105 | 6.3 | 50.3 | 50 | 0.3 | 3 | ★ |
| 1.06 | VAPDSD0106 | 6.3 | 50.3 | 50 | 0.3 | 3 | ★ |
| 1.07 | VAPDSD0107 | 8.3 | 55.3 | 55 | 0.3 | 3 | ★ |
| 1.08 | VAPDSD0108 | 8.3 | 55.3 | 55 | 0.3 | 3 | ★ |
| 1.09 | VAPDSD0109 | 8.3 | 55.3 | 55 | 0.3 | 3 | ★ |
| 1.10 | VAPDSD0110 | 8.3 | 55.3 | 55 | 0.3 | 3 | ★ |
| 1.11 | VAPDSD0111 | 8.3 | 55.3 | 55 | 0.3 | 3 | ★ |
| 1.12 | VAPDSD0112 | 8.3 | 55.3 | 55 | 0.3 | 3 | ★ |
| 1.13 | VAPDSD0113 | 8.3 | 55.3 | 55 | 0.3 | 3 | ★ |
| 1.14 | VAPDSD0114 | 8.3 | 55.3 | 55 | 0.3 | 3 | ★ |
| 1.15 | VAPDSD0115 | 8.4 | 55.4 | 55 | 0.4 | 3 | ★ |

● : Article stocké. ★ : Article standard Japon.

| DC (mm) | Référence | Dimensions (mm) | | | | | Stock |
|---|---|---|---|---|---|---|---|
| | | LCF | OAL | LF | PL | DCON | |
| 1.16 | VAPDSD0116 | 8.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.17 | VAPDSD0117 | 8.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.18 | VAPDSD0118 | 8.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.19 | VAPDSD0119 | 8.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.20 | VAPDSD0120 | 8.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.21 | VAPDSD0121 | 8.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.22 | VAPDSD0122 | 8.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.23 | VAPDSD0123 | 8.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.24 | VAPDSD0124 | 8.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.25 | VAPDSD0125 | 8.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.26 | VAPDSD0126 | 8.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.27 | VAPDSD0127 | 8.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.28 | VAPDSD0128 | 8.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.29 | VAPDSD0129 | 8.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.30 | VAPDSD0130 | 9.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.31 | VAPDSD0131 | 9.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.32 | VAPDSD0132 | 9.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.33 | VAPDSD0133 | 9.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.34 | VAPDSD0134 | 9.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.35 | VAPDSD0135 | 9.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.36 | VAPDSD0136 | 9.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.37 | VAPDSD0137 | 9.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.38 | VAPDSD0138 | 9.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.39 | VAPDSD0139 | 9.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.40 | VAPDSD0140 | 9.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.41 | VAPDSD0141 | 9.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.42 | VAPDSD0142 | 9.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.43 | VAPDSD0143 | 9.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.44 | VAPDSD0144 | 9.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.45 | VAPDSD0145 | 9.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.46 | VAPDSD0146 | 9.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.47 | VAPDSD0147 | 9.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.48 | VAPDSD0148 | 9.4 | 55.4 | 55 | 0.4 | 3 | ★ |
| 1.49 | VAPDSD0149 | 9.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.50 | VAPDSD0150 | 9.5 | 55.5 | 55 | 0.5 | 3 | ● |
| 1.51 | VAPDSD0151 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.52 | VAPDSD0152 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.53 | VAPDSD0153 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.54 | VAPDSD0154 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.55 | VAPDSD0155 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.56 | VAPDSD0156 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.57 | VAPDSD0157 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.58 | VAPDSD0158 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.59 | VAPDSD0159 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.60 | VAPDSD0160 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.61 | VAPDSD0161 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.62 | VAPDSD0162 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.63 | VAPDSD0163 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.64 | VAPDSD0164 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.65 | VAPDSD0165 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |

| DC (mm) | Référence | Dimensions (mm) | | | | | Stock |
|---|---|---|---|---|---|---|---|
| | | LCF | OAL | LF | PL | DCON | |
| 1.66 | VAPDSD0166 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.67 | VAPDSD0167 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.68 | VAPDSD0168 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.69 | VAPDSD0169 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.70 | VAPDSD0170 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.71 | VAPDSD0171 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.72 | VAPDSD0172 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.73 | VAPDSD0173 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.74 | VAPDSD0174 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.75 | VAPDSD0175 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.76 | VAPDSD0176 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.77 | VAPDSD0177 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.78 | VAPDSD0178 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.79 | VAPDSD0179 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.80 | VAPDSD0180 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.81 | VAPDSD0181 | 11.5 | 55.5 | 55 | 0.5 | 3 | ★ |
| 1.82 | VAPDSD0182 | 11.6 | 55.6 | 55 | 0.6 | 3 | ★ |
| 1.83 | VAPDSD0183 | 11.6 | 55.6 | 55 | 0.6 | 3 | ★ |
| 1.84 | VAPDSD0184 | 11.6 | 55.6 | 55 | 0.6 | 3 | ★ |
| 1.85 | VAPDSD0185 | 11.6 | 55.6 | 55 | 0.6 | 3 | ★ |
| 1.86 | VAPDSD0186 | 11.6 | 55.6 | 55 | 0.6 | 3 | ★ |
| 1.87 | VAPDSD0187 | 11.6 | 55.6 | 55 | 0.6 | 3 | ★ |
| 1.88 | VAPDSD0188 | 11.6 | 55.6 | 55 | 0.6 | 3 | ★ |
| 1.89 | VAPDSD0189 | 11.6 | 55.6 | 55 | 0.6 | 3 | ★ |
| 1.90 | VAPDSD0190 | 12.6 | 55.6 | 55 | 0.6 | 3 | ★ |
| 1.91 | VAPDSD0191 | 12.6 | 60.6 | 60 | 0.6 | 3 | ★ |
| 1.92 | VAPDSD0192 | 12.6 | 60.6 | 60 | 0.6 | 3 | ★ |
| 1.93 | VAPDSD0193 | 12.6 | 60.6 | 60 | 0.6 | 3 | ★ |
| 1.94 | VAPDSD0194 | 12.6 | 60.6 | 60 | 0.6 | 3 | ★ |
| 1.95 | VAPDSD0195 | 12.6 | 60.6 | 60 | 0.6 | 3 | ★ |
| 1.96 | VAPDSD0196 | 12.6 | 60.6 | 60 | 0.6 | 3 | ★ |
| 1.97 | VAPDSD0197 | 12.6 | 60.6 | 60 | 0.6 | 3 | ★ |
| 1.98 | VAPDSD0198 | 12.6 | 60.6 | 60 | 0.6 | 3 | ★ |
| 1.99 | VAPDSD0199 | 12.6 | 60.6 | 60 | 0.6 | 3 | ★ |
| 2.00 | VAPDSD0200 | 12.4 | 60.4 | 60 | 0.4 | 3 | ● |
| 2.05 | VAPDSD0205 | 12.4 | 60.4 | 60 | 0.4 | 3 | ★ |
| 2.10 | VAPDSD0210 | 12.4 | 60.4 | 60 | 0.4 | 3 | ★ |
| 2.15 | VAPDSD0215 | 12.5 | 60.5 | 60 | 0.5 | 3 | ★ |
| 2.20 | VAPDSD0220 | 12.5 | 60.5 | 60 | 0.5 | 3 | ★ |
| 2.25 | VAPDSD0225 | 12.5 | 60.5 | 60 | 0.5 | 3 | ★ |
| 2.30 | VAPDSD0230 | 13.5 | 60.5 | 60 | 0.5 | 3 | ★ |
| 2.35 | VAPDSD0235 | 13.5 | 60.5 | 60 | 0.5 | 3 | ★ |
| 2.40 | VAPDSD0240 | 13.5 | 60.5 | 60 | 0.5 | 3 | ★ |
| 2.45 | VAPDSD0245 | 13.5 | 60.5 | 60 | 0.5 | 3 | ★ |
| 2.50 | VAPDSD0250 | 13.5 | 60.5 | 60 | 0.5 | 3 | ● |
| 2.55 | VAPDSD0255 | 13.5 | 60.5 | 60 | 0.5 | 3 | ★ |
| 2.60 | VAPDSD0260 | 15.5 | 60.5 | 60 | 0.5 | 3 | ★ |
| 2.65 | VAPDSD0265 | 15.6 | 60.6 | 60 | 0.6 | 3 | ★ |
| 2.70 | VAPDSD0270 | 15.6 | 60.6 | 60 | 0.6 | 3 | ★ |
| 2.75 | VAPDSD0275 | 15.6 | 60.6 | 60 | 0.6 | 3 | ★ |

CONDITIONS DE COUPE ➤ M178
DONNÉES TECHNIQUES ➤ P001

# VAPDS

Longueur utile courte, haute précision

| DC (mm) | Référence | Dimensions (mm) | | | | | Stock |
|---|---|---|---|---|---|---|---|
| | | LCF | OAL | LF | PL | DCON | |
| 2.80 | VAPDSD0280 | 15.6 | 60.6 | 60 | 0.6 | 3 | ★ |
| 2.85 | VAPDSD0285 | 15.6 | 60.6 | 60 | 0.6 | 3 | ★ |
| 2.90 | VAPDSD0290 | 15.6 | 60.6 | 60 | 0.6 | 3 | ★ |
| 2.95 | VAPDSD0295 | 15.6 | 60.6 | 60 | 0.6 | 3 | ★ |
| 3.00 | VAPDSD0300 | 15.6 | 60.6 | 60 | 0.6 | 3 | ● |
| 3.05 | VAPDSD0305 | 17.6 | 70.6 | 70 | 0.6 | 4 | ★ |
| 3.10 | VAPDSD0310 | 17.6 | 70.6 | 70 | 0.6 | 4 | ★ |
| 3.15 | VAPDSD0315 | 17.7 | 70.7 | 70 | 0.7 | 4 | ★ |
| 3.20 | VAPDSD0320 | 17.7 | 70.7 | 70 | 0.7 | 4 | ★ |
| 3.25 | VAPDSD0325 | 17.7 | 70.7 | 70 | 0.7 | 4 | ★ |
| 3.30 | VAPDSD0330 | 19.7 | 70.7 | 70 | 0.7 | 4 | ★ |
| 3.35 | VAPDSD0335 | 19.7 | 70.7 | 70 | 0.7 | 4 | ★ |
| 3.40 | VAPDSD0340 | 19.7 | 70.7 | 70 | 0.7 | 4 | ★ |
| 3.45 | VAPDSD0345 | 19.7 | 70.7 | 70 | 0.7 | 4 | ★ |
| 3.50 | VAPDSD0350 | 19.7 | 70.7 | 70 | 0.7 | 4 | ● |
| 3.55 | VAPDSD0355 | 19.7 | 70.7 | 70 | 0.7 | 4 | ★ |
| 3.60 | VAPDSD0360 | 21.8 | 70.8 | 70 | 0.8 | 4 | ★ |
| 3.65 | VAPDSD0365 | 21.8 | 70.8 | 70 | 0.8 | 4 | ★ |
| 3.70 | VAPDSD0370 | 21.8 | 70.8 | 70 | 0.8 | 4 | ★ |
| 3.75 | VAPDSD0375 | 21.8 | 70.8 | 70 | 0.8 | 4 | ★ |
| 3.80 | VAPDSD0380 | 21.8 | 70.8 | 70 | 0.8 | 4 | ★ |
| 3.85 | VAPDSD0385 | 21.8 | 70.8 | 70 | 0.8 | 4 | ★ |
| 3.90 | VAPDSD0390 | 21.8 | 70.8 | 70 | 0.8 | 4 | ★ |
| 3.95 | VAPDSD0395 | 21.8 | 70.8 | 70 | 0.8 | 4 | ★ |
| 4.00 | VAPDSD0400 | 21.8 | 70.8 | 70 | 0.8 | 4 | ● |
| 4.05 | VAPDSD0405 | 21.8 | 80.8 | 80 | 0.8 | 6 | ★ |
| 4.10 | VAPDSD0410 | 21.9 | 80.9 | 80 | 0.9 | 6 | ★ |
| 4.15 | VAPDSD0415 | 21.9 | 80.9 | 80 | 0.9 | 6 | ★ |
| 4.20 | VAPDSD0420 | 21.9 | 80.9 | 80 | 0.9 | 6 | ★ |
| 4.25 | VAPDSD0425 | 21.9 | 80.9 | 80 | 0.9 | 6 | ★ |
| 4.30 | VAPDSD0430 | 23.9 | 80.9 | 80 | 0.9 | 6 | ★ |
| 4.35 | VAPDSD0435 | 23.9 | 80.9 | 80 | 0.9 | 6 | ★ |
| 4.40 | VAPDSD0440 | 23.9 | 80.9 | 80 | 0.9 | 6 | ★ |
| 4.45 | VAPDSD0445 | 23.9 | 80.9 | 80 | 0.9 | 6 | ★ |
| 4.50 | VAPDSD0450 | 23.9 | 80.9 | 80 | 0.9 | 6 | ● |
| 4.55 | VAPDSD0455 | 23.9 | 80.9 | 80 | 0.9 | 6 | ★ |
| 4.60 | VAPDSD0460 | 26.0 | 81.0 | 80 | 1.0 | 6 | ★ |
| 4.65 | VAPDSD0465 | 26.0 | 81.0 | 80 | 1.0 | 6 | ★ |
| 4.70 | VAPDSD0470 | 26.0 | 81.0 | 80 | 1.0 | 6 | ★ |
| 4.75 | VAPDSD0475 | 26.0 | 81.0 | 80 | 1.0 | 6 | ★ |
| 4.80 | VAPDSD0480 | 26.0 | 81.0 | 80 | 1.0 | 6 | ★ |
| 4.85 | VAPDSD0485 | 26.0 | 81.0 | 80 | 1.0 | 6 | ★ |
| 4.90 | VAPDSD0490 | 26.0 | 81.0 | 80 | 1.0 | 6 | ★ |
| 4.95 | VAPDSD0495 | 26.0 | 81.0 | 80 | 1.0 | 6 | ★ |
| 5.00 | VAPDSD0500 | 26.0 | 81.0 | 80 | 1.0 | 6 | ● |
| 5.05 | VAPDSD0505 | 26.1 | 81.1 | 80 | 1.1 | 6 | ★ |
| 5.10 | VAPDSD0510 | 26.1 | 81.1 | 80 | 1.1 | 6 | ★ |
| 5.15 | VAPDSD0515 | 26.1 | 81.1 | 80 | 1.1 | 6 | ★ |
| 5.20 | VAPDSD0520 | 26.1 | 81.1 | 80 | 1.1 | 6 | ★ |
| 5.25 | VAPDSD0525 | 26.1 | 81.1 | 80 | 1.1 | 6 | ★ |

| DC (mm) | Référence | Dimensions (mm) | | | | | Stock |
|---|---|---|---|---|---|---|---|
| | | LCF | OAL | LF | PL | DCON | |
| 5.30 | VAPDSD0530 | 26.1 | 81.1 | 80 | 1.1 | 6 | ★ |
| 5.35 | VAPDSD0535 | 28.1 | 81.1 | 80 | 1.1 | 6 | ★ |
| 5.40 | VAPDSD0540 | 28.1 | 81.1 | 80 | 1.1 | 6 | ★ |
| 5.45 | VAPDSD0545 | 28.1 | 81.1 | 80 | 1.1 | 6 | ★ |
| 5.50 | VAPDSD0550 | 28.1 | 81.1 | 80 | 1.1 | 6 | ● |
| 5.55 | VAPDSD0555 | 28.2 | 81.2 | 80 | 1.2 | 6 | ★ |
| 5.60 | VAPDSD0560 | 28.2 | 81.2 | 80 | 1.2 | 6 | ★ |
| 5.65 | VAPDSD0565 | 28.2 | 81.2 | 80 | 1.2 | 6 | ★ |
| 5.70 | VAPDSD0570 | 28.2 | 81.2 | 80 | 1.2 | 6 | ★ |
| 5.75 | VAPDSD0575 | 28.2 | 81.2 | 80 | 1.2 | 6 | ★ |
| 5.80 | VAPDSD0580 | 28.2 | 81.2 | 80 | 1.2 | 6 | ★ |
| 5.85 | VAPDSD0585 | 28.2 | 81.2 | 80 | 1.2 | 6 | ★ |
| 5.90 | VAPDSD0590 | 28.2 | 81.2 | 80 | 1.2 | 6 | ★ |
| 5.95 | VAPDSD0595 | 28.2 | 81.2 | 80 | 1.2 | 6 | ★ |
| 6.00 | VAPDSD0600 | 28.2 | 81.2 | 80 | 1.2 | 6 | ● |
| 6.05 | VAPDSD0605 | 31.3 | 81.3 | 80 | 1.3 | 8 | ★ |
| 6.10 | VAPDSD0610 | 31.3 | 81.3 | 80 | 1.3 | 8 | ★ |
| 6.15 | VAPDSD0615 | 31.3 | 81.3 | 80 | 1.3 | 8 | ★ |
| 6.20 | VAPDSD0620 | 31.3 | 81.3 | 80 | 1.3 | 8 | ★ |
| 6.25 | VAPDSD0625 | 31.3 | 81.3 | 80 | 1.3 | 8 | ★ |
| 6.30 | VAPDSD0630 | 31.3 | 81.3 | 80 | 1.3 | 8 | ★ |
| 6.35 | VAPDSD0635 | 31.3 | 81.3 | 80 | 1.3 | 8 | ★ |
| 6.40 | VAPDSD0640 | 31.3 | 81.3 | 80 | 1.3 | 8 | ★ |
| 6.45 | VAPDSD0645 | 31.3 | 81.3 | 80 | 1.3 | 8 | ★ |
| 6.50 | VAPDSD0650 | 31.4 | 81.4 | 80 | 1.4 | 8 | ● |
| 6.55 | VAPDSD0655 | 31.4 | 81.4 | 80 | 1.4 | 8 | ★ |
| 6.60 | VAPDSD0660 | 31.4 | 81.4 | 80 | 1.4 | 8 | ★ |
| 6.65 | VAPDSD0665 | 31.4 | 81.4 | 80 | 1.4 | 8 | ★ |
| 6.70 | VAPDSD0670 | 31.4 | 81.4 | 80 | 1.4 | 8 | ★ |
| 6.75 | VAPDSD0675 | 33.4 | 81.4 | 80 | 1.4 | 8 | ★ |
| 6.80 | VAPDSD0680 | 33.4 | 81.4 | 80 | 1.4 | 8 | ★ |
| 6.85 | VAPDSD0685 | 33.4 | 81.4 | 80 | 1.4 | 8 | ★ |
| 6.90 | VAPDSD0690 | 33.4 | 81.4 | 80 | 1.4 | 8 | ★ |
| 6.95 | VAPDSD0695 | 33.4 | 81.4 | 80 | 1.4 | 8 | ★ |
| 7.00 | VAPDSD0700 | 33.5 | 81.5 | 80 | 1.5 | 8 | ● |
| 7.05 | VAPDSD0705 | 33.5 | 81.5 | 80 | 1.5 | 8 | ★ |
| 7.10 | VAPDSD0710 | 33.5 | 81.5 | 80 | 1.5 | 8 | ★ |
| 7.15 | VAPDSD0715 | 33.5 | 81.5 | 80 | 1.5 | 8 | ★ |
| 7.20 | VAPDSD0720 | 33.5 | 81.5 | 80 | 1.5 | 8 | ★ |
| 7.25 | VAPDSD0725 | 33.5 | 81.5 | 80 | 1.5 | 8 | ★ |
| 7.30 | VAPDSD0730 | 33.5 | 81.5 | 80 | 1.5 | 8 | ★ |
| 7.35 | VAPDSD0735 | 33.5 | 81.5 | 80 | 1.5 | 8 | ★ |
| 7.40 | VAPDSD0740 | 33.5 | 81.5 | 80 | 1.5 | 8 | ★ |
| 7.45 | VAPDSD0745 | 33.5 | 81.5 | 80 | 1.5 | 8 | ★ |
| 7.50 | VAPDSD0750 | 33.6 | 81.6 | 80 | 1.6 | 8 | ● |
| 7.55 | VAPDSD0755 | 36.6 | 86.6 | 85 | 1.6 | 8 | ★ |
| 7.60 | VAPDSD0760 | 36.6 | 86.6 | 85 | 1.6 | 8 | ★ |
| 7.65 | VAPDSD0765 | 36.6 | 86.6 | 85 | 1.6 | 8 | ★ |
| 7.70 | VAPDSD0770 | 36.6 | 86.6 | 85 | 1.6 | 8 | ★ |
| 7.75 | VAPDSD0775 | 36.6 | 86.6 | 85 | 1.6 | 8 | ★ |

● : Article stocké. ★ : Article standard Japon.

| DC (mm) | Référence | Dimensions (mm) | | | | | Stock |
|---|---|---|---|---|---|---|---|
| | | LCF | OAL | LF | PL | DCON | |
| 7.80 | VAPDSD0780 | 36.6 | 86.6 | 85 | 1.6 | 8 | ★ |
| 7.85 | VAPDSD0785 | 36.6 | 86.6 | 85 | 1.6 | 8 | ★ |
| 7.90 | VAPDSD0790 | 36.6 | 86.6 | 85 | 1.6 | 8 | ★ |
| 7.95 | VAPDSD0795 | 36.7 | 86.7 | 85 | 1.7 | 8 | ★ |
| 8.00 | VAPDSD0800 | 36.7 | 86.7 | 85 | 1.7 | 8 | ● |
| 8.05 | VAPDSD0805 | 36.7 | 91.7 | 90 | 1.7 | 10 | ★ |
| 8.10 | VAPDSD0810 | 36.7 | 91.7 | 90 | 1.7 | 10 | ★ |
| 8.15 | VAPDSD0815 | 36.7 | 91.7 | 90 | 1.7 | 10 | ★ |
| 8.20 | VAPDSD0820 | 36.7 | 91.7 | 90 | 1.7 | 10 | ★ |
| 8.25 | VAPDSD0825 | 36.7 | 91.7 | 90 | 1.7 | 10 | ★ |
| 8.30 | VAPDSD0830 | 36.7 | 91.7 | 90 | 1.7 | 10 | ★ |
| 8.35 | VAPDSD0835 | 36.7 | 91.7 | 90 | 1.7 | 10 | ★ |
| 8.40 | VAPDSD0840 | 36.7 | 91.7 | 90 | 1.7 | 10 | ★ |
| 8.45 | VAPDSD0845 | 36.8 | 91.8 | 90 | 1.8 | 10 | ★ |
| 8.50 | VAPDSD0850 | 36.8 | 91.8 | 90 | 1.8 | 10 | ● |
| 8.55 | VAPDSD0855 | 39.8 | 94.8 | 93 | 1.8 | 10 | ★ |
| 8.60 | VAPDSD0860 | 39.8 | 94.8 | 93 | 1.8 | 10 | ★ |
| 8.65 | VAPDSD0865 | 39.8 | 94.8 | 93 | 1.8 | 10 | ★ |
| 8.70 | VAPDSD0870 | 39.8 | 94.8 | 93 | 1.8 | 10 | ★ |
| 8.75 | VAPDSD0875 | 39.8 | 94.8 | 93 | 1.8 | 10 | ★ |
| 8.80 | VAPDSD0880 | 39.8 | 94.8 | 93 | 1.8 | 10 | ★ |
| 8.85 | VAPDSD0885 | 39.8 | 94.8 | 93 | 1.8 | 10 | ★ |
| 8.90 | VAPDSD0890 | 39.8 | 94.8 | 93 | 1.8 | 10 | ★ |
| 8.95 | VAPDSD0895 | 39.9 | 94.9 | 93 | 1.9 | 10 | ★ |
| 9.00 | VAPDSD0900 | 39.9 | 94.9 | 93 | 1.9 | 10 | ● |
| 9.10 | VAPDSD0910 | 39.9 | 94.9 | 93 | 1.9 | 10 | ★ |
| 9.20 | VAPDSD0920 | 39.9 | 94.9 | 93 | 1.9 | 10 | ★ |
| 9.30 | VAPDSD0930 | 39.9 | 94.9 | 93 | 1.9 | 10 | ★ |
| 9.40 | VAPDSD0940 | 40.0 | 95.0 | 93 | 2.0 | 10 | ★ |
| 9.50 | VAPDSD0950 | 40.0 | 95.0 | 93 | 2.0 | 10 | ● |
| 9.60 | VAPDSD0960 | 43.0 | 98.0 | 96 | 2.0 | 10 | ★ |
| 9.70 | VAPDSD0970 | 43.0 | 98.0 | 96 | 2.0 | 10 | ★ |
| 9.80 | VAPDSD0980 | 43.0 | 98.0 | 96 | 2.0 | 10 | ★ |
| 9.90 | VAPDSD0990 | 43.1 | 98.1 | 96 | 2.1 | 10 | ★ |
| 10.00 | VAPDSD1000 | 43.1 | 98.1 | 96 | 2.1 | 10 | ● |
| 10.10 | VAPDSD1010 | 43.1 | 103.1 | 101 | 2.1 | 12 | ★ |
| 10.20 | VAPDSD1020 | 43.1 | 103.1 | 101 | 2.1 | 12 | ★ |
| 10.30 | VAPDSD1030 | 43.1 | 103.1 | 101 | 2.1 | 12 | ★ |
| 10.40 | VAPDSD1040 | 43.2 | 103.2 | 101 | 2.2 | 12 | ★ |
| 10.50 | VAPDSD1050 | 43.2 | 103.2 | 101 | 2.2 | 12 | ● |
| 10.60 | VAPDSD1060 | 43.2 | 103.2 | 101 | 2.2 | 12 | ★ |
| 10.70 | VAPDSD1070 | 47.2 | 107.2 | 105 | 2.2 | 12 | ★ |
| 10.80 | VAPDSD1080 | 47.2 | 107.2 | 105 | 2.2 | 12 | ★ |
| 10.90 | VAPDSD1090 | 47.3 | 107.3 | 105 | 2.3 | 12 | ★ |
| 11.00 | VAPDSD1100 | 47.3 | 107.3 | 105 | 2.3 | 12 | ● |
| 11.10 | VAPDSD1110 | 47.3 | 107.3 | 105 | 2.3 | 12 | ★ |
| 11.20 | VAPDSD1120 | 47.3 | 107.3 | 105 | 2.3 | 12 | ★ |
| 11.30 | VAPDSD1130 | 47.3 | 107.3 | 105 | 2.3 | 12 | ★ |
| 11.40 | VAPDSD1140 | 47.4 | 107.4 | 105 | 2.4 | 12 | ★ |
| 11.50 | VAPDSD1150 | 47.4 | 107.4 | 105 | 2.4 | 12 | ★ |

| DC (mm) | Référence | Dimensions (mm) | | | | | Stock |
|---|---|---|---|---|---|---|---|
| | | LCF | OAL | LF | PL | DCON | |
| 11.60 | VAPDSD1160 | 47.4 | 107.4 | 105 | 2.4 | 12 | ★ |
| 11.70 | VAPDSD1170 | 47.4 | 107.4 | 105 | 2.4 | 12 | ★ |
| 11.80 | VAPDSD1180 | 47.4 | 107.4 | 105 | 2.4 | 12 | ★ |
| 11.90 | VAPDSD1190 | 51.5 | 111.5 | 109 | 2.5 | 12 | ★ |
| 12.00 | VAPDSD1200 | 51.5 | 111.5 | 109 | 2.5 | 12 | ● |
| 12.10 | VAPDSD1210 | 51.5 | 111.5 | 109 | 2.5 | 12 | ★ |
| 12.20 | VAPDSD1220 | 51.5 | 111.5 | 109 | 2.5 | 12 | ★ |
| 12.30 | VAPDSD1230 | 51.6 | 111.6 | 109 | 2.6 | 12 | ★ |
| 12.40 | VAPDSD1240 | 51.6 | 111.6 | 109 | 2.6 | 12 | ★ |
| 12.50 | VAPDSD1250 | 51.6 | 111.6 | 109 | 2.6 | 12 | ● |
| 12.60 | VAPDSD1260 | 51.6 | 111.6 | 109 | 2.6 | 12 | ★ |
| 12.70 | VAPDSD1270 | 51.6 | 111.6 | 109 | 2.6 | 12 | ★ |
| 12.80 | VAPDSD1280 | 51.7 | 111.7 | 109 | 2.7 | 12 | ★ |
| 12.90 | VAPDSD1290 | 51.7 | 111.7 | 109 | 2.7 | 12 | ★ |
| 13.00 | VAPDSD1300 | 51.7 | 111.7 | 109 | 2.7 | 12 | ★ |

CONDITIONS DE COUPE ➢ M178
DONNÉES TECHNIQUES ➢ P001

# VAPDS

Longueur utile courte, haute précision

## CONDITIONS DE COUPE RECOMMANDÉES

| Matière | P | | P | K | P | M | P | M |
|---|---|---|---|---|---|---|---|---|
| | Acier structuré | | Acier carbone XC55<br>Acier allié 070M55<br>Fonte | | Alliage acier outil X210Cr12<br>(Faible dureté matière)<br>Ferritique Acier inox<br>X10CrAl18, X10CrAl13<br>Acier inoxydable martensitique<br>X20Cr13, X10CrAl13 | | Alliage acier outil X40CrMoV51<br>(−40HRC)<br>Acier difficile auto-trempant<br>X7CrNiAl177 | |
| Diamètre foret **DC** (mm) | Régime ($min^{-1}$) | Avance (mm/tour) | Régime ($min^{-1}$) | Avance (mm/tour) | Régime ($min^{-1}$) | Avance (mm/tour) | Régime ($min^{-1}$) | Avance (mm/tour) |
| **0.5** | 18000 | 0.02 | 16000 | 0.02 | 9000 | 0.02 | 8200 | 0.02 |
| **1.0** | 12000 | 0.05 | 10000 | 0.05 | 6300 | 0.05 | 5500 | 0.04 |
| **2.0** | 6400 | 0.09 | 5500 | 0.09 | 3200 | 0.09 | 2900 | 0.05 |
| **3.0** | 4300 | 0.13 | 3700 | 0.13 | 2100 | 0.13 | 1900 | 0.06 |
| **4.0** | 3200 | 0.15 | 2800 | 0.15 | 1600 | 0.15 | 1400 | 0.08 |
| **5.0** | 2600 | 0.18 | 2200 | 0.18 | 1300 | 0.18 | 1100 | 0.10 |
| **6.0** | 2100 | 0.19 | 1800 | 0.19 | 1100 | 0.20 | 950 | 0.11 |
| **8.0** | 1600 | 0.24 | 1400 | 0.24 | 800 | 0.22 | 720 | 0.13 |
| **10.0** | 1300 | 0.28 | 1100 | 0.28 | 640 | 0.25 | 570 | 0.15 |
| **12.0** | 1100 | 0.34 | 930 | 0.34 | 530 | 0.30 | 480 | 0.17 |
| **13.0** | 980 | 0.36 | 860 | 0.36 | 490 | 0.32 | 440 | 0.19 |

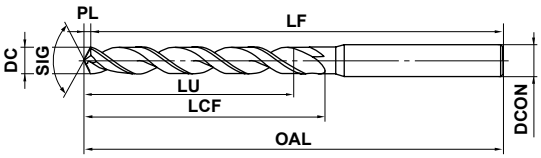
Remarque 1) Réduire la vitesse de rotation et l'avance en cas de manque de rigidité de la machine ou du montage de la pièce.
Remarque 2) Utiliser un mandrin à pince ou un mandrin de fraisage.
Remarque 3) Utiliser suffisamment de liquide de coupe.
Remarque 4) Lorsque vous percez des trous de plus de 4 x DC, veuillez utiliser un cycle de brise-copeaux.
Remarque 5) Les conditions de coupe mentionnées ci-dessus sont standards et avec l'utilisation d'un liquide de coupe.
Veuillez réduire la rotation quand vous usinez sans liquide de coupe.

# VAPDM

Longueur utile moyenne, haute précision

DC<2 DC≥2

P M K N S H




*LU = LCF-2DC (max 5×DC)

| 0.5≤DC≤3 | 3<DC≤6 | 6<DC≤10 | 10<DC≤18 | 18<DC≤30 | 30<DC≤32 |
|---|---|---|---|---|---|
| 0 −0.014 | 0 −0.018 | 0 −0.022 | 0 −0.027 | 0 −0.033 | 0 −0.039 |

●L'efficacité de perçage et la durée de vie sont augmentées grâce au nouveau développement du revêtement Violet.

| DC (mm) | Référence | Dimensions (mm) LCF | OAL | LF | PL | DCON | Stock |
|---|---|---|---|---|---|---|---|
| 0.50 | VAPDMD0050 | 6.2 | 50.2 | 50 | 0.15 | 3 | ● |
| 0.55 | VAPDMD0055 | 6.2 | 50.2 | 50 | 0.17 | 3 | ★ |
| 0.60 | VAPDMD0060 | 8.2 | 50.2 | 50 | 0.18 | 3 | ★ |
| 0.65 | VAPDMD0065 | 8.2 | 50.2 | 50 | 0.20 | 3 | ★ |
| 0.70 | VAPDMD0070 | 10.2 | 50.2 | 50 | 0.21 | 3 | ★ |
| 0.75 | VAPDMD0075 | 10.2 | 50.2 | 50 | 0.23 | 3 | ★ |
| 0.80 | VAPDMD0080 | 10.2 | 50.2 | 50 | 0.24 | 3 | ★ |
| 0.85 | VAPDMD0085 | 10.3 | 50.3 | 50 | 0.26 | 3 | ★ |
| 0.90 | VAPDMD0090 | 12.3 | 50.3 | 50 | 0.27 | 3 | ★ |
| 0.95 | VAPDMD0095 | 12.3 | 50.3 | 50 | 0.29 | 3 | ★ |
| 1.00 | VAPDMD0100 | 12.3 | 60.3 | 60 | 0.3 | 3 | ● |
| 1.05 | VAPDMD0105 | 12.3 | 60.3 | 60 | 0.3 | 3 | ★ |
| 1.10 | VAPDMD0110 | 16.3 | 60.3 | 60 | 0.3 | 3 | ★ |
| 1.15 | VAPDMD0115 | 16.4 | 60.4 | 60 | 0.4 | 3 | ★ |
| 1.20 | VAPDMD0120 | 16.4 | 60.4 | 60 | 0.4 | 3 | ★ |
| 1.25 | VAPDMD0125 | 16.4 | 60.4 | 60 | 0.4 | 3 | ★ |
| 1.30 | VAPDMD0130 | 16.4 | 60.4 | 60 | 0.4 | 3 | ★ |
| 1.35 | VAPDMD0135 | 18.4 | 60.4 | 60 | 0.4 | 3 | ★ |
| 1.40 | VAPDMD0140 | 18.4 | 60.4 | 60 | 0.4 | 3 | ★ |
| 1.45 | VAPDMD0145 | 18.4 | 60.4 | 60 | 0.4 | 3 | ★ |
| 1.50 | VAPDMD0150 | 18.5 | 60.5 | 60 | 0.5 | 3 | ● |
| 1.55 | VAPDMD0155 | 20.5 | 60.5 | 60 | 0.5 | 3 | ★ |
| 1.60 | VAPDMD0160 | 20.5 | 60.5 | 60 | 0.5 | 3 | ★ |
| 1.65 | VAPDMD0165 | 20.5 | 60.5 | 60 | 0.5 | 3 | ★ |
| 1.70 | VAPDMD0170 | 20.5 | 60.5 | 60 | 0.5 | 3 | ★ |
| 1.75 | VAPDMD0175 | 20.5 | 60.5 | 60 | 0.5 | 3 | ★ |
| 1.80 | VAPDMD0180 | 22.5 | 60.5 | 60 | 0.5 | 3 | ★ |
| 1.85 | VAPDMD0185 | 22.6 | 60.6 | 60 | 0.6 | 3 | ★ |
| 1.90 | VAPDMD0190 | 22.6 | 60.6 | 60 | 0.6 | 3 | ★ |
| 1.95 | VAPDMD0195 | 23.6 | 60.6 | 60 | 0.6 | 3 | ★ |
| 2.00 | VAPDMD0200 | 23.4 | 70.4 | 70 | 0.4 | 3 | ● |
| 2.05 | VAPDMD0205 | 23.4 | 70.4 | 70 | 0.4 | 3 | ★ |
| 2.10 | VAPDMD0210 | 23.4 | 70.4 | 70 | 0.4 | 3 | ★ |

| DC (mm) | Référence | Dimensions (mm) LCF | OAL | LF | PL | DCON | Stock |
|---|---|---|---|---|---|---|---|
| 2.15 | VAPDMD0215 | 23.5 | 70.5 | 70 | 0.5 | 3 | ★ |
| 2.20 | VAPDMD0220 | 26.5 | 70.5 | 70 | 0.5 | 3 | ★ |
| 2.25 | VAPDMD0225 | 26.5 | 70.5 | 70 | 0.5 | 3 | ★ |
| 2.30 | VAPDMD0230 | 26.5 | 70.5 | 70 | 0.5 | 3 | ★ |
| 2.35 | VAPDMD0235 | 26.5 | 70.5 | 70 | 0.5 | 3 | ★ |
| 2.40 | VAPDMD0240 | 29.5 | 70.5 | 70 | 0.5 | 3 | ★ |
| 2.45 | VAPDMD0245 | 29.5 | 70.5 | 70 | 0.5 | 3 | ★ |
| 2.50 | VAPDMD0250 | 29.5 | 70.5 | 70 | 0.5 | 3 | ● |
| 2.55 | VAPDMD0255 | 29.5 | 70.5 | 70 | 0.5 | 3 | ★ |
| 2.60 | VAPDMD0260 | 29.5 | 70.5 | 70 | 0.5 | 3 | ★ |
| 2.65 | VAPDMD0265 | 29.6 | 70.6 | 70 | 0.6 | 3 | ★ |
| 2.70 | VAPDMD0270 | 32.6 | 70.6 | 70 | 0.6 | 3 | ★ |
| 2.75 | VAPDMD0275 | 32.6 | 70.6 | 70 | 0.6 | 3 | ★ |
| 2.80 | VAPDMD0280 | 32.6 | 70.6 | 70 | 0.6 | 3 | ★ |
| 2.85 | VAPDMD0285 | 32.6 | 70.6 | 70 | 0.6 | 3 | ★ |
| 2.90 | VAPDMD0290 | 32.6 | 70.6 | 70 | 0.6 | 3 | ★ |
| 2.95 | VAPDMD0295 | 32.6 | 70.6 | 70 | 0.6 | 3 | ★ |
| 3.00 | VAPDMD0300 | 32.6 | 70.6 | 70 | 0.6 | 3 | ● |
| 3.05 | VAPDMD0305 | 35.6 | 85.6 | 85 | 0.6 | 4 | ★ |
| 3.10 | VAPDMD0310 | 35.6 | 85.6 | 85 | 0.6 | 4 | ★ |
| 3.15 | VAPDMD0315 | 35.7 | 85.7 | 85 | 0.7 | 4 | ★ |
| 3.20 | VAPDMD0320 | 35.7 | 85.7 | 85 | 0.7 | 4 | ★ |
| 3.25 | VAPDMD0325 | 35.7 | 85.7 | 85 | 0.7 | 4 | ★ |
| 3.30 | VAPDMD0330 | 35.7 | 85.7 | 85 | 0.7 | 4 | ★ |
| 3.35 | VAPDMD0335 | 35.7 | 85.7 | 85 | 0.7 | 4 | ★ |
| 3.40 | VAPDMD0340 | 38.7 | 85.7 | 85 | 0.7 | 4 | ★ |
| 3.45 | VAPDMD0345 | 38.7 | 85.7 | 85 | 0.7 | 4 | ★ |
| 3.50 | VAPDMD0350 | 38.7 | 85.7 | 85 | 0.7 | 4 | ● |
| 3.55 | VAPDMD0355 | 38.7 | 85.7 | 85 | 0.7 | 4 | ★ |
| 3.60 | VAPDMD0360 | 38.8 | 85.8 | 85 | 0.8 | 4 | ★ |
| 3.65 | VAPDMD0365 | 38.8 | 85.8 | 85 | 0.8 | 4 | ★ |
| 3.70 | VAPDMD0370 | 38.8 | 85.8 | 85 | 0.8 | 4 | ★ |
| 3.75 | VAPDMD0375 | 42.8 | 85.8 | 85 | 0.8 | 4 | ★ |

● : Article stocké. ★ : Article standard Japon.

CONDITIONS DE COUPE ➤ M182
DONNÉES TECHNIQUES ➤ P001

# VAPDM

Longueur utile moyenne, haute précision

| DC (mm) | Référence | Dimensions (mm) | | | | | Stock |
|---|---|---|---|---|---|---|---|
| | | LCF | OAL | LF | PL | DCON | |
| 3.80 | VAPDMD0380 | 42.8 | 85.8 | 85 | 0.8 | 4 | ★ |
| 3.85 | VAPDMD0385 | 42.8 | 85.8 | 85 | 0.8 | 4 | ★ |
| 3.90 | VAPDMD0390 | 42.8 | 85.8 | 85 | 0.8 | 4 | ★ |
| 3.95 | VAPDMD0395 | 42.8 | 85.8 | 85 | 0.8 | 4 | ★ |
| 4.00 | VAPDMD0400 | 42.8 | 85.8 | 85 | 0.8 | 4 | ● |
| 4.05 | VAPDMD0405 | 42.8 | 100.8 | 100 | 0.8 | 6 | ★ |
| 4.10 | VAPDMD0410 | 42.9 | 100.9 | 100 | 0.9 | 6 | ★ |
| 4.15 | VAPDMD0415 | 42.9 | 100.9 | 100 | 0.9 | 6 | ★ |
| 4.20 | VAPDMD0420 | 42.9 | 100.9 | 100 | 0.9 | 6 | ★ |
| 4.25 | VAPDMD0425 | 46.9 | 100.9 | 100 | 0.9 | 6 | ★ |
| 4.30 | VAPDMD0430 | 46.9 | 100.9 | 100 | 0.9 | 6 | ★ |
| 4.35 | VAPDMD0435 | 46.9 | 100.9 | 100 | 0.9 | 6 | ★ |
| 4.40 | VAPDMD0440 | 46.9 | 100.9 | 100 | 0.9 | 6 | ★ |
| 4.45 | VAPDMD0445 | 46.9 | 100.9 | 100 | 0.9 | 6 | ★ |
| 4.50 | VAPDMD0450 | 46.9 | 100.9 | 100 | 0.9 | 6 | ● |
| 4.55 | VAPDMD0455 | 46.9 | 100.9 | 100 | 0.9 | 6 | ★ |
| 4.60 | VAPDMD0460 | 47.0 | 101.0 | 100 | 1.0 | 6 | ★ |
| 4.65 | VAPDMD0465 | 47.0 | 101.0 | 100 | 1.0 | 6 | ★ |
| 4.70 | VAPDMD0470 | 47.0 | 101.0 | 100 | 1.0 | 6 | ★ |
| 4.75 | VAPDMD0475 | 47.0 | 101.0 | 100 | 1.0 | 6 | ★ |
| 4.80 | VAPDMD0480 | 52.0 | 101.0 | 100 | 1.0 | 6 | ★ |
| 4.85 | VAPDMD0485 | 52.0 | 101.0 | 100 | 1.0 | 6 | ★ |
| 4.90 | VAPDMD0490 | 52.0 | 101.0 | 100 | 1.0 | 6 | ★ |
| 4.95 | VAPDMD0495 | 52.0 | 101.0 | 100 | 1.0 | 6 | ★ |
| 5.00 | VAPDMD0500 | 52.0 | 101.0 | 100 | 1.0 | 6 | ● |
| 5.05 | VAPDMD0505 | 52.1 | 101.1 | 100 | 1.1 | 6 | ★ |
| 5.10 | VAPDMD0510 | 52.1 | 101.1 | 100 | 1.1 | 6 | ★ |
| 5.15 | VAPDMD0515 | 52.1 | 101.1 | 100 | 1.1 | 6 | ★ |
| 5.20 | VAPDMD0520 | 52.1 | 101.1 | 100 | 1.1 | 6 | ★ |
| 5.25 | VAPDMD0525 | 52.1 | 101.1 | 100 | 1.1 | 6 | ★ |
| 5.30 | VAPDMD0530 | 52.1 | 101.1 | 100 | 1.1 | 6 | ★ |
| 5.35 | VAPDMD0535 | 57.1 | 107.1 | 106 | 1.1 | 6 | ★ |
| 5.40 | VAPDMD0540 | 57.1 | 107.1 | 106 | 1.1 | 6 | ★ |
| 5.45 | VAPDMD0545 | 57.1 | 107.1 | 106 | 1.1 | 6 | ★ |
| 5.50 | VAPDMD0550 | 57.1 | 107.1 | 106 | 1.1 | 6 | ● |
| 5.55 | VAPDMD0555 | 57.2 | 107.2 | 106 | 1.2 | 6 | ★ |
| 5.60 | VAPDMD0560 | 57.2 | 107.2 | 106 | 1.2 | 6 | ★ |
| 5.65 | VAPDMD0565 | 57.2 | 107.2 | 106 | 1.2 | 6 | ★ |
| 5.70 | VAPDMD0570 | 57.2 | 107.2 | 106 | 1.2 | 6 | ★ |
| 5.75 | VAPDMD0575 | 57.2 | 107.2 | 106 | 1.2 | 6 | ★ |
| 5.80 | VAPDMD0580 | 57.2 | 107.2 | 106 | 1.2 | 6 | ★ |
| 5.85 | VAPDMD0585 | 57.2 | 107.2 | 106 | 1.2 | 6 | ★ |
| 5.90 | VAPDMD0590 | 57.2 | 107.2 | 106 | 1.2 | 6 | ★ |
| 5.95 | VAPDMD0595 | 57.2 | 107.2 | 106 | 1.2 | 6 | ★ |
| 6.00 | VAPDMD0600 | 57.2 | 107.2 | 106 | 1.2 | 6 | ● |
| 6.05 | VAPDMD0605 | 63.3 | 113.3 | 112 | 1.3 | 8 | ★ |
| 6.10 | VAPDMD0610 | 63.3 | 113.3 | 112 | 1.3 | 8 | ★ |
| 6.15 | VAPDMD0615 | 63.3 | 113.3 | 112 | 1.3 | 8 | ★ |
| 6.20 | VAPDMD0620 | 63.3 | 113.3 | 112 | 1.3 | 8 | ★ |
| 6.25 | VAPDMD0625 | 63.3 | 113.3 | 112 | 1.3 | 8 | ★ |

| DC (mm) | Référence | Dimensions (mm) | | | | | Stock |
|---|---|---|---|---|---|---|---|
| | | LCF | OAL | LF | PL | DCON | |
| 6.30 | VAPDMD0630 | 63.3 | 113.3 | 112 | 1.3 | 8 | ★ |
| 6.35 | VAPDMD0635 | 63.3 | 113.3 | 112 | 1.3 | 8 | ★ |
| 6.40 | VAPDMD0640 | 63.3 | 113.3 | 112 | 1.3 | 8 | ★ |
| 6.45 | VAPDMD0645 | 63.3 | 113.3 | 112 | 1.3 | 8 | ★ |
| 6.50 | VAPDMD0650 | 63.4 | 113.4 | 112 | 1.4 | 8 | ● |
| 6.55 | VAPDMD0655 | 63.4 | 113.4 | 112 | 1.4 | 8 | ★ |
| 6.60 | VAPDMD0660 | 63.4 | 113.4 | 112 | 1.4 | 8 | ★ |
| 6.65 | VAPDMD0665 | 63.4 | 113.4 | 112 | 1.4 | 8 | ★ |
| 6.70 | VAPDMD0670 | 63.4 | 113.4 | 112 | 1.4 | 8 | ★ |
| 6.75 | VAPDMD0675 | 68.4 | 118.4 | 117 | 1.4 | 8 | ★ |
| 6.80 | VAPDMD0680 | 68.4 | 118.4 | 117 | 1.4 | 8 | ★ |
| 6.85 | VAPDMD0685 | 68.4 | 118.4 | 117 | 1.4 | 8 | ★ |
| 6.90 | VAPDMD0690 | 68.4 | 118.4 | 117 | 1.4 | 8 | ★ |
| 6.95 | VAPDMD0695 | 68.4 | 118.4 | 117 | 1.4 | 8 | ★ |
| 7.00 | VAPDMD0700 | 68.5 | 118.5 | 117 | 1.5 | 8 | ● |
| 7.05 | VAPDMD0705 | 68.5 | 118.5 | 117 | 1.5 | 8 | ★ |
| 7.10 | VAPDMD0710 | 68.5 | 118.5 | 117 | 1.5 | 8 | ★ |
| 7.15 | VAPDMD0715 | 68.5 | 118.5 | 117 | 1.5 | 8 | ★ |
| 7.20 | VAPDMD0720 | 68.5 | 118.5 | 117 | 1.5 | 8 | ★ |
| 7.25 | VAPDMD0725 | 68.5 | 118.5 | 117 | 1.5 | 8 | ★ |
| 7.30 | VAPDMD0730 | 68.5 | 118.5 | 117 | 1.5 | 8 | ★ |
| 7.35 | VAPDMD0735 | 68.5 | 118.5 | 117 | 1.5 | 8 | ★ |
| 7.40 | VAPDMD0740 | 68.5 | 118.5 | 117 | 1.5 | 8 | ★ |
| 7.45 | VAPDMD0745 | 68.5 | 118.5 | 117 | 1.5 | 8 | ★ |
| 7.50 | VAPDMD0750 | 68.6 | 118.6 | 117 | 1.6 | 8 | ● |
| 7.55 | VAPDMD0755 | 74.6 | 124.6 | 123 | 1.6 | 8 | ★ |
| 7.60 | VAPDMD0760 | 74.6 | 124.6 | 123 | 1.6 | 8 | ★ |
| 7.65 | VAPDMD0765 | 74.6 | 124.6 | 123 | 1.6 | 8 | ★ |
| 7.70 | VAPDMD0770 | 74.6 | 124.6 | 123 | 1.6 | 8 | ★ |
| 7.75 | VAPDMD0775 | 74.6 | 124.6 | 123 | 1.6 | 8 | ★ |
| 7.80 | VAPDMD0780 | 74.6 | 124.6 | 123 | 1.6 | 8 | ★ |
| 7.85 | VAPDMD0785 | 74.6 | 124.6 | 123 | 1.6 | 8 | ★ |
| 7.90 | VAPDMD0790 | 74.6 | 124.6 | 123 | 1.6 | 8 | ★ |
| 7.95 | VAPDMD0795 | 74.7 | 124.7 | 123 | 1.7 | 8 | ★ |
| 8.00 | VAPDMD0800 | 74.7 | 124.7 | 123 | 1.7 | 8 | ● |
| 8.05 | VAPDMD0805 | 74.7 | 129.7 | 128 | 1.7 | 10 | ★ |
| 8.10 | VAPDMD0810 | 74.7 | 129.7 | 128 | 1.7 | 10 | ★ |
| 8.15 | VAPDMD0815 | 74.7 | 129.7 | 128 | 1.7 | 10 | ★ |
| 8.20 | VAPDMD0820 | 74.7 | 129.7 | 128 | 1.7 | 10 | ★ |
| 8.25 | VAPDMD0825 | 74.7 | 129.7 | 128 | 1.7 | 10 | ★ |
| 8.30 | VAPDMD0830 | 74.7 | 129.7 | 128 | 1.7 | 10 | ★ |
| 8.35 | VAPDMD0835 | 74.7 | 129.7 | 128 | 1.7 | 10 | ★ |
| 8.40 | VAPDMD0840 | 74.7 | 129.7 | 128 | 1.7 | 10 | ★ |
| 8.45 | VAPDMD0845 | 74.8 | 129.8 | 128 | 1.8 | 10 | ★ |
| 8.50 | VAPDMD0850 | 74.8 | 129.8 | 128 | 1.8 | 10 | ● |
| 8.55 | VAPDMD0855 | 80.8 | 135.8 | 134 | 1.8 | 10 | ★ |
| 8.60 | VAPDMD0860 | 80.8 | 135.8 | 134 | 1.8 | 10 | ★ |
| 8.65 | VAPDMD0865 | 80.8 | 135.8 | 134 | 1.8 | 10 | ★ |
| 8.70 | VAPDMD0870 | 80.8 | 135.8 | 134 | 1.8 | 10 | ★ |
| 8.75 | VAPDMD0875 | 80.8 | 135.8 | 134 | 1.8 | 10 | ★ |

● : Article stocké. ★ : Article standard Japon.

| DC (mm) | Référence | Dimensions (mm) | | | | | Stock |
|---|---|---|---|---|---|---|---|
| | | LCF | OAL | LF | PL | DCON | |
| 8.80 | VAPDMD0880 | 80.8 | 135.8 | 134 | 1.8 | 10 | ★ |
| 8.85 | VAPDMD0885 | 80.8 | 135.8 | 134 | 1.8 | 10 | ★ |
| 8.90 | VAPDMD0890 | 80.8 | 135.8 | 134 | 1.8 | 10 | ★ |
| 8.95 | VAPDMD0895 | 80.9 | 135.9 | 134 | 1.9 | 10 | ★ |
| 9.00 | VAPDMD0900 | 80.9 | 135.9 | 134 | 1.9 | 10 | ● |
| 9.10 | VAPDMD0910 | 80.9 | 135.9 | 134 | 1.9 | 10 | ★ |
| 9.20 | VAPDMD0920 | 80.9 | 135.9 | 134 | 1.9 | 10 | ★ |
| 9.30 | VAPDMD0930 | 80.9 | 135.9 | 134 | 1.9 | 10 | ★ |
| 9.40 | VAPDMD0940 | 81.0 | 136.0 | 134 | 2.0 | 10 | ★ |
| 9.50 | VAPDMD0950 | 81.0 | 136.0 | 134 | 2.0 | 10 | ● |
| 9.60 | VAPDMD0960 | 87.0 | 142.0 | 140 | 2.0 | 10 | ★ |
| 9.70 | VAPDMD0970 | 87.0 | 142.0 | 140 | 2.0 | 10 | ★ |
| 9.80 | VAPDMD0980 | 87.0 | 142.0 | 140 | 2.0 | 10 | ★ |
| 9.90 | VAPDMD0990 | 87.1 | 142.1 | 140 | 2.1 | 10 | ★ |
| 10.00 | VAPDMD1000 | 87.1 | 142.1 | 140 | 2.1 | 10 | ● |
| 10.10 | VAPDMD1010 | 87.1 | 147.1 | 145 | 2.1 | 12 | ★ |
| 10.20 | VAPDMD1020 | 87.1 | 147.1 | 145 | 2.1 | 12 | ★ |
| 10.30 | VAPDMD1030 | 87.1 | 147.1 | 145 | 2.1 | 12 | ★ |
| 10.40 | VAPDMD1040 | 87.2 | 147.2 | 145 | 2.2 | 12 | ★ |
| 10.50 | VAPDMD1050 | 87.2 | 147.2 | 145 | 2.2 | 12 | ● |
| 10.60 | VAPDMD1060 | 87.2 | 147.2 | 145 | 2.2 | 12 | ★ |
| 10.70 | VAPDMD1070 | 94.2 | 154.2 | 152 | 2.2 | 12 | ★ |
| 10.80 | VAPDMD1080 | 94.2 | 154.2 | 152 | 2.2 | 12 | ★ |
| 10.90 | VAPDMD1090 | 94.3 | 154.3 | 152 | 2.3 | 12 | ★ |
| 11.00 | VAPDMD1100 | 94.3 | 154.3 | 152 | 2.3 | 12 | ● |
| 11.10 | VAPDMD1110 | 94.3 | 154.3 | 152 | 2.3 | 12 | ★ |
| 11.20 | VAPDMD1120 | 94.3 | 154.3 | 152 | 2.3 | 12 | ★ |
| 11.30 | VAPDMD1130 | 94.3 | 154.3 | 152 | 2.3 | 12 | ★ |
| 11.40 | VAPDMD1140 | 94.4 | 154.4 | 152 | 2.4 | 12 | ★ |
| 11.50 | VAPDMD1150 | 94.4 | 154.4 | 152 | 2.4 | 12 | ● |
| 11.60 | VAPDMD1160 | 94.4 | 154.4 | 152 | 2.4 | 12 | ★ |
| 11.70 | VAPDMD1170 | 94.4 | 154.4 | 152 | 2.4 | 12 | ★ |
| 11.80 | VAPDMD1180 | 94.4 | 154.4 | 152 | 2.4 | 12 | ★ |
| 11.90 | VAPDMD1190 | 101.5 | 161.5 | 159 | 2.5 | 12 | ★ |
| 12.00 | VAPDMD1200 | 101.5 | 161.5 | 159 | 2.5 | 12 | ● |
| 12.10 | VAPDMD1210 | 101.5 | 161.5 | 159 | 2.5 | 12 | ★ |
| 12.20 | VAPDMD1220 | 101.5 | 161.5 | 159 | 2.5 | 12 | ★ |
| 12.30 | VAPDMD1230 | 101.6 | 161.6 | 159 | 2.6 | 12 | ★ |
| 12.40 | VAPDMD1240 | 101.6 | 161.6 | 159 | 2.6 | 12 | ★ |
| 12.50 | VAPDMD1250 | 101.6 | 161.6 | 159 | 2.6 | 12 | ● |
| 12.60 | VAPDMD1260 | 101.6 | 161.6 | 159 | 2.6 | 12 | ★ |
| 12.70 | VAPDMD1270 | 101.6 | 161.6 | 159 | 2.6 | 12 | ★ |
| 12.80 | VAPDMD1280 | 101.7 | 161.7 | 159 | 2.7 | 12 | ★ |
| 12.90 | VAPDMD1290 | 101.7 | 161.7 | 159 | 2.7 | 12 | ★ |
| 13.00 | VAPDMD1300 | 101.7 | 161.7 | 159 | 2.7 | 12 | ● |
| 13.50 | VAPDMD1350 | 102.8 | 162.8 | 160 | 2.8 | 16 | ● |
| 14.00 | VAPDMD1400 | 102.9 | 162.9 | 160 | 2.9 | 16 | ● |
| 14.10 | VAPDMD1410 | 107.9 | 167.9 | 165 | 2.9 | 16 | ★ |
| 14.20 | VAPDMD1420 | 107.9 | 167.9 | 165 | 2.9 | 16 | ★ |
| 14.50 | VAPDMD1450 | 108.0 | 168.0 | 165 | 3.0 | 16 | ● |
| 15.00 | VAPDMD1500 | 108.1 | 168.1 | 165 | 3.1 | 16 | ● |

| DC (mm) | Référence | Dimensions (mm) | | | | | Stock |
|---|---|---|---|---|---|---|---|
| | | LCF | OAL | LF | PL | DCON | |
| 15.50 | VAPDMD1550 | 113.2 | 173.2 | 170 | 3.2 | 16 | ★ |
| 15.60 | VAPDMD1560 | 113.2 | 173.2 | 170 | 3.2 | 16 | ★ |
| 15.70 | VAPDMD1570 | 113.3 | 173.3 | 170 | 3.3 | 16 | ★ |
| 16.00 | VAPDMD1600 | 113.3 | 173.3 | 170 | 3.3 | 16 | ● |
| 16.50 | VAPDMD1650 | 113.4 | 178.4 | 175 | 3.4 | 20 | ● |
| 17.00 | VAPDMD1700 | 113.5 | 178.5 | 175 | 3.5 | 20 | ● |
| 17.50 | VAPDMD1750 | 118.6 | 183.6 | 180 | 3.6 | 20 | ● |
| 17.60 | VAPDMD1760 | 118.7 | 183.7 | 180 | 3.7 | 20 | ★ |
| 17.70 | VAPDMD1770 | 118.7 | 183.7 | 180 | 3.7 | 20 | ★ |
| 18.00 | VAPDMD1800 | 118.7 | 183.7 | 180 | 3.7 | 20 | ● |
| 18.50 | VAPDMD1850 | 123.8 | 188.8 | 185 | 3.8 | 20 | ★ |
| 19.00 | VAPDMD1900 | 123.9 | 188.9 | 185 | 3.9 | 20 | ★ |
| 19.50 | VAPDMD1950 | 124.0 | 189.0 | 185 | 4.0 | 20 | ★ |
| 19.60 | VAPDMD1960 | 124.1 | 189.1 | 185 | 4.1 | 20 | ★ |
| 19.70 | VAPDMD1970 | 124.1 | 189.1 | 185 | 4.1 | 20 | ★ |
| 20.00 | VAPDMD2000 | 124.1 | 189.1 | 185 | 4.1 | 20 | ★ |
| 20.50 | VAPDMD2050 | 129.3 | 204.3 | 200 | 4.3 | 25 | ● |
| 21.00 | VAPDMD2100 | 129.4 | 204.4 | 200 | 4.4 | 25 | ● |
| 21.10 | VAPDMD2110 | 129.4 | 204.4 | 200 | 4.4 | 25 | ★ |
| 21.20 | VAPDMD2120 | 129.4 | 204.4 | 200 | 4.4 | 25 | ★ |
| 21.50 | VAPDMD2150 | 129.5 | 204.5 | 200 | 4.5 | 25 | ★ |
| 22.00 | VAPDMD2200 | 129.6 | 204.6 | 200 | 4.6 | 25 | ● |
| 22.50 | VAPDMD2250 | 134.7 | 209.7 | 205 | 4.7 | 25 | ★ |
| 23.00 | VAPDMD2300 | 134.8 | 209.8 | 205 | 4.8 | 25 | ● |
| 23.50 | VAPDMD2350 | 134.9 | 209.9 | 205 | 4.9 | 25 | ★ |
| 24.00 | VAPDMD2400 | 140.0 | 215.0 | 210 | 5.0 | 25 | ★ |
| 24.50 | VAPDMD2450 | 140.1 | 215.1 | 210 | 5.1 | 25 | ★ |
| 25.00 | VAPDMD2500 | 140.2 | 215.2 | 210 | 5.2 | 25 | ★ |
| 25.50 | VAPDMD2550 | 145.3 | 225.3 | 220 | 5.3 | 32 | ● |
| 26.00 | VAPDMD2600 | 145.4 | 225.4 | 220 | 5.4 | 32 | ★ |
| 26.50 | VAPDMD2650 | 145.5 | 225.5 | 220 | 5.5 | 32 | ★ |
| 27.00 | VAPDMD2700 | 145.6 | 225.6 | 220 | 5.6 | 32 | ★ |
| 28.00 | VAPDMD2800 | 145.8 | 225.8 | 220 | 5.8 | 32 | ★ |
| 29.00 | VAPDMD2900 | 151.0 | 231.0 | 225 | 6.0 | 32 | ★ |
| 30.00 | VAPDMD3000 | 151.2 | 231.2 | 225 | 6.2 | 32 | ★ |
| 31.00 | VAPDMD3100 | 156.4 | 236.4 | 230 | 6.4 | 32 | ★ |
| 32.00 | VAPDMD3200 | 161.6 | 241.6 | 235 | 6.6 | 32 | ★ |

CONDITIONS DE COUPE ➤ M182
DONNÉES TECHNIQUES ➤ P001

HSS

# VAPDM

Longueur utile moyenne, haute précision

M

PERÇAGE

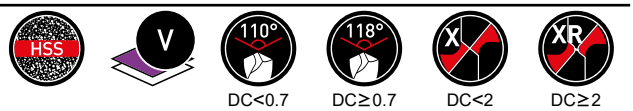
## CONDITIONS DE COUPE RECOMMANDÉES (Profondeur de perçage : jusqu'à 5 fois le diamètre)

| Matière | P | | P | K | P | M | P | M |
|---|---|---|---|---|---|---|---|---|
| | Acier structuré | | Acier carbone XC55<br>Acier allié 070M55<br>Fonte | | Alliage acier outil X210Cr12<br>(Faible dureté matière)<br>Ferritique Acier inox<br>X10CrAl18, X10CrAl13<br>Acier inoxydable martensitique<br>X20Cr13, X10CrAl13 | | Alliage acier outil X40CrMoV51<br>(−40HRC)<br>Acier difficile auto-trempant<br>X7CrNiAl177 | |
| Diamètre foret **DC** (mm) | Régime ($min^{-1}$) | Avance (mm/tour) | Régime ($min^{-1}$) | Avance (mm/tour) | Régime ($min^{-1}$) | Avance (mm/tour) | Régime ($min^{-1}$) | Avance (mm/tour) |
| **0.5** | 17000 | 0.01 | 12800 | 0.01 | 8000 | 0.01 | 6600 | 0.01 |
| **1.0** | 11000 | 0.05 | 8300 | 0.05 | 5000 | 0.05 | 4100 | 0.04 |
| **2.0** | 6400 | 0.09 | 4800 | 0.09 | 2900 | 0.06 | 2400 | 0.05 |
| **3.0** | 4300 | 0.13 | 3200 | 0.13 | 1900 | 0.10 | 1600 | 0.06 |
| **4.0** | 3200 | 0.15 | 2400 | 0.15 | 1400 | 0.10 | 1200 | 0.08 |
| **5.0** | 2600 | 0.18 | 1900 | 0.18 | 1100 | 0.13 | 950 | 0.10 |
| **6.0** | 2100 | 0.19 | 1600 | 0.20 | 950 | 0.15 | 800 | 0.11 |
| **8.0** | 1600 | 0.24 | 1200 | 0.22 | 720 | 0.18 | 600 | 0.13 |
| **10.0** | 1300 | 0.28 | 950 | 0.25 | 570 | 0.21 | 480 | 0.15 |
| **12.0** | 1100 | 0.34 | 800 | 0.30 | 480 | 0.25 | 400 | 0.17 |
| **14.0** | 910 | 0.39 | 680 | 0.35 | 410 | 0.30 | 340 | 0.21 |
| **15.0** | 850 | 0.40 | 640 | 0.36 | 380 | 0.31 | 320 | 0.22 |
| **16.0** | 800 | 0.42 | 600 | 0.38 | 360 | 0.32 | 300 | 0.23 |
| **18.0** | 710 | 0.44 | 530 | 0.40 | 320 | 0.34 | 270 | 0.24 |
| **20.0** | 570 | 0.44 | 450 | 0.40 | 250 | 0.34 | 220 | 0.24 |
| **22.0** | 520 | 0.46 | 410 | 0.42 | 230 | 0.36 | 200 | 0.25 |
| **24.0** | 480 | 0.48 | 370 | 0.44 | 210 | 0.37 | 190 | 0.26 |
| **26.0** | 440 | 0.51 | 340 | 0.46 | 200 | 0.39 | 170 | 0.28 |
| **28.0** | 410 | 0.53 | 320 | 0.48 | 180 | 0.41 | 160 | 0.29 |
| **30.0** | 380 | 0.55 | 300 | 0.50 | 170 | 0.43 | 150 | 0.30 |
| **32.0** | 360 | 0.55 | 280 | 0.50 | 160 | 0.43 | 140 | 0.30 |

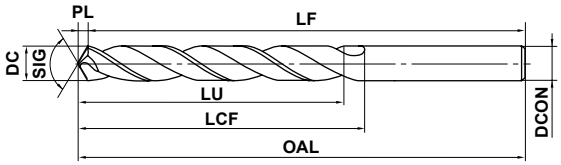
Remarque 1) Réduire la vitesse de rotation et l'avance en cas de manque de rigidité de la machine ou du montage de la pièce.
Remarque 2) Utiliser un mandrin à pince ou un mandrin de fraisage.
Remarque 3) Utiliser suffisamment de liquide de coupe.
Remarque 4) Lorsque vous percez des trous de plus de 4 x D, veuillez utiliser un cycle de brise-copeaux.
Remarque 5) Les conditions de coupe mentionnées ci-dessus sont standards et avec l'utilisation d'un liquide de coupe.
Veuillez réduire la rotation quand vous usinez sans liquide de coupe.

# VSD

Queue cylindrique




P | M | K | N | S | H




*LU = LCF-2DC

| 0.5≤DC≤1 | 1≤DC≤3 | 3<DC≤6 | 6<DC≤10 | 10<DC≤13 |
|---|---|---|---|---|
| 0 −0.010 | 0 −0.014 | 0 −0.018 | 0 −0.022 | 0 −0.027 |

| DC (mm) | Référence | Dimensions (mm) LCF | OAL | LF | PL | DCON | Stock |
|---|---|---|---|---|---|---|---|
| 0.5 | VSDD0050 | 6.2 | 27.2 | 27 | 0.18 | 0.5 | ★ |
| 0.6 | VSDD0060 | 7.2 | 30.2 | 30 | 0.21 | 0.6 | ● |
| 0.7 | VSDD0070 | 9.2 | 32.2 | 32 | 0.21 | 0.7 | ● |
| 0.8 | VSDD0080 | 10.2 | 34.2 | 34 | 0.24 | 0.8 | ● |
| 0.9 | VSDD0090 | 11.3 | 36.3 | 36 | 0.27 | 0.9 | ● |
| 1.0 | VSDD0100 | 12.3 | 40.3 | 40 | 0.3 | 1.0 | ● |
| 1.1 | VSDD0110 | 14.3 | 42.3 | 42 | 0.3 | 1.1 | ● |
| 1.2 | VSDD0120 | 16.4 | 42.4 | 42 | 0.4 | 1.2 | ● |
| 1.3 | VSDD0130 | 16.4 | 45.4 | 45 | 0.4 | 1.3 | ● |
| 1.4 | VSDD0140 | 18.4 | 48.4 | 48 | 0.4 | 1.4 | ● |
| 1.5 | VSDD0150 | 18.5 | 48.5 | 48 | 0.5 | 1.5 | ● |
| 1.6 | VSDD0160 | 20.5 | 50.5 | 50 | 0.5 | 1.6 | ● |
| 1.7 | VSDD0170 | 20.5 | 50.5 | 50 | 0.5 | 1.7 | ★ |
| 1.8 | VSDD0180 | 22.5 | 52.5 | 52 | 0.5 | 1.8 | ● |
| 1.9 | VSDD0190 | 22.6 | 52.6 | 52 | 0.6 | 1.9 | ● |
| 2.0 | VSDD0200 | 23.6 | 55.6 | 55 | 0.6 | 2.0 | ● |
| 2.1 | VSDD0210 | 23.6 | 55.6 | 55 | 0.6 | 2.1 | ● |
| 2.2 | VSDD0220 | 26.7 | 58.7 | 58 | 0.7 | 2.2 | ● |
| 2.3 | VSDD0230 | 26.7 | 58.7 | 58 | 0.7 | 2.3 | ★ |
| 2.4 | VSDD0240 | 29.7 | 61.7 | 61 | 0.7 | 2.4 | ★ |
| 2.5 | VSDD0250 | 29.8 | 61.8 | 61 | 0.8 | 2.5 | ● |
| 2.6 | VSDD0260 | 29.8 | 64.8 | 64 | 0.8 | 2.6 | ★ |
| 2.7 | VSDD0270 | 32.8 | 64.8 | 64 | 0.8 | 2.7 | ★ |
| 2.8 | VSDD0280 | 32.8 | 67.8 | 67 | 0.8 | 2.8 | ● |
| 2.9 | VSDD0290 | 32.9 | 71.9 | 71 | 0.9 | 2.9 | ★ |
| 3.0 | VSDD0300 | 32.9 | 71.9 | 71 | 0.9 | 3.0 | ● |
| 3.1 | VSDD0310 | 35.9 | 71.9 | 71 | 0.9 | 3.1 | ● |
| 3.2 | VSDD0320 | 36.0 | 72.0 | 71 | 1.0 | 3.2 | ● |
| 3.3 | VSDD0330 | 36.0 | 74.0 | 73 | 1.0 | 3.3 | ● |
| 3.4 | VSDD0340 | 39.0 | 74.0 | 73 | 1.0 | 3.4 | ● |
| 3.5 | VSDD0350 | 39.1 | 74.1 | 73 | 1.1 | 3.5 | ● |
| 3.6 | VSDD0360 | 39.1 | 77.1 | 76 | 1.1 | 3.6 | ★ |
| 3.7 | VSDD0370 | 39.1 | 77.1 | 76 | 1.1 | 3.7 | ★ |
| 3.8 | VSDD0380 | 43.1 | 77.1 | 76 | 1.1 | 3.8 | ★ |
| 3.9 | VSDD0390 | 43.2 | 80.2 | 79 | 1.2 | 3.9 | ★ |
| 4.0 | VSDD0400 | 43.2 | 84.2 | 83 | 1.2 | 4.0 | ● |
| 4.1 | VSDD0410 | 43.2 | 84.2 | 83 | 1.2 | 4.1 | ● |
| 4.2 | VSDD0420 | 43.3 | 84.3 | 83 | 1.3 | 4.2 | ● |
| 4.3 | VSDD0430 | 47.3 | 84.3 | 83 | 1.3 | 4.3 | ● |
| 4.4 | VSDD0440 | 47.3 | 87.3 | 86 | 1.3 | 4.4 | ★ |

| DC (mm) | Référence | Dimensions (mm) LCF | OAL | LF | PL | DCON | Stock |
|---|---|---|---|---|---|---|---|
| 4.5 | VSDD0450 | 47.4 | 87.4 | 86 | 1.4 | 4.5 | ● |
| 4.6 | VSDD0460 | 47.4 | 87.4 | 86 | 1.4 | 4.6 | ★ |
| 4.7 | VSDD0470 | 47.4 | 90.4 | 89 | 1.4 | 4.7 | ★ |
| 4.8 | VSDD0480 | 52.4 | 90.4 | 89 | 1.4 | 4.8 | ● |
| 4.9 | VSDD0490 | 52.5 | 93.5 | 92 | 1.5 | 4.9 | ★ |
| 5.0 | VSDD0500 | 52.5 | 93.5 | 92 | 1.5 | 5.0 | ● |
| 5.1 | VSDD0510 | 52.5 | 93.5 | 92 | 1.5 | 5.1 | ● |
| 5.2 | VSDD0520 | 52.6 | 96.6 | 95 | 1.6 | 5.2 | ● |
| 5.3 | VSDD0530 | 52.6 | 96.6 | 95 | 1.6 | 5.3 | ★ |
| 5.4 | VSDD0540 | 57.6 | 96.6 | 95 | 1.6 | 5.4 | ★ |
| 5.5 | VSDD0550 | 57.7 | 96.7 | 95 | 1.7 | 5.5 | ● |
| 5.6 | VSDD0560 | 57.7 | 99.7 | 98 | 1.7 | 5.6 | ★ |
| 5.7 | VSDD0570 | 57.7 | 99.7 | 98 | 1.7 | 5.7 | ★ |
| 5.8 | VSDD0580 | 57.7 | 99.7 | 98 | 1.7 | 5.8 | ★ |
| 5.9 | VSDD0590 | 57.8 | 99.8 | 98 | 1.8 | 5.9 | ● |
| 6.0 | VSDD0600 | 57.8 | 103.8 | 102 | 1.8 | 6.0 | ● |
| 6.1 | VSDD0610 | 63.8 | 103.8 | 102 | 1.8 | 6.1 | ★ |
| 6.2 | VSDD0620 | 63.9 | 103.9 | 102 | 1.9 | 6.2 | ● |
| 6.3 | VSDD0630 | 63.9 | 103.9 | 102 | 1.9 | 6.3 | ● |
| 6.4 | VSDD0640 | 63.9 | 106.9 | 105 | 1.9 | 6.4 | ★ |
| 6.5 | VSDD0650 | 64.0 | 107.0 | 105 | 2.0 | 6.5 | ● |
| 6.6 | VSDD0660 | 64.0 | 107.0 | 105 | 2.0 | 6.6 | ★ |
| 6.7 | VSDD0670 | 64.0 | 107.0 | 105 | 2.0 | 6.7 | ★ |
| 6.8 | VSDD0680 | 69.0 | 107.0 | 105 | 2.0 | 6.8 | ● |
| 6.9 | VSDD0690 | 69.1 | 107.1 | 105 | 2.1 | 6.9 | ★ |
| 7.0 | VSDD0700 | 69.1 | 107.1 | 105 | 2.1 | 7.0 | ● |
| 7.1 | VSDD0710 | 69.1 | 110.1 | 108 | 2.1 | 7.1 | ★ |
| 7.2 | VSDD0720 | 69.2 | 110.2 | 108 | 2.2 | 7.2 | ★ |
| 7.3 | VSDD0730 | 69.2 | 110.2 | 108 | 2.2 | 7.3 | ● |
| 7.4 | VSDD0740 | 69.2 | 113.2 | 111 | 2.2 | 7.4 | ★ |
| 7.5 | VSDD0750 | 69.3 | 113.3 | 111 | 2.3 | 7.5 | ★ |
| 7.6 | VSDD0760 | 75.3 | 113.3 | 111 | 2.3 | 7.6 | ★ |
| 7.7 | VSDD0770 | 75.3 | 116.3 | 114 | 2.3 | 7.7 | ★ |
| 7.8 | VSDD0780 | 75.3 | 116.3 | 114 | 2.3 | 7.8 | ★ |
| 7.9 | VSDD0790 | 75.4 | 116.4 | 114 | 2.4 | 7.9 | ● |
| 8.0 | VSDD0800 | 75.4 | 116.4 | 114 | 2.4 | 8.0 | ● |
| 8.1 | VSDD0810 | 75.4 | 119.4 | 117 | 2.4 | 8.1 | ★ |
| 8.2 | VSDD0820 | 75.5 | 119.5 | 117 | 2.5 | 8.2 | ★ |
| 8.3 | VSDD0830 | 75.5 | 119.5 | 117 | 2.5 | 8.3 | ★ |
| 8.4 | VSDD0840 | 75.5 | 123.5 | 121 | 2.5 | 8.4 | ★ |

Remarque 1) Du Ø0,5 au Ø1,9 mm : 5 pcs/boîte, Pour les diamètres supérieurs à ø2 mm : 1 pc/boîte.

● : Article stocké. ★ : Article standard Japon.

CONDITIONS DE COUPE ➤ M184
DONNÉES TECHNIQUES ➤ P001

# FORETS VIOLET

## VSD

Queue cylindrique

| DC (mm) | Référence | Dimensions (mm) LCF | OAL | LF | PL | DCON | Stock |
|---|---|---|---|---|---|---|---|
| **8.5** | **VSDD0850** | 75.6 | 123.6 | 121 | 2.6 | 8.5 | ● |
| **8.6** | **VSDD0860** | 81.6 | 123.6 | 121 | 2.6 | 8.6 | ● |
| **8.7** | **VSDD0870** | 81.6 | 123.6 | 121 | 2.6 | 8.7 | ● |
| **8.8** | **VSDD0880** | 81.6 | 126.6 | 124 | 2.6 | 8.8 | ★ |
| **8.9** | **VSDD0890** | 81.7 | 126.7 | 124 | 2.7 | 8.9 | ★ |
| **9.0** | **VSDD0900** | 81.7 | 126.7 | 124 | 2.7 | 9.0 | ● |
| **9.1** | **VSDD0910** | 81.7 | 126.7 | 124 | 2.7 | 9.1 | ★ |
| **9.2** | **VSDD0920** | 81.8 | 129.8 | 127 | 2.8 | 9.2 | ★ |
| **9.3** | **VSDD0930** | 81.8 | 129.8 | 127 | 2.8 | 9.3 | ★ |
| **9.4** | **VSDD0940** | 81.8 | 129.8 | 127 | 2.8 | 9.4 | ★ |
| **9.5** | **VSDD0950** | 81.9 | 129.9 | 127 | 2.9 | 9.5 | ● |
| **9.6** | **VSDD0960** | 87.9 | 132.9 | 130 | 2.9 | 9.6 | ★ |
| **9.7** | **VSDD0970** | 87.9 | 132.9 | 130 | 2.9 | 9.7 | ★ |
| **9.8** | **VSDD0980** | 87.9 | 132.9 | 130 | 2.9 | 9.8 | ★ |
| **9.9** | **VSDD0990** | 88.0 | 133.0 | 130 | 3.0 | 9.9 | ★ |
| **10.0** | **VSDD1000** | 88.0 | 133.0 | 130 | 3.0 | 10.0 | ● |
| **10.1** | **VSDD1010** | 88.0 | 136.0 | 133 | 3.0 | 10.1 | ★ |
| **10.2** | **VSDD1020** | 88.1 | 136.1 | 133 | 3.1 | 10.2 | ● |
| **10.3** | **VSDD1030** | 88.1 | 136.1 | 133 | 3.1 | 10.3 | ● |
| **10.4** | **VSDD1040** | 88.1 | 136.1 | 133 | 3.1 | 10.4 | ★ |
| **10.5** | **VSDD1050** | 88.2 | 140.2 | 137 | 3.2 | 10.5 | ● |
| **10.6** | **VSDD1060** | 88.2 | 140.2 | 137 | 3.2 | 10.6 | ★ |
| **10.7** | **VSDD1070** | 95.2 | 140.2 | 137 | 3.2 | 10.7 | ★ |

| DC (mm) | Référence | Dimensions (mm) LCF | OAL | LF | PL | DCON | Stock |
|---|---|---|---|---|---|---|---|
| **10.8** | **VSDD1080** | 95.2 | 143.2 | 140 | 3.2 | 10.8 | ★ |
| **10.9** | **VSDD1090** | 95.3 | 143.3 | 140 | 3.3 | 10.9 | ★ |
| **11.0** | **VSDD1100** | 95.3 | 143.3 | 140 | 3.3 | 11.0 | ● |
| **11.1** | **VSDD1110** | 95.3 | 143.3 | 140 | 3.3 | 11.1 | ★ |
| **11.2** | **VSDD1120** | 95.4 | 146.4 | 143 | 3.4 | 11.2 | ★ |
| **11.3** | **VSDD1130** | 95.4 | 146.4 | 143 | 3.4 | 11.3 | ★ |
| **11.4** | **VSDD1140** | 95.4 | 146.4 | 143 | 3.4 | 11.4 | ★ |
| **11.5** | **VSDD1150** | 95.5 | 146.5 | 143 | 3.5 | 11.5 | ★ |
| **11.6** | **VSDD1160** | 95.5 | 149.5 | 146 | 3.5 | 11.6 | ★ |
| **11.7** | **VSDD1170** | 95.5 | 149.5 | 146 | 3.5 | 11.7 | ★ |
| **11.8** | **VSDD1180** | 95.5 | 149.5 | 146 | 3.5 | 11.8 | ★ |
| **11.9** | **VSDD1190** | 102.6 | 149.6 | 146 | 3.6 | 11.9 | ★ |
| **12.0** | **VSDD1200** | 102.6 | 152.6 | 149 | 3.6 | 12.0 | ● |
| **12.1** | **VSDD1210** | 102.6 | 152.6 | 149 | 3.6 | 12.1 | ★ |
| **12.2** | **VSDD1220** | 102.7 | 152.7 | 149 | 3.7 | 12.2 | ★ |
| **12.3** | **VSDD1230** | 102.7 | 152.7 | 149 | 3.7 | 12.3 | ★ |
| **12.4** | **VSDD1240** | 102.7 | 155.7 | 152 | 3.7 | 12.4 | ★ |
| **12.5** | **VSDD1250** | 102.8 | 155.8 | 152 | 3.8 | 12.5 | ★ |
| **12.6** | **VSDD1260** | 102.8 | 155.8 | 152 | 3.8 | 12.6 | ★ |
| **12.7** | **VSDD1270** | 102.8 | 155.8 | 152 | 3.8 | 12.7 | ★ |
| **12.8** | **VSDD1280** | 102.8 | 155.8 | 152 | 3.8 | 12.8 | ★ |
| **12.9** | **VSDD1290** | 102.9 | 155.9 | 152 | 3.9 | 12.9 | ★ |
| **13.0** | **VSDD1300** | 102.9 | 155.9 | 152 | 3.9 | 13.0 | ● |

## CONDITIONS DE COUPE RECOMMANDÉES

| Matière | P Acier structuré | | P Acier carbone XC55 | | M Acier inoxydable X20Cr13 | | P / M Acier inox X5CrNi1810 Acier outil X210Cr12 (Faible dureté matière) Acier traité X40CrMoV51 (−40HRC) | |
|---|---|---|---|---|---|---|---|---|
| Vitesse de coupe | 40m/min | | 30m/min | | 20m/min | | 10−14m/min | |
| Diamètre foret **DC** (mm) | Régime ($min^{-1}$) | Avance (mm/tour) | Régime ($min^{-1}$) | Avance (mm/tour) | Régime ($min^{-1}$) | Avance (mm/tour) | Régime ($min^{-1}$) | Avance (mm/tour) |
| **0.5** | 15000 | 0.01 | 11250 | 0.01 | 7500 | 0.01 | 5620 | 0.01 |
| **1.0** | 10000 | 0.02 | 7500 | 0.02 | 5000 | 0.02 | 3750 | 0.02 |
| **1.5** | 8200 | 0.03 | 6150 | 0.03 | 4100 | 0.03 | 2800 | 0.03 |
| **2.0** | 6370 | 0.05 | 4780 | 0.05 | 3180 | 0.05 | 2200 | 0.04 |
| **3.0** | 4250 | 0.10 | 3180 | 0.10 | 2120 | 0.07 | 1400 | 0.06 |
| **4.0** | 3180 | 0.13 | 2390 | 0.13 | 1590 | 0.09 | 1100 | 0.08 |
| **5.0** | 2550 | 0.15 | 1910 | 0.15 | 1270 | 0.11 | 860 | 0.10 |
| **6.0** | 2120 | 0.18 | 1590 | 0.18 | 1060 | 0.13 | 720 | 0.11 |
| **7.0** | 1820 | 0.20 | 1360 | 0.20 | 910 | 0.14 | 610 | 0.12 |
| **8.0** | 1590 | 0.22 | 1190 | 0.21 | 800 | 0.15 | 540 | 0.13 |
| **9.0** | 1420 | 0.24 | 1060 | 0.22 | 710 | 0.17 | 480 | 0.14 |
| **10.0** | 1270 | 0.26 | 960 | 0.23 | 640 | 0.18 | 430 | 0.15 |
| **11.0** | 1160 | 0.28 | 870 | 0.24 | 580 | 0.19 | 390 | 0.16 |
| **12.0** | 1060 | 0.30 | 800 | 0.25 | 530 | 0.20 | 360 | 0.17 |
| **13.0** | 980 | 0.30 | 730 | 0.26 | 490 | 0.20 | 330 | 0.17 |

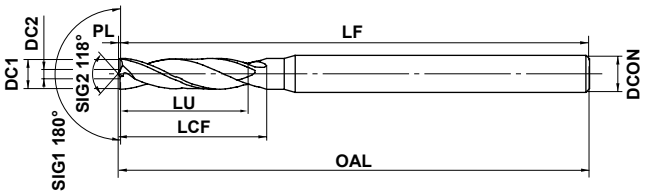
Remarque 1) Réduire la vitesse de rotation et l'avance en cas de manque de rigidité de la machine ou du montage de la pièce.
Remarque 2) Les conditions de coupe mentionnées ci-dessus sont standards et avec l'utilisation d'un liquide de coupe.
Veuillez réduire la rotation quand vous usinez sans liquide de coupe.

# VAPDSCB

Longueur utile courte, haute précision, pour le perçage et le lamage

P M K N S H

| DC≤3 | 3<DC≤6 | 6<DC≤10 | 10<DC≤18 | 18<DC≤30 | 30<DC≤32 |
|---|---|---|---|---|---|
| 0 −0.014 | 0 −0.018 | 0 −0.022 | 0 −0.027 | 0 −0.033 | 0 −0.039 |




*LU = LCF-2DC (max 3×DC)

● Sa géométrie unique permet un perçage-alésage très efficace.
Excellente fragmentation des copeaux et surface de lamage plane.

| DC1 (mm) | Référence | Dimensions (mm) DC2 | LCF | OAL | LF | PL | DCON | Stock |
|---|---|---|---|---|---|---|---|---|
| 2.0 | VAPDSCBD0200 | 0.7 | 12 | 60.2 | 60 | 0.2 | 3 | ★ |
| 2.1 | VAPDSCBD0210 | 0.7 | 12 | 60.2 | 60 | 0.2 | 3 | ★ |
| 2.2 | VAPDSCBD0220 | 0.7 | 12 | 60.2 | 60 | 0.2 | 3 | ★ |
| 2.3 | VAPDSCBD0230 | 0.7 | 13 | 60.2 | 60 | 0.2 | 3 | ★ |
| 2.4 | VAPDSCBD0240 | 0.7 | 13 | 60.2 | 60 | 0.2 | 3 | ★ |
| 2.5 | VAPDSCBD0250 | 0.7 | 13 | 60.2 | 60 | 0.2 | 3 | ★ |
| 2.6 | VAPDSCBD0260 | 0.8 | 15 | 60.2 | 60 | 0.2 | 3 | ★ |
| 2.7 | VAPDSCBD0270 | 0.8 | 15 | 60.2 | 60 | 0.2 | 3 | ★ |
| 2.8 | VAPDSCBD0280 | 0.8 | 15 | 60.2 | 60 | 0.2 | 3 | ★ |
| 2.9 | VAPDSCBD0290 | 0.8 | 15 | 60.2 | 60 | 0.2 | 3 | ★ |
| 3.0 | VAPDSCBD0300 | 0.8 | 15 | 60.2 | 60 | 0.2 | 3 | ★ |
| 3.1 | VAPDSCBD0310 | 0.8 | 17 | 70.2 | 70 | 0.2 | 4 | ★ |
| 3.2 | VAPDSCBD0320 | 0.8 | 17 | 70.2 | 70 | 0.2 | 4 | ★ |
| 3.3 | VAPDSCBD0330 | 0.8 | 19 | 70.2 | 70 | 0.2 | 4 | ★ |
| 3.4 | VAPDSCBD0340 | 0.8 | 19 | 70.2 | 70 | 0.2 | 4 | ★ |
| 3.5 | VAPDSCBD0350 | 0.8 | 19 | 70.2 | 70 | 0.2 | 4 | ★ |
| 3.6 | VAPDSCBD0360 | 1.0 | 21 | 70.2 | 70 | 0.2 | 4 | ★ |
| 3.7 | VAPDSCBD0370 | 1.0 | 21 | 70.2 | 70 | 0.2 | 4 | ★ |
| 3.8 | VAPDSCBD0380 | 1.0 | 21 | 70.2 | 70 | 0.2 | 4 | ★ |
| 3.9 | VAPDSCBD0390 | 1.0 | 21 | 70.2 | 70 | 0.2 | 4 | ★ |
| 4.0 | VAPDSCBD0400 | 1.0 | 21 | 70.3 | 70 | 0.3 | 4 | ★ |
| 4.1 | VAPDSCBD0410 | 1.0 | 21 | 80.3 | 80 | 0.3 | 6 | ★ |
| 4.2 | VAPDSCBD0420 | 1.0 | 21 | 80.3 | 80 | 0.3 | 6 | ★ |
| 4.3 | VAPDSCBD0430 | 1.0 | 23 | 80.3 | 80 | 0.3 | 6 | ★ |
| 4.4 | VAPDSCBD0440 | 1.0 | 23 | 80.3 | 80 | 0.3 | 6 | ★ |
| 4.5 | VAPDSCBD0450 | 1.0 | 23 | 80.3 | 80 | 0.3 | 6 | ★ |
| 4.6 | VAPDSCBD0460 | 1.4 | 25 | 80.3 | 80 | 0.3 | 6 | ★ |
| 4.7 | VAPDSCBD0470 | 1.4 | 25 | 80.3 | 80 | 0.3 | 6 | ★ |
| 4.8 | VAPDSCBD0480 | 1.4 | 25 | 80.3 | 80 | 0.3 | 6 | ★ |
| 4.9 | VAPDSCBD0490 | 1.4 | 25 | 80.3 | 80 | 0.3 | 6 | ★ |
| 5.0 | VAPDSCBD0500 | 1.4 | 25 | 80.4 | 80 | 0.4 | 6 | ★ |
| 5.1 | VAPDSCBD0510 | 1.4 | 25 | 80.4 | 80 | 0.4 | 6 | ★ |
| 5.2 | VAPDSCBD0520 | 1.4 | 25 | 80.4 | 80 | 0.4 | 6 | ★ |
| 5.3 | VAPDSCBD0530 | 1.4 | 25 | 80.4 | 80 | 0.4 | 6 | ★ |
| 5.4 | VAPDSCBD0540 | 1.4 | 27 | 80.4 | 80 | 0.4 | 6 | ★ |
| 5.5 | VAPDSCBD0550 | 1.4 | 27 | 80.4 | 80 | 0.4 | 6 | ★ |
| 5.6 | VAPDSCBD0560 | 1.4 | 27 | 80.4 | 80 | 0.4 | 6 | ★ |
| 5.7 | VAPDSCBD0570 | 1.4 | 27 | 80.4 | 80 | 0.4 | 6 | ★ |
| 5.8 | VAPDSCBD0580 | 1.4 | 27 | 80.4 | 80 | 0.4 | 6 | ★ |
| 5.9 | VAPDSCBD0590 | 1.4 | 27 | 80.4 | 80 | 0.4 | 6 | ★ |

| DC1 (mm) | Référence | Dimensions (mm) DC2 | LCF | OAL | LF | PL | DCON | Stock |
|---|---|---|---|---|---|---|---|---|
| 6.0 | VAPDSCBD0600 | 1.4 | 27 | 80.4 | 80 | 0.4 | 6 | ★ |
| 6.1 | VAPDSCBD0610 | 1.4 | 30 | 80.4 | 80 | 0.4 | 8 | ★ |
| 6.2 | VAPDSCBD0620 | 1.4 | 30 | 80.4 | 80 | 0.4 | 8 | ★ |
| 6.3 | VAPDSCBD0630 | 1.4 | 30 | 80.4 | 80 | 0.4 | 8 | ★ |
| 6.4 | VAPDSCBD0640 | 1.4 | 30 | 80.4 | 80 | 0.4 | 8 | ★ |
| 6.5 | VAPDSCBD0650 | 1.4 | 30 | 80.4 | 80 | 0.4 | 8 | ★ |
| 6.6 | VAPDSCBD0660 | 1.8 | 30 | 80.4 | 80 | 0.4 | 8 | ★ |
| 6.7 | VAPDSCBD0670 | 1.8 | 30 | 80.4 | 80 | 0.4 | 8 | ★ |
| 6.8 | VAPDSCBD0680 | 1.8 | 32 | 80.4 | 80 | 0.4 | 8 | ★ |
| 6.9 | VAPDSCBD0690 | 1.8 | 32 | 80.4 | 80 | 0.4 | 8 | ★ |
| 7.0 | VAPDSCBD0700 | 1.8 | 32 | 80.6 | 80 | 0.6 | 8 | ★ |
| 7.1 | VAPDSCBD0710 | 1.8 | 32 | 80.6 | 80 | 0.6 | 8 | ★ |
| 7.2 | VAPDSCBD0720 | 1.8 | 32 | 80.6 | 80 | 0.6 | 8 | ★ |
| 7.3 | VAPDSCBD0730 | 1.8 | 32 | 80.6 | 80 | 0.6 | 8 | ★ |
| 7.4 | VAPDSCBD0740 | 1.8 | 32 | 80.6 | 80 | 0.6 | 8 | ★ |
| 7.5 | VAPDSCBD0750 | 1.8 | 32 | 80.6 | 80 | 0.6 | 8 | ★ |
| 7.6 | VAPDSCBD0760 | 2.0 | 35 | 85.6 | 85 | 0.6 | 8 | ★ |
| 7.7 | VAPDSCBD0770 | 2.0 | 35 | 85.6 | 85 | 0.6 | 8 | ★ |
| 7.8 | VAPDSCBD0780 | 2.0 | 35 | 85.6 | 85 | 0.6 | 8 | ★ |
| 7.9 | VAPDSCBD0790 | 2.0 | 35 | 85.6 | 85 | 0.6 | 8 | ★ |
| 8.0 | VAPDSCBD0800 | 2.0 | 35 | 85.6 | 85 | 0.6 | 8 | ★ |
| 8.1 | VAPDSCBD0810 | 2.0 | 35 | 90.6 | 90 | 0.6 | 10 | ★ |
| 8.5 | VAPDSCBD0850 | 2.0 | 35 | 90.6 | 90 | 0.6 | 10 | ★ |
| 8.6 | VAPDSCBD0860 | 2.8 | 38 | 93.6 | 93 | 0.6 | 10 | ★ |
| 8.8 | VAPDSCBD0880 | 2.8 | 38 | 93.6 | 93 | 0.6 | 10 | ★ |
| 9.0 | VAPDSCBD0900 | 2.8 | 38 | 93.8 | 93 | 0.8 | 10 | ★ |
| 9.1 | VAPDSCBD0910 | 2.8 | 38 | 93.8 | 93 | 0.8 | 10 | ★ |
| 9.5 | VAPDSCBD0950 | 2.8 | 38 | 93.8 | 93 | 0.8 | 10 | ★ |
| 9.6 | VAPDSCBD0960 | 3.2 | 41 | 96.8 | 96 | 0.8 | 10 | ★ |
| 9.8 | VAPDSCBD0980 | 3.2 | 41 | 96.8 | 96 | 0.8 | 10 | ★ |
| 10.0 | VAPDSCBD1000 | 3.2 | 41 | 96.9 | 96 | 0.9 | 10 | ★ |
| 10.1 | VAPDSCBD1010 | 3.2 | 41 | 101.9 | 101 | 0.9 | 12 | ★ |
| 10.3 | VAPDSCBD1030 | 3.2 | 41 | 101.9 | 101 | 0.9 | 12 | ★ |
| 10.5 | VAPDSCBD1050 | 3.2 | 41 | 101.9 | 101 | 0.9 | 12 | ★ |
| 10.8 | VAPDSCBD1080 | 3.7 | 45 | 105.9 | 105 | 0.9 | 12 | ★ |
| 11.0 | VAPDSCBD1100 | 3.7 | 45 | 105.9 | 105 | 0.9 | 12 | ★ |
| 11.1 | VAPDSCBD1110 | 3.7 | 45 | 105.9 | 105 | 0.9 | 12 | ★ |
| 11.5 | VAPDSCBD1150 | 3.7 | 45 | 105.9 | 105 | 0.9 | 12 | ★ |
| 11.8 | VAPDSCBD1180 | 3.7 | 45 | 105.9 | 105 | 0.9 | 12 | ★ |
| 12.0 | VAPDSCBD1200 | 3.7 | 49 | 109.9 | 109 | 0.9 | 12 | ★ |

★ : Article standard Japon.

CONDITIONS DE COUPE ➤ M187
DONNÉES TECHNIQUES ➤ P001

# VAPDSCB

Longueur utile courte, haute précision, pour le perçage et le lamage



| DC1 (mm) | Référence | Dimensions (mm) | | | | | | Stock |
|---|---|---|---|---|---|---|---|---|
| | | DC2 | LCF | OAL | LF | PL | DCON | |
| 12.5 | VAPDSCBD1250 | 3.7 | 49 | 109.9 | 109 | 0.9 | 12 | ★ |
| 13.0 | VAPDSCBD1300 | 4.2 | 49 | 110.1 | 109 | 1.1 | 12 | ★ |
| 13.5 | VAPDSCBD1350 | 4.2 | 51 | 122.1 | 121 | 1.1 | 16 | ★ |
| 13.8 | VAPDSCBD1380 | 4.2 | 51 | 122.1 | 121 | 1.1 | 16 | ★ |
| 14.0 | VAPDSCBD1400 | 4.2 | 51 | 122.1 | 121 | 1.1 | 16 | ★ |
| 14.1 | VAPDSCBD1410 | 5.5 | 58 | 124.1 | 123 | 1.1 | 16 | ★ |
| 14.2 | VAPDSCBD1420 | 5.5 | 58 | 124.1 | 123 | 1.1 | 16 | ★ |
| 14.5 | VAPDSCBD1450 | 5.5 | 58 | 124.1 | 123 | 1.1 | 16 | ★ |
| 14.8 | VAPDSCBD1480 | 5.5 | 58 | 124.1 | 123 | 1.1 | 16 | ★ |
| 15.0 | VAPDSCBD1500 | 5.5 | 58 | 124.3 | 123 | 1.3 | 16 | ★ |
| 15.5 | VAPDSCBD1550 | 5.5 | 60 | 126.3 | 125 | 1.3 | 16 | ★ |
| 15.7 | VAPDSCBD1570 | 5.5 | 60 | 126.3 | 125 | 1.3 | 16 | ★ |
| 15.8 | VAPDSCBD1580 | 5.5 | 60 | 126.3 | 125 | 1.3 | 16 | ★ |
| 16.0 | VAPDSCBD1600 | 5.5 | 60 | 126.3 | 125 | 1.3 | 16 | ★ |
| 17.0 | VAPDSCBD1700 | 5.5 | 62 | 133.3 | 132 | 1.3 | 20 | ★ |
| 17.5 | VAPDSCBD1750 | 5.5 | 63 | 134.6 | 133 | 1.6 | 20 | ★ |
| 17.6 | VAPDSCBD1760 | 6.5 | 63 | 134.6 | 133 | 1.6 | 20 | ★ |
| 17.7 | VAPDSCBD1770 | 6.5 | 63 | 134.6 | 133 | 1.6 | 20 | ★ |
| 17.8 | VAPDSCBD1780 | 6.5 | 63 | 134.6 | 133 | 1.6 | 20 | ★ |
| 18.0 | VAPDSCBD1800 | 6.5 | 63 | 134.6 | 133 | 1.6 | 20 | ★ |
| 18.1 | VAPDSCBD1810 | 6.5 | 65 | 136.6 | 135 | 1.6 | 20 | ★ |
| 19.0 | VAPDSCBD1900 | 6.5 | 65 | 136.6 | 135 | 1.6 | 20 | ★ |
| 19.8 | VAPDSCBD1980 | 7.5 | 67 | 138.6 | 137 | 1.6 | 20 | ★ |
| 20.0 | VAPDSCBD2000 | 7.5 | 67 | 138.8 | 137 | 1.8 | 20 | ★ |
| 20.1 | VAPDSCBD2010 | 7.5 | 67 | 138.8 | 137 | 1.8 | 20 | ★ |
| 21.0 | VAPDSCBD2100 | 7.5 | 75 | 166.8 | 165 | 1.8 | 25 | ★ |
| 22.0 | VAPDSCBD2200 | 7.5 | 75 | 166.8 | 165 | 1.8 | 25 | ★ |
| 23.0 | VAPDSCBD2300 | 7.5 | 80 | 171.8 | 170 | 1.8 | 25 | ★ |
| 24.0 | VAPDSCBD2400 | 8.5 | 80 | 172.2 | 170 | 2.2 | 25 | ★ |
| 25.0 | VAPDSCBD2500 | 8.5 | 85 | 182.2 | 180 | 2.2 | 25 | ★ |
| 26.0 | VAPDSCBD2600 | 9.0 | 85 | 182.2 | 180 | 2.2 | 32 | ★ |
| 27.0 | VAPDSCBD2700 | 9.0 | 95 | 192.2 | 190 | 2.2 | 32 | ★ |
| 28.0 | VAPDSCBD2800 | 10.0 | 95 | 192.6 | 190 | 2.6 | 32 | ★ |
| 29.0 | VAPDSCBD2900 | 10.0 | 100 | 197.6 | 195 | 2.6 | 32 | ★ |
| 30.0 | VAPDSCBD3000 | 11.0 | 100 | 197.6 | 195 | 2.6 | 32 | ★ |
| 31.0 | VAPDSCBD3100 | 11.0 | 105 | 202.6 | 200 | 2.6 | 32 | ★ |
| 32.0 | VAPDSCBD3200 | 13.0 | 105 | 202.6 | 200 | 2.6 | 32 | ★ |

★ : Article standard Japon.

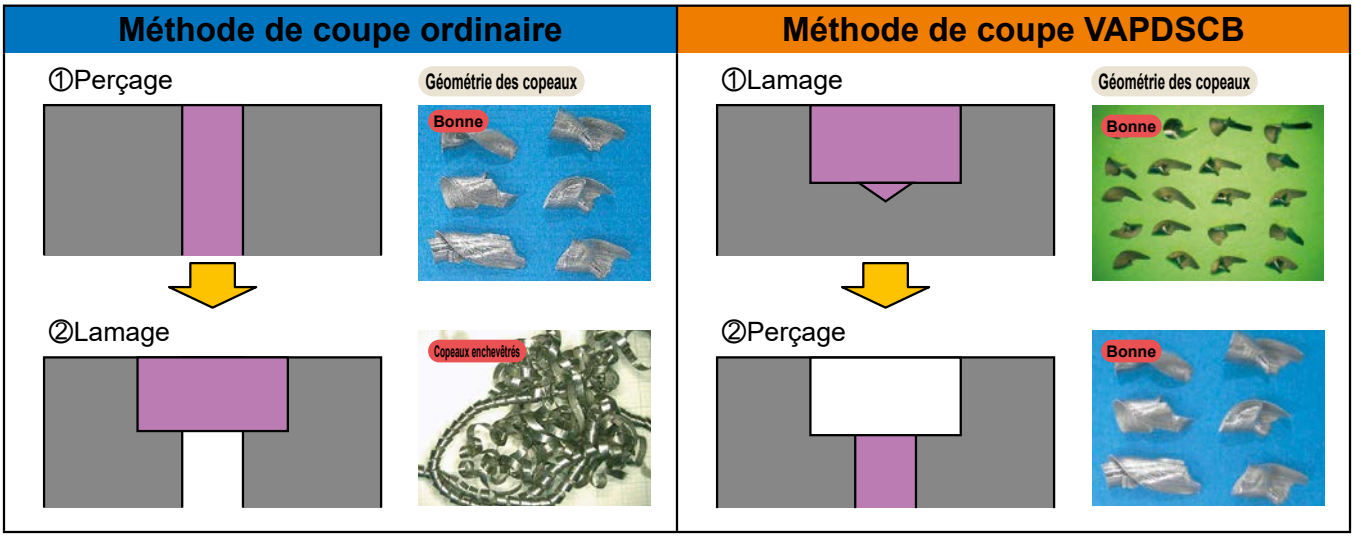
## CONDITIONS DE COUPE RECOMMANDÉES

| Matière | P N | | P K | | P M | | P M | |
|---|---|---|---|---|---|---|---|---|
| | Acier structuré, Alliage aluminium | | Acier au carbone XC55, Acier allié 070M55, Fonte ductile | | Alliage acier outil X210Cr12, (Faible dureté matière) Acier inoxydable ferritique, X10CrAl18, X10CrAl13 Acier inoxydable martensitique, X20Cr13, X10CrAl13 | | Alliage acier outil, X40CrMoV51 (−40HRC) Acier inoxydable auto-trempant, X7CrNiAl177 | |
| Diamètre foret **DC** (mm) | Rotation ($min^{-1}$) | Taux d'avance (mm/tour) | Rotation ($min^{-1}$) | Taux d'avance (mm/tour) | Rotation ($min^{-1}$) | Taux d'avance (mm/tour) | Rotation ($min^{-1}$) | Taux d'avance (mm/tour) |
| **2.0** | 5600 | 0.07 | 4800 | 0.07 | 3200 | 0.07 | 2800 | 0.04 |
| **3.0** | 3700 | 0.10 | 3200 | 0.10 | 2100 | 0.10 | 1900 | 0.05 |
| **4.0** | 2800 | 0.12 | 2400 | 0.12 | 1600 | 0.12 | 1400 | 0.06 |
| **5.0** | 2200 | 0.14 | 1900 | 0.14 | 1300 | 0.14 | 1150 | 0.07 |
| **6.0** | 1850 | 0.15 | 1600 | 0.15 | 1050 | 0.15 | 950 | 0.08 |
| **8.0** | 1400 | 0.20 | 1200 | 0.20 | 800 | 0.20 | 720 | 0.10 |
| **10.0** | 1100 | 0.23 | 960 | 0.23 | 640 | 0.21 | 570 | 0.11 |
| **12.0** | 950 | 0.26 | 800 | 0.26 | 530 | 0.24 | 470 | 0.12 |
| **14.0** | 800 | 0.27 | 680 | 0.27 | 450 | 0.25 | 410 | 0.13 |
| **16.0** | 700 | 0.28 | 500 | 0.28 | 360 | 0.26 | 300 | 0.14 |
| **18.0** | 620 | 0.29 | 450 | 0.29 | 320 | 0.27 | 260 | 0.15 |
| **20.0** | 560 | 0.30 | 400 | 0.30 | 290 | 0.27 | 240 | 0.15 |
| **22.0** | 510 | 0.32 | 360 | 0.32 | 260 | 0.29 | 220 | 0.16 |
| **24.0** | 460 | 0.33 | 330 | 0.33 | 240 | 0.30 | 200 | 0.16 |
| **26.0** | 430 | 0.35 | 310 | 0.35 | 220 | 0.31 | 180 | 0.17 |
| **28.0** | 400 | 0.36 | 290 | 0.36 | 210 | 0.33 | 170 | 0.18 |
| **30.0** | 370 | 0.37 | 270 | 0.37 | 190 | 0.34 | 160 | 0.18 |
| **32.0** | 350 | 0.38 | 250 | 0.38 | 180 | 0.35 | 150 | 0.19 |

Remarque 1) Les conditions de coupe ci-dessus concernent le perçage de profondeurs de trous DCx3 sans avant-trou.
Pour un perçage inférieur à DCx1, vous pouvez d'augmenter la vitesse de coupe de 20 %.
Remarque 2) Il est recommandé de percer sans avant-trou au préalable.
Dans le cas contraire, il est possible que les copeaux ne se détachent pas. Utilisez un brise-copeaux lorsque la fragmentation est nécessaire.
Remarque 3) Lors du perçage-alésage d'une surface inclinée, il est recommandé d'employer une fraise deux tailles en carbure.
Remarque 4) Lors de l'usinage d'acier inoxydable austénitique (X5CrNi1810), réduisez la vitesse de rotation de 30 à 60 % et l'avance de 40 à 60 %.
Remarque 5) Utilisez un mandrin à pince.
Remarque 6) Diminuez la vitesse de rotation et le taux d'avance en cas de manque de rigidité de la machine ou du montage de la pièce.
Remarque 7) Utilisez une quantité suffisante de liquide de coupe.
Remarque 8) Les conditions de coupe mentionnées ci-dessus sont indiquées pour un arrosage à l'huile soluble.
Réduisez la vitesse de rotation lorsque vous utilisez de l'huile entière.

## MÉTHODE DE COUPE RECOMMANDÉE

**■ Le modèle VAPDSCB permet un usinage de grande efficacité sans accumulation de copeaux.**




Remarque 1) Lorsque vous utilisez le modèle VAPDSCB pour une opération de perçage-alésage, le perçage d'un avant-trou peut produire des copeaux en rubans susceptibles de s'enrouler autour de l'outil.

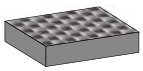
# PERÇAGE (CARBURE MONOBLOC)

# MCC

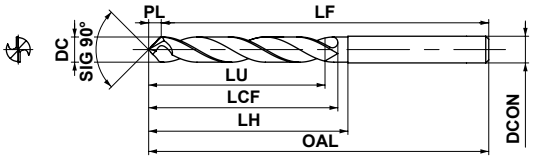
P M K N S H **CFRP**

Machine CN

×


CFRP

Arrosage extérieur




| 3<DC≤6 | 6<DC≤10 | 10<DC≤18 | 18<DC≤20 |
|---|---|---|---|
| 0 −0.018 | 0 −0.022 | 0 −0.027 | 0 −0.033 |
| DCON=6 | 6<DCON≤10 | 10<DCON≤12 | |
| 0 −0.008 | 0 −0.009 | 0 −0.011 | |

| Dia. Trou | | Dia. Foret | | Rapport | Référence | Nuance | Dimensions (mm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| * AWG | pouce | DC (mm) | pouce | (L/D) | | DD2105 | LU | LCF | LH | OAL | LF | PL | DCON |
| — | 3/16 | 4.76 | .1875 | 3 | **MCC0476X03S060** | ★ | 16.7 | 40 | 40 | 80 | 77.6 | 2.4 | 6 |
| — | 1/4 | 6.38 | .251 | 3 | **MCC0638X03S080** | ★ | 22.3 | 50 | 50 | 90 | 86.8 | 3.2 | 8 |
| — | 5/16 | 7.96 | .3125 | 3 | **MCC0796X03S080** | ★ | 27.9 | 50 | 50 | 90 | 86.0 | 4.0 | 8 |
| — | 3/8 | 9.55 | .375 | 3 | **MCC0955X03S100** | ★ | 33.5 | 50 | 50 | 100 | 95.2 | 4.8 | 10 |
| — | 7/16 | 11.14 | .4375 | 3 | **MCC1114X03S120** | ★ | 39.0 | 60 | 60 | 110 | 104.4 | 5.6 | 12 |

***AWG** : American Wire Gage

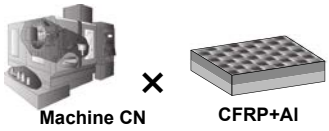
## CONDITIONS DE COUPE RECOMMANDÉES

| Matière | | X | | | |
|---|---|---|---|---|---|
| | | CFRP | | | |
| Diamètre foret **DC** (mm) | Diamètre foret **DC** (pouce) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (Min.−Max.) (mm/tour) | Avance table (mm/min) |
| **4.76** | **.1875** | 100 | 6700 | 0.08 (0.05−0.12) | 540 |
| **6.38** | **.251** | 100 | 5000 | 0.1 (0.05−0.12) | 500 |
| **7.96** | **.3125** | 100 | 4000 | 0.1 (0.05−0.12) | 400 |
| **9.55** | **.375** | 100 | 3400 | 0.1 (0.05−0.12) | 340 |
| **11.14** | **.4375** | 100 | 2900 | 0.1 (0.05−0.12) | 290 |

**★ : Article standard Japon.**
**□ : Article non stocké - Fabrication sur commande uniquement.**

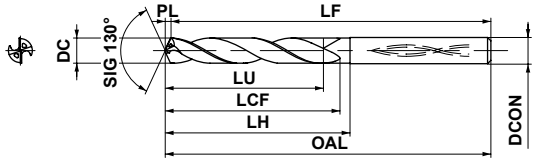
# MCA

P | M | K | **N** | S | H | **CFRP+Al**


Machine CN

CFRP+Al

Arrosage intérieur




| | |
|---|---|
| 6<DC≤10 | 0<br>– 0.022 |
| 6<DCON≤10 | 0<br>– 0.009 |

| Dia. Trou | | Dia. Foret | | Rapport | Référence | Nuance | Dimensions (mm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| * AWG | pouce | DC (mm) | pouce | (L/D) | | DD2110 | LU | LCF | LH | OAL | LF | PL | DCON |
| — | 1/4 | 6.38 | .251 | 5 | **MCA0638X05S070** | □ | 33.4 | 51 | 51 | 91 | 89.5 | 1.5 | 7 |
| — | 3/8 | 9.55 | .375 | 5 | **MCA0955X05S100** | □ | 50.0 | 77 | 77 | 118 | 115.8 | 2.2 | 10 |

***AWG** : American Wire Gage

## CONDITIONS DE COUPE RECOMMANDÉES

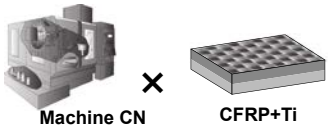
| Matière | | X | | | | N | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | CFRP | | | | Alliage aluminium (Si<5%)<br>ASTM A6061, ASTM A7075 etc | | | |
| Diamètre foret **DC** (mm) | Diamètre foret **DC** (pouce) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (Min.—Max.) (mm/tour) | Avance table (mm/min) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (Min.—Max.) (mm/tour) | Avance table (mm/min) |
| **6.38** | **.251** | 100 | 5000 | 0.15 (0.10—0.20) | 750 | 100 | 5000 | 0.03 (0.02—0.04) | 150 |
| **9.55** | **.375** | 100 | 3400 | 0.15 (0.10—0.20) | 680 | 100 | 3400 | 0.03 (0.02—0.04) | 100 |

Remarque 1) Nous recommandons d'ajuster les conditions de coupe aux différentes matières du sandwich.

# MCT

UWC 150° X

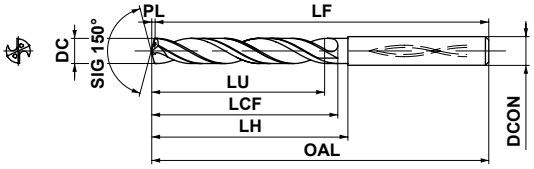
P M K N **S** H **CFRP+Ti**








Arrosage intérieur




| 6<DC≤10 |
|---|
| 0<br>– 0.022 |

| 6<DCON≤10 |
|---|
| 0<br>– 0.009 |

| Dia. Trou | | Dia. Foret | | Rapport | Référence | Nuance | Dimensions (mm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AWG* | pouce | DC (mm) | pouce | (L/D) | | TF15 | LU | LCF | LH | OAL | LF | PL | DCON |
| — | 1/4 | 6.38 | .251 | 5 | **MCT0638X05S070** | □ | 32.8 | 47 | 47 | 96 | 95.1 | 0.9 | 7 |
| — | 3/8 | 9.55 | .375 | 5 | **MCT0955X05S100** | □ | 49.1 | 71 | 71 | 122 | 120.7 | 1.3 | 10 |

***AWG** : American Wire Gage

## CONDITIONS DE COUPE RECOMMANDÉES

| Matière | | X | | | | S | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | CFRP | | | | Alliage titane Ti-6Al-4V etc. | | | | |
| Diamètre foret DC (mm) | Diamètre foret DC (pouce) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (Min.—Max.) (mm/tour) | Avance table (mm/min) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (Min.—Max.) (mm/tour) | Avance table (mm/min) | Pas de débourrage (mm) |
| **6.38** | **.251** | 100 | 5000 | 0.15 (0.10—0.20) | 750 | 15 | 750 | 0.02 (0.01—0.03) | 15 | 1 |
| **9.55** | **.375** | 100 | 3400 | 0.15 (0.10—0.20) | 680 | 15 | 500 | 0.02 (0.01—0.03) | 10 | 1 |

Remarque 1) Conditions de coupe pour soufflage ou micro-pulvérisation interne

Remarque 2) Nous recommandons d'ajuster les conditions de coupe aux différentes matières du sandwich.

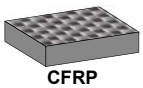
□ : **Article non stocké - Fabrication sur commande uniquement.**

# MCW

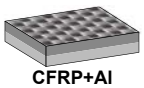
P | M | K | **N** | **S** | H | CFRP CFRTP | CFRP+Al CFRP+Ti

Machine CN

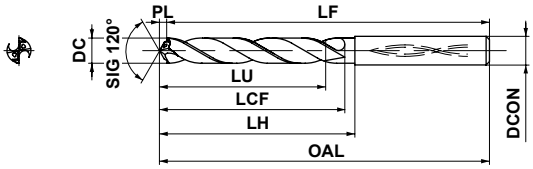
×


CFRP
CFRTP

ou


CFRP+Al
CFRP+Ti

Arrosage intérieur




6<DC≤10
0
– 0.022

6<DCON≤10
0
– 0.009

| Dia. Trou | | Dia. Foret | | Rapport | Référence | Nuance | | Dimensions (mm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *AWG | pouce | DC (mm) | pouce | (L/D) | | HTi10 | DD2110 | LU | LCF | LH | OAL | LF | PL | DCON |
| — | 1/4 | 6.38 | .251 | 5 | **MCW0638X05S070** | ☐ | ☐ | 33.7 | 52 | 52 | 92 | 90.2 | 1.8 | 7 |
| — | 3/8 | 9.55 | .375 | 5 | **MCW0955X05S100** | ☐ | ☐ | 50.6 | 73 | 73 | 119 | 116.2 | 2.8 | 10 |

∗**AWG** : American Wire Gage

## CONDITIONS DE COUPE RECOMMANDÉES

| Matière | | X | | | |
|---|---|---|---|---|---|
| | | CFRP | | | |
| Diamètre foret DC (mm) | Diamètre foret DC (pouce) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (Min.—Max.) (mm/tour) | Avance table (mm/min) |
| **6.38** | **.251** | 100 | 5000 | 0.15 (0.10—0.20) | 750 |
| **9.55** | **.375** | 100 | 3400 | 0.15 (0.10—0.20) | 680 |

| Matière | | N | | | | | S | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Alliage aluminium (Si<5%) A6061, A7075 etc. | | | | | Alliage titane Ti-6Al-4V etc. | | | | |
| Diamètre foret DC (mm) | Diamètre foret DC (pouce) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (Min.—Max.) (mm/tour) | Avance table (mm/min) | Pas de débourrage (mm) | Vitesse de coupe (m/min) | Régime ($min^{-1}$) | Avance (Min.—Max.) (mm/tour) | Avance table (mm/min) | Pas de débourrage (mm) |
| **6.38** | **.251** | 100 | 5000 | 0.15 (0.10—0.20) | 750 | 3 | 15 | 750 | 0.02 (0.01—0.03) | 15 | 1 |
| **9.55** | **.375** | 100 | 3400 | 0.15 (0.10—0.20) | 500 | 3 | 15 | 500 | 0.02 (0.01—0.03) | 10 | 1 |

Remarque 1) Conditions de coupe pour soufflage ou micro-pulvérisation interne
Remarque 2) Nous recommandons d'ajuster les conditions de coupe aux différentes matières du sandwich.

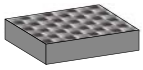
# PERÇAGE (CARBURE MONOBLOC)

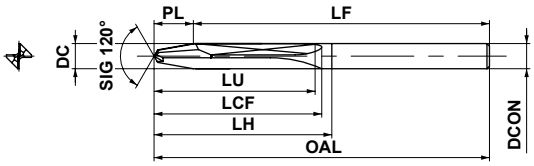
# MCCH

P | M | K | **N** | S | H | **CFRP**

Unité autonome

×


CFRP




| 1≤DC≤3 | 3<DC≤6 | 6<DC≤10 |
|---|---|---|
| 0 −0.014 | 0 −0.018 | 0 −0.022 |
| **DCON=3** | **3<DCON≤6** | **6<DCON≤10** |
| 0 −0.006 | 0 −0.008 | 0 −0.009 |

| Dia. Trou | | Dia. Foret | | Rapport | Référence | Nuance | Dimensions (mm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ***AWG** | pouce | **DC** (mm) | pouce | (L/D) | | **DT2030** | **LU** | **LCF** | **LH** | **OAL** | **LF** | **PL** | **DCON** |
| #40 | — | 2.5 | .0985 | 15 | **MCCH0250X15S030** | ★ | 42.1 | 48 | 50 | 100 | 95.4 | 4.6 | 3 |
| #30 | — | 3.26 | .1285 | 10 | **MCCH0326X10S040** | ★ | 38.6 | 48 | 50 | 100 | 94.0 | 6.0 | 4 |
| #20 | — | 4.1 | .1615 | 8 | **MCCH0410X08S050** | ★ | 40.3 | 48 | 50 | 100 | 92.5 | 7.5 | 5 |
| #11 | — | 4.86 | .1915 | 5 | **MCCH0486X05S050** | ★ | 33.2 | 48 | 50 | 100 | 91.1 | 8.9 | 5 |
| — | 1/4 | 6.38 | .251 | 3 | **MCCH0638X03S070** | ★ | 30.8 | 48 | 50 | 100 | 88.3 | 11.7 | 7 |
| — | 3/8 | 9.55 | .375 | 2 | **MCCH0955X02S100** | ★ | 36.6 | 48 | 50 | 100 | 82.5 | 17.5 | 10 |

***AWG** : American Wire Gage

Remarque 1) Veuillez consulter la documentation de votre unité autonome pour les conditions de coupe.

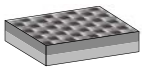
**★ : Article standard Japon.**

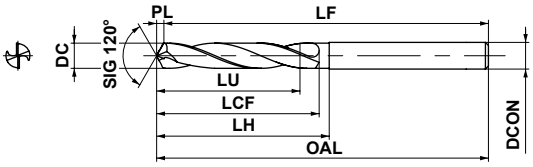
# MCAH

P | M | K | **N** | S | H | **CFRP+Al**

**Unité autonome**

×


**CFRP+Al**




| 1≤DC≤3 | 3<DC≤6 | 6<DC≤10 |
|---|---|---|
| 0<br>– 0.014 | 0<br>– 0.018 | 0<br>– 0.022 |
| **DCON=3** | **3<DCON≤6** | **6<DCON≤10** |
| 0<br>– 0.006 | 0<br>– 0.008 | 0<br>– 0.009 |

| Dia. Trou | | Dia. Foret | | Rapport | Référence | Nuance | Dimensions (mm) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ***AWG** | pouce | **DC** (mm) | pouce | (L/D) | | DT2030 | **LU** | **LCF** | **LH** | **OAL** | **LF** | **PL** | **DCON** |
| #40 | — | 2.5 | .0985 | 15 | **MCAH0250X15S030** | ★ | 38.2 | 50 | 50 | 100 | 99.3 | 0.7 | 3 |
| #30 | — | 3.26 | .1285 | 15 | **MCAH0326X15S040** | ★ | 49.8 | 50 | 50 | 100 | 99.1 | 0.9 | 4 |
| #20 | — | 4.1 | .1615 | 10 | **MCAH0410X10S050** | ★ | 42.2 | 50 | 50 | 100 | 98.8 | 1.2 | 5 |
| #11 | — | 4.86 | .1915 | 8 | **MCAH0486X08S050** | ★ | 40.3 | 50 | 50 | 100 | 98.6 | 1.4 | 5 |
| — | 1/4 | 6.38 | .251 | 5 | **MCAH0638X05S070** | ★ | 33.7 | 50 | 50 | 100 | 98.2 | 1.8 | 7 |
| — | 3/8 | 9.55 | .375 | 3 | **MCAH0955X03S100** | ★ | 31.5 | 50 | 50 | 100 | 97.2 | 2.8 | 10 |

***AWG** : American Wire Gage

Remarque 1) Veuillez consulter la documentation de votre unité autonome pour les conditions de coupe.

# Notes

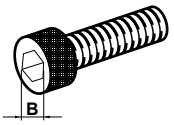
# PIÈCES DÉTACHÉES


IDENTIFICATION ····· N002
PIÈCES DÉTACHÉES
- VIS DE FIXATION ····· N003
- VIS D'ATTACHEMENT ····· N009
- VIS / ÉCROU DE RÉGLAGE ····· N010
- ASSISE ····· N011
- GOUPILLE / LEVIER ····· N014
- GOUPILLE DE FIXATION ····· N015
- BRIDE DE SERRAGE ····· N015
- BRISE-COPEAUX ····· N017
- ANTI-GRIPPANT ····· N018

# IDENTIFICATION



## ■ IDENTIFICATION DES VIS DE SERRAGE (Filetage à droite métrique à pas fin)




**H** **SC** **060** **05**

**Longueur**

| Exemple | |
|---|---|
| Symbole | L |
| 05 | 5 |
| 10 | 10 |
| 20 | 20 |
| 30 | 30 |

**Diamètre vis**

| Exemple | |
|---|---|
| Symbole | d |
| 050 | M5 |
| 060 | M6 |

● **Dimensions trou 6 pans**

| Diamètre | Pas | Dimensions B | | | |
|---|---|---|---|---|---|
| | | HBH | HFC | HSC | HS◌ |
| M2 | 0.4 | — | — | 1.5 | 0.9 |
| M2.5 | 0.45 | — | — | 2 | 1.3 |
| M3 | 0.5 | 2 | 2 | 2.5 | 1.5 |
| M4 | 0.7 | 2.5 | 2.5 | 3 | 2 |
| M5 | 0.8 | 3 | 3 | 4 | 2.5 |
| M6 | 1 | 4 | 4 | 5 | 3 |
| M8 | 1.25 | 5 | 5 | 6 | 4 |
| M10 | 1.5 | 6 | 6 | 8 | 5 |

**Tête de vis**

| | | |
|---|---|---|
| BH / BHA | CHUUBURASHI CO. / UNBRAKO CO. | Tête ronde |
| FC | CHUUBURASHI CO. | Tête plate |
| SC | Standard JIS | Tête six pans |
| PM | Standard JIS | Tête ovale |
| FM | Standard JIS | Tête plate |
| SD | Standard JIS | Vis (Pointe coupée) |
| SP | Standard JIS | Vis (Pointe conique) |
| SR | Standard JIS | Vis (Pointe carrée) |
| SS | Standard JIS | Vis (Pointe plate) |

**Dimensions trou 6 pans**

| Symbole | Géométrie |
|---|---|
| H | |

**Fendu**

| Symbole | Géométrie |
|---|---|
| S | |

**En croix**

| Symbole | Géométrie |
|---|---|
| C | |

## ■ IDENTIFICATION CLÉ

**HKY** **15** **R**

| Symbole | Clé |
|---|---|
| HKY | Clé hexagonale |
| TKY | Tournevis Torx |
| RKY | Tournevis R |
| TIP | Tournevis Torx plus |

Clé hexagonale

| Symbole | B |
|---|---|
| 15 | 1.5 |
| 20 | 2 |
| 25 | 2.5 |
| 30 | 3 |
| 35 | 3.5 |
| 40 | 4 |
| 50 | 5 |
| 60 | 6 |

Tournevis Torx

| Symbole | B | Dimension |
|---|---|---|
| 06 | 1.7 | T6 |
| 08 | 2.3 | T8 |
| 10 | 2.7 | T10 |
| 15 | 3.3 | T15 |
| 20 | 3.8 | T20 |
| 25 | 4.4 | T25 |
| 27 | 5.0 | T27 |
| 30 | 5.5 | T30 |

Tournevis Torx plus

| Symbole | B | Dimension |
|---|---|---|
| 06 | 1.8 | 6IP |
| 07 | 2.1 | 7IP |
| 08 | 2.4 | 8IP |
| 10 | 2.8 | 10IP |
| 15 | 3.4 | 15IP |

| | | |
|---|---|---|
| R | Clé allen | |
| L | Clé allen type long | |
| T | Clé T | |
| F FS | Clé drapeau | |
| W | Clé drapeau | |
| D DS | Tournevis | |
| S | Clé | |

**IMX** **10** - **WR**

| Symbole | Clé |
|---|---|
| iMX | Clef pour embouts iMX |

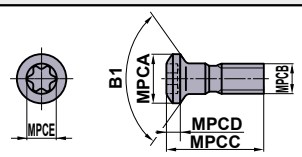
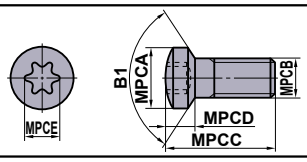
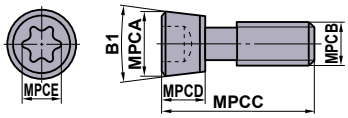
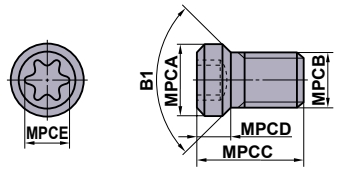
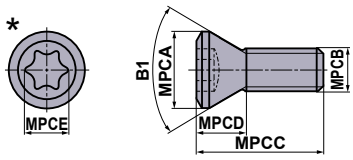
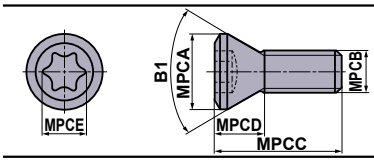
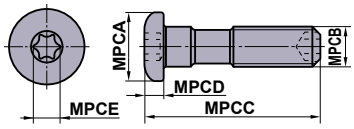
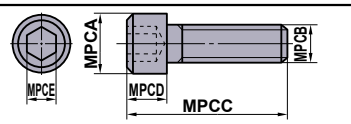
Clé hexagonale

| Symbole | B |
|---|---|
| 10 | 8 |
| 12 | 10 |
| 16 | 13 |
| 20 | 16 |
| 25 | 20 |

**WR**

# PIÈCES DÉTACHÉES

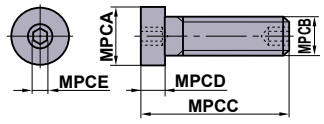
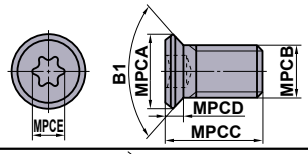
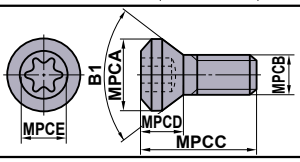
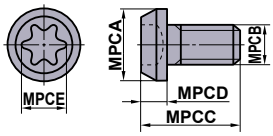
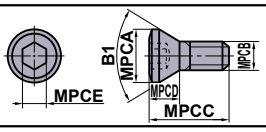
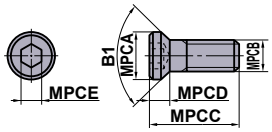
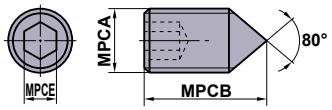
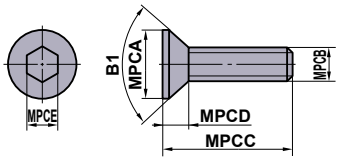
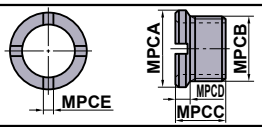
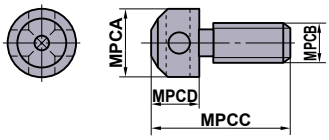
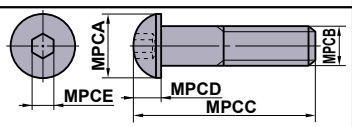
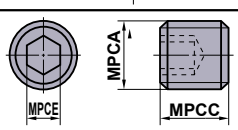
## VIS DE FIXATION

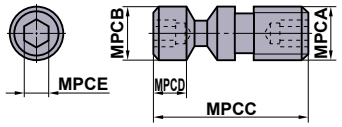
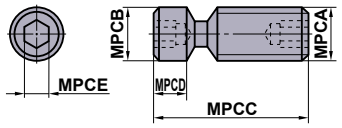
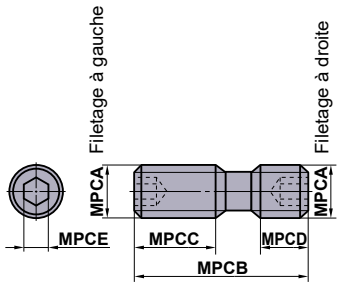
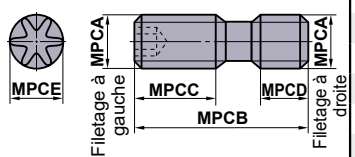
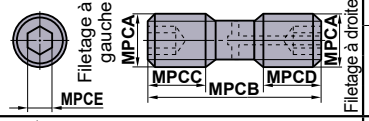
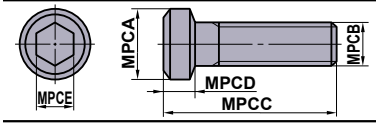
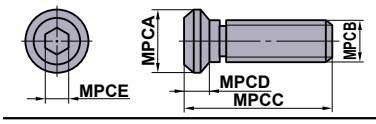
| Géométrie | Référence | Dimensions (mm) | | | | | Angle | MPCDS | TQ (N•m) | Porte-outil |
|---|---|---|---|---|---|---|---|---|---|---|
| | | MPCA | MPCB | MPCC | MPCD | MPCE | B1 | | | |
|  | **AJS3010T10** | 5 | M3×0.5 | 10 | 1.5 | 2.8 | 120° | T10 | 2.5 | Porte-outil **Profil** (➲C032) **AJX** (➲K180) |
| | **AJS4012T15** | 7 | M4×0.7 | 12 | 2.2 | 3.4 | 120° | T15 | 3.5 | **AJX** (➲K180) |
| | **AJS5014T25** | 8 | M5×0.8 | 14 | 2.7 | 4.5 | 120° | T25 | 7.5 | |
|  | **BRS103** | 5 | M3×0.5 | 9.9 | 2.9 | 3.4 | 120° | T15 | 3.5 | |
| | **BRS105** | 8 | M5×0.8 | 13.8 | 3.8 | 4.5 | 120° | T25 | 7.5 | |
|  | **CAS51T** | 7.9 | M5×0.8 | 19 | 5 | 4.5 | 10° | T25 | 8.5 | |
|  | **CS200T** | 3.2 | M2×0.4 | 5 | 1.6 | 1.8 | 90° | T6 | 0.6 | Barre d'alésage **F** (➲E027) |
| | **CS250T** | 3.7 | M2.5×0.45 | 6 | 1.8 | 2.4 | 90° | T8 | 1.0 | **Outils de** fraisage (➲K001) |
| | * **CS250560T** | 3.9 | M2.5×0.45 | 5.2 | 2.5 | 2.4 | 60° | T8 | 1.0 | **BRP** (➲K190) |
| | **CS300590T** | 4.1 | M3×0.5 | 5.5 | 2.1 | 2.4 | 90° | T8 | 1.0 | |
| | **CS300790TS** | 4.7 | M3×0.5 | 7 | 2.3 | 2.8 | 90° | T10 | 2.0 | |
| | **CS300890T** | 4.1 | M3×0.5 | 8 | 2.1 | 2.4 | 90° | T8 | 1.0 | **DCCC** (➲K200) |
| | **CS350690T** | 4.8 | M3.5×0.6 | 6.5 | 2.4 | 2.8 | 90° | T10 | 2.5 | |
| | * **CS350760T** | 5.5 | M3.5×0.6 | 7 | 4.0 | 3.4 | 60° | T15 | 3.5 | |
| | **CS350790T** | 4.8 | M3.5×0.6 | 7 | 2.4 | 2.8 | 90° | T10 | 3.5 | |
| | * **CS350860T** | 5.5 | M3.5×0.6 | 8.4 | 4.0 | 3.4 | 60° | T15 | 3.5 | Barre d'alésage **MMTI** (➲G026) **BRP** (➲K190) |
| | **CS350990T** | 4.8 | M3.5×0.6 | 9 | 2.4 | 2.8 | 90° | T10 | 2.5 | **DCCC** (➲K200) |
| | **CS400990T** | 6.0 | M4×0.7 | 9 | 2.8 | 3.4 | 90° | T15 | 3.5 | |
|  | **CS401160T** | 5.7 | M4×0.7 | 11 | 4.5 | 3.4 | 60° | T15 | 3.5 | |
| | **CS401990T** | 6.0 | M4×0.7 | 19 | 3.0 | 3.9 | 90° | T20 | 3.5 | |
| | **CS451190T** | 6.3 | M4.5×0.75 | 11 | 2.9 | 3.9 | 90° | T20 | 5.0 | Porte-outil type **AL** (➲C034) |
| | * **CS501160T** | 7.0 | M5×0.8 | 11 | 3.6 | 3.9 | 60° | T20 | 5.0 | |
| | **CS501290T** | 7.0 | M5×0.8 | 11 | 3.5 | 4.5 | 90° | T25 | 7.5 | |
| | * **CS5015060T** | 7.2 | M5×0.8 | 15 | 2.4 | 3.9 | 60° | T20 | 5.0 | **AHX640S** (➲K041) |
| | **CS502190T** | 8.5 | M5×0.8 | 21 | 4.0 | 5.1 | 90° | T27 | 7.5 | |
| | **CS6016060T** | 8.5 | M6×1.0 | 16 | 4.5 | 4.5 | 60° | T25 | 7.5 | |
|  | **CSF401260T** | 7.2 | M4×0.5 | 12 | 5.2 | 3.9 | 60° | T20 | 5.0 | **PMR** (➲K236) |
|  | **DC0520T** | 8.5 | M5×0.8 | 22.5 | 2.5 | 3.4 | — | T15 | 3.5 | Porte-outil **DOUBLE-FORCE** (➲C008) |
| | **DC0621T** | 10.5 | M6×1.0 | 25 | 4 | 3.9 | — | T20 | 5.0 | **BARRE D'ALÉSAGE DIMPLE BAR** (➲E015) Porte-outil **HSK** (➲H001) |
|  | **DKS4** | 5.6 | M4×0.7 | 18 | 3.5 | 3 | — | — | 3.3 | |
| | **DKS5** | 7.6 | M5×0.8 | 19 | 4.5 | 4 | — | — | 7.0 | |

# PIÈCES DÉTACHÉES



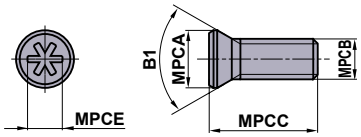
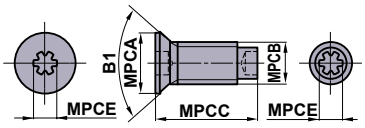
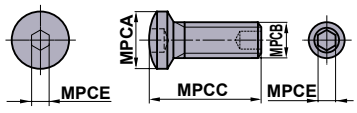
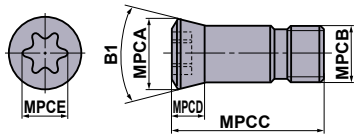
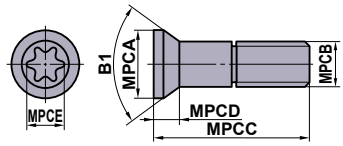
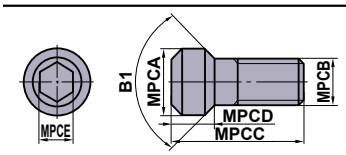
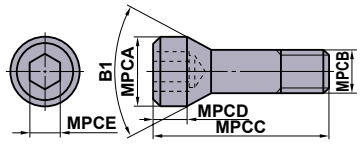
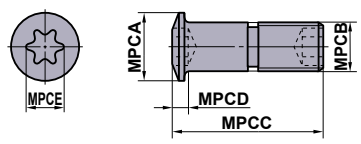
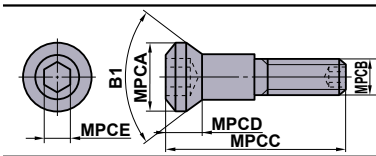
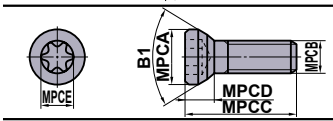
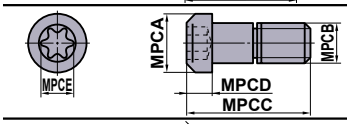
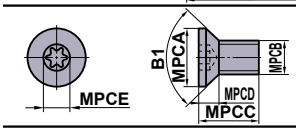
## VIS DE FIXATION

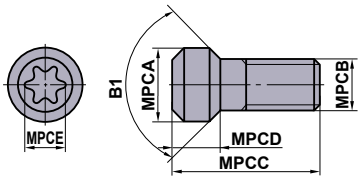
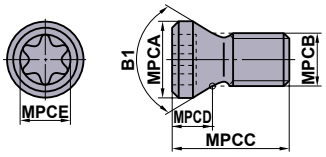
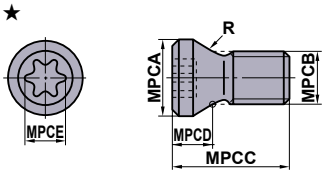
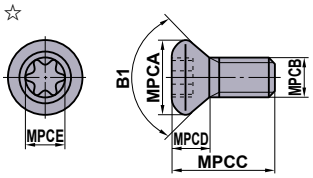
| Géométrie | Référence | Dimensions (mm) | | | | | Angle | MPCDS | TQ (N•m) | Porte-outil |
|---|---|---|---|---|---|---|---|---|---|---|
| | | MPCA | MPCB | MPCC | MPCD | MPCE | B1 | | | |
|  | **EGS06019** | 9 | M6×1 | 22.5 | 3.5 | 3 | — | — | 3.3 | |
| | **EGS08024** | 11 | M8×1.25 | 28.5 | 4.5 | 4 | — | — | 7.0 | |
|  | **FC400890T** | 5.6 | M4×0.7 | 7.5 | 1.3 | 2.8 | 90° | T10 | 2.5 | Porte-outil type **AL** (➲C035)<br>Barre d'alésage **AL** (➲E041) |
|  | **GY05016S** | 8.7 | M5×0.8 | 16 | 3.5 | 3.9 | 90° | T20 | 5.0 | Série **GY** (➲F004) |
|  | **GY06013M** | 12 | M6×1 | 18 | 5 | 5.6 | — | T30 | 6.0 | Série **GY** (➲F004) |
|  | **HFF06015** | 10 | M6×1 | 15 | 6 | 5 | 80° | — | 8.2 | |
|  | **HS4L** | 5.4 | M4×0.7 | 14 | 2.3 | 2.5 | 80° | — | 3.8 | |
| | **HS5S** | 6.8 | M5×0.8 | 9 | 2.8 | 3 | 80° | — | 3.3 | |
| | **HS5L** | 6.8 | M5×0.8 | 15 | 2.8 | 3 | 80° | — | 6.6 | |
|  | **HSP05008C** | M5×0.8 | 8 | — | — | 2.5 | — | — | 2.5 | Porte-outil type **MP** (➲C019) |
|  | **HY-A1** | 4.4 | M3×0.5 | 7 | 2.1 | 2 | 82° | — | 1.5 | |
| | **HY-V1** | 5.5 | M3×0.5 | 7 | 2.5 | 2 | 82° | — | 1.5 | |
| | **HY2** | 5.5 | M3×0.5 | 10 | 2.5 | 2 | 82° | — | 1.5 | |
| | **HY3** | 7 | M3.5×0.6 | 12 | 2.9 | 2 | 82° | — | 1.5 | |
| | **HY4** | 9.3 | M5×0.8 | 16 | 3.6 | 3 | 82° | — | 3.3 | |
|  | **JSS6** | 6.9 | M6×0.75 | 4.5 | 1.5 | 0.8 | — | — | — | |
| | **JSS7** | 8 | M7×0.75 | 4.4 | 1.5 | 1 | — | — | — | |
|  | **KS1** | 7 | M4×0.7 | 14 | 5 | — | — | — | — | |
| | **KS2** | 10 | M6×1 | 18 | 7 | — | — | — | — | |
| | **KS2S** | 10 | M6×1 | 18 | 7 | — | — | — | — | |
|  | **KS12** | 10 | M6×1 | 26 | 4 | 4 | — | — | 7.0 | |
|  | **LLR1** | M5×0.8 | — | 3.5 | — | 2.5 | — | — | — | |
| | **LLR2** | M6×1 | — | 5 | — | 3 | — | — | — | |

| Géométrie | Référence | Dimensions (mm) | | | | | Angle | MPCDS | TQ (N•m) | Porte-outil |
|---|---|---|---|---|---|---|---|---|---|---|
| | | MPCA | MPCB | MPCC | MPCD | MPCE | B1 | | | |
|  | ☆**LLCS103** | M3×0.5 | 4 | 11 | 4.6 | 2 | — | — | 1.5 | |
| | ✱ **LLCS105** | M5×0.8 | M5×0.8 | 10 | 1.5 | 2 | — | — | 1.5 | Barre d'alésage **P** (➲E037) |
| | **LLCS106** | M6×1 | 6 | 16.5 | 3.5 | 2.5 | — | — | 2.2 | Porte-outil **HSK** (➲H001) |
| | ✱ **LLCS106S** | M6×1 | 6 | 13.4 | 0.7 | 2.5 | — | — | 2.2 | |
| | **LLCS108** | M8×1.25 | 8 | 21 | 6.5 | 3 | — | — | 3.3 | |
| | ✱ **LLCS108S** | M8×1.25 | 8 | 16.5 | 2 | 3 | — | — | 3.3 | |
| | **LLCS110** | M10×1.5 | 10 | 29 | 8 | 4 | — | — | 7.0 | |
|  | **LLCS112** | M12×1 | 11.9 | 36.2 | 9 | 5 | — | — | 8.0 | |
| | **LLCS125** | M5×0.8 | M5×0.8 | 12 | 2 | 2 | — | — | 1.5 | |
| | **LLCS205** | M5×0.8 | M5×0.8 | 16 | 4 | 2 | — | — | 1.5 | |
| | **LLCS206** | M6×1 | 6 | 26 | 13 | 2.5 | — | — | 2.2 | |
| **LLCS103, LLCS105**<br>**LLCS112, LLCS125**<br>**LLCS205** | **LLCS208** | M8×1.25 | 8 | 24 | 6.5 | 3 | — | — | 3.3 | |
| | **LLCS306** | M6×1 | 6 | 21 | 4 | 2.5 | — | — | 2.2 | |
| | **LLCS308** | M8×1.25 | 8 | 42 | 27.5 | 3 | — | — | 3.3 | |
| Les produits ayant une "✱" ne sont pas pourvus du trou marqué de la lettre **MPCB** à l'extrémité. | **LLCS310** | M10×1 | 10 | 29 | 8 | 4 | — | — | 7.0 | |
| | **LLCS410** | M10×1 | 10 | 30 | 6.6 | 4 | — | — | 7.0 | |
| Les produits ayant une "☆" ne sont pas pourvus du trou marqué de la lettre **MPCA** à l'extrémité. | **LLCS508** | M8×1 | 8 | 24 | 6.5 | 3 | — | — | 3.3 | |
| | ✱ **LLCS508S** | M8×1 | 8 | 20.5 | 3 | 3 | — | — | 3.3 | |
| | **LS1** | M6×1 | 22 | 8 | 8 | 3 | — | — | 5.0 | |
| | **LS2** | M8×1 | 29 | 13 | 10 | 4 | — | — | 8.2 | |
| | **LS3** | M8×1 | 32 | 13 | 13 | 4 | — | — | 8.2 | |
|  | ✱ **LS4** | M6×1 | 15 | 8 | 4 | 3 | — | — | 5.0 | **Outils de** fraisage (➲K001) |
| | ✱ **LS5** | M6×1 | 18 | 8 | 5 | 3 | — | — | 5.0 | |
| | ✱ **LS6** | M8×1 | 24 | 13 | 5 | 4 | — | — | 8.2 | |
| | ✱ **LS7** | M8×1 | 27 | 13 | 8 | 4 | — | — | 8.2 | |
| | ✱ **LS8** | M6×0.75 | 18 | 7 | 7 | 3 | — | — | 5.0 | |
| | ✱ **LS9** | M6×0.75 | 22 | 8 | 8 | 3 | — | — | 5.0 | |
| | ✱ **LS10** | M7×0.75 | 16 | 6 | 6 | 4 | — | — | 8.2 | |
| | ✱ **LS11** | M8×1 | 16 | 6 | 6 | 4 | — | — | 7.8 | |
| | ✱ **LS12** | M8×1 | 24 | 7 | 7 | 4 | — | — | 7.8 | |
| ✱Sans empreinte hexagonale côté filetage à droite | ✱ **LS13** | M8×1 | 34 | 12 | 12 | 4 | — | — | 7.8 | |
| | ✱ **LS14** | M7×0.75 | 24 | 10 | 10 | 4 | — | — | 7.8 | |
| | ✱ **LS16** | M7×0.75 | 23 | 11 | 8 | 4 | — | — | 7.8 | |
| | ✱ **LS18** | M7×0.75 | 14 | 6 | 4 | 4 | — | — | 7.8 | |
| | ✱ **LS20** | M10×1.5 | 26 | 9 | 9 | 5 | — | — | 9.0 | |
| | ✱ **LS21** | M10×1.5 | 32 | 12 | 12 | 5 | — | — | 9.0 | |
| | **LS24** | M8×1.25 | 24 | 8.5 | 8.5 | 4 | — | — | 7.8 | |
| | **LS25** | M8×1 | 28.5 | 12.0 | 10.5 | 4 | — | — | 8.2 | Porte-outil **DOUBLE-FORCE** (➲C009) |
| | **LS10T** | M7×0.75 | 14 | 6 | 5 | 4.5 | — | T25 | 8.0 | |
| | **LS14T** | M7×0.75 | 24 | 10 | 10 | 4.5 | — | T25 | 8.0 | |
| | **LS15T** | M7×0.75 | 18 | 7 | 7 | 4.5 | — | T25 | 8.0 | |
|  | **LS19T** | M6×0.75 | 11 | 4 | 4 | 3.4 | — | T15 | 5.0 | |
| | **LS10TS** | M7×0.75 | 13 | 6 | 4 | 4.5 | — | T25 | 8.5 | |
| | **LS0622T** | M6×0.75 | 22 | 8 | 8 | 3.4 | — | T15 | 6.0 | **AHX640W** (➲K048) |
|  | **LS24H** | M8×1.25 | 24 | 8.5 | 8.5 | 4 | — | — | 8.2 | |
|  | **MGS6** | 10 | M6×1 | 26 | 4 | 5 | — | — | 9.0 | **APX3000** (➲K133) |
|  | **MHT1** | 11 | M8×1 | 18.5 | 3.5 | 4 | — | — | 8.7 | |

# PIÈCES DÉTACHÉES

## VIS DE FIXATION

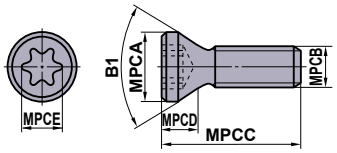
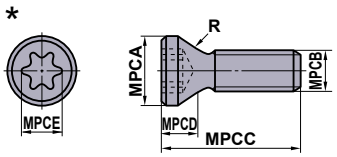
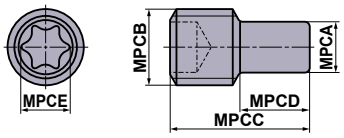
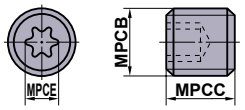
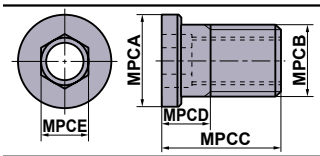
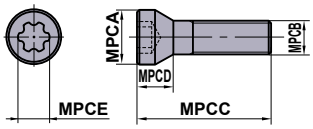
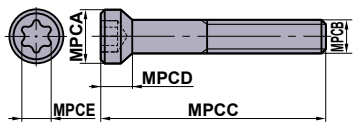
| Géométrie | Référence | Dimensions (mm) | | | | | Angle | MPCDS | TQ (N•m) | Porte-outil |
|---|---|---|---|---|---|---|---|---|---|---|
| | | MPCA | MPCB | MPCC | MPCD | MPCE | B1 | | | |
|  | **NS251** | 3.6 | M2.5×0.45 | 7 | — | 2.2 | 60° | — | 0.7 | **BTVH** (➲D016) **CSVH** (➲D027) |
| | **NS401** | 5.8 | M4×0.7 | 6 | — | 3.6 | 60° | — | 3.5 | **CTAH-S** (➲D020) |
|  | **NS402W** | 5.85 | M4×0.7 | 10 | — | 2.2 | 60° | — | 0.7 | **CTAH** (➲D020) **CTBH** (➲D022) |
| | **NS403W** | 5.85 | M4×0.7 | 12 | — | 2.2 | 60° | — | 0.7 | |
| | **NS404W** | 5.8 | M4×0.7 | 10 | — | 2.2 | 90° | — | 0.7 | |
|  | **NS501W** | 8 | M5×0.8 | 16 | — | 2.5 | 120° | — | 2.2 | **OUTILS MINI** (➲D001) |
| | **NS502W** | 8 | M5×0.8 | 20 | — | 2.5 | 120° | — | 2.2 | |
|  | **RN-S6** | 9.5 | M6×0.75 | 20.3 | 4.6 | 3.9 | 61° | T20 | 5.0 | |
| | **RN-S7** | 11 | M7×0.75 | 24.7 | 5.2 | 4.5 | 61° | T25 | 7.5 | |
|  | **RS3008T** | 4.3 | M3×0.35 | 8.6 | 2 | 2.4 | 61° | T8 | 1.5 | **SRF** (➲K212) **SUF** (➲K216) |
| | **RS3510T** | 5 | M3.5×0.35 | 10 | 2.3 | 2.8 | 61° | T10 | 2.5 | |
| | **RS4015T** | 6 | M4×0.5 | 14 | 2.7 | 3.4 | 61° | T15 | 3.3 | |
| | **RS5020T** | 8.1 | M5×0.5 | 16.4 | 3.6 | 3.9 | 61° | T20 | 5.0 | |
| | **RS6025T** | 9.5 | M6×0.75 | 21.5 | 4.2 | 4.5 | 61° | T25 | 7.5 | |
| | **RS8030T** | 12 | M8×0.75 | 25 | 5 | 5.6 | 61° | T30 | 10.0 | |
|  | **S1** | 3.5 | M2×0.4 | 5.5 | 2.2 | 1.5 | 92° | — | 0.6 | |
| | **S3** | 4.5 | M3×0.5 | 7.7 | 2.4 | 2 | 92° | — | 1.5 | |
| | **S4** | 5.3 | M4×0.7 | 8 | 1.8 | 2.5 | 62° | — | 2.2 | |
| | **S5** | 6.8 | M5×0.8 | 9 | 2.4 | 3 | 62° | — | 3.3 | |
|  | **SD32** | 12 | M8×1.25 | 28 | 7.2 | 6 | 50° | — | 9.5 | |
| | **SD40** | 12 | M8×1.25 | 36 | 7.2 | 6 | 50° | — | 9.5 | |
| | **SD50** | 16 | M10×1.5 | 46 | 8.2 | 8 | 50° | — | 1.0 | |
| | **SD63** | 16 | M10×1.5 | 61 | 8.2 | 8 | 50° | — | 1.0 | |
|  | **SETS51** | 6.8 | M5×0.8 | 14.8 | 1.5 | 3.4 | — | T15 | 3.5 | Porte-outil type **MMTE** (➲G019) |
| | **SETS61** | 8 | M6×1 | 20 | 1.8 | 3.9 | — | T20 | 5.0 | Barre d'alésage **MMTI** (➲G026) |
| | | | | | | | | | | Porte-outil **HSK** (➲H001) |
|  | **SLCS105** | 10 | M5×0.8 | 25 | 6.3 | 4 | 90° | — | 7.0 | Porte-outil type **WP** (➲C017) |
| | **SLCS106** | 12 | M6×1 | 32 | 6.2 | 4 | 90° | — | 7.0 | |
|  | **SPS1** | 8.5 | M5×0.8 | 16 | 4 | 4.5 | 70° | T25 | 5.0 | |
|  | **SRS5** | 6.7 | M5×0.8 | 16 | 3.5 | 3.9 | — | T20 | 5.0 | |
|  | **STS1** | 6.8 | M3×0.5 | 7 | 2.2 | 2.8 | 90° | T10 | 2.5 | |

| Géométrie | Référence | Dimensions (mm) | | | | | Angle | MPCDS | TQ (N•m) | Porte-outil |
|---|---|---|---|---|---|---|---|---|---|---|
| | | MPCA | MPCB | MPCC | MPCD | MPCE | B1 | | | |
|  | ★ **TS16** | 2.5 | M1.6×0.35 | 3.2 | 1.6 | 1.8 | 60° | T6 | 0.6 | **MICRO-DEX** (➲E018) |
| | **TS2** | 2.7 | M2×0.4 | 4.6 | 1.4 | 1.8 | 60° | T6 | 0.6 | |
| | ★ **TS2A** | 2.7 | M2×0.4 | 4.5 | 1.2 | 1.8 | 60° | T6 | 0.6 | **AQX** (➲K172) |
| | **TS2C** | 2.7 | M2×0.4 | 3.8 | 1.4 | 1.8 | 60° | T6 | 0.6 | |
| | ☆ **TS2D** | 3.8 | M2×0.4 | 5.3 | 1.9 | 1.8 | 82° | T6 | 0.6 | **DIMPLE BARRE** (➲E007) |
| | **TS21** | 2.7 | M2×0.4 | 3.4 | 1.4 | 1.8 | 60° | T6 | 0.6 | Barre d'alésage **F** (➲E029) |
| | ★ **TS22** | 3.0 | M2.2×0.45 | 5 | 1.2 | 1.8 | 60° | T6 | 0.6 | Barre d'alésage **S** (➲E030) |
| | ★ **TS25** | 3.3 | M2.5×0.45 | 5.5 | 1.7 | 2.4 | 60° | T8 | 1.0 | **AQX** (➲K172) **AJX** (➲K180) |
| | ☆ **TS25D** | 4.4 | M2.5×0.45 | 6.2 | 2.2 | 2.4 | 82° | T8 | 1.0 | Barre d'alésage **MMTI** (➲G026) |
| | ★ **TS25H** | 3.6 | M2.5×0.45 | 5.5 | 2 | 2.4 | 60° | T8 | 1.0 | **SRM2** (➲K220) |
| | **TS202** | 2.7 | M2×0.4 | 5.5 | 1.8 | 1.8 | 60° | T6 | 0.6 | |
| | **TS253** | 3.3 | M2.5×0.45 | 4.5 | 1.7 | 2.4 | 60° | T8 | 1.0 | **Outils de** fraisage (➲K001) |
| | **TS254** | 3.3 | M2.5×0.45 | 7 | 1.7 | 2.4 | 60° | T8 | 1.0 | **OUTILS MINI** (➲D001) **PMF** (➲K234) |
| | ★ **TS255** | 3.5 | M2.5×0.45 | 7.5 | 1.6 | 2.4 | 60° | T8 | 1.0 | Porte-outil **Profil** (➲C032) |
| | **TS3** | 3.9 | M3×0.5 | 6 | 2 | 2.4 | 60° | T8 | 1.0 | **TSMP** (➲K232) |
| | **TS304** | 3.9 | M3×0.5 | 10.5 | 2.0 | 2.4 | 60° | T8 | 1.5 | |
| | **TS3D** | 5.0 | M3×0.5 | 6 | 2.3 | 2.8 | 82° | T10 | 2.5 | **DIMPLE BARRE** (➲E007) |
| ★  | ★ **TS3SB** | 4.4 | M3×0.5 | 8 | 2 | 2.4 | 80° | T8 | 1.5 | **AXD4000** (➲K155) |
| | **TS3SBS** | 4.4 | M3×0.5 | 6.5 | 2 | 2.4 | 80° | T8 | 1.5 | **AXD4000** (➲K155) |
| | ☆ **TS31D** | 4.8 | M3×0.5 | 7.2 | 2.2 | 2.8 | 82° | T10 | 2.5 | **DIMPLE BARRE** (➲E007) |
| | ★ **TS32** | 3.9 | M3×0.5 | 7.5 | 2 | 2.4 | 60° | T8 | 2.0 | **SRM2** (➲K220) |
| | ★ **TS33** | 3.9 | M3×0.5 | 6.7 | 2 | 2.4 | 60° | T8 | 1.5 | **AQX** (➲K172) **AJX** (➲K180) |
| | **TS35** | 4.8 | M3.5×0.6 | 6.5 | 2.4 | 2.8 | 60° | T10 | 2.5 | |
| | ★ **TS35D** | 5.3 | M3.5×0.6 | 12 | 2.8 | 3.4 | 60° | T15 | 3.5 | Porte-outil **HSK** (➲H001) |
| | ★ **TS35R** | 5.7 | M3.5×0.6 | 10 | 2.1 | 3.4 | — | T15 | 3.5 | **AHX440S** (➲K034) **AHX475S** (➲K038) |
| | **TS351** | 4.8 | M3.5×0.6 | 7.2 | 2.4 | 2.8 | 60° | T10 | 2.5 | **AJX** (➲K180) **SRM2** (➲K220) |
| | **TS352** | 4.8 | M3.5×0.6 | 10 | 3 | 2.8 | 60° | T10 | 2.5 | **VFX5** (➲K192) |
| ★  | **TS4S** | 5.4 | M4×0.7 | 7 | 2.4 | 3.4 | 80° | T15 | 3.5 | |
| | ★ **TS4SL** | 5.4 | M4×0.7 | 8 | 2.4 | 3.4 | 80° | T15 | 4.0 | |
| | ★ **TS4SB** | 5.8 | M4×0.7 | 9 | 2.7 | 3.4 | 80° | T15 | 3.5 | **AXD7000** (➲K166) |
| | ★ **TS4SBL** | 5.8 | M4×0.7 | 10.5 | 2.7 | 3.4 | 80° | T15 | 3.5 | Série **GY** (➲F004) **AXD7000** (➲K166) |
| | **TS4** | 5.4 | M4×0.7 | 8 | 2.6 | 3.4 | 60° | T15 | 3.5 | **CE/CF/CGSP** (➲K230) **TSMP** (➲K232) |
| | **TS4D** | 5.6 | M4×0.7 | 7.7 | 2.5 | 3.4 | 82° | T15 | 3.5 | **DIMPLE BARRE** (➲E007) |
| | **TS42** | 5.4 | M4×0.7 | 6 | 2.6 | 3.4 | 60° | T15 | 3.5 | |
| | **TS43** | 5.4 | M4×0.7 | 10 | 2.6 | 3.4 | 60° | T15 | 3.5 | **AJX** (➲K180) **BRP** (➲K190) **SRM2** (➲K220) |
| | **TS44** | 5.4 | M4×0.7 | 12 | 2.6 | 3.4 | 60° | T15 | 3.5 | |
| | **TS406** | 5.4 | M4×0.7 | 15.5 | 2.6 | 3.4 | 60° | T15 | 3.5 | |
| ☆  | **TS407** | 5.4 | M4×0.7 | 9 | 2.6 | 3.4 | 60° | T15 | 3.5 | **AQX** (➲K172) **AJX** (➲K180) |
| | **TS450** | 5.9 | M4.5×0.75 | 13 | 3.6 | 3.9 | 60° | T20 | 5.0 | **VFX6** (➲K196) |
| | **TS5S** | 6.8 | M5×0.8 | 9 | 2.9 | 4.5 | 80° | T25 | 7.5 | |
| | ★ **TS5SL** | 6.8 | M5×0.8 | 12 | 2.9 | 4.5 | 80° | T25 | 7.5 | |
| | **TS5** | 6.8 | M5×0.8 | 9 | 3.2 | 4.5 | 60° | T25 | 7.5 | Porte-outil **SP** (➲C024) **CE/CF/CGSP** (➲K230) **TSMP** (➲K232) |
| | **TS5L** | 6.8 | M5×0.8 | 15 | 2.9 | 4.5 | 80° | T25 | 7.5 | |
| | ★ **TS5R** | 6.9 | M5×0.8 | 12 | 3.5 | 3.9 | — | T20 | 5.0 | **WWX400** (➲K056) **WJX** (➲K072) |
| | **TS52** | 6.8 | M5×0.8 | 8 | 3.2 | 4.5 | 60° | T25 | 7.5 | **CE/CF/CGSP** (➲K230) |
| | **TS53** | 6.8 | M5×0.8 | 16 | 3.2 | 4.5 | 60° | T25 | 7.5 | |
| | **TS54** | 6.8 | M5×0.8 | 12 | 3.2 | 4.5 | 60° | T25 | 7.5 | **AJX** (➲K180) |
| | **TS55** | 6.8 | M5×0.8 | 10.5 | 3.2 | 4.5 | 60° | T25 | 7.5 | Série **GY** (➲F004) **AQX** (➲K172) **SPX** (➲K203) **SRM2** (➲K220) |
| | ★ **TS6S** | 8.5 | M6×1.0 | 13 | 4.4 | 5.6 | 60° | T30 | 10.0 | **AQX** (➲K172) **SRM2** (➲K220) |
| | ★ **TS6** | 8.5 | M6×1.0 | 16 | 4.4 | 5.6 | 60° | T30 | 10.0 | **SRM2** (➲K220) |

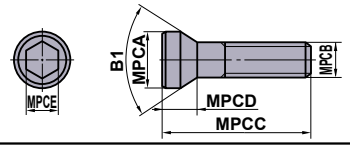
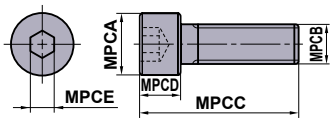
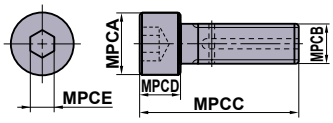
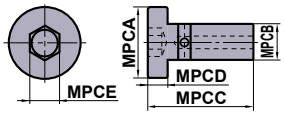
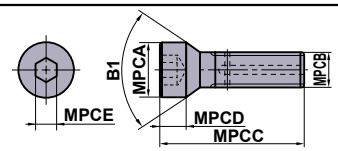
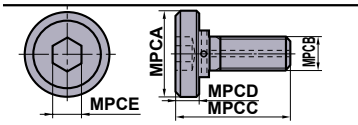
# PIÈCES DÉTACHÉES

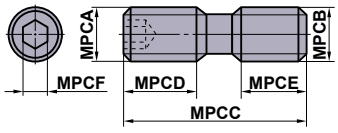


## VIS DE FIXATION

| Géométrie | Référence | Dimensions (mm) | | | | | Angle | MPCDS | TQ (N•m) | Porte-outil |
|---|---|---|---|---|---|---|---|---|---|---|
| | | MPCA | MPCB | MPCC | MPCD | MPCE | B1 | | | |
|  | **TPS20** | 2.7 | M2×0.4 | 3.5 | 1.3 | 1.8 | 60° | 6IP | 0.5 | |
| | **TPS20-1** | 2.65 | M2×0.4 | 4.7 | 2.4 | 1.8 | 60° | 6IP | 0.6 | **MVX** (➲M160) |
| | **TPS22** | 3.0 | M2.2×0.45 | 4.7 | 1.6 | 2.1 | 60° | 7IP | 0.5 | |
| | **TPS22S** | 3.0 | M2.2×0.45 | 4.2 | 1.6 | 2.1 | 60° | 7IP | 0.5 | |
| | **TPS25** | 3.3 | M2.5×0.45 | 5.5 | 1.7 | 2.1 | 60° | 7IP | 1.0 | **APX3000** (➲K133) **MVX** (➲M160) |
| | **TPS25-1** | 3.3 | M2.5×0.45 | 6.5 | 1.7 | 2.1 | 60° | 7IP | 1.0 | **APX3000** (➲K133) |
| | **TPS27F1** | 3.7 | M2.7×0.35 | 6.5 | 1.8 | 2.1 | 60° | 7IP | 1.0 | **VPX200** (➲K086) |
| | **TPS27F2** | 3.7 | M2.7×0.35 | 8.0 | 1.8 | 2.1 | 60° | 7IP | 1.0 | **VPX300** (➲K100) |
| | **TPS3** | 3.9 | M3×0.5 | 6.7 | 1.4 | 2.82 | 60° | 10IP | 1.0 | **MVX** (➲M160) |
| | *** TPS3R** | 4.6 | M3×0.5 | 8.5 | 1.4 | 2.82 | — | 10IP | 2.0 | **WJX09** (➲K072) |
| | **TPS3SB** | 4.4 | M3×0.5 | 8 | 2.0 | 2.82 | 80° | 10IP | 3.0 | **AXD4000A** (➲K162) |
|  | **TPS35** | 5.3 | M3.5×0.6 | 11.5 | 2.8 | 3.4 | 60° | 15IP | 3.5 | **ASX445** (➲K026) **ASX400** (➲K068) **PMR** (➲K236) |
| | **TPS351** | 4.8 | M3.5×0.6 | 7.2 | 1.4 | 2.82 | 60° | 10IP | 2.5 | **MVX** (➲M160) |
| | **TPS351B** | 5.1 | M3.5×0.6 | 7.2 | 1.4 | 2.82 | 60° | 10IP | 2.5 | **ARP** (➲K238) |
| | **TPS4** | 5.3 | M4×0.7 | 8 | 2.6 | 3.4 | 60° | 15IP | 3.5 | **APX4000** (➲K140) **ARP** (➲K238) **MVX** (➲M160) |
| | **TPS40F1** | 5.3 | M4×0.5 | 10.5 | 2.8 | 3.4 | 60° | 15IP | 3.0 | **VPX300** (➲K100) |
| | **TPS43** | 5.3 | M4×0.7 | 10 | 2.6 | 3.4 | 60° | 15IP | 4.0 | **APX4000** (➲K140) **MVX** (➲M160) |
| | *** TPS4R** | 6.4 | M4×0.7 | 10.6 | 2.9 | 3.4 | — | 15IP | 3.5 | **WSX445** (➲K016) |
| | **TPS54** | 6.8 | M5×0.8 | 12 | 3.2 | 4.5 | 60° | 25IP | 7.5 | **MVX** (➲M160) |
|  | **TSR05008S** | 3.5 | M5×0.8 | 8 | — | 2.8 | — | T10 | — | |
| | **TSR06011S** | 4 | M6×1.0 | 11 | — | 3.9 | — | T20 | — | |
|  | **TSS04005** | — | M4×0.7 | 5 | — | 2.4 | — | T8 | — | **PMF** (➲K234) |
| | **TSS04505S** | — | M4.5×0.7 | 5 | — | 3.5 | — | T10 | 3.5 | **FMAX** (➲K051) |
| | **TSS05006** | — | M5×0.8 | 6 | — | 2.8 | — | T10 | — | |
| | **TSS06010** | — | M6×1 | 10 | — | 3.9 | — | T20 | — | |
|  | **WCS503507H** | 6.3 | M5×0.5 | 7 | 3.3 | 3.5 | — | — | 5.0 | **ASX445** (➲K026) **ASX400** (➲K068) **PMR** (➲K236) |
| | **WCS604010H** | 7.8 | M6×0.75 | 10 | 4.1 | 4.0 | — | — | 7.0 | **PMR** (➲K236) |
|  | **WS203107TPS** | 3.1 | M2×0.25 | 7.3 | 1.7 | 1.8 | 60° | 6IP | 1.0 | **STAW** (➲M141) |
| | **WS203108TPS** | 3.1 | M2×0.25 | 8.3 | 1.9 | 1.8 | 60° | 6IP | 1.0 | |
| | **WS253909TPS** | 3.9 | M2.5×0.35 | 9.5 | 2.4 | 2.4 | 60° | 8IP | 2.0 | |
| | **WS304912TPS** | 4.9 | M3×0.35 | 12 | 3.25 | 2.82 | 60° | 10IP | 2.5 | |
|  | **WS254012T** | 4 | M2.5×0.45 | 11.5 | 2.2 | 2.4 | 80° | T8 | 2.0 | **TAW** (➲M150) |
| | **WS254013T** | 4 | M2.5×0.45 | 12.5 | 2.2 | 2.4 | 80° | T8 | 2.0 | |
| | **WS254014T** | 4 | M2.5×0.45 | 13.5 | 2.2 | 2.4 | 80° | T8 | 2.0 | |
| | **WS254015T** | 4 | M2.5×0.45 | 14.5 | 2.2 | 2.4 | 80° | T8 | 2.0 | |
| | **WS254016T** | 4 | M2.5×0.45 | 15.5 | 2.2 | 2.4 | 80° | T8 | 2.0 | |
| | **WS304517T** | 4.5 | M3×0.5 | 16.5 | 3.4 | 2.8 | 60° | T10 | 3.5 | |
| | **WS304518T** | 4.5 | M3×0.5 | 17.5 | 3.4 | 2.8 | 60° | T10 | 3.5 | |
| | **WS355520T** | 5.5 | M3.5×0.6 | 19.5 | 3.9 | 3.4 | 60° | T15 | 5.5 | |
| | **WS355521T** | 5.5 | M3.5×0.6 | 20.5 | 3.9 | 3.4 | 60° | T15 | 5.5 | |
| | **WS406023T** | 6 | M4×0.7 | 22.0 | 4.4 | 4.5 | 60° | T25 | 8.5 | |
| | **WS406024T** | 6 | M4×0.7 | 23.0 | 4.4 | 4.5 | 60° | T25 | 8.5 | |
| | **WS508026T** | 8 | M5×0.8 | 25.0 | 5.2 | 5.1 | 60° | T27 | 12.0 | |
| | **WS508027T** | 8 | M5×0.8 | 26.0 | 5.2 | 5.1 | 60° | T27 | 12.0 | |

## VIS D'ATTACHEMENT

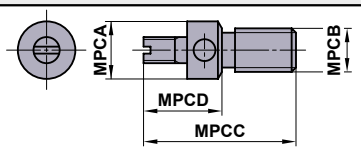
| Géométrie | Référence | Dimensions (mm) MPCA | MPCB | MPCC | MPCD | MPCE | Angle B1 | MPCDS | TQ (N•m) | Porte-outil |
|---|---|---|---|---|---|---|---|---|---|---|
|  | **BOES101** | 15 | M10×1.5 | 45 | 10 | 8 | 60° | — | 10.0 | |
|  | *** HSC08025H** | 13 | M8×1.25 | 33 | 8 | 5 | — | — | 24 | **VPX200/300** (➲K086,K100) **ARP** (➲K238) |
| | **HSC05030** | 8.5 | M5×0.8 | 35 | 5 | 4 | — | — | 10 | **APX3000/4000** (➲K133,K140) |
| | *** HSC08030H** | 13 | M8×1.25 | 38 | 8 | 5 | — | — | 24 | **WSX445** (➲K016) |
| | **HSC08045** | 13 | M8×1.25 | 53 | 8 | 5 | — | — | 24 | **VPX200/300** (➲K086,K100) |
| | **HSC08040** | 13 | M8×1.25 | 48 | 8 | 5 | — | — | 24 | **WSX445** (➲K016) |
| | **HSC08050** | 13 | M8×1.25 | 58 | 8 | 5 | — | — | 24 | **VPX200/300** (➲K086,K100) |
| | *** HSC10030H** | 16 | M10×1.5 | 40 | 10 | 6 | — | — | 40 | **APX3000/4000** (➲K133,K140) **AJX** (➲K180) **WSX445** (➲K016) |
| | **HSC10035** | 16 | M10×1.5 | 45 | 10 | 6 | — | — | 44 | **VFX5** (➲K192) **VFX6** (➲K196) |
| | **HSC10050** | 16 | M10×1.5 | 60 | 10 | 8 | — | — | 44 | **APX3000/4000** (➲K133,K140) **VPX200/300** (➲K086,K100) |
| | **HSC10055** | 16 | M10×1.5 | 65 | 10 | 8 | — | — | 44 | **VFX5** (➲K192) |
| | **HSC10060** | 16 | M10×1.5 | 70 | 10 | 8 | — | — | 44 | **VPX200/300** (➲K086,K100) |
| | **HSC10070** | 16 | M10×1.5 | 80 | 10 | 8 | — | — | 44 | **VPX200/300** (➲K086,K100) **ASPX** (➲K028) |
| | **HSC12035** | 18 | M12×1.75 | 47 | 12 | 10 | — | — | 80 | **WSX445** (➲K016) |
| | *** HSC12035H** | 18 | M12×1.75 | 47 | 12 | 10 | — | — | 80 | **APX3000/4000** (➲K133,K140) **AJX** (➲K180) |
|  | **HSC12040** | 18 | M12×1.75 | 52 | 12 | 10 | — | — | 80 | |
| | **HSC12045** | 18 | M12×1.75 | 57 | 12 | 10 | — | — | 80 | **WSX445** (➲K016) |
| | **HSC12060** | 18 | M12×1.75 | 72 | 12 | 10 | — | — | 80 | **VPX200/300** (➲K086,K100) |
| | **HSC12070** | 18 | M12×1.75 | 82 | 12 | 10 | — | — | 80 | **APX3000/4000** (➲K133,K140) **AJX** (➲K180) **WSX445** (➲K016) |
| | **HSC16040** | 24 | M16×2 | 56 | 16 | 14 | — | — | 150 | **WSX445** (➲K016) |
| | *** HSC16040H** | 24 | M16×2 | 56 | 16 | 14 | — | — | 150 | **APX3000/4000** (➲K133,K140) **AJX** (➲K180) |
| | **HSC16055** | 24 | M16×2 | 71 | 16 | 14 | — | — | 150 | **VPX200/300** (➲K086,K100) |
| | **HSC16065** | 24 | M16×2 | 81 | 16 | 14 | — | — | 150 | **VPX200/300** (➲K086,K100) |
| | **HSC16080** | 24 | M16×2 | 96 | 16 | 14 | — | — | 150 | |
| ✶ Avec trou de lubrification. | **HSC20040** | 30 | M20×2.5 | 60 | 20 | 17 | — | — | 320 | |
| | **HSC20090** | 30 | M20×2.5 | 110 | 20 | 17 | — | — | 320 | |
|  | **HSCX12030H** | 24 | M12×1.75 | 37 | 7 | 8 | — | — | 40 | **FMAX** (➲K051) |
| | **HSCX16035H** | 30 | M16×2 | 44 | 9 | 12 | — | — | 100 | |
| | **HSCX20035H** | 36 | M20×2.5 | 46 | 11 | 14 | — | — | 180 | |
|  | **HFF08033H** | 11 | M8×1.25 | 33 | 5 | 5 | 90° | — | 8.2 | **WJX09** (➲K072) |
| | **HFF08043H** | 11 | M8×1.25 | 43 | 5 | 5 | 90° | — | 8.2 | **AXD4000** (➲K155) |
|  | **MBA16033H** | 40 | M16×2 | 43 | 10 | 14 | — | — | 150 | **AHX640** (pour ϕ100) (➲K041) **WSX445** (➲K016) **APX4000** (➲K140) **AHX475S** (➲K038) **AHX640S** (➲K041) **AXD4000** (➲K155) **AXD7000** (➲K166) **AJX** (➲K180) |
| | **MBA20040H** | 50 | M20×2.5 | 54 | 14 | 17 | — | — | 320 | |

| Géométrie | Référence | Dimensions (mm) MPCA | MPCB | MPCC | MPCD | MPCE | MPCF | TQ (N•m) | Porte-outil |
|---|---|---|---|---|---|---|---|---|---|
|  | **HDS08030** | M8×0.75 | M8×1.25 | 30 | 13.5 | 11.5 | 4 | 8.2 | **BRP** (➲K190) |
| | **HDS10031** | M10×1.0 | M10×1.5 | 31 | 14 | 12 | 5 | 9.0 | **PMF** (➲K234) |

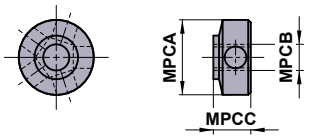
# PIÈCES DÉTACHÉES



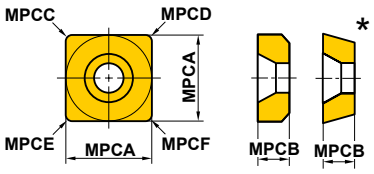
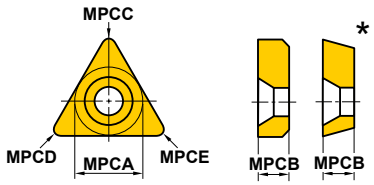
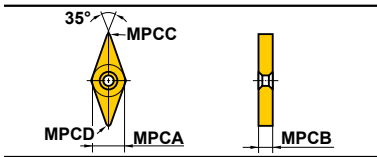
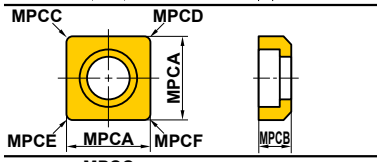
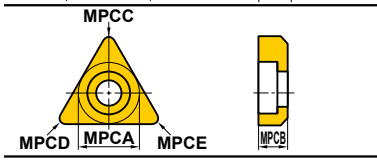
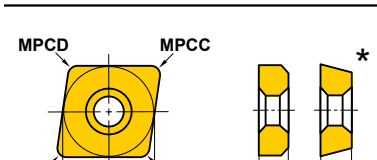
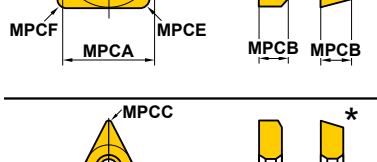
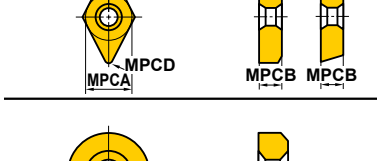
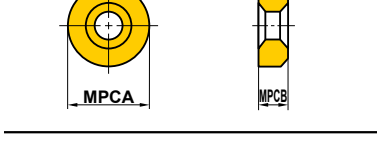
## VIS DE RÉGLAGE GROSSIER

| Géométrie | Référence | Dimensions (mm) | | | | | Angle | MPCDS | TQ (N•m) | Porte-outil |
|---|---|---|---|---|---|---|---|---|---|---|
| | | MPCA | MPCB | MPCC | MPCD | MPCE | B1 | | | |
|  | **KSS2** | 6.6 | M5×0.8 | 17.5 | 9 | — | — | — | — | **FMAX** (➲K051) |

## ÉCROU DE RÉGLAGE MICROMÉTRIQUE

| Géométrie | Référence | Dimensions (mm) | | | | | Angle | MPCDS | TQ (N•m) | Porte-outil |
|---|---|---|---|---|---|---|---|---|---|---|
| | | MPCA | MPCB | MPCC | MPCD | MPCE | B1 | | | |
|  | **KSN3** | 8.6 | M3×0.35 | 4.3 | — | — | — | — | — | **FMAX** (➲K051) |

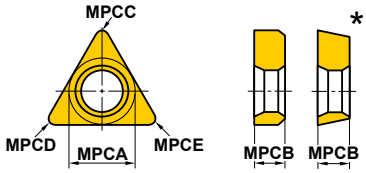
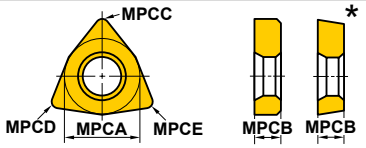
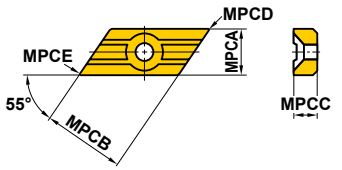
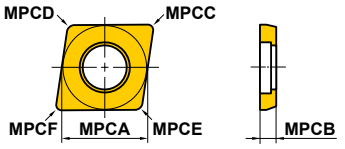
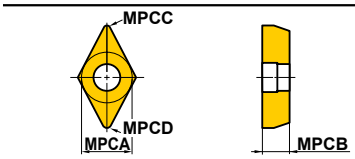
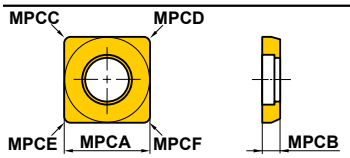
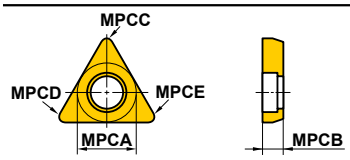
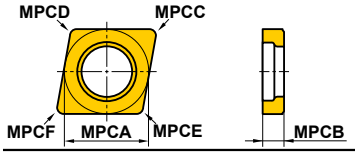
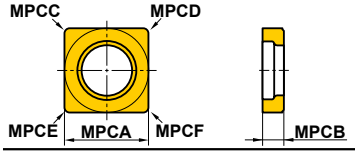
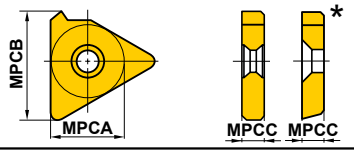
## ASSISE

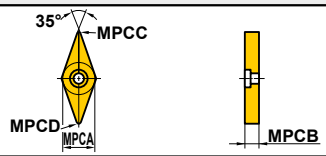
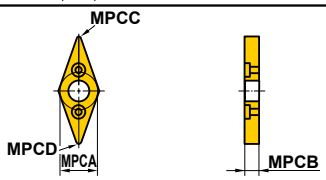
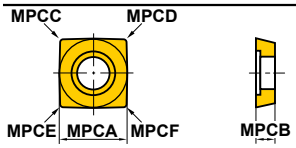
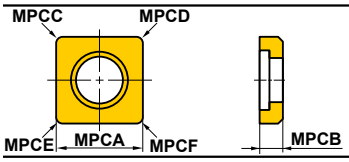
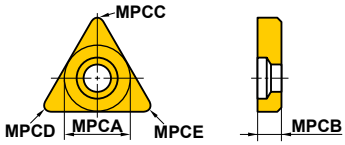
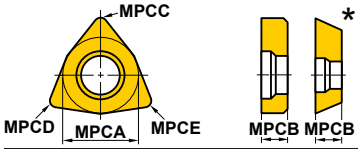
| Géométrie | Référence | Dimensions (mm) | | | | | | Porte-outil |
|---|---|---|---|---|---|---|---|---|
| | | MPCA | MPCB | MPCC | MPCD | MPCE | MPCF | |
|  | **CS32** | 9.52 | 3.18 | 0.8 | 0.8 | 1.2 | 1.2 | |
| | **CS42** | 12.70 | 3.18 | 0.8 | 0.8 | 1.2 | 1.6 | |
| | **CS43** | 12.70 | 4.76 | 0.8 | 0.8 | 1.2 | 1.6 | |
| | * **PS31** | 8.28 | 2.38 | 0.2 | 0.2 | 0.6 | 0.6 | |
| | * **PS42** | 11.46 | 3.18 | 0.2 | 0.2 | 0.6 | 1.0 | |
|  | **CT22** | 6.35 | 3.18 | 0.4 | 0.8 | 1.2 | — | |
| | **CT32** | 9.52 | 3.18 | 0.4 | 0.8 | 1.2 | — | |
| | * **PT21** | 5.11 | 2.38 | 0.2 | 0.2 | 0.6 | — | |
| | * **PT32** | 8.28 | 3.18 | 0.2 | 0.2 | 0.6 | — | Barre d'alésage **F** (➲E028) |
| | * **PT42** | 10.85 | 3.18 | 0.3 | 0.3 | 0.7 | — | |
| | **BPT322** | 7.8 | 3.18 | — | — | — | — | |
|  | **DCSVN32** | 9.52 | 3.18 | 0.8 | 1.2 | — | — | Porte-outil **DOUBLE-FORCE** (➲C019)<br>**BARRE D'ALÉSAGE DIMPLE BAR** (➲E017) |
|  | **ESS42** | 12.70 | 3.18 | 0.8 | 0.8 | 1.2 | 1.6 | |
|  | **EST32** | 9.52 | 3.18 | 0.4 | 0.8 | 1.2 | — | |
| | **EST43** | 12.70 | 4.76 | 0.4 | 0.8 | 1.2 | — | |
|  | **LLSCN3T3** | 9.52 | 3.97 | 0.4 | 0.4 | 0.8 | 0.8 | Porte-outil type **LL** (➲C008) |
| | **LLSCN33** | 9.52 | 4.76 | 0.4 | 0.4 | 0.8 | 0.8 | Porte-outil type **LL** (➲C008) |
| | **LLSCN42** | 12.70 | 3.18 | 0.8 | 0.8 | 1.2 | 1.2 | **BARRE D'ALÉSAGE DIMPLE BAR** (➲E015) |
| | **LLSCN53** | 15.87 | 4.76 | 1.2 | 1.2 | 1.6 | 1.6 | Barre d'alésage **P** (➲E038) |
| | **LLSCN63** | 19.05 | 4.76 | 1.2 | 1.2 | 1.6 | 1.6 | Porte-outil **HSK** (➲H001) |
| | * **LLSCP42** | 12.70 | 3.18 | 0.8 | 0.8 | 1.2 | 1.2 | **BARRE D'ALÉSAGE DIMPLE BAR** (➲E015) |
| | * **LLSCP63** | 19.05 | 4.76 | 1.2 | 1.2 | 1.6 | 1.6 | Barre d'alésage **P** (➲E038) |
| | | | | | | | | Porte-outil **HSK** (➲H001) |
|  | **LLSDN32** | 9.52 | 3.18 | 0.8 | 1.2 | — | — | Porte-outil **DOUBLE-FORCE** (➲C010) |
| | **LLSDN42** | 12.70 | 3.18 | 0.8 | 1.2 | — | — | Porte-outil type **LL** (➲C010) |
| | **LLSDN43** | 12.70 | 4.76 | 0.8 | 1.2 | — | — | **BARRE D'ALÉSAGE DIMPLE BAR** (➲E015) |
| | **LLSDN53** | 15.87 | 4.76 | 1.2 | 1.6 | — | — | Barre d'alésage **P** (➲E038)<br>Porte-outil **HSK** (➲H001) |
| | * **LLSDP42** | 12.70 | 3.18 | 0.8 | 1.2 | — | — | **BARRE D'ALÉSAGE DIMPLE BAR** (➲E015) |
|  | **LLSRN103** | 8.3 | 3.18 | — | — | — | — | Porte-outil type **LL** (➲C026) |
| | **LLSRN123** | 9.8 | 3.18 | — | — | — | — | Porte-outil **HSK** (➲H001) |
| | **LLSRN164** | 13.6 | 4.76 | — | — | — | — | |
| | **LLSRN204** | 17.3 | 4.76 | — | — | — | — | |
| | **LLSRN256** | 22.0 | 6.35 | — | — | — | — | |
| | **LLSRN326** | 28.0 | 6.35 | — | — | — | — | |
|  | **LLSSN32** | 9.52 | 3.18 | 0.8 | 0.8 | 1.2 | 1.2 | |
| | **LLSSN33** | 9.52 | 4.76 | 0.8 | 0.8 | 1.2 | 1.2 | **BARRE D'ALÉSAGE DIMPLE BAR** (➲E016) |
| | **LLSSN42** | 12.70 | 3.18 | 0.8 | 0.8 | 1.2 | 1.6 | Barre d'alésage **P** (➲E037) |
| | **LLSSN53** | 15.87 | 4.76 | 1.2 | 1.2 | 1.6 | 1.6 | |
| | **LLSSN63** | 19.05 | 4.76 | 1.2 | 1.2 | 1.6 | 2.0 | |
| | **LLSSN84** | 25.40 | 6.35 | 1.6 | 1.6 | 2.4 | 2.4 | |
| | * **LLSSP42** | 12.70 | 3.18 | 0.8 | 0.8 | 1.2 | 1.6 | **BARRE D'ALÉSAGE DIMPLE BAR** (➲E016) |

# PIÈCES DÉTACHÉES



## ASSISE

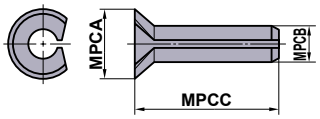
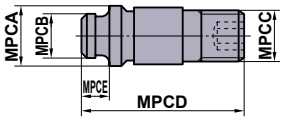
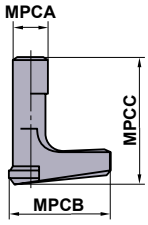
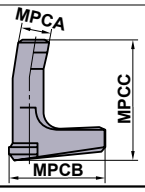
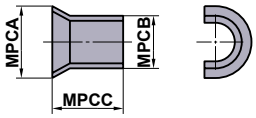
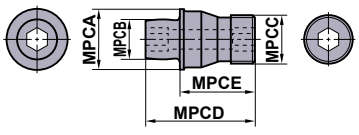
| Géométrie | Référence | Dimensions (mm) | | | | | | Porte-outil |
|---|---|---|---|---|---|---|---|---|
| | | MPCA | MPCB | MPCC | MPCD | MPCE | MPCF | |
|   | LLSTE32 | 7.6 | 3.18 | 0.4 | 0.4 | 0.4 | — | Porte-outil type **LL** (➲C016)<br>**BARRE D'ALÉSAGE DIMPLE BAR** (➲E016)<br>Barre d'alésage **P** (➲E037) |
| | LLSTN32 | 9.52 | 3.18 | 0.4 | 0.8 | 1.2 | — | |
| | LLSTN33 | 9.52 | 4.76 | 0.4 | 0.8 | 1.2 | — | |
| | LLSTN42 | 12.70 | 3.18 | 0.4 | 0.8 | 1.2 | — | |
| | LLSTN53 | 15.87 | 4.76 | 0.8 | 1.2 | 1.6 | — | |
| | * LLSTP32 | 9.52 | 3.18 | 0.4 | 0.8 | 1.2 | — | |
| | * LLSTP42 | 12.70 | 3.18 | 0.4 | 0.8 | 1.2 | — | |
|   | LLSWN32 | 9.52 | 3.18 | 0.4 | 0.8 | 1.2 | — | Porte-outil type **LL** (➲C022)<br>Porte-outil **DOUBLE-FORCE** (➲C022)<br>**BARRE D'ALÉSAGE DIMPLE BAR** (➲E017) |
| | LLSWN3T3 | 9.52 | 3.97 | 0.4 | 0.8 | 1.2 | — | |
| | LLSWN42 | 12.70 | 3.18 | 0.4 | 0.8 | 1.2 | — | |
| | * LLSWP32 | 9.52 | 3.18 | 0.4 | 0.8 | 1.2 | — | |
| | * LLSWP42 | 12.70 | 3.18 | 0.4 | 0.8 | 1.2 | — | |
|   | MHS532R/L | 9.4 | 15.7 | 4.5 | 0.8 | 0.8 | — | |
| | MHS533R/L | 9.4 | 15.7 | 4.5 | 1.2 | 1.2 | — | |
| | MHS534R/L | 9.4 | 15.7 | 4.5 | 1.6 | 1.6 | — | |
| | MHS543R/L | 9.4 | 15.7 | 6.5 | 1.2 | 1.2 | — | |
|   Trou de fixation excentré | MLCP42 | 12.58 | 3.18 | 1.2 | 1.2 | 1.2 | 1.2 | Barre d'alésage **P** (➲E038) |
|   Trou de fixation excentré | MLDP42 | 12.56 | 3.18 | 1.2 | 1.2 | — | — | Barre d'alésage **P** (➲E038) |
|   Trou de fixation excentré | MLSP42 | 12.63 | 3.18 | 1.2 | 1.2 | 1.2 | 1.2 | Barre d'alésage **P** (➲E037) |
|   Trou de fixation excentré | MLTP32 | 9.50 | 3.18 | 1.2 | 1.2 | 1.2 | — | Barre d'alésage **P** (➲E037) |
|   | MSCN63 | 18.8 | 4.76 | 1.6 | 1.6 | 1.6 | 1.6 | Porte-outil **DOUBLE-FORCE** (➲C009)<br>(pour coupe difficile) |
|   | MSSN63 | 18.8 | 4.76 | 1.6 | 1.6 | 1.6 | 1.6 | Porte-outil **DOUBLE-FORCE** (➲C012)<br>(pour coupe difficile) |
|   | CT32T1 | 9.525 | 15.03 | 3.18 | — | — | — | |
| | * PT32T1R | 8.28 | 13.34 | 3.18 | — | — | — | |
| | * PT32T2R | 8.28 | 13.19 | 3.18 | — | — | — | |

| Géométrie | Référence | Dimensions (mm) | | | | | | Porte-outil |
|---|---|---|---|---|---|---|---|---|
| | | MPCA | MPCB | MPCC | MPCD | MPCE | MPCF | |
|  | **PV321** | 9.52 | 3.18 | 0.4 | 0.4 | — | — | Porte-outil type **MP** (➲C019) |
| | **PV322** | 9.52 | 3.18 | 0.8 | 0.8 | — | — | |
| | **PV323** | 9.52 | 3.18 | 1.2 | 1.2 | — | — | |
|  | **SPSVN32** | 8.06 | 3.18 | 0.3 | 0.3 | — | — | Porte-outil type **SP** (➲C030)<br>Porte-outil **HSK** (➲H001) |
|  | **STASX400N** | 11.00 | 3.00 | 0.4 | 0.4 | 0.4 | 0.4 | **ASX400** (➲K068) |
| | **STASX445N** | 10.76 | 3.00 | — | — | — | — | **ASX445** (➲K026) |
|  | **STBS500N** | 12.7 | 3.18 | 0.8 | 0.8 | 0.8 | 0.8 | |
|  | **WPSTN33** | 9.3 | 4.76 | 0.8 | 0.4 | 1.2 | — | Porte-outil type **WP** (➲C017) |
| | **WPSTN43** | 12.50 | 4.76 | 0.8 | 0.4 | 1.2 | — | |
|  | * **WPSWC43** | 12.50 | 4.76 | 0.4 | 0.8 | 1.2 | — | |
| | **WPSWN43** | 12.50 | 4.76 | 0.4 | 0.8 | 1.2 | — | Porte-outil type **WP** (➲C023) |

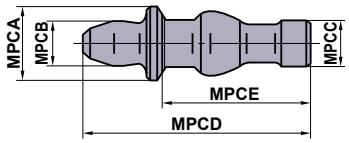
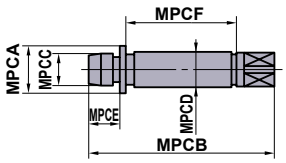
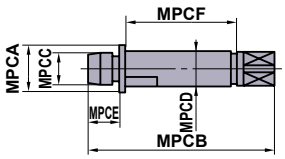
# PIÈCES DÉTACHÉES



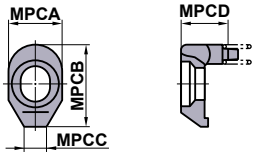
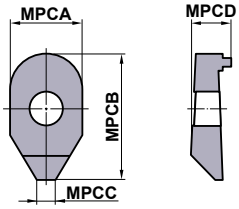
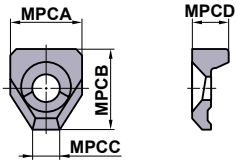
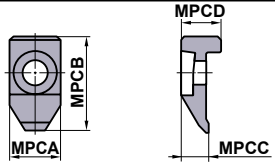
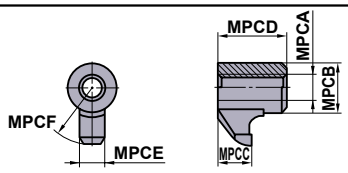
## GOUPILLE / LEVIER

| Géométrie | Référence | Dimensions (mm) | | | | | Porte-outil |
|---|---|---|---|---|---|---|---|
| | | MPCA | MPCB | MPCC | MPCD | MPCE | |
|  | **BCP141** | 3.0 | 1.4 | 5.6 | — | — | Porte-outil type **SP** (➲C030) |
| | **BCP201** | 4.3 | 2 | 7.4 | — | — | Barre d'alésage **F** (➲E028) |
| | **BCP202** | 4.3 | 2 | 6.4 | — | — | Porte-outil **HSK** (➲H013) |
| | **BCP251** | 4.8 | 2.5 | 7.4 | — | — | |
| | **BCP252** | 4.8 | 2.5 | 6.4 | — | — | |
| | **BCP301** | 5.3 | 3 | 7.4 | — | — | |
|  | **CCP33** | 6.5 | 3.66 | M5×0.8 | 18.5 | 3 | Porte-outil **WP** (➲C017) |
| | **CCP34** | 7.5 | 5.0 | M6×1.0 | 18.5 | 3 | |
| | **CCP44** | 7.5 | 5.0 | M5×0.8 | 14.2 | 3 | |
| | | | | | | | |
|  | **LLCL12S** | 2.1 | 9.3 | 5.6 | — | — | Porte-outil type **LL** (➲C016) |
| | **LLCL13** | 3.6 | 10 | 12.5 | — | — | Barre d'alésage **P** (➲E037) |
| | **LLCL13S** | 3.6 | 10 | 7.8 | — | — | Porte-outil **HSK** (➲H001) |
| | **LLCL14** | 4.7 | 13.4 | 13.2 | — | — | |
| | **LLCL14S** | 4.7 | 13.6 | 12.2 | — | — | |
| | **LLCL15** | 6.0 | 19 | 17 | — | — | |
| | **LLCL16** | 7.5 | 20.8 | 21 | — | — | |
| | **LLCL18** | 8.6 | 25.4 | 25.2 | — | — | |
| | **LLCL23** | 3.6 | 12.0 | 11.5 | — | — | |
| | **LLCL23S** | 3.6 | 11.6 | 9.5 | — | — | |
| | **LLCL24** | 4.7 | 16.2 | 14.8 | — | — | |
| | **LLCL25** | 6.0 | 17.1 | 17 | — | — | |
|  | **LLCL110** | 3.0 | 10.7 | 11.6 | — | — | |
| | **LLCL112** | 3.5 | 13 | 13.5 | — | — | |
| | **LLCL116** | 4.5 | 18.5 | 18 | — | — | |
| | **LLCL120** | 5.6 | 20.3 | 19 | — | — | |
| | **LLCL125** | 6 | 24 | 24 | — | — | |
| | **LLCL132** | 8 | 30 | 27 | — | — | |
|  | **LLP13** | 5.55 | 4.85 | 5.3 | — | — | Porte-outil type **LL** (➲C008) |
| | **LLP14** | 7.25 | 6.55 | 5.8 | — | — | Porte-outil **DOUBLE-FORCE** (➲C008) |
| | **LLP15** | 8.8 | 8.05 | 8.6 | — | — | **BARRE D'ALÉSAGE DIMPLE BAR** (➲E015) |
| | **LLP16** | 10.85 | 9.85 | 11.1 | — | — | Barre d'alésage **P** (➲E037) |
| | **LLP18** | 15.35 | 13.05 | 12.0 | — | — | Porte-outil **HSK** (➲H001) |
| | **LLP23** | 5.55 | 4.85 | 6.8 | — | — | |
| | **LLP24** | 7.25 | 6.55 | 9.1 | — | — | |
| | | | | | | | |
|  | **MP6** | 11.9 | 7.8 | M10×1 | 22.1 | 15 | Porte-outil **DOUBLE-FORCE** (➲C009) (pour coupe difficile) |
| | | | | | | | |

## GOUPILLE DE FIXATION

| Géométrie | Référence | Dimensions (mm) | | | | | | Porte-outil |
|---|---|---|---|---|---|---|---|---|
| | | MPCA | MPCB | MPCC | MPCD | MPCE | MPCF | |
|  | **P11S** | 6 | 3.7 | 4 | 17 | 11.1 | — | Porte-outil type **MP** (➲C019) |
| | **P21S** | 7.5 | 4.9 | 4.5 | 17.2 | 11.5 | — | |
|  | **P221US** | 4 | 18 | 2.11 | 3.5 | 3.3 | 7.7 | |
|  | **P333WS** | 5.75 | 24 | 3.64 | 5.0 | 4.9 | 11.3 | |
| | **P434W** | 7.75 | 30 | 5.03 | 7.0 | 4.9 | 16.8 | |

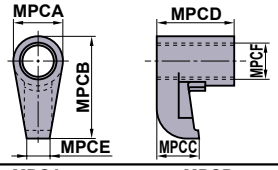
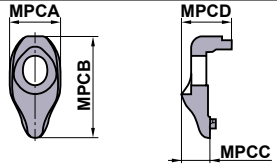
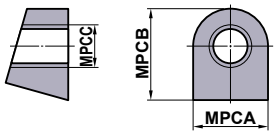
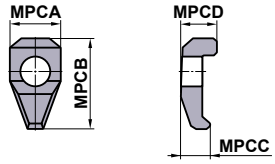
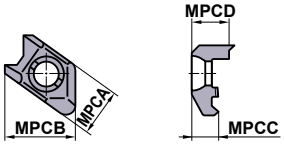
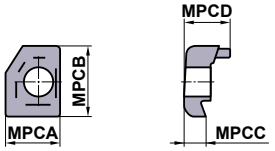
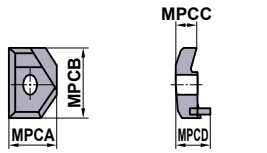
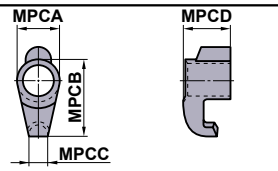
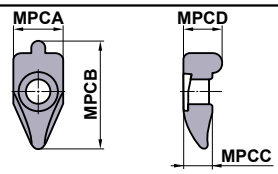
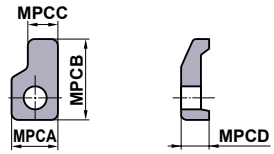
## BRIDE DE SERRAGE

| Géométrie | Référence | Dimensions (mm) | | | | | | Porte-outil |
|---|---|---|---|---|---|---|---|---|
| | | MPCA | MPCB | MPCC | MPCD | MPCE | MPCF | |
|  | **AMS3** | 7 | 12 | 3 | 3.3 | — | — | Porte-outil **Profil** (➲C032) |
| | **AMS4** | 9 | 13.5 | 3 | 3.8 | — | — | **AJX** (➲K180) |
| | **AMS5** | 10 | 15 | 3.5 | 5 | — | — | |
|  | **CA142** | 8 | 15 | 4 | 7 | — | — | |
| | **CA150** | 9 | 16 | 4.5 | 7 | — | — | |
| | **CA151** | 10 | 17 | 5 | 7 | — | — | |
| | **CA152** | 10 | 19 | 5 | 7 | — | — | |
| | **CA153** | 10 | 24 | 5 | 7 | — | — | |
| | **CA161** | 13 | 20 | 6 | 8 | — | — | |
| | **CA162** | 13 | 24 | 6 | 8 | — | — | |
| | **CA163** | 13 | 27 | 6 | 8 | — | — | |
| | **CA181** | 16 | 30 | 8 | 10 | — | — | |
| | **CA183** | 16 | 37 | 8 | 10 | — | — | |
|  | **CCK13** | 15 | 18.5 | 6 | 9 | — | — | Porte-outil type **WP** (➲C017) |
| | **CCK14** | 19 | 22 | 8 | 9.5 | — | — | |
|  | **CCTC1** | 13 | 25 | 7 | 10.2 | — | — | |
|  | **CK231** | M6×1 | 8 | 4 | 7.5 | 4.5 | 9.5 | |
| | **CK232** | M6×1 | 8 | 4.5 | 8 | 4.5 | 11.5 | |
| | **CK341** | M8×1 | 11 | 5.5 | 13.5 | 6 | 13.5 | |
| | **CK342** | M8×1 | 11 | 6 | 14 | 6 | 16.5 | |

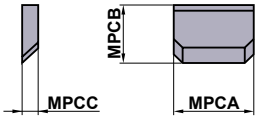
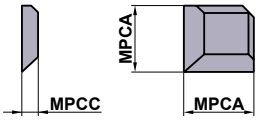
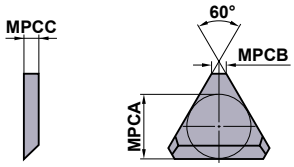
# PIÈCES DÉTACHÉES

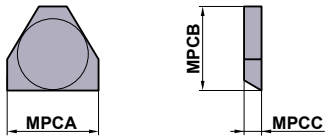


## BRIDE DE SERRAGE

| Géométrie | Référence | Dimensions (mm) | | | | | | Porte-outil |
|---|---|---|---|---|---|---|---|---|
| | | MPCA | MPCB | MPCC | MPCD | MPCE | MPCF | |
|   | **CKW6** | 10.9 | 22.5 | 9.2 | 16.8 | 5 | M8×1 | Porte-outil **DOUBLE-FORCE** (➲C009) (pour coupe difficile) |
|   | **DCK2211** | 11 | 22 | 6.57 | 11.1 | — | — | Porte-outil **DOUBLE-FORCE** (➲C008) |
| | **DCK2613** | 13 | 26.5 | 7.35 | 12.9 | — | — | **BARRE D'ALÉSAGE DIMPLE BAR** (➲E015) |
| | **DCK3113** | 13 | 31 | 9 | 14.5 | — | — | Porte-outil **HSK** (➲H001) |
|   | **KGC1** | 12.0 | 15.0 | M7×0.75 | — | — | — | |
|   | **LK1** | 8 | 14.3 | 4.5 | 5.9 | — | — | |
|   | **MHK5NR/L** | 15.5 | 23.5 | 8.1 | 12.1 | — | — | |
|   | **MTK1R/L** | 13 | 17.5 | 5 | 12 | — | — | Porte-outil type **MG** (➲F124) Porte-outil type **MT** (➲G024) Porte-outil **HSK** (➲H001) |
|   | **MTK2R/L** | 18 | 28 | 7 | 14 | — | — | |
|   | **SETK51** | 6.8 | 14.5 | 2.9 | 8 | — | — | Porte-outil type **MMTE** (➲G019) |
| | **SETK61** | 8.9 | 18.1 | 4.1 | 8.6 | — | — | Porte-outil type **MMTI** (➲G026) Porte-outil **HSK** (➲H001) |
|   | **SRK1R** | 9.4 | 21 | 5.5 | 7.5 | — | — | |
|   | **UCR** | 12 | 24 | 8 | 7 | — | — | |

## BRISE-COPEAUX

| Géométrie | Référence | Dimensions (mm) | | | | | Porte-outil |
|---|---|---|---|---|---|---|---|
| | | **MPCA** | **MPCB** | **MPCC** | **IC** | **LBB** | |
|  | **CBS3** | 9.4 | 8.0 | 1.5 | 9.525 | 1.5 | |
| | **CBS4** | 12.6 | 9.2 | 2.5 | 12.70 | 3.5 | |
| | **CBS4N** | 12.6 | 10.2 | 2.5 | 12.70 | 2.5 | |
| | **CBS4F** | 12.6 | 11.2 | 2.5 | 12.70 | 1.5 | |
| | **CBS6** | 18.9 | 14.6 | 2.5 | 19.05 | 4.5 | |
| | **CBS6F** | 18.9 | 17.6 | 2.5 | 19.05 | 1.5 | |
|  | **CBS3D** | 8.0 | — | 1.5 | 9.525 | 1.5 | |
| | **CBS4D** | 10.2 | — | 2.5 | 12.70 | 2.5 | |
|  | **CBT2N** | 5.67 | 1.4 | 1.5 | 6.35 | 1.0 | Barre d'alésage **F** (➲E028)<br>✱Pour les plaquettes positives, la largeur du brise-copeaux est 0.5mm plus grande que ce qui est représenté dans la liste. |
| | **CBT3** | 7.20 | 1.4 | 2.5 | 9.525 | 3.5 | |
| | **CBT3N** | 7.87 | 1.4 | 2.5 | 9.525 | 2.5 | |
| | **CBT3F** | 8.53 | 1.4 | 2.5 | 9.525 | 1.5 | |
| | **CBT4N** | 11.07 | 1.4 | 2.5 | 12.70 | 2.5 | |
| | **CBT4F** | 11.73 | 1.4 | 2.5 | 12.70 | 1.5 | |

| Géométrie | Référence | Dimensions (mm) | | | **MPCD** (mm) | Porte-outil |
|---|---|---|---|---|---|---|
| | | **MPCA** | **MPCB** | **MPCC** | | |
|  | **CBT3106** | 11.5 | 10.6 | 2.0 | 2.5—3.0 | |
| | **CBT3113** | 11.5 | 11.3 | 2.0 | 1.5—2.0 | |
| | **CBT3120** | 11.5 | 12 | 2.0 | 0.75—1.25 | |

# ANTI-GRIPPANT



## ANTI-GRIPPANT

| Forme | Référence | Stock | Volume (g) |
|---|---|---|---|
| | **MK1K** | ★ | 20 |
| | **MK1KS** | ★ | 3 |

★ : Article standard Japon.

# Notes

# Notes

# DONNÉES TECHNIQUES


CONFORMITÉ ISO13399 ..... P002
PERÇAGE - PROBLÈMES/SOLUTIONS ..... P006
USURE DU FORET ET DOMMAGE DEE L'ARÊTE DE COUPE ..... P007
CARACTÉRISTIQUES ET SPÉCIFICATIONS DES FORETS ..... P008
FORMULES DE PERÇAGE ..... P011
TABLEAU DE COMPARAISON DES MATIÈRES ..... P012
ÉTAT DE SURFACE ..... P016
CORRESPONDANCE DURETÉ ..... P017
TABLE DE TOLÉRANCES DES TROUS ..... P018
TABLEAU DE TOLÉRANCES DES ARBRES ..... P020
DIAMÈTRES FORETS, PERÇAGES AVANT TARAUDAGES ..... P022
DIAMÈTRES DE PERÇAGES POURVIS À TÊTE SIX PANS ET C.H.C ..... P023
SYSTÈME INTERNATIONAL ..... P024

# CONFORMITÉ ISO13399

## Liste de symboles normalisés ISO 13399

Alphabétique

**Source : norme ISO 13399**
**URL : https://www.iso.org/search/x/query/13399**



| ISO13399 Symbole | Contenu |
|---|---|
| **ADJLX** | Limite de réglage maximum |
| **ADJRG** | Plage de réglage |
| **ALF** | Angle de dépouille radial |
| **ALP** | Angle de dépouille axial |
| **AN** | Angle de dépouille principal |
| **ANN** | Angle de dépouille secondaire |
| **APMX** | Profondeur de coupe maximale |
| **AS** | Angle de dépouille de l'arête de planage |
| **ASP** | Vis de réglage |
| **AZ** | Profondeur de plongée maximale |
| **B** | Largeur de queue |
| **BBD** | Équilibré par conception |
| **BCH** | Longueur du chanfrein d'angle |
| **BD** | Diamètre de corps |
| **BDX** | Diamètre de corps maximale |
| **BHCC** | Nombre de cercles d'avant-trous |
| **BHTA** | Angle semi-conique du corps |
| **BMC** | Code de la matière du corps |
| **BS** | Longueur de l'arête de planage |
| **BSR** | Rayon de l'arête de planage |
| **CASC** | Code de taille du la cartouche |
| **CB** | Nombre de faces du brise-copeaux |
| **CBDP** | Profondeur d'alésage |
| **CBMD** | Désignation du fabricant du brise-copeaux |
| **CBP** | Propriété du brise-copeaux |
| **CCMS** | Code de connexion côté machine |
| **CCWS** | Code de connexion côté pièce à usiner |
| **CCP** | Propriété du chanfrein d'angle |
| **CDI** | Diamètre de coupe de la plaquette |
| **CDX** | Profondeur de coupe maximum |
| **CEATC** | Code de type de l'angle de l'arête de coupe de l'outil |
| **CECC** | Code de l'état de l'arête de coupe |
| **CEDC** | Nombre d'arêtes de coupe |
| **CF** | Chanfrein de point |
| **CHW** | Largeur du chanfrein de la pointe |
| **CICT** | Nombre d'éléments de coupe |
| **CNC** | Nombre d'angles |
| **CND** | Diamètre de l'entrée du liquide de coupe |
| **CNSC** | Code du type d'entrée du liquide de coupe |
| **CNT** | Taille du filetage de l'orifice d'adduction de liquide de coupe |
| **CP** | Pression du liquide de coupe |
| **CRE** | Rayon de point |
| **CRKS** | Dimension du filetage de fixation |
| **CSP** | Propriété du liquide de coupe |
| **CTP** | Propriété du revêtement |
| **CTX** | Translation horizontale du point de coupe |
| **CTY** | Translation verticale du point de coupe |
| **CUTDIA** | Diamètre de tronçonnage maximal de la pièce |
| **CUB** | Base de l'unité de connexion |
| **CW** | Largeur de coupe |
| **CWX** | Largeur de coupe maximum |
| **CXD** | Diamètre de la sortie du liquide de coupe |

| ISO13399 Symbole | Contenu |
|---|---|
| **CXSC** | Code de type de sortie de liquide de coupe |
| **CZC** | Code de dimension de connexion |
| **D1** | Diamètre du trou de fixation |
| **DAH** | Diamètre du trou d'accès |
| **DAXN** | Diamètre extérieur minimum de la gorge axiale |
| **DAXX** | Diamètre extérieur maximum de la gorge axiale |
| **DBC** | Diamètre du cercle de vissage |
| **DC** | Diamètre de coupe |
| **DCB** | Diamètre d'alésage du raccord |
| **DCBN** | Diamètre d'alésage du raccord minimum |
| **DCBX** | Diamètre d'alésage du raccord maximum |
| **DCC** | Code de style de la configuration conceptuelle |
| **DCCB** | Diamètre nominal d'alésage de la connexion |
| **DCIN** | Diamètre de coupe interne |
| **DCINN** | Diamètre de coupe interne minimum |
| **DCINX** | Diamètre de coupe interne maximum |
| **DCN** | Diamètre de coupe min. |
| **DCON** | Diamètre de raccordement |
| **DCONMS** | Diamètre de connexion côté machine |
| **DCONWS** | Diamètre de connexion côté pièce à usiner |
| **DCSC** | Code de taille du diamètre de coupe |
| **DCSFMS** | Diamètre de la surface de contact côté machine |
| **DCX** | Diamètre de coupe maximale |
| **DF** | Diamètre de flasque |
| **DHUB** | Diamètre du moyeu |
| **DMIN** | Diamètre d'alésage minimal |
| **DMM** | Diamètre de la queue |
| **DN** | Diamètre de collet |
| **DRVA** | Angle de travail |
| **EPSR** | Angle inclus de la plaquette |
| **FHA** | Angle d'hélice de goujure |
| **FHCSA** | Angle de lamage du trou de fixation |
| **FHCSD** | Diamètre nominal du trou de fixation |
| **FLGT** | Épaisseur de bride |
| **FMT** | Type de forme |
| **FXHLP** | Propriété du trou de fixation |
| **GAMF** | Angle de coupe radial |
| **GAMN** | Angle de coupe normal |
| **GAMO** | Angle de dépouille orthogonal |
| **GAMP** | Angle de dépouille axial |
| **GAN** | Angle d'attaque |
| **H** | Hauteur de queue |
| **HA** | Hauteur de filet théorique |
| **HAND** | Sens |
| **HBH** | Hauteur de la tête |
| **HBKL** | Longueur excentrée du dos de la tête |
| **HBKW** | Largeur de la tête |
| **HBL** | Longueur excentrée du bas de la tête |
| **HC** | Hauteur de filet réelle |
| **HF** | Hauteur fonctionnelle |
| **HHUB** | Hauteur du moyeu |
| **HTB** | Hauteur de corps |
| **IC** | Diamètre du cercle inscrit |
| **IFS** | Code de style du montage de la plaquette |
| **IIC** | Code d'interface de la plaquette |
| **INSL** | Longueur de la plaquette |
| **KAPR** | Angle de coupe |
| **KCH** | Chanfrein d'angle |

| ISO13399 Symbole | Contenu |
|---|---|
| **KRINS** | Angle de l'arête principale |
| **KWW** | Largeur de clavette |
| **KYP** | Propriété de la clavette |
| **L** | Longueur taillée |
| **LAMS** | Inclinaison de l'angle |
| **LB** | Longueur de corps |
| **LBB** | Largeur du brise-copeaux |
| **LBX** | Longueur maximum de corps |
| **LCCB** | Profondeur nominale d'alésage de la connexion |
| **LCF** | Longueur de goujure |
| **LDRED** | Longueur réduite du diamètre du corps |
| **LE** | Longueur effective de l'arête de coupe |
| **LF** | Longueur fonctionnelle |
| **LFA** | une dimension sur lf |
| **LH** | Longueur de tête |
| **LPR** | Porte-à-faux |
| **LS** | Longueur de queue |
| **LSC** | Longueur de serrage |
| **LSCN** | Longueur de serrage minimum |
| **LSCX** | Longueur de serrage maximale |
| **LTA** | Longueur LTA (longueur de MCS à CRP) |
| **LU** | Longueur utile |
| **LUX** | Longueur utile maximale |
| **M** | Dimension m |
| **M2** | Distance entre le cercle inscrit nominal et le bec d'une plaquette à angle complémentaire |
| **MHA** | Angle du trou de fixation |
| **MHD** | Distance du trou de fixation |
| **MHH** | Hauteur du trou de fixation |
| **MIID** | Identification de la plaquette modèle |
| **MTP** | Code de type de serrage |
| **NCE** | Nombre d'extrémités tranchantes |
| **NOF** | Nombre de goujures |
| **NOI** | Nombre d'index de plaquette |
| **NT** | Nombre de dents |
| **OAH** | Hauteur totale |
| **OAL** | Longueur totale |
| **OAW** | Largeur totale |
| **PDPT** | Profondeur de profil de la plaquette |
| **PDX** | Distance du profil ex |
| **PDY** | Distance du profil ey |
| **PFS** | Code de style du profil |
| **PL** | Longueur de pointe |
| **PNA** | Profil d'angle |
| **PRFRAD** | Rayon de profil |
| **PSIR** | Angle d'attaque de l'outil |
| **PSIRL** | Angle de coupe, outil à gauche |
| **PSIRR** | Angle de coupe, outil à droite |
| **RAL** | Angle de dépouille, outil à gauche |
| **RAR** | Angle de dépouille, outil à droite |
| **RCP** | Propriété de l'angle arrondi |
| **RE** | Rayon de pointe |
| **REL** | Rayon de pointe gauche |
| **RER** | Rayon de pointe droite |
| **RMPX** | Angle de rampe maximale |
| **RPMX** | Vitesse rotative maximale |
| **S** | Épaisseur plaquette |
| **S1** | Épaisseur de plaquette |
| **SC** | Épaisseur de plaquette totale |
| **SDL** | Longueur d'épaulement |
| **SIG** | Angle de pointe |

| ISO13399 Symbole | Contenu |
|---|---|
| **SSC** | Code de taille de plaquette |
| **SX** | Code de forme de la coupe transversale de queue |
| **TC** | Classe de tolérance de la plaquette |
| **TCE** | Code de l'arête de coupe munie d'une plaquette |
| **TCTR** | Classe de tolérance du filet |
| **TD** | Diamètre du filet |
| **THFT** | Type de forme |
| **THL** | Longueur du filetage |
| **THLGTH** | Longueur du filet |
| **THSC** | Code de forme du porte-outil |
| **THUB** | Épaisseur du moyeu |
| **TP** | Pas filetage |
| **TPI** | Filets par pouce |
| **TPIN** | Filets par pouce, minimum |
| **TPIX** | Filets par pouce, maximum |
| **TPN** | Pas filetage minimum |
| **TPT** | Type de profil du filet |
| **TPX** | Pas filetage maximale |
| **TQ** | Couple |
| **TSYC** | Code du type d'outil |
| **TTP** | Type filetage |
| **ULDR** | Rapport longueur utile diamètre |
| **UST** | Système d'unités |
| **W1** | Largeur de la plaquette |
| **WEP** | Propriété de l'arête de planage |
| **WF** | Largeur fonctionnelle |
| **WF2** | Distance entre le point de référence et l'appui frontal d'un outil de tournage |
| **WFS** | Largeur fonctionnelle secondaire |
| **WT** | Poids de l'article |
| **ZEFF** | Nombre d'arêtes de coupe effectives en bout |
| **ZEFP** | Nombre effectif d'arêtes |
| **ZNC** | Nombre d'arêtes de coupe au centre |
| **ZNF** | Nombre de plaquettes de face |
| **ZNP** | Nombre de plaquettes périphériques |

# Symboles de référence (ISO 13399)

| ISO13399 Symbole | Contenu |
|---|---|
| **CIP** | Système de coordination en cours d'utilisation |
| **CRP** | Point de référence de coupe |
| **CSW** | Système de coordination côté pièce à usiner |
| **MCS** | Système de coordination de montage |
| **PCS** | Système de coordination primaire |

# PERÇAGE - PROBLÈMES/SOLUTIONS

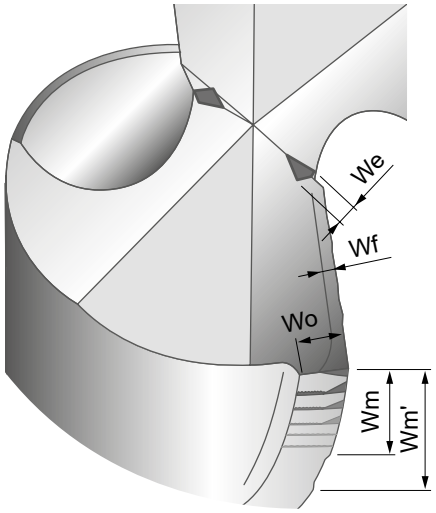


| Problème | | Facteur / Solution | Conditions de coupe: Vitesse de coupe (Augmenter ↗ / Diminuer ↘) | Conditions de coupe: Avance (Augmenter ↗ / Diminuer ↘) | Conditions de coupe: Réduire l'avance en début de coupe | Conditions de coupe: Réduire l'avance en sortie de perçage | Conditions de coupe: Avance pas | Conditions de coupe: Augmenter la précision du pré-trou et de la profondeur | Conditions de coupe: Arrosage: Augmentez le ratio d'huile | Conditions de coupe: Arrosage: Augmentez le volume | Conditions de coupe: Arrosage: Augmentez la pression d'arrosage | Géométrie outil: Largeur du tranchant transversal (Augmenter ↗ / Diminuer ↘) | Géométrie outil: Largeur préparation arête (Augmenter ↗ / Diminuer ↘) | Géométrie outil: Épaisseur noyau (Augmenter ↗ / Diminuer ↘) | Géométrie outil: Diminuer la longueur de goujure | Géométrie outil: Diminuer la hauteur de lèvre | Géométrie outil: Utiliser un foret avec liquide de refroidissement interne | Géométrie outil: Passer à un foret avec affûtage X | Machine fixation outil: Augmenter la précision d'installation de l'outil | Machine fixation outil: Réduction porte-à-faux | Machine fixation outil: Aplanir surface de la matière | Machine fixation outil: Augmenter la résistance de bridage de l'outil | Machine fixation outil: Diminuer le jeu de la machine et augmenter la rigidité |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Détérioration de la durée de vie de l'outil | Cassure foret | Manque de rigidité du foret | | | | | | | | | | | | ● | ● | | | | | | | | |
| | | Conditions de coupe inadaptées | | ● ↘ | | | | | | | | | | | | | | | | | | | |
| | | Forte déviation du porte-outil | | | | | | | | | | | | | | | | | ● | | | | ● |
| | | Surface de la pièce inclinée | | | | | | | | | | | | | | | | | | | ● | | |
| | Forte usure de l'arête de coupe périphérique et des tranchants transversaux | Conditions de coupe inadaptées | ● ↘ | | | | | | | | | | | | | | | | | | | | |
| | | Augmentation de la température au point de coupe | | | | | | | ● | ● | | | | | | | | ● | | | | | |
| | | Tolérance de circularité insuffisante | | | | | | | | | | | | | | | | | ● | | | | |
| | Ebrèchement de l'arête de coupe en périphérie | Conditions de coupe inadaptées | | ● ↘ | | | ● | | | | | | | | | | | | | | | | |
| | | Forte déviation du porte-outil | | | | | | | | | | | | | | | | | ● | | | | ● |
| | | Tremblements, vibrations | | | | | | | | | | | ● ↘ | | | | | | | ● | | ● | ● |
| | Rupture du tranchant transversal | Tranchant transversal trop large | | | | | | | | | | ● ↘ | | | | | | | | | | | |
| | | Entré defectueuse | | | ● | | | | | | | | | | | | | | | | | | |
| | | Vibrations, broutements | | | | | | | | | | | ● ↘ | | | | | | | ● | | ● | ● |
| Détérioration de la précision du trou | Le diamètre de perçage augmente | Manque de rigidité du foret | | | | | | | | | | | | ● | ● | | | | | | | | |
| | | Géométrie de foret inappropriée | | | | | | | | | | | | | | | ● | | | | | | |
| | Le diamètre de perçage diminue | Augmentation de la température au point de coupe | | | | | | | ● | ● | | | | | | | | ● | | | | | |
| | | Conditions de coupe inadaptées | ● ↘ | | | | | | | | | | | | | | | | | | | | |
| | | Géométrie de foret inappropriée | | | | | | | | | | | | | | | ● | | | | | | |
| | Linéarité insuffisante | Manque de rigidité du foret | | | | | | | | | | | | ● | ● | | | | | | | | |
| | | Forte déviation du porte-outil | | | | | | | | | | | | | | | | | ● | | | | ● |
| | | Propriétés de guidage insuffisantes | | | | | | ● | | | | | | | | | | | | | | | |
| | Précision insuffisante de la position du perçage, de la circularité et de la qualité de surface | Manque de rigidité du foret | | | | | | | | | | | | ● | ● | | | | | | | | |
| | | Entré defectueuse | | | | | | | | | | | | | | | | | ● | | | | |
| | | Conditions de coupe inadaptées | | | ● | | | | | | | | | | | | | | | | | | |
| | | Forte déviation du porte-outil | | | | | | | | | | | | | | | | | | ● | | | ● |
| Bavures | Formation de bavures à la sortie du trou | Géométrie de foret inappropriée | | | | | | | | | | | ● ↘ | | | | | | | | | | |
| | | Conditions de coupe inadaptées | | | | ● | | | | | | | | | | | | | | | | | |
| Mauvaise formation copeaux | Copeaux longs | Conditions de coupe inadaptées | | ● ↗ | | | | ● | | | | | | | | | | | | | | | |
| | | Mauvaise formation copeaux | | | | | | | | ● | ● | | | ● ↘ | | | | ● | | | | | |
| | Collage copeaux | Conditions de coupe inadaptées | ● ↘ | ● ↘ | | | | ● | | | | | | | | | | | | | | | |
| | | Mauvaise formation copeaux | | | | | | | | ● | ● | | | ● ↘ | | | | ● | | | | | |

# USURE DU FORET ET DOMMAGE DE L'ARÊTE DE COUPE

## ■CONDITIONS D'USURE DU FORET

Le tableau suivant comporte un dessin simple qui représente l'usure de l'arête de coupe d'un foret. La production et l'étendue de l'usure varient en fonction des matériaux de la pièce et des conditions de coupe de l'application. En général, l'usure périphérique est la plus importante et elle détermine la durée de vie de l'outil de perçage. Pour un nouvel affûtage, il faut entièrement réaffûter les listels et les arêtes de coupe. Lorsque l'usure est importante, il faut donc enlever plus de matière pour rétablir l'arête de coupe.




We : **Usure des arêtes transversales**

Wf : **Usure en dépouille (Centre de l'arête principale)**

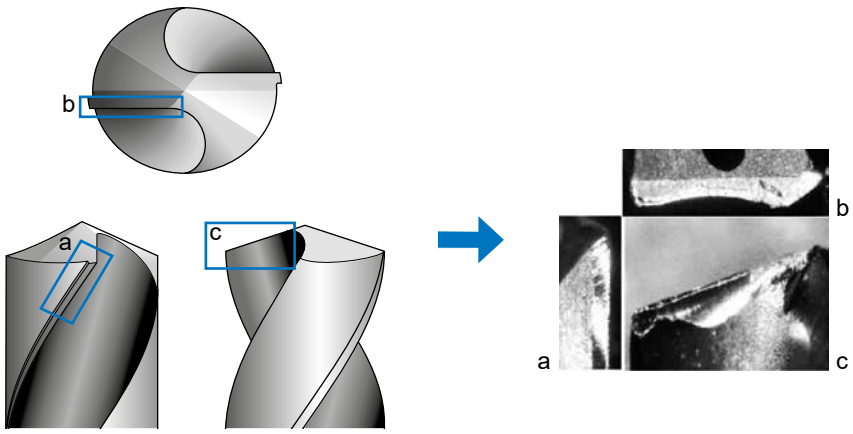
Wo : **Usure des angles de coupe**

Wm : **Usure du listel**

Wm' : **Usure du listel (arêtes annexes)**

## ■DOMMAGE DE L'ARÊTE DE COUPE

En perçant, l'arête de coupe peut être altérée par la formation de copeaux, par rupture et des dommages anormaux. Dans de tels cas, il est important d'expertiser le dommage, de rechercher la cause et de prendre des contre-mesures.

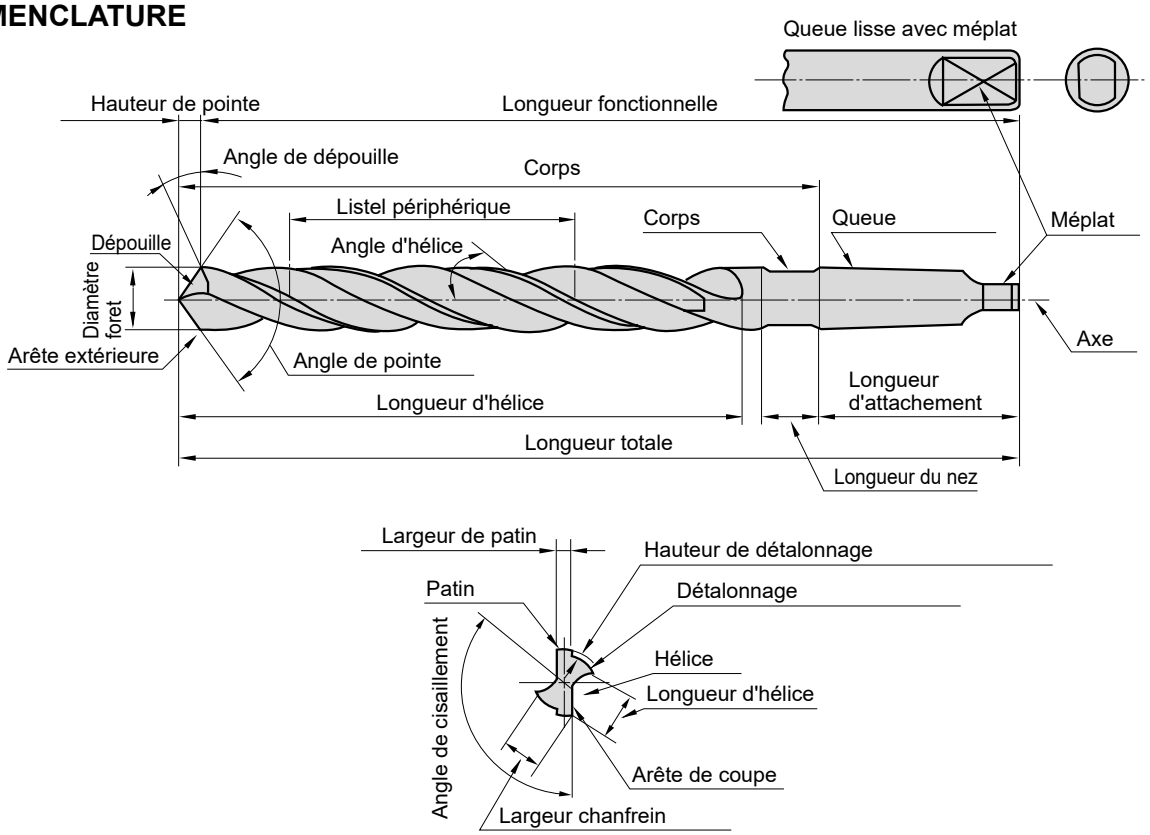



**Dommages des arêtes de coupe**

# CARACTÉRISTIQUES ET SPÉCIFICATIONS DES FORETS



## ■NOMENCLATURE



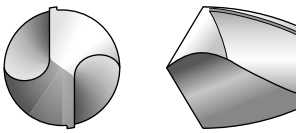
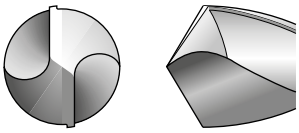
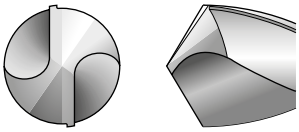
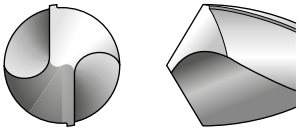
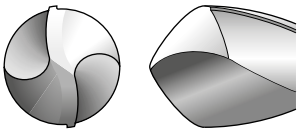
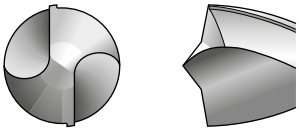

## ■FORMES ET CARACTÉRISTIQUES DE COUPE

| | |
|---|---|
| Angle d'hélice | C'est l'inclinaison de la pente de l'hélice en regard de la direction axiale d'un foret, cela correspond à l'inclinaison de l'arête de coupe d'un outil. L'angle de coupe d'un foret varie en fonction de la position de l'arête de coupe et il diminue au fur et à mesure que l'on s'approche du centre.<br>**Matériaux durs Petit ◀·· Angle de coupe ··▶ Grand Matériaux tendres** |
| Longueur d'hélice | Elle est déterminée par la profondeur du trou, la longueur du canon de perçage, et le nombre de réaffûtages souhaité. Directement lié à la durée de vie, à choisir la plus courte possible. |
| Angle de pointe | Un angle de pointe standard est de 118° et doit être modifié en fonction des différentes applications.<br>**Matériaux tendres avec conditions normales d'usinage. Petit ◀·· Angle de pointe ··▶ Grand Pour matériaux durs et perçage performant.** |
| Epaisseur de l'âme | C'est un élément important qui détermine la rigidité et la performance de coupe du foret. Le choix de l'épaisseur de l'âme du foret est fonction des applications.<br>Faible résistance de coupe<br>Faible rigidité<br>Grande résistance à la coupe<br>Bonne usinabilité<br>**Mince ◀·· Epaisseur de l'âme ··▶ Epais**<br>Grande résistance à la coupe<br>Grande rigidité<br>Fractionnement copeaux difficile<br>Matériaux haute dureté,<br>perçage trou sécant, etc. |
| Patin | Le patin défini le diamètre du foret, et assure une fonction de guidage pendant le perçage. La largeur du patin est déterminée en fonction du frottement généré.<br>**Faible guidage Petit ◀·· Largeur de patin ··▶ Grand Bon guidage** |
| Diamètre de conicité | Pour réduire le frottement à l'intérieur du trou percé, une partie de l'hélice est légèrement conique, de la pointe du foret à la queue. Le degré de conicité est habituellement représenté en rapport avec la réduction du diamètre et la longueur de queue, soit approximativement 0.04−0.1mm. |

## ■LA GÉOMÉTRIE DE L'ARÊTE DE COUPE ET SON INFLUENCE

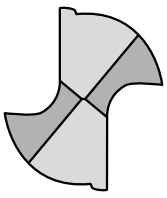
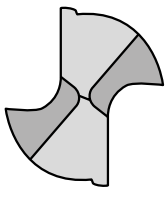
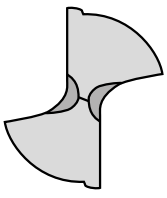
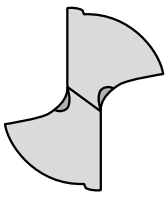
Comme ceci est représenté dans le tableau suivant, la géométrie optimale de l'arête de coupe peut être sélectionnée pour différentes applications. Si vous utilisez la géométrie optimale d'arête de coupe, alors il est possible d'avoir une plus grande efficacité de la machine et une meilleure précision de perçage.

**●Les Formes des Arêtes de Coupe**

| Affûtage | Forme | Propriétés et effets | Application |
|---|---|---|---|
| Conique |  | • La dépouille est conique et l'angle de dégagement augmente en allant vers le centre du foret. | • Usage général |
| Plate |  | • Le flanc est plat.<br>• Affûtage simple. | • Principalement pour les forets de petit diamètre. |
| Angle à trois niveaux |  | • En raison du manque d'arête de coupe. transversale, la force centripète est trop élevée et les petits perçages sont surdimensionnés.<br>• Nécessite une affûteuse spéciale.<br>• Rectification plane des trois côtés. | • Pour les trous nécessitant une précision de perçage et une précision de positionnement. |
| Point de spirale |  | • Afin d'augmenter l'angle de dépouille à proximité du centre de perçage, on combine l'affûtage conique avec une hélice irrégulière.<br>• Arête de coupe transversale S avec une force centripète élevée et une précision d'usinage | • Pour les trous nécessitant une grande précision. |
| Lèvre radiale |  | • L'arête de coupe est affûtée de manière radiale pour répartir la charge.<br>• Grande précision du trou et qualité de surface.<br>• Petites bavures à la base des trous de part en part<br>• Nécessite une affûteuse spéciale. | • Fonte grise, Alliage aluminium<br>• Pour les plaques en fonte.<br>• Acier |
| Perçage à point central |  | • Cette géométrie présente un angle tranchant à deux niveaux garantissant une meilleure concentricité et une diminution des forces de coupe en sortant de la pièce. | • Pour les trous dans la tôle fine. |

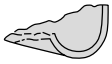
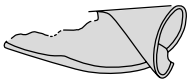
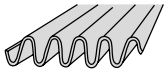
## ■AMINCISSEMENT DE L'ÂME

L'angle de coupe d'un foret diminue en remontant vers le centre, et devient négatif. Pendant le perçage , le centre du foret exerce sur la pièce une pression équivalente à 50−70% de la résistance à la coupe. Un amincissement de l'âme est très efficace pour réduire la résistance à la coupe du foret et favoriser l'évacuation des copeaux et un meilleur engagement du foret.

| | Type X | Type XR | Type S | Type N |
|---|---|---|---|---|
| Forme |  |  |  |  |
| Caractéristiques | Effort axial diminué et amorce de coupe facilitée. Efficace avec une âme de foret plutôt épaisse. | Pénétration du foret moins favorable, mais arête de coupe robuste pour un grand nombre d'applications. | Coupe facile. Cette forme est généralement utilisée. | Efficace quand l'âme est épaisse. |
| Applications principales | Perçage en général et perçage long. | Longue vie. Recommandé pour le perçage en général et pour les aciers inoxydable. | Recommandé pour le perçage des aciers, des fontes et des matériaux non-ferreux. | Perçage de trou profond. |

# CARACTÉRISTIQUES ET SPÉCIFICATIONS DES FORETS

## ■COPEAUX DE PERCAGE

| Type de copeaux | Forme | Caractéristiques et comportement de coupe |
|---|---|---|
| Conique en spirale | | Ces copeaux sont produits par l'inclinaison de l'hélice à faible avance. Des copeaux de cette sorte se produisent lorsque l'on perce de la fonte ductile avec une faible vitesse d'avance. Si le copeau se fragmente après quelques tours, la performance est satisfaisante. |
| Long | | Les longs copeaux sortent sans former d'hélice et s'enrouleront autour du foret. |
| Fragmenté |  | C'est un copeau cassé par l'hélice du foret et la paroi du trou percé. Il est généré par une avance trop importante. |
| Segmenté |  | Un copeau conique en forme de spirale qui casse juste avant que celui-ci grandisse et ne devienne une longue denture, est le résultat d'un perçage avec un taux de ductilité iinsuffisant. Excellente formation et dégagement du copeau. |
| Ondulé |  | Un copeau qui est plié à cause de la goujure et des caractéristiques de la matière percée. Celui-ci peut facilement créer un bourrage copeaux dans la goujure du foret. |
| Aiguille | | Ces copeaux sont cassés par les vibrations perçant des matériaux friables avec un petit rayon. La performance de fragmentation est satisfaisante. Toutefois, les copeaux peuvent créés un bourrage. |

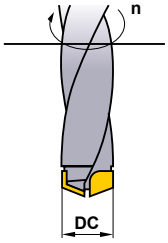
# FORMULES DE PERÇAGE

## ■VITESSE DE COUPE (Vc)

$$Vc = \frac{\pi \cdot DC \cdot n}{1000} \ (m/min)$$

**Vc (m/min):** Vitesse de coupe　**DC (mm) :** Diamètre foret
**π (3.14)　: Pi**　**n (t/min) :** Régime de broche principale

*Diviser par 1000 pour passer de m en mm.




(Exemple) Quelle est la vitesse de coupe quand la broche tourne à 1350t/min, avec un foret de diamètre 12mm ?

(Réponse) Substitut π=3.14, DC=12, n=1350 dans la formule.

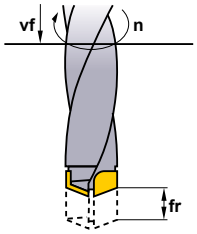
$$Vc = \frac{\pi \cdot DC \cdot n}{1000} = \frac{3.14 \times 12 \times 1350}{1000} = 50.9 m/min$$

La vitesse de coupe est de 50.9m/min

## ■VITESSE D'AVANCE (Vf)

$$Vf = fr \cdot n (mm/min)$$

**Vf (mm/min) :** Vitesse d'avance broche (axe Z)
**fr (mm/tour):** Avance par tour
**n (t/min)　: Régime de broche principale**




(Exemple) Quelle est la vitesse d'avance de la broche quand l'avance est de 0.2mm/tour et la vitesse de rotation 1350t/min ?

(Réponse) Substitut fr=0.2, n=1350 dans la formule.

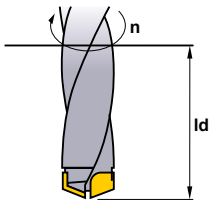
**Vf = fr×n = 0.2×1350 = 270mm/min**

La vitesse d'avance de la broche est 270mm/min.

## ■TEMPS DE COUPE (Tc)

$$Tc = \frac{ld \cdot i}{n \cdot fr}$$

**Tc (min)　: Durée d'usinage**
**n (t/min)　: Régime**
**ld (mm)　: Profondeur**
**fr (mm/tour) : Avance par tour**
**i　: Nombre de trou**




**:** Régime de broche

(Exemple) Trouver le temps de coupe pour un perçage de 30mm de profond, acier allié, à une vitesse de coupe de 50m/min et avec une avance de 0.15mm/tour ?

(Réponse) Régime $n = \frac{50 \times 1000}{15 \times 3.14} = 1061.57 t/min$

$$Tc = \frac{30 \times 1}{1061.57 \times 0.15} = 0.188$$

$$= 0.188 \times 60 \fallingdotseq 11.3 \ sec$$

# TABLEAU DE COMPARAISON DES MATIÈRES



## ■ACIER CARBONE

| Allemagne | | Royaume-uni | | France | Italie | Espagne | Suède | Japon | USA | Chine |
|---|---|---|---|---|---|---|---|---|---|---|
| W-nr. | DIN | BS | EN | AFNOR | UNI | UNE | SS | JIS | AISI/SAE | GB |
| 1.0038 | RSt.37-2 | 4360 40 C | – | E 24-2 Ne | – | – | 1311 | STKM 12A<br>STKM 12C | A570.36 | 15 |
| 1.0401 | C15 | 080M15 | – | CC12 | C15, C16 | F.111 | 1350 | – | 1015 | 15 |
| 1.0402 | C22 | 050A20 | 2C | CC20 | C20, C21 | F.112 | 1450 | – | 1020 | 20 |
| 1.0715 | 9SMn28 | 230M07 | 1A | S250 | CF9SMn28 | F.2111<br>11SMn28 | 1912 | SUM22 | 1213 | Y15 |
| 1.0718 | 9SMnPb28 | – | – | S250Pb | CF9SMnPb28 | 11SMnPb28 | 1914 | SUM22L | 12L13 | – |
| 1.0722 | 10SPb20 | – | – | 10PbF2 | CF10Pb20 | 10SPb20 | – | – | – | – |
| 1.0736 | 9SMn36 | 240M07 | 1B | S300 | CF9SMn36 | 12SMn35 | – | – | 1215 | Y13 |
| 1.0737 | 9SMnPb36 | – | – | S300Pb | CF9SMnPb36 | 12SMnP35 | 1926 | – | 12L14 | – |
| 1.1141 | Ck15 | 080M15 | 32C | XC12 | C16 | C15K | 1370 | S15C | 1015 | 15 |
| 1.1158 | Ck25 | – | – | – | – | – | – | S25C | 1025 | 25 |
| 1.8900 | StE380 | 4360 55 E | – | – | FeE390KG | – | 2145 | – | A572-60 | – |
| 1.0501 | C35 | 060A35 | – | CC35 | C35 | F.113 | 1550 | – | 1035 | 35 |
| 1.0503 | C45 | 080M46 | – | CC45 | C45 | F.114 | 1650 | – | 1045 | 45 |
| 1.0726 | 35S20 | 212M36 | 8M | 35MF4 | – | F210G | 1957 | – | 1140 | – |
| 1.1157 | 40Mn4 | 150M36 | 15 | 35M5 | – | – | – | – | 1039 | 40Mn |
| 1.1167 | 36Mn5 | – | – | 40M5 | – | 36Mn5 | 2120 | SMn438(H) | 1335 | 35Mn2 |
| 1.1170 | 28Mn6 | 150M28 | 14A | 20M5 | C28Mn | – | – | SCMn1 | 1330 | 30Mn |
| 1.1183 | Cf35 | 060A35 | – | XC38TS | C36 | – | 1572 | S35C | 1035 | 35Mn |
| 1.1191 | Ck45 | 080M46 | – | XC42 | C45 | C45K | 1672 | S45C | 1045 | Ck45 |
| 1.1213 | Cf53 | 060A52 | – | XC48TS | C53 | – | 1674 | S50C | 1050 | 50 |
| 1.0535 | C55 | 070M55 | 9 | – | C55 | – | 1655 | – | 1055 | 55 |
| 1.0601 | C60 | 080A62 | 43D | CC55 | C60 | – | – | – | 1060 | 60 |
| 1.1203 | Ck55 | 070M55 | – | XC55 | C50 | C55K | – | S55C | 1055 | 55 |
| 1.1221 | Ck60 | 080A62 | 43D | XC60 | C60 | – | 1678 | S58C | 1060 | 60Mn |
| 1.1274 | Ck101 | 060A96 | – | XC100 | – | F.5117 | 1870 | – | 1095 | – |
| 1.1545 | C105W1 | BW1A | – | Y105 | C36KU | F.5118 | 1880 | SK3 | W1 | – |
| 1.1545 | C105W1 | BW2 | – | Y120 | C120KU | F.515 | 2900 | SUP4 | W210 | – |

## ■ALLIAGE ACIER

| Allemagne | | Royaume-uni | | France | Italie | Espagne | Suède | Japon | USA | Chine |
|---|---|---|---|---|---|---|---|---|---|---|
| W-nr. | DIN | BS | EN | AFNOR | UNI | UNE | SS | JIS | AISI/SAE | GB |
| 1.0144 | St.44.2 | 4360 43 C | – | E28-3 | – | – | 1412 | SM400A, SM400B<br>SM400C | A573-81 | – |
| 1.0570 | St52-3 | 4360 50 B | – | E36-3 | Fe52BFN<br>Fe52CFN | – | 2132 | SM490A, SM490B<br>SM490C | – | – |
| 1.0841 | St52-3 | 150M19 | – | 20MC5 | Fe52 | F.431 | 2172 | – | 5120 | – |
| 1.0904 | 55Si7 | 250A53 | 45 | 55S7 | 55Si8 | 56Si7 | 2085 | – | 9255 | 55Si2Mn |
| 1.0961 | 60SiCr7 | – | – | 60SC7 | 60SiCr8 | 60SiCr8 | – | – | 9262 | – |
| 1.3505 | 100Cr6 | 534A99 | 31 | 100C6 | 100Cr6 | F.131 | 2258 | SUJ2 | ASTM 52100 | Gr15, 45G |
| 1.5415 | 15Mo3 | 1501-240 | – | 15D3 | 16Mo3KW | 16Mo3 | 2912 | – | ASTM A204Gr.A | – |
| 1.5423 | 16Mo5 | 1503-245-420 | – | – | 16Mo5 | 16Mo5 | – | – | 4520 | – |
| 1.5622 | 14Ni6 | – | – | 16N6 | 14Ni6 | 15Ni6 | – | – | ASTM A350LF5 | – |
| 1.5662 | X8Ni9 | 1501-509-510 | – | – | X10Ni9 | XBNi09 | – | – | ASTM A353 | – |
| 1.5710 | 36NiCr6 | 640A35 | 111A | 35NC6 | – | – | – | SNC236 | 3135 | – |
| 1.5732 | 14NiCr10 | – | – | 14NC11 | 16NiCr11 | 15NiCr11 | – | SNC415(H) | 3415 | – |
| 1.5752 | 14NiCr14 | 655M13 | 36A | 12NC15 | – | – | – | SNC815(H) | 3415, 3310 | – |
| 1.6523 | 21NiCrMo2 | 805M20 | 362 | 20NCD2 | 20NiCrMo2 | 20NiCrMo2 | 2506 | SNCM220(H) | 8620 | – |
| 1.6546 | 40NiCrMo22 | 311-Type 7 | – | – | 40NiCrMo2(KB) | 40NiCrMo2 | – | SNCM240 | 8740 | – |
| 1.6587 | 17CrNiMo6 | 820A16 | – | 18NCD6 | – | 14NiCrMo13 | – | – | – | – |
| 1.7015 | 15Cr3 | 523M15 | – | 12C3 | – | – | – | SCr415(H) | 5015 | 15Cr |

| Allemagne | | Royaume-uni | | France | Italie | Espagne | Suède | Japon | USA | Chine |
|---|---|---|---|---|---|---|---|---|---|---|
| W-nr. | DIN | BS | EN | AFNOR | UNI | UNE | SS | JIS | AISI/SAE | GB |
| 1.7045 | 42Cr4 | – | – | – | – | 42Cr4 | 2245 | SCr440 | 5140 | 40Cr |
| 1.7176 | 55Cr3 | 527A60 | 48 | 55C3 | – | – | – | SUP9(A) | 5155 | 20CrMn |
| 1.7262 | 15CrMo5 | – | – | 12CD4 | – | 12CrMo4 | 2216 | SCM415(H) | – | – |
| 1.7335 | 13CrMo4 4 | 1501-620Gr27 | – | 15CD3.5<br>15CD4.5 | 14CrMo45 | 14CrMo45 | – | – | ASTM A182<br>F11, F12 | – |
| 1.7380 | 10CrMo910 | 1501-622<br>Gr31, 45 | – | 12CD9<br>12CD10 | 12CrMo9<br>12CrMo10 | TU.H | 2218 | – | ASTM A182<br>F.22 | – |
| 1.7715 | 14MoV63 | 1503-660-440 | – | – | – | 13MoCrV6 | – | – | – | – |
| 1.8523 | 39CrMoV13 9 | 897M39 | 40C | – | 36CrMoV12 | – | – | – | – | – |
| 1.6511 | 36CrNiMo4 | 816M40 | 110 | 40NCD3 | 38NiCrMo4(KB) | 35NiCrMo4 | – | – | 9840 | – |
| 1.6582 | 34CrNiMo6 | 817M40 | 24 | 35NCD6 | 35NiCrMo6(KB) | – | 2541 | – | 4340 | 40CrNiMoA |
| 1.7033 | 34Cr4 | 530A32 | 18B | 32C4 | 34Cr4(KB) | 35Cr4 | – | SCr430(H) | 5132 | 35Cr |
| 1.7035 | 41Cr4 | 530M40 | 18 | 42C4 | 41Cr4 | 42Cr4 | – | SCr440(H) | 5140 | 40Cr |
| 1.7131 | 16MnCr5 | (527M20) | – | 16MC5 | 16MnCr5 | 16MnCr5 | 2511 | – | 5115 | 18CrMn |
| 1.7218 | 25CrMo4 | 1717CDS110<br>708M20 | – | 25CD4 | 25CrMo4(KB) | 55Cr3 | 2225 | SCM420<br>SCM430 | 4130 | 30CrMn |
| 1.7220 | 34CrMo4 | 708A37 | 19B | 35CD4 | 35CrMo4 | 34CrMo4 | 2234 | SCM432<br>SCCRM3 | 4137<br>4135 | 35CrMo |
| 1.7223 | 41CrMo4 | 708M40 | 19A | 42CD4TS | 41CrMo4 | 42CrMo4 | 2244 | SCM 440 | 4140<br>4142 | 40CrMoA |
| 1.7225 | 42CrMo4 | 708M40 | 19A | 42CD4 | 42CrMo4 | 42CrMo4 | 2244 | SCM440(H) | 4140 | 42CrMo<br>42CrMnMo |
| 1.7361 | 32CrMo12 | 722M24 | 40B | 30CD12 | 32CrMo12 | F.124.A | 2240 | – | – | – |
| 1.8159 | 50CrV4 | 735A50 | 47 | 50CV4 | 50CrV4 | 51CrV4 | 2230 | SUP10 | 6150 | 50CrVA |
| 1.8509 | 41CrAlMo7 | 905M39 | 41B | 40CAD6<br>40CAD2 | 41CrAlMo7 | 41CrAlMo7 | 2940 | – | – | – |
| 1.2067 | 100Cr6 | BL3 | – | Y100C6 | – | 100Cr6 | – | – | L3 | CrV, 9SiCr |
| 1.2419 | 105WCr6 | – | – | 105WC13 | 100WCr6<br>107WCr5KU | 105WCr5 | 2140 | SKS31<br>SKS2, SKS3 | – | CrWMo |
| 1.2713 | 55NiCrMoV6 | BH224/5 | – | 55NCDV7 | – | F.520.S | – | SKT4 | L6 | 5CrNiMo |
| 1.5662 | X8Ni9 | 1501-509 | – | – | X10Ni9 | XBNi09 | – | – | ASTM A353 | – |
| 1.5680 | 12Ni19 | – | – | Z18N5 | – | – | – | – | 2515 | – |
| 1.6657 | 14NiCrMo134 | 832M13 | 36C | – | 15NiCrMo13 | 14NiCrMo131 | – | – | – | – |
| 1.2080 | X210Cr12 | BD3 | – | Z200C12 | X210Cr13KU<br>X250Cr12KU | X210Cr12 | – | SKD1 | D3<br>ASTM D3 | Cr12 |
| 1.2601 | X153CrMoV12 | BD2 | – | – | X160CrMoV12 | – | – | SKD11 | D2 | Cr12MoV |
| 1.2363 | X100CrMoV5 | BA2 | – | Z100CDV5 | X100CrMoV5 | F.5227 | 2260 | SKD12 | A2 | Cr5Mo1V |
| 1.2344 | X40CrMoV51<br>X40CrMoV51 | BH13 | – | Z40CDV5 | X35CrMoV05KU<br>X40CrMoV51KU | X40CrMoV5 | 2242 | SKD61 | H13<br>ASTM H13 | 40CrMoV5 |
| 1.2436 | X210CrW12 | – | – | – | X215CrW121KU | X210CrW12 | 2312 | SKD2 | – | – |
| 1.2542 | 45WCrV7 | BS1 | – | – | 45WCrV8KU | 45WCrSi8 | 2710 | – | S1 | – |
| 1.2581 | X30WCrV93 | BH21 | – | Z30WCV9 | X28W09KU | X30WCrV9 | – | SKD5 | H21 | 30WCrV9 |
| 1.2601 | X165CrMoV12 | – | – | – | X165CrMoW12KU | X160CrMoV12 | 2310 | – | – | – |
| 1.2833 | 100V1 | BW2 | – | Y1105V | – | – | – | SKS43 | W210 | V |
| 1.3255 | S 18-1-2-5 | BT4 | – | Z80WKCV | X78WCo1805KU | HS18-1-1-5 | – | SKH3 | T4 | W18Cr4VCo5 |
| 1.3355 | S 18-0-1 | BT1 | – | Z80WCV | X75W18KU | HS18-0-1 | – | SKH2 | T1 | – |
| 1.3401 | G-X120Mn12 | Z120M12 | – | Z120M12 | XG120Mn12 | X120MN12 | – | SCMnH/1 | – | – |
| 1.4718 | X45CrSi93 | 401S45 | 52 | Z45CS9 | X45CrSi8 | F.322 | – | SUH1 | HW3 | X45CrSi93 |
| 1.3343 | S6-5-2 | 4959BA2 | – | Z40CSD10 | 15NiCrMo13 | – | 2715 | SUH3 | D3 | – |
| 1.3343 | S6/5/2 | BM2 | – | Z85WDCV | HS6-5-2-2 | F.5603 | 2722 | SKH9, SKH51 | M2 | – |
| 1.3348 | S 2-9-2 | – | – | – | HS2-9-2 | HS2-9-2 | 2782 | – | M7 | – |
| 1.3243 | S6/5/2/5 | BM35 | – | 6-5-2-5 | HS6-5-2-5 | F.5613 | 2723 | SKH55 | M35 | – |

# TABLEAU DE COMPARAISON DES MATIÈRES



## ■ACIER INOXYDABLE (FERRITIQUE,MARTENSITIQUE)

| Allemagne | | Royaume-uni | | France | Italie | Espagne | Suède | Japon | USA | Chine |
|---|---|---|---|---|---|---|---|---|---|---|
| W-nr. | DIN | BS | EN | AFNOR | UNI | UNE | SS | JIS | AISI/SAE | GB |
| 1.4000 | X7Cr13 | 403S17 | – | Z6C13 | X6Cr13 | F.3110 | 2301 | SUS403 | 403 | OCr13<br>1Cr12 |
| 1.4001 | X7Cr14 | – | – | – | – | F.8401 | – | – | – | – |
| 1.4005 | X12CrS13 | 416S21 | – | Z11CF13 | X12CrS13 | F.3411 | 2380 | SUS416 | 416 | – |
| 1.4006 | X10Cr13 | 410S21 | 56A | Z10C14 | X12Cr13 | F.3401 | 2302 | SUS410 | 410 | 1Cr13 |
| 1.4016 | X8Cr17 | 430S15 | 60 | Z8C17 | X8Cr17 | F.3113 | 2320 | SUS430 | 430 | 1Cr17 |
| 1.4027 | G-X20Cr14 | 420C29 | 56B | Z20C13M | – | – | – | SCS2 | – | – |
| 1.4034 | X46Cr13 | 420S45 | 56D | Z40CM<br>Z38C13M | X40Cr14 | F.3405 | 2304 | SUS420J2 | – | 4Cr13 |
| 1.4003 | – | 405S17 | – | Z8CA12 | X6CrAl13 | – | – | – | 405 | – |
| 1.4021 | – | 420S37 | – | Z8CA12 | X20Cr13 | – | 2303 | – | 420 | – |
| 1.4057 | X22CrNi17 | 431S29 | 57 | Z15CNi6.02 | X16CrNi16 | F.3427 | 2321 | SUS431 | 431 | 1Cr17Ni2 |
| 1.4104 | X12CrMoS17 | – | – | Z10CF17 | X10CrS17 | F.3117 | 2383 | SUS430F | 430F | Y1Cr17 |
| 1.4113 | X6CrMo17 | 434S17 | – | Z8CD17.01 | X8CrMo17 | – | 2325 | SUS434 | 434 | 1Cr17Mo |
| 1.4313 | X5CrNi134 | 425C11 | – | Z4CND13.4M | (G)X6CrNi304 | – | 2385 | SCS5 | CA6-NM | – |
| 1.4724 | X10CrA113 | 403S17 | – | Z10C13 | X10CrA112 | F.311 | – | SUS405 | 405 | OCr13Al |
| 1.4742 | X10CrA118 | 430S15 | 60 | Z10CAS18 | X8Cr17 | F.3113 | – | SUS430 | 430 | Cr17 |
| 1.4747 | X80CrNiSi20 | 443S65 | 59 | Z80CSN20.02 | X80CrSiNi20 | F.320B | – | SUH4 | HNV6 | – |
| 1.4762 | X10CrA124 | – | – | Z10CAS24 | X16Cr26 | – | 2322 | SUH446 | 446 | 2Cr25N |
| 1.4871 | X53CrMnNiN219 | 349S54 | – | Z52CMN21.09 | X53CrMnNiN219 | – | – | SUH35 | EV8 | 5Cr2Mn9Ni4N |
| 1.4521 | X1CrMoTi182 | – | – | – | – | – | 2326 | – | S44400 | – |
| 1.4922 | X20CrMoV12-1 | – | – | – | X20CrMoNi1201 | – | 2317 | – | – | – |
| 1.4542 | – | – | – | Z7CNU17-04 | – | – | – | – | 630 | – |

## ■ACIER INOXYDABLE (AUSTÉNITIQUE)

| Allemagne | | Royaume-uni | | France | Italie | Espagne | Suède | Japon | USA | Chine |
|---|---|---|---|---|---|---|---|---|---|---|
| W-nr. | DIN | BS | EN | AFNOR | UNI | UNE | SS | JIS | AISI/SAE | GB |
| 1.4306 | X2CrNi1911 | 304S11 | – | Z2CN18.10 | X2CrNi18.11 | – | 2352 | SUS304L | 304L | OCr19Ni10 |
| 1.4350 | X5CrNi189 | 304S11 | 58E | Z6CN18.09 | X5CrNi1810 | F.3551<br>F.3541<br>F.3504 | 2332 | SUS304 | 304 | OCr18Ni9 |
| 1.4305 | X12CrNiS188 | 303S21 | 58M | Z10CNF18.09 | X10CrNiS18.09 | F.3508 | 2346 | SUS303 | 303 | 1Cr18Ni9MoZr |
| – | – | 304C12 | – | Z3CN19.10 | – | – | 2333 | SUS304L | – | – |
| 1.4306 | X2CrNi189 | 304S12 | – | Z2CrNi1810 | X2CrNi18.11 | F.3503 | 2352 | SCS19 | 304L | – |
| 1.4310 | X12CrNi177 | – | – | Z12CN17.07 | X12CrNi1707 | F.3517 | 2331 | SUS301 | 301 | Cr17Ni7 |
| 1.4311 | X2CrNiN1810 | 304S62 | – | Z2CN18.10 | – | – | 2371 | SUS304LN | 304LN | – |
| 1.4401 | X5CrNiMo1810 | 316S16 | 58J | Z6CND17.11 | X5CrNiMo1712 | F.3543 | 2347 | SUS316 | 316 | 0Cr17Ni11Mo2 |
| 1.4308 | G-X6CrNi189 | 304C15 | – | Z6CN18.10M | – | – | – | SCS13 | – | – |
| 1.4408 | G-X6CrNiMo1810 | 316C16 | – | – | – | F.8414 | – | SCS14 | – | – |
| 1.4581 | G-X5CrNiMoNb1810 | 318C17 | – | Z4CNDNb1812M | XG8CrNiMo1811 | – | – | SCS22 | – | – |
| 1.4429 | X2CrNiMoN1813 | – | – | Z2CND17.13 | – | – | 2375 | SUS316LN | 316LN | OCr17Ni13Mo |
| 1.4404 | – | 316S13 | – | Z2CND17.12 | X2CrNiMo1712 | – | 2348 | – | 316L | – |
| 1.4435 | X2CrNiMo1812 | 316S13 | – | Z2CND17.12 | X2CrNiMo1712 | – | 2353 | SCS16<br>SUS316L | 316L | 0Cr27Ni12Mo3 |
| 1.4436 | – | 316S13 | – | Z6CND18-12-03 | X8CrNiMo1713 | – | 2343, 2347 | – | 316 | – |
| 1.4438 | X2CrNiMo1816 | 317S12 | – | Z2CND19.15 | X2CrNiMo1816 | – | 2367 | SUS317L | 317L | 00Cr19Ni13Mo |
| 1.4539 | X1NiCrMo | – | – | Z6CNT18.10 | – | – | 2562 | – | UNS V<br>0890A | – |
| 1.4541 | X10CrNiTi189 | 321S12 | 58B | Z6CNT18.10 | X6CrNiTi1811 | F.3553<br>F.3523 | 2337 | SUS321 | 321 | 1Cr18NI9Ti |
| 1.4550 | X10CrNiNb189 | 347S17 | 58F | Z6CNNb18.10 | X6CrNiNb1811 | F.3552<br>F.3524 | 2338 | SUS347 | 347 | 1Cr18Ni11Nb |
| 1.4571 | X10CrNiMoTi1810 | 320S17 | 58J | Z6CNDT17.12 | X6CrNiMoTi1712 | F.3535 | 2350 | – | 316Ti | Cr18Ni12Mo2T |
| 1.4583 | X10CrNiMoNb1812 | – | – | Z6CNDNb1713B | X6CrNiMoNb1713 | – | – | – | 318 | Cr17Ni12Mo3Mb |

| Allemagne | | Royaume-uni | | France | Italie | Espagne | Suède | Japon | USA | Chine |
|---|---|---|---|---|---|---|---|---|---|---|
| W-nr. | DIN | BS | EN | AFNOR | UNI | UNE | SS | JIS | AISI/SAE | GB |
| 1.4828 | X15CrNiSi2012 | 309S24 | – | Z15CNS20.12 | X6CrNi2520 | – | – | SUH309 | 309 | 1Cr23Ni13 |
| 1.4845 | X12CrNi2521 | 310S24 | – | Z12CN2520 | X6CrNi2520 | F.331 | 2361 | SUH310 | 310S | OCr25Ni20 |
| 1.4406 | X10CrNi18.08 | – | 58C | Z1NCDU25.20 | – | F.8414 | 2370 | SCS17 | 308 | – |
| 1.4418 | X4CrNiMo165 | – | – | Z6CND16-04-01 | – | – | – | – | – | – |
| 1.4568<br>1.4504 | – | 316S111 | – | Z8CNA17-07 | X2CrNiMo1712 | – | – | – | 17-7PH | – |
| 1.4563 | – | – | – | Z1NCDU31-27-03<br>Z1CNDU20-18-06AZ | – | – | 2584<br>2378 | – | NO8028<br>S31254 | – |
| 1.4878 | X12CrNiTi189 | 321S32 | 58B, 58C | Z6CNT18.12B | X6CrNiTi18 11 | F.3523 | – | SUS321 | 321 | 1Cr18Ni9Ti |

## ■ACIERS RÉSISTANT À LA CHALEUR

| Allemagne | | Royaume-uni | | France | Italie | Espagne | Suède | Japon | USA | Chine |
|---|---|---|---|---|---|---|---|---|---|---|
| W-nr. | DIN | BS | EN | AFNOR | UNI | UNE | SS | JIS | AISI/SAE | GB |
| 1.4864 | X12NiCrSi3616 | – | – | Z12NCS35.16 | – | – | – | SUH330 | 330 | – |
| 1.4865 | G-X40NiCrSi3818 | 330C11 | – | – | XG50NiCr3919 | – | – | SCH15 | HT, HT 50 | – |

## ■FONTE GRISE

| Allemagne | | Royaume-uni | | France | Italie | Espagne | Suède | Japon | USA | Chine |
|---|---|---|---|---|---|---|---|---|---|---|
| W-nr. | DIN | BS | EN | AFNOR | UNI | UNE | SS | JIS | AISI/SAE | GB |
| – | – | – | – | – | – | – | 0100 | – | – | – |
| – | GG 10 | – | – | Ft 10 D | – | – | 0110 | FC100 | No 20 B | – |
| 0.6015 | GG 15 | Grade 150 | – | Ft 15 D | G15 | FG15 | 0115 | FC150 | No 25 B | HT150 |
| 0.6020 | GG 20 | Grade 220 | – | Ft 20 D | G20 | – | 0120 | FC200 | No 30 B | HT200 |
| 0.6025 | GG 25 | Grade 260 | – | Ft 25 D | G25 | FG25 | 0125 | FC250 | No 35 B | HT250 |
| – | – | – | – | – | – | – | – | – | No 40 B | – |
| 0.6030 | GG 30 | Grade 300 | – | Ft 30 D | G30 | FG30 | 0130 | FC300 | No 45 B | HT300 |
| 0.6035 | GG 35 | Grade 350 | – | Ft 35 D | G35 | FG35 | 0135 | FC350 | No 50 B | HT350 |
| 0.6040 | GG 40 | Grade 400 | – | Ft 40 D | – | – | 0140 | – | No 55 B | HT400 |
| 0.6660 | GGL NiCr202 | L-NiCuCr202 | – | L-NC 202 | – | – | 0523 | – | A436 Type 2 | – |

## ■FONTE DUCTILE

| Allemagne | | Royaume-uni | | France | Italie | Espagne | Suède | Japon | USA | Chine |
|---|---|---|---|---|---|---|---|---|---|---|
| W-nr. | DIN | BS | EN | AFNOR | UNI | UNE | SS | JIS | AISI/SAE | GB |
| 0.7040 | GGG 40 | SNG 420/12 | – | FCS 400-12 | GS 370-17 | FGE 38-17 | 07 17-02 | FCD400 | 60-40-18 | QT400-18 |
| – | GGG 40.3 | SNG 370/17 | – | FGS 370-17 | – | – | 07 17-12 | – | – | – |
| 0.7033 | GGG 35.3 | – | – | – | – | – | 07 17-15 | – | – | – |
| 0.7050 | GGG 50 | SNG 500/7 | – | FGS 500-7 | GS 500 | FGE 50-7 | 07 27-02 | FCD500 | 80-55-06 | QT500-7 |
| 0.7660 | GGG NiCr202 | Grade S6 | – | S-NC202 | – | – | 07 76 | – | A43D2 | – |
| – | GGG NiMn137 | L-NiMn 137 | – | L-MN 137 | – | – | 07 72 | – | – | – |
| – | GGG 60 | SNG 600/3 | – | FGS 600-3 | – | – | 07 32-03 | FCD600 | – | QT600-3 |
| 0.7070 | GGG 70 | SNG 700/2 | – | FGS 700-2 | GS 700-2 | FGS 70-2 | 07 37-01 | FCD700 | 100-70-03 | QT700-18 |

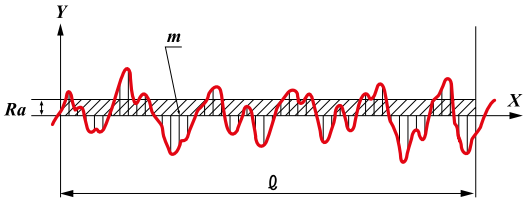
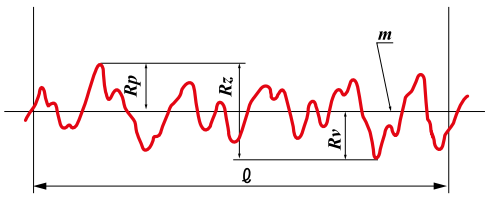
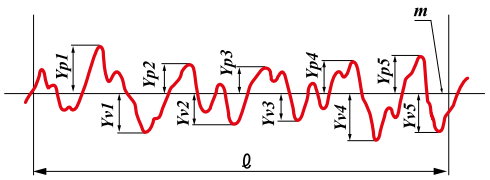
## ■FONTE MALLÉABLE

| Allemagne | | Royaume-uni | | France | Italie | Espagne | Suède | Japon | USA | Chine |
|---|---|---|---|---|---|---|---|---|---|---|
| W-nr. | DIN | BS | EN | AFNOR | UNI | UNE | SS | JIS | AISI/SAE | GB |
| – | – | 8 290/6 | – | MN 32-8 | – | – | 08 14 | FCMB310 | – | – |
| – | GTS-35 | B 340/12 | – | MN 35-10 | – | – | 08 15 | FCMW330 | 32510 | – |
| 0.8145 | GTS-45 | P 440/7 | – | Mn 450 | GMN45 | – | 08 52 | FCMW370 | 40010 | – |
| 0.8155 | GTS-55 | P 510/4 | – | MP 50-5 | GMN55 | – | 08 54 | FCMP490 | 50005 | – |
| – | GTS-65 | P 570/3 | – | MP 60-3 | – | – | 08 58 | FCMP540 | 70003 | – |
| 0.8165 | GTS-65-02 | P 570/3 | – | Mn 650-3 | GMN 65 | – | 08 56 | FCMP590 | A220-70003 | – |
| – | GTS-70-02 | P 690/2 | – | Mn 700-2 | GMN 70 | – | 08 62 | FCMP690 | A220-80002 | – |

# ÉTAT DE SURFACE

## ÉTAT DE SURFACE

(De JIS B 601-1994)

| Type | Symbole | Méthode de mesure | Exemple de mesure (Schéma) |
|---|---|---|---|
| Rugosité moyenne | Ra | Les écarts de surface se présentent sous la forme de rugosité créée par le saut axial des plaquettes, la forme et l'usure des arêtes et par les irrégularités de l'écoulement des copeaux. La mesure de l'état de surface s'effectue sur une longueur linéaire. Ra mesure l'état de surface par rapport à une ligne moyenne des écarts. Ra est exprimé en microns et est calculé à partir de l'équation suivante : $Ra=\frac{1}{\ell}\int_0^{\ell}\lvert f(x)\rvert dx$ |  |
| Poids maximum | Rz | La plupart des enregistrements d'états de surface sont dotés de filtres électriques permettant d'éliminer l'ondulation (écart de forme). Rz max. indique pour une longueur référence mesurée la différence maximum exprimée en microns entre le point le plus haut et le point le plus bas mesuré en (μm).<br>Remarque) Pour une longueur référence donnée, Rz indique l'état de surface moyen arithmétique de la différence entre les 5 points les plus bas mesurés. Rz est exprimé en micron (μm).<br>$Rz=R_P+Rv$ |  |
| Rugosité moyenne en dix points | RzJIS | RzJIS sera la longueur de référence sélectionnée de la courbe moyenne et la somme de la valeur moyenne des valeurs absolues des hauteurs de cinq sommets de profil les plus hauts (Yp) et les profondeurs de cinq points de profil les plus bas (Yv) mesurés dans la direction verticale de la ligne moyenne de cette partie sélectionnée et cette somme est exprimée en microns (μm).<br>$Rz_{JIS}=\frac{(Yp1+Yp2+Yp3+Yp4+Yp5)+(Yv1+Yv2+Yv3+Yv4+Yv5)}{5}$ |  <br>$Yp1,Yp2,Yp3,Yp4,Yp5$ : Les 5 points les plus hauts de la longueur référence mesurée.<br>$Yv1,Yv2,Yv3,Yv4,Yv5$ : Les 5 points les plus bas de la longueur référence mesurée. |

## ■RELATION ENTRE LA RUGOSITÉ MOYENNE (Ra) ET DÉSIGNATION CONVENTIONNELLE (DONNÉE DE RÉFÉRENCE)

| Rugosité moyenne **Ra** | | Poids maximum **Rz** | Rugosité moyenne en dix points **RzJIS** | Longueur étalon **Rz • RzJIS** l (mm) | Symbole |
|---|---|---|---|---|---|
| Séries standards | Moyenne arithmétique λc (mm) | Séries standards | | | |
| 0.012 a | 0.08 | 0.05s | 0.05z | 0.08 | ▽▽▽▽ |
| 0.025 a | 0.25 | 0.1 s | 0.1 z | | |
| 0.05 a | | 0.2 s | 0.2 z | 0.25 | |
| 0.1 a | 0.8 | 0.4 s | 0.4 z | | |
| 0.2 a | | 0.8 s | 0.8 z | 0.8 | |
| 0.4 a | | 1.6 s | 1.6 z | | ▽▽▽ |
| 0.8 a | | 3.2 s | 3.2 z | | |
| 1.6 a | | 6.3 s | 6.3 z | | |
| 3.2 a | 2.5 | 12.5 s | 12.5 z | 2.5 | ▽▽ |
| 6.3 a | | 25 s | 25 z | | |
| 12.5 a | 8 | 50 s | 50 z | | ▽ |
| 25 a | | 100 s | 100 z | 8 | |
| 50 a | | 200 s | 200 z | | – |
| 100 a | – | 400 s | 400 z | – | |

*La corrélation entre les trois rugosités est d'ordre théorique.
*La mesure de Rz et RzJIS est faite par la moyenne arithmétique des valeurs mesurées sur la longueur étalonnée multipliées respectivement par 5.

# CORRESPONDANCE DURETÉ

## MATIÈRES - CORRESPONDANCE DURETÉ ACIER

| Dureté Brinell (**HB**) Bille 10mm,3000kgf | | Dureté Vickers | Dureté Rockwell | | | | Dureté shore | Résistance à la traction (Env.) |
|---|---|---|---|---|---|---|---|---|
| Bille standard | Bille carbure de tungstène | | Échelle A 60kgf, Diamant Cône diamant | Échelle B, 100kgf, Bille 1/16" | Échelle C, 150kgf, Diamant Cône diamant | Échelle D, 100kgf, Diamant Cône diamant | | MPa |
| | | (HV) | (HRA) | (HRB) | (HRC) | (HRD) | (HS) | |
| — | — | 940 | 85.6 | — | 68.0 | 76.9 | 97 | — |
| — | — | 920 | 85.3 | — | 67.5 | 76.5 | 96 | — |
| — | — | 900 | 85.0 | — | 67.0 | 76.1 | 95 | — |
| — | (767) | 880 | 84.7 | — | 66.4 | 75.7 | 93 | — |
| — | (757) | 860 | 84.4 | — | 65.9 | 75.3 | 92 | — |
| — | (745) | 840 | 84.1 | — | 65.3 | 74.8 | 91 | — |
| — | (733) | 820 | 83.8 | — | 64.7 | 74.3 | 90 | — |
| — | (722) | 800 | 83.4 | — | 64.0 | 73.8 | 88 | — |
| — | (712) | — | — | — | — | — | — | — |
| — | (710) | 780 | 83.0 | — | 63.3 | 73.3 | 87 | — |
| — | (698) | 760 | 82.6 | — | 62.5 | 72.6 | 86 | — |
| — | (684) | 740 | 82.2 | — | 61.8 | 72.1 | — | — |
| — | (682) | 737 | 82.2 | — | 61.7 | 72.0 | 84 | — |
| — | (670) | 720 | 81.8 | — | 61.0 | 71.5 | 83 | — |
| — | (656) | 700 | 81.3 | — | 60.1 | 70.8 | — | — |
| — | (653) | 697 | 81.2 | — | 60.0 | 70.7 | 81 | — |
| — | (647) | 690 | 81.1 | — | 59.7 | 70.5 | — | — |
| — | (638) | 680 | 80.8 | — | 59.2 | 70.1 | 80 | — |
| — | 630 | 670 | 80.6 | — | 58.8 | 69.8 | — | — |
| — | 627 | 667 | 80.5 | — | 58.7 | 69.7 | 79 | — |
| — | — | 677 | 80.7 | — | 59.1 | 70.0 | — | — |
| — | 601 | 640 | 79.8 | — | 57.3 | 68.7 | 77 | — |
| — | — | 640 | 79.8 | — | 57.3 | 68.7 | — | — |
| — | 578 | 615 | 79.1 | — | 56.0 | 67.7 | 75 | — |
| — | — | 607 | 78.8 | — | 55.6 | 67.4 | — | — |
| — | 555 | 591 | 78.4 | — | 54.7 | 66.7 | 73 | 2055 |
| — | — | 579 | 78.0 | — | 54.0 | 66.1 | — | 2015 |
| — | 534 | 569 | 77.8 | — | 53.5 | 65.8 | 71 | 1985 |
| — | — | 533 | 77.1 | — | 52.5 | 65.0 | — | 1915 |
| — | 514 | 547 | 76.9 | — | 52.1 | 64.7 | 70 | 1890 |
| (495) | — | 539 | 76.7 | — | 51.6 | 64.3 | — | 1855 |
| — | — | 530 | 76.4 | — | 51.1 | 63.9 | — | 1825 |
| | 495 | 528 | 76.3 | — | 51.0 | 63.8 | 68 | 1820 |
| (477) | — | 516 | 75.9 | — | 50.3 | 63.2 | — | 1780 |
| — | — | 508 | 75.6 | — | 49.6 | 62.7 | — | 1740 |
| | 477 | 508 | 75.6 | — | 49.6 | 62.7 | 66 | 1740 |
| (461) | — | 495 | 75.1 | — | 48.8 | 61.9 | — | 1680 |
| — | — | 491 | 74.9 | — | 48.5 | 61.7 | — | 1670 |
| | 461 | 491 | 74.9 | — | 48.5 | 61.7 | 65 | 1670 |
| 444 | — | 474 | 74.3 | — | 47.2 | 61.0 | — | 1595 |
| — | — | 472 | 74.2 | — | 47.1 | 60.8 | — | 1585 |
| — | 444 | 472 | 74.2 | — | 47.1 | 60.8 | 63 | 1585 |

| Dureté Brinell (**HB**) Bille 10mm,3000kgf | | Dureté Vickers | Dureté Rockwell | | | | Dureté shore | Résistance à la traction (Env.) |
|---|---|---|---|---|---|---|---|---|
| Bille standard | Bille carbure de tungstène | | Échelle A 60kgf, Diamant Cône diamant | Échelle B, 100kgf, Bille 1/16" | Échelle C, 150kgf, Diamant Cône diamant | Échelle D, 100kgf, Diamant Cône diamant | | MPa |
| | | (HV) | (HRA) | (HRB) | (HRC) | (HRD) | (HS) | |
| 429 | 429 | 455 | 73.4 | — | 45.7 | 59.7 | 61 | 1510 |
| 415 | 415 | 440 | 72.8 | — | 44.5 | 58.8 | 59 | 1460 |
| 401 | 401 | 425 | 72.0 | — | 43.1 | 57.8 | 58 | 1390 |
| 388 | 388 | 410 | 71.4 | — | 41.8 | 56.8 | 56 | 1330 |
| 375 | 375 | 396 | 70.6 | — | 40.4 | 55.7 | 54 | 1270 |
| 363 | 363 | 383 | 70.0 | — | 39.1 | 54.6 | 52 | 1220 |
| 352 | 352 | 372 | 69.3 | (110.0) | 37.9 | 53.8 | 51 | 1180 |
| 341 | 341 | 360 | 68.7 | (109.0) | 36.6 | 52.8 | 50 | 1130 |
| 331 | 331 | 350 | 68.1 | (108.5) | 35.5 | 51.9 | 48 | 1095 |
| 321 | 321 | 339 | 67.5 | (108.0) | 34.3 | 51.0 | 47 | 1060 |
| 311 | 311 | 328 | 66.9 | (107.5) | 33.1 | 50.0 | 46 | 1025 |
| 302 | 302 | 319 | 66.3 | (107.0) | 32.1 | 49.3 | 45 | 1005 |
| 293 | 293 | 309 | 65.7 | (106.0) | 30.9 | 48.3 | 43 | 970 |
| 285 | 285 | 301 | 65.3 | (105.5) | 29.9 | 47.6 | — | 950 |
| 277 | 277 | 292 | 64.6 | (104.5) | 28.8 | 46.7 | 41 | 925 |
| 269 | 269 | 284 | 64.1 | (104.0) | 27.6 | 45.9 | 40 | 895 |
| 262 | 262 | 276 | 63.6 | (103.0) | 26.6 | 45.0 | 39 | 875 |
| 255 | 255 | 269 | 63.0 | (102.0) | 25.4 | 44.2 | 38 | 850 |
| 248 | 248 | 261 | 62.5 | (101.0) | 24.2 | 43.2 | 37 | 825 |
| 241 | 241 | 253 | 61.8 | 100 | 22.8 | 42.0 | 36 | 800 |
| 235 | 235 | 247 | 61.4 | 99.0 | 21.7 | 41.4 | 35 | 785 |
| 229 | 229 | 241 | 60.8 | 98.2 | 20.5 | 40.5 | 34 | 765 |
| 223 | 223 | 234 | — | 97.3 | (18.8) | — | — | — |
| 217 | 217 | 228 | — | 96.4 | (17.5) | — | 33 | 725 |
| 212 | 212 | 222 | — | 95.5 | (16.0) | — | — | 705 |
| 207 | 207 | 218 | — | 94.6 | (15.2) | — | 32 | 690 |
| 201 | 201 | 212 | — | 93.8 | (13.8) | — | 31 | 675 |
| 197 | 197 | 207 | — | 92.8 | (12.7) | — | 30 | 655 |
| 192 | 192 | 202 | — | 91.9 | (11.5) | — | 29 | 640 |
| 187 | 187 | 196 | — | 90.7 | (10.0) | — | — | 620 |
| 183 | 183 | 192 | — | 90.0 | (9.0) | — | 28 | 615 |
| 179 | 179 | 188 | — | 89.0 | (8.0) | — | 27 | 600 |
| 174 | 174 | 182 | — | 87.8 | (6.4) | — | — | 585 |
| 170 | 170 | 178 | — | 86.8 | (5.4) | — | 26 | 570 |
| 167 | 167 | 175 | — | 86.0 | (4.4) | — | — | 560 |
| 163 | 163 | 171 | — | 85.0 | (3.3) | — | 25 | 545 |
| 156 | 156 | 163 | — | 82.9 | (0.9) | — | — | 525 |
| 149 | 149 | 156 | — | 80.8 | — | — | 23 | 505 |
| 143 | 143 | 150 | — | 78.7 | — | — | 22 | 490 |
| 137 | 137 | 143 | — | 76.4 | — | — | 21 | 460 |
| 131 | 131 | 137 | — | 74.0 | — | — | — | 450 |
| 126 | 126 | 132 | — | 72.0 | — | — | 20 | 435 |
| 121 | 121 | 127 | — | 69.8 | — | — | 19 | 415 |
| 116 | 116 | 122 | — | 67.6 | — | — | 18 | 400 |
| 111 | 111 | 117 | — | 65.7 | — | — | 15 | 385 |

Remarque 1) Les valeurs du tableau ci-dessus sont les valeurs métriques du AMS Metals Handbook.
Remarque 2) 1MPa=1N/mm$^2$
Remarque 3) Les valeurs entre sont peu utilisées. Cette liste est tirée de JIS Handbook Steel I.

# TABLE DE TOLÉRANCES DES TROUS

| Classification, dimensions standards (mm) | | Classification des zones de tolérance géométrique de trous | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| > | ≤ | B10 | C9 | C10 | D8 | D9 | D10 | E7 | E8 | E9 | F6 | F7 | F8 | G6 | G7 | H6 | H7 |
| — | 3 | +180<br>+140 | +85<br>+60 | +100<br>+60 | +34<br>+20 | +45<br>+20 | +60<br>+20 | +24<br>+14 | +28<br>+14 | +39<br>+14 | +12<br>+6 | +16<br>+6 | +20<br>+6 | +8<br>+2 | +12<br>+2 | +6<br>0 | +10<br>0 |
| 3 | 6 | +188<br>+140 | +100<br>+70 | +118<br>+70 | +48<br>+30 | +60<br>+30 | +78<br>+30 | +32<br>+20 | +38<br>+20 | +50<br>+20 | +18<br>+10 | +22<br>+10 | +28<br>+10 | +12<br>+4 | +16<br>+4 | +8<br>0 | +12<br>0 |
| 6 | 10 | +208<br>+150 | +116<br>+80 | +138<br>+80 | +62<br>+40 | +76<br>+40 | +98<br>+40 | +40<br>+25 | +47<br>+25 | +61<br>+25 | +22<br>+13 | +28<br>+13 | +35<br>+13 | +14<br>+5 | +20<br>+5 | +9<br>0 | +15<br>0 |
| 10 | 14 | +220<br>+150 | +138<br>+95 | +165<br>+95 | +77<br>+50 | +93<br>+50 | +120<br>+50 | +50<br>+32 | +59<br>+32 | +75<br>+32 | +27<br>+16 | +34<br>+16 | +43<br>+16 | +17<br>+6 | +24<br>+6 | +11<br>0 | +18<br>0 |
| 14 | 18 | | | | | | | | | | | | | | | | |
| 18 | 24 | +244<br>+160 | +162<br>+110 | +194<br>+110 | +98<br>+65 | +117<br>+65 | +149<br>+65 | +61<br>+40 | +73<br>+40 | +92<br>+40 | +33<br>+20 | +41<br>+20 | +53<br>+20 | +20<br>+7 | +28<br>+7 | +13<br>0 | +21<br>0 |
| 24 | 30 | | | | | | | | | | | | | | | | |
| 30 | 40 | +270<br>+170 | +182<br>+120 | +220<br>+120 | +119 | +142 | +180 | +75 | +89 | +112 | +41 | +50 | +64 | +25 | +34 | +16 | +25 |
| 40 | 50 | +280<br>+180 | +192<br>+130 | +230<br>+130 | +80 | +80 | +80 | +50 | +50 | +50 | +25 | +25 | +25 | +9 | +9 | 0 | 0 |
| 50 | 65 | +310<br>+190 | +214<br>+140 | +260<br>+140 | +146 | +174 | +220 | +90 | +106 | +134 | +49 | +60 | +76 | +29 | +40 | +19 | +30 |
| 65 | 80 | +320<br>+200 | +224<br>+150 | +270<br>+150 | +100 | +100 | +100 | +60 | +60 | +60 | +30 | +30 | +30 | +10 | +10 | 0 | 0 |
| 80 | 100 | +360<br>+220 | +257<br>+170 | +310<br>+170 | +174 | +207 | +260 | +107 | +126 | +159 | +58 | +71 | +90 | +34 | +47 | +22 | +35 |
| 100 | 120 | +380<br>+240 | +267<br>+180 | +320<br>+180 | +120 | +120 | +120 | +72 | +72 | +72 | +36 | +36 | +36 | +12 | +12 | 0 | 0 |
| 120 | 140 | +420<br>+260 | +300<br>+200 | +360<br>+200 | | | | | | | | | | | | | |
| 140 | 160 | +440<br>+280 | +310<br>+210 | +370<br>+210 | +208<br>+145 | +245<br>+145 | +305<br>+145 | +125<br>+85 | +148<br>+85 | +185<br>+85 | +68<br>+43 | +83<br>+43 | +106<br>+43 | +39<br>+14 | +54<br>+14 | +25<br>0 | +40<br>0 |
| 160 | 180 | +470<br>+310 | +330<br>+230 | +390<br>+230 | | | | | | | | | | | | | |
| 180 | 200 | +525<br>+340 | +355<br>+240 | +425<br>+240 | | | | | | | | | | | | | |
| 200 | 225 | +565<br>+380 | +375<br>+260 | +445<br>+260 | +242<br>+170 | +285<br>+170 | +355<br>+170 | +146<br>+100 | +172<br>+100 | +215<br>+100 | +79<br>+50 | +96<br>+50 | +122<br>+50 | +44<br>+15 | +61<br>+15 | +29<br>0 | +46<br>0 |
| 225 | 250 | +605<br>+420 | +395<br>+280 | +465<br>+280 | | | | | | | | | | | | | |
| 250 | 280 | +690<br>+480 | +430<br>+300 | +510<br>+300 | +271 | +320 | +400 | +162 | +191 | +240 | +88 | +108 | +137 | +49 | +69 | +32 | +52 |
| 280 | 315 | +750<br>+540 | +460<br>+330 | +540<br>+330 | +190 | +190 | +190 | +110 | +110 | +110 | +56 | +56 | +56 | +17 | +17 | 0 | 0 |
| 315 | 355 | +830<br>+600 | +500<br>+360 | +590<br>+360 | +299 | +350 | +440 | +182 | +214 | +265 | +98 | +119 | +151 | +54 | +75 | +36 | +57 |
| 355 | 400 | +910<br>+680 | +540<br>+400 | +630<br>+400 | +210 | +210 | +210 | +125 | +125 | +125 | +62 | +62 | +62 | +18 | +18 | 0 | 0 |
| 400 | 450 | +1010<br>+760 | +595<br>+440 | +690<br>+440 | +327 | +385 | +480 | +198 | +232 | +290 | +108 | +131 | +165 | +60 | +83 | +40 | +63 |
| 450 | 500 | +1090<br>+840 | +635<br>+480 | +730<br>+480 | +230 | +230 | +230 | +135 | +135 | +135 | +68 | +68 | +68 | +20 | +20 | 0 | 0 |

Remarque 1) Les dénominations de la première ligne du tableau représentent les plages de tolérances, les autres lignes du tableau indiquent les valeurs mini et maxi en microns suivant les diamètres indiqués dans la colonne de gauche.

Unités : $\mu$m

Classification des zones de tolérance géométrique de trous

| H8 | H9 | H10 | JS6 | JS7 | K6 | K7 | M6 | M7 | N6 | N7 | P6 | P7 | R7 | S7 | T7 | U7 | X7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +14<br>0 | +25<br>0 | +40<br>0 | ±3 | ±5 | 0<br>−6 | 0<br>−10 | −2<br>−8 | −2<br>−12 | −4<br>−10 | −4<br>−14 | −6<br>−12 | −6<br>−16 | −10<br>−20 | −14<br>−24 | — | −18<br>−28 | −20<br>−30 |
| +18<br>0 | +30<br>0 | +48<br>0 | ±4 | ±6 | +2<br>−6 | +3<br>−9 | −1<br>−9 | 0<br>−12 | −5<br>−13 | −4<br>−16 | −9<br>−17 | −8<br>−20 | −11<br>−23 | −15<br>−27 | — | −19<br>−31 | −24<br>−36 |
| +22<br>0 | +36<br>0 | +58<br>0 | ±4.5 | ±7 | +2<br>−7 | +5<br>−10 | −3<br>−12 | 0<br>−15 | −7<br>−16 | −4<br>−19 | −12<br>−21 | −9<br>−24 | −13<br>−28 | −17<br>−32 | — | −22<br>−37 | −28<br>−43 |
| +27<br>0 | +43<br>0 | +70<br>0 | ±5.5 | ±9 | +2<br>−9 | +6<br>−12 | −4<br>−15 | 0<br>−18 | −9<br>−20 | −5<br>−23 | −15<br>−26 | −11<br>−29 | −16<br>−34 | −21<br>−39 | —<br>— | −26<br>−44 | −33<br>−51<br>−38<br>−56 |
| +33<br>0 | +52<br>0 | +84<br>0 | ±6.5 | ±10 | +2<br>−11 | +6<br>−15 | −4<br>−17 | 0<br>−21 | −11<br>−24 | −7<br>−28 | −18<br>−31 | −14<br>−35 | −20<br>−41 | −27<br>−48 | —<br>−33<br>−54 | −33<br>−54<br>−40<br>−61 | −46<br>−67<br>−56<br>−77 |
| +39<br>0 | +62<br>0 | +100<br>0 | ±8 | ±12 | +3<br>−13 | +7<br>−18 | −4<br>−20 | 0<br>−25 | −12<br>−28 | −8<br>−33 | −21<br>−37 | −17<br>−42 | −25<br>−50 | −34<br>−59 | −39<br>−64<br>−45<br>−70 | −51<br>−76<br>−61<br>−86 | — |
| +46<br>0 | +74<br>0 | +120<br>0 | ±9.5 | ±15 | +4<br>−15 | +9<br>−21 | −5<br>−24 | 0<br>−30 | −14<br>−33 | −9<br>−39 | −26<br>−45 | −21<br>−51 | −30<br>−60<br>−32<br>−62 | −42<br>−72<br>−48<br>−78 | −55<br>−85<br>−64<br>−94 | −76<br>−106<br>−91<br>−121 | — |
| +54<br>0 | +87<br>0 | +140<br>0 | ±11 | ±17 | +4<br>−18 | +10<br>−25 | −6<br>−28 | 0<br>−35 | −16<br>−38 | −10<br>−45 | −30<br>−52 | −24<br>−59 | −38<br>−73<br>−41<br>−76 | −58<br>−93<br>−66<br>−101 | −78<br>−113<br>−91<br>−126 | −111<br>−146<br>−131<br>−166 | — |
| +63<br>0 | +100<br>0 | +160<br>0 | ±12.5 | ±20 | +4<br>−21 | +12<br>−28 | −8<br>−33 | 0<br>−40 | −20<br>−45 | −12<br>−52 | −36<br>−61 | −28<br>−68 | −48<br>−88<br>−50<br>−90<br>−53<br>−93 | −77<br>−117<br>−85<br>−125<br>−93<br>−133 | −107<br>−147<br>−119<br>−159<br>−131<br>−171 | — | — |
| +72<br>0 | +115<br>0 | +185<br>0 | ±14.5 | ±23 | +5<br>−24 | +13<br>−33 | −8<br>−37 | 0<br>−46 | −22<br>−51 | −14<br>−60 | −41<br>−70 | −33<br>−79 | −60<br>−106<br>−63<br>−109<br>−67<br>−113 | −105<br>−151<br>−113<br>−159<br>−123<br>−169 | — | — | — |
| +81<br>0 | +130<br>0 | +210<br>0 | ±16 | ±26 | +5<br>−27 | +16<br>−36 | −9<br>−41 | 0<br>−52 | −25<br>−57 | −14<br>−66 | −47<br>−79 | −36<br>−88 | −74<br>−126<br>−78<br>−130 | — | — | — | — |
| +89<br>0 | +140<br>0 | +230<br>0 | ±18 | ±28 | +7<br>−29 | +17<br>−40 | −10<br>−46 | 0<br>−57 | −26<br>−62 | −16<br>−73 | −51<br>−87 | −41<br>−98 | −87<br>−144<br>−93<br>−150 | — | — | — | — |
| +97<br>0 | +155<br>0 | +250<br>0 | ±20 | ±31 | +8<br>−32 | +18<br>−45 | −10<br>−50 | 0<br>−63 | −27<br>−67 | −17<br>−80 | −55<br>−95 | −45<br>−108 | −103<br>−166<br>−109<br>−172 | — | — | — | — |

# TABLEAU DE TOLÉRANCES DES ARBRES

| Classification, dimensions standards (mm) | | Classification des tolérances géométriques des arbres | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| > | ≤ | b9 | c9 | d8 | d9 | e7 | e8 | e9 | f6 | f7 | f8 | g5 | g6 | h5 | h6 | h7 |
| — | 3 | −140<br>−165 | −60<br>−85 | −20<br>−34 | −20<br>−45 | −14<br>−24 | −14<br>−28 | −14<br>−39 | −6<br>−12 | −6<br>−16 | −6<br>−20 | −2<br>−6 | −2<br>−8 | 0<br>−4 | 0<br>−6 | 0<br>−10 |
| 3 | 6 | −140<br>−170 | −70<br>−100 | −30<br>−48 | −30<br>−60 | −20<br>−32 | −20<br>−38 | −20<br>−50 | −10<br>−18 | −10<br>−22 | −10<br>−28 | −4<br>−9 | −4<br>−12 | 0<br>−5 | 0<br>−8 | 0<br>−12 |
| 6 | 10 | −150<br>−186 | −80<br>−116 | −40<br>−62 | −40<br>−76 | −25<br>−40 | −25<br>−47 | −25<br>−61 | −13<br>−22 | −13<br>−28 | −13<br>−35 | −5<br>−11 | −5<br>−14 | 0<br>−6 | 0<br>−9 | 0<br>−15 |
| 10 | 14 | −150<br>−193 | −95<br>−138 | −50<br>−77 | −50<br>−93 | −32<br>−50 | −32<br>−59 | −32<br>−75 | −16<br>−27 | −16<br>−34 | −16<br>−43 | −6<br>−14 | −6<br>−17 | 0<br>−8 | 0<br>−11 | 0<br>−18 |
| 14 | 18 | | | | | | | | | | | | | | | |
| 18 | 24 | −160<br>−212 | −110<br>−162 | −65<br>−98 | −65<br>−117 | −40<br>−61 | −40<br>−73 | −40<br>−92 | −20<br>−33 | −20<br>−41 | −20<br>−53 | −7<br>−16 | −7<br>−20 | 0<br>−9 | 0<br>−13 | 0<br>−21 |
| 24 | 30 | | | | | | | | | | | | | | | |
| 30 | 40 | −170<br>−232 | −120<br>−182 | −80<br>−119 | −80<br>−142 | −50<br>−75 | −50<br>−89 | −50<br>−112 | −25<br>−41 | −25<br>−50 | −25<br>−64 | −9<br>−20 | −9<br>−25 | 0<br>−11 | 0<br>−16 | 0<br>−25 |
| 40 | 50 | −180<br>−242 | −130<br>−192 | | | | | | | | | | | | | |
| 50 | 65 | −190<br>−264 | −140<br>−214 | −100<br>−146 | −100<br>−174 | −60<br>−90 | −60<br>−106 | −60<br>−134 | −30<br>−49 | −30<br>−60 | −30<br>−76 | −10<br>−23 | −10<br>−29 | 0<br>−13 | 0<br>−19 | 0<br>−30 |
| 65 | 80 | −200<br>−274 | −150<br>−224 | | | | | | | | | | | | | |
| 80 | 100 | −220<br>−307 | −170<br>−257 | −120<br>−174 | −120<br>−207 | −72<br>−107 | −72<br>−126 | −72<br>−159 | −36<br>−58 | −36<br>−71 | −36<br>−90 | −12<br>−27 | −12<br>−34 | 0<br>−15 | 0<br>−22 | 0<br>−35 |
| 100 | 120 | −240<br>−327 | −180<br>−267 | | | | | | | | | | | | | |
| 120 | 140 | −260<br>−360 | −200<br>−300 | −145<br>−208 | −145<br>−245 | −85<br>−125 | −85<br>−148 | −85<br>−185 | −43<br>−68 | −43<br>−83 | −43<br>−106 | −14<br>−32 | −14<br>−39 | 0<br>−18 | 0<br>−25 | 0<br>−40 |
| 140 | 160 | −280<br>−380 | −210<br>−310 | | | | | | | | | | | | | |
| 160 | 180 | −310<br>−410 | −230<br>−330 | | | | | | | | | | | | | |
| 180 | 200 | −340<br>−455 | −240<br>−355 | −170<br>−242 | −170<br>−285 | −100<br>−146 | −100<br>−172 | −100<br>−215 | −50<br>−79 | −50<br>−96 | −50<br>−122 | −15<br>−35 | −15<br>−44 | 0<br>−20 | 0<br>−29 | 0<br>−46 |
| 200 | 225 | −380<br>−495 | −260<br>−375 | | | | | | | | | | | | | |
| 225 | 250 | −420<br>−535 | −280<br>−395 | | | | | | | | | | | | | |
| 250 | 280 | −480<br>−610 | −300<br>−430 | −190<br>−271 | −190<br>−320 | −110<br>−162 | −110<br>−191 | −110<br>−240 | −56<br>−88 | −56<br>−108 | −56<br>−137 | −17<br>−40 | −17<br>−49 | 0<br>−23 | 0<br>−32 | 0<br>−52 |
| 280 | 315 | −540<br>−670 | −330<br>−460 | | | | | | | | | | | | | |
| 315 | 355 | −600<br>−740 | −360<br>−500 | −210<br>−299 | −210<br>−350 | −125<br>−182 | −125<br>−214 | −125<br>−265 | −62<br>−98 | −62<br>−119 | −62<br>−151 | −18<br>−43 | −18<br>−54 | 0<br>−25 | 0<br>−36 | 0<br>−57 |
| 355 | 400 | −680<br>−820 | −400<br>−540 | | | | | | | | | | | | | |
| 400 | 450 | −760<br>−915 | −440<br>−595 | −230<br>−327 | −230<br>−385 | −135<br>−198 | −135<br>−232 | −135<br>−290 | −68<br>−108 | −68<br>−131 | −68<br>−165 | −20<br>−47 | −20<br>−60 | 0<br>−27 | 0<br>−40 | 0<br>−63 |
| 450 | 500 | −840<br>−995 | −480<br>−635 | | | | | | | | | | | | | |

Remarque 1) Les dénominations de la première ligne du tableau représentent les plages de tolérances, les autres lignes du tableau indiquent les valeurs mini et maxi en microns suivant les diamètres indiqués dans la colonne de gauche.

Unités : $\mu$m

Classification des tolérances géométriques des arbres

| h8 | h9 | js5 | js6 | js7 | k5 | k6 | m5 | m6 | n6 | p6 | r6 | s6 | t6 | u6 | x6 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0<br>−14 | 0<br>−25 | ±2 | ±3 | ±5 | +4<br>0 | +6<br>0 | +6<br>+2 | +8<br>+2 | +10<br>+4 | +12<br>+6 | +16<br>+10 | +20<br>+14 | — | +24<br>+18 | +26<br>+20 |
| 0<br>−18 | 0<br>−30 | ±2.5 | ±4 | ±6 | +6<br>+1 | +9<br>+1 | +9<br>+4 | +12<br>+4 | +16<br>+8 | +20<br>+12 | +23<br>+15 | +27<br>+19 | — | +31<br>+23 | +36<br>+28 |
| 0<br>−22 | 0<br>−36 | ±3 | ±4.5 | ±7 | +7<br>+1 | +10<br>+1 | +12<br>+6 | +15<br>+6 | +19<br>+10 | +24<br>+15 | +28<br>+19 | +32<br>+23 | — | +37<br>+28 | +43<br>+34 |
| 0<br>−27 | 0<br>−43 | ±4 | ±5.5 | ±9 | +9<br>+1 | +12<br>+1 | +15<br>+7 | +18<br>+7 | +23<br>+12 | +29<br>+18 | +34<br>+23 | +39<br>+28 | — | +44<br>+33 | +51<br>+40<br>+56<br>+45 |
| 0<br>−33 | 0<br>−52 | ±4.5 | ±6.5 | ±10 | +11<br>+2 | +15<br>+2 | +17<br>+8 | +21<br>+8 | +28<br>+15 | +35<br>+22 | +41<br>+28 | +48<br>+35 | —<br>+54<br>+41 | +54<br>+41<br>+61<br>+48 | +67<br>+54<br>+77<br>+64 |
| 0<br>−39 | 0<br>−62 | ±5.5 | ±8 | ±12 | +13<br>+2 | +18<br>+2 | +20<br>+9 | +25<br>+9 | +33<br>+17 | +42<br>+26 | +50<br>+34 | +59<br>+43 | +64<br>+48<br>+70<br>+54 | +76<br>+60<br>+86<br>+70 | — |
| 0<br>−46 | 0<br>−74 | ±6.5 | ±9.5 | ±15 | +15<br>+2 | +21<br>+2 | +24<br>+11 | +30<br>+11 | +39<br>+20 | +51<br>+32 | +60<br>+41<br>+62<br>+43 | +72<br>+53<br>+78<br>+59 | +85<br>+66<br>+94<br>+75 | +106<br>+87<br>+121<br>+102 | — |
| 0<br>−54 | 0<br>−87 | ±7.5 | ±11 | ±17 | +18<br>+3 | +25<br>+3 | +28<br>+13 | +35<br>+13 | +45<br>+23 | +59<br>+37 | +73<br>+51<br>+76<br>+54 | +93<br>+71<br>+101<br>+79 | +113<br>+91<br>+126<br>+104 | +146<br>+124<br>+166<br>+144 | — |
| 0<br>−63 | 0<br>−100 | ±9 | ±12.5 | ±20 | +21<br>+3 | +28<br>+3 | +33<br>+15 | +40<br>+15 | +52<br>+27 | +68<br>+43 | +88<br>+63<br>+90<br>+65<br>+93<br>+68 | +117<br>+92<br>+125<br>+100<br>+133<br>+108 | +147<br>+122<br>+159<br>+134<br>+171<br>+146 | — | — |
| 0<br>−72 | 0<br>−115 | ±10 | ±14.5 | ±23 | +24<br>+4 | +33<br>+4 | +37<br>+17 | +46<br>+17 | +60<br>+31 | +79<br>+50 | +106<br>+77<br>+109<br>+80<br>+113<br>+84 | +151<br>+122<br>+159<br>+130<br>+169<br>+140 | — | — | — |
| 0<br>−81 | 0<br>−130 | ±11.5 | ±16 | ±26 | +27<br>+4 | +36<br>+4 | +43<br>+20 | +52<br>+20 | +66<br>+34 | +88<br>+56 | +126<br>+94<br>+130<br>+98 | — | — | — | — |
| 0<br>−89 | 0<br>−140 | ±12.5 | ±18 | ±28 | +29<br>+4 | +40<br>+4 | +46<br>+21 | +57<br>+21 | +73<br>+37 | +98<br>+62 | +144<br>+108<br>+150<br>+114 | — | — | — | — |
| 0<br>−97 | 0<br>−155 | ±13.5 | ±20 | ±31 | +32<br>+5 | +45<br>+5 | +50<br>+23 | +63<br>+23 | +80<br>+40 | +108<br>+68 | +166<br>+126<br>+172<br>+132 | — | — | — | — |

# DIAMÈTRES FORETS, PERÇAGES AVANT TARAUDAGES



## ●Filetage métrique

| Nominal | Diamètre foret | |
|---|---|---|
| | HSS | Carbure |
| M1 ×0.25 | 0.75 | 0.75 |
| M1.1×0.25 | 0.85 | 0.85 |
| M1.2×0.25 | 0.95 | 0.95 |
| M1.4×0.3 | 1.10 | 1.10 |
| M1.6×0.35 | 1.25 | 1.30 |
| M1.7×0.35 | 1.35 | 1.40 |
| M1.8×0.35 | 1.45 | 1.50 |
| M2 ×0.4 | 1.60 | 1.65 |
| M2.2×0.45 | 1.75 | 1.80 |
| M2.3×0.4 | 1.90 | 1.95 |
| M2.5×0.45 | 2.10 | 2.15 |
| M2.6×0.45 | 2.15 | 2.20 |
| M3 ×0.5 | 2.50 | 2.55 |
| M3.5×0.6 | 2.90 | 2.95 |
| M4 ×0.7 | 3.3 | 3.4 |
| M4.5×0.75 | 3.8 | 3.9 |
| M5 ×0.8 | 4.2 | 4.3 |
| M6 ×1.0 | 5.0 | 5.1 |
| M7 ×1.0 | 6.0 | 6.1 |
| M8 ×1.25 | 6.8 | 6.9 |
| M9 ×1.25 | 7.8 | 7.9 |
| M10 ×1.5 | 8.5 | 8.7 |
| M11 ×1.5 | 9.5 | 9.7 |
| M12 ×1.75 | 10.3 | 10.5 |
| M14 ×2.0 | 12.0 | 12.2 |
| M16 ×2.0 | 14.0 | 14.2 |
| M18 ×2.5 | 15.5 | 15.7 |
| M20 ×2.5 | 17.5 | 17.7 |
| M22 ×2.5 | 19.5 | 19.7 |
| M24 ×3.0 | 21.0 | — |
| M27 ×3.0 | 24.0 | — |
| M30 ×3.5 | 26.5 | — |
| M33 ×3.5 | 29.5 | — |
| M36 ×4.0 | 32.0 | — |
| M39 ×4.0 | 35.0 | — |
| M42 ×4.5 | 37.5 | — |
| M45 ×4.5 | 40.5 | — |
| M48 ×5.0 | 43.0 | — |

## ●Filetage fin métrique

| Nominal | Diamètre foret | |
|---|---|---|
| | HSS | Carbure |
| M1 ×0.2 | 0.80 | 0.80 |
| M1.1×0.2 | 0.90 | 0.90 |
| M1.2×0.2 | 1.00 | 1.00 |
| M1.4×0.2 | 1.20 | 1.20 |
| M1.6×0.2 | 1.40 | 1.40 |
| M1.8×0.2 | 1.60 | 1.60 |
| M2 ×0.25 | 1.75 | 1.75 |
| M2.2×0.25 | 1.95 | 2.00 |
| M2.5×0.35 | 2.20 | 2.20 |
| M3 ×0.35 | 2.70 | 2.70 |
| M3.5×0.35 | 3.20 | 3.20 |
| M4 ×0.5 | 3.50 | 3.55 |
| M4.5×0.5 | 4.00 | 4.05 |
| M5 ×0.5 | 4.50 | 4.55 |
| M5.5×0.5 | 5.00 | 5.05 |
| M6 ×0.75 | 5.30 | 5.35 |
| M7 ×0.75 | 6.30 | 6.35 |
| M8 ×1.0 | 7.00 | 7.10 |
| M8 ×0.75 | 7.30 | 7.35 |
| M9 ×1.0 | 8.00 | 8.10 |
| M9 ×0.75 | 8.30 | 8.35 |
| M10 ×1.25 | 8.80 | 8.90 |
| M10 ×1.0 | 9.00 | 9.10 |
| M10 ×0.75 | 9.30 | 9.35 |
| M11 ×1.0 | 10.0 | 10.1 |
| M11 ×0.75 | 10.3 | 10.3 |
| M12 ×1.5 | 10.5 | 10.7 |
| M12 ×1.25 | 10.8 | 10.9 |
| M12 ×1.0 | 11.0 | 11.1 |
| M14 ×1.5 | 12.5 | 12.7 |
| M14 ×1.0 | 13.0 | 13.1 |
| M15 ×1.5 | 13.5 | 13.7 |
| M15 ×1.0 | 14.0 | 14.1 |
| M16 ×1.5 | 14.5 | 14.7 |
| M16 ×1.0 | 15.0 | 15.1 |
| M17 ×1.5 | 15.5 | 15.7 |
| M17 ×1.0 | 16.0 | 16.1 |
| M18 ×2.0 | 16.0 | 16.3 |
| M18 ×1.5 | 16.5 | 16.7 |
| M18 ×1.0 | 17.0 | 17.1 |

| Nominal | Diamètre foret | |
|---|---|---|
| | HSS | Carbure |
| M20 ×2.0 | 18.0 | 18.3 |
| M20 ×1.5 | 18.5 | 18.7 |
| M20 ×1.0 | 19.0 | 19.1 |
| M22 ×2.0 | 20.0 | — |
| M22 ×1.5 | 20.5 | — |
| M22 ×1.0 | 21.0 | — |
| M24 ×2.0 | 22.0 | — |
| M24 ×1.5 | 22.5 | — |
| M24 ×1.0 | 23.0 | — |
| M25 ×2.0 | 23.0 | — |
| M25 ×1.5 | 23.5 | — |
| M25 ×1.0 | 24.0 | — |
| M26 ×1.5 | 24.5 | — |
| M27 ×2.0 | 25.0 | — |
| M27 ×1.5 | 25.5 | — |
| M27 ×1.0 | 26.0 | — |
| M28 ×2.0 | 26.0 | — |
| M28 ×1.5 | 26.5 | — |
| M28 ×1.0 | 27.0 | — |
| M30 ×3.0 | 27.0 | — |
| M30 ×2.0 | 28.0 | — |
| M30 ×1.5 | 28.5 | — |
| M30 ×1.0 | 29.0 | — |
| M32 ×2.0 | 30.0 | — |
| M32 ×1.5 | 30.5 | — |
| M33 ×3.0 | 30.0 | — |
| M33 ×2.0 | 31.0 | — |
| M33 ×1.5 | 31.5 | — |
| M35 ×1.5 | 33.5 | — |
| M36 ×3.0 | 33.0 | — |
| M36 ×2.0 | 34.0 | — |
| M36 ×1.5 | 34.5 | — |
| M38 ×1.5 | 36.5 | — |
| M39 ×3.0 | 36.0 | — |
| M39 ×2.0 | 37.0 | — |
| M39 ×1.5 | 37.5 | — |
| M40 ×3.0 | 37.0 | — |
| M40 ×2.0 | 38.0 | — |
| M40 ×1.5 | 38.5 | — |
| M42 ×4.0 | 38.0 | — |

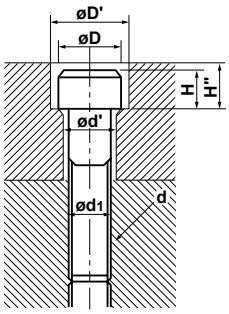
| Nominal | Diamètre foret | |
|---|---|---|
| | HSS | Carbure |
| M42 ×3.0 | 39.0 | — |
| M42 ×2.0 | 40.0 | — |
| M42 ×1.5 | 40.5 | — |
| M45 ×4.0 | 41.0 | — |
| M45 ×3.0 | 42.0 | — |
| M45 ×2.0 | 43.0 | — |
| M45 ×1.5 | 43.5 | — |
| M48 ×4.0 | 44.0 | — |
| M48 ×3.0 | 45.0 | — |
| M48 ×2.0 | 46.0 | — |
| M48 ×1.5 | 46.5 | — |
| M50 ×3.0 | 47.0 | — |
| M50 ×2.0 | 48.0 | — |
| M50 ×1.5 | 48.5 | — |

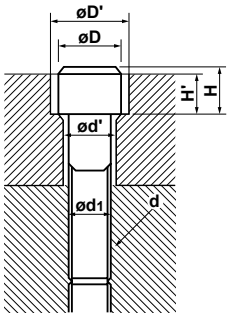
Remarque 1) Le diamètre de perçage doit être mesuré puisqu'il peut varier selon les conditions d'usinage, et de la matière.
Si le diamètre est inapproprié avant taraudage, le diamètre du foret doit être modifié.

# DIAMÈTRES DE PERÇAGES POUR VIS À TÊTE SIX PANS ET C.H.C

**DIMENSIONS DES LAMAGES ET DIAMÈTRES DE PERÇAGES POUR VIS À TÊTE SIX PANS ET CHC** Unité : mm

| Filetage nominal | M3 | M4 | M5 | M6 | M8 | M10 | M12 | M14 | M16 | M18 | M20 | M22 | M24 | M27 | M30 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **$d_1$** | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 27 | 30 |
| **d'** | 3.4 | 4.5 | 5.5 | 6.6 | 9 | 11 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 30 | 33 |
| **D** | 5.5 | 7 | 8.5 | 10 | 13 | 16 | 18 | 21 | 24 | 27 | 30 | 33 | 36 | 40 | 45 |
| **D'** | 6.5 | 8 | 9.5 | 11 | 14 | 17.5 | 20 | 23 | 26 | 29 | 32 | 35 | 39 | 43 | 48 |
| **H** | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 27 | 30 |
| **H'** | 2.7 | 3.6 | 4.6 | 5.5 | 7.4 | 9.2 | 11 | 12.8 | 14.5 | 16.5 | 18.5 | 20.5 | 22.5 | 25 | 28 |
| **H"** | 3.3 | 4.4 | 5.4 | 6.5 | 8.6 | 10.8 | 13 | 15.2 | 17.5 | 19.5 | 21.5 | 23.5 | 25.5 | 29 | 32 |



# SYSTÈME INTERNATIONAL

## ■TABLEAUX DE CONVERSION (Couple de serrage, unité : SI)

### ●Pression

| **Pa** | **kPa** | **MPa** | bar | kgf/cm$^2$ | atm | mmH$_2$O | mmHg ou Torr |
|---|---|---|---|---|---|---|---|
| 1 | $1\times10^{-3}$ | $1\times10^{-6}$ | $1\times10^{-5}$ | $1.01972\times10^{-5}$ | $9.86923\times10^{-6}$ | $1.01972\times10^{-1}$ | $7.50062\times10^{-3}$ |
| $1\times10^{3}$ | 1 | $1\times10^{-3}$ | $1\times10^{-2}$ | $1.01972\times10^{-2}$ | $9.86923\times10^{-3}$ | $1.01972\times10^{2}$ | 7.50062 |
| $1\times10^{6}$ | $1\times10^{3}$ | 1 | $1\times10$ | $1.01972\times10$ | 9.86923 | $1.01972\times10^{5}$ | $7.50062\times10^{3}$ |
| $1\times10^{5}$ | $1\times10^{2}$ | $1\times10^{-1}$ | 1 | 1.01972 | $9.86923\times10^{-1}$ | $1.01972\times10^{4}$ | $7.50062\times10^{2}$ |
| $9.80665\times10^{4}$ | $9.80665\times10$ | $9.80665\times10^{-2}$ | $9.80665\times10^{-1}$ | 1 | $9.67841\times10^{-1}$ | $1\times10^{4}$ | $7.35559\times10^{2}$ |
| $1.01325\times10^{5}$ | $1.01325\times10^{2}$ | $1.01325\times10^{-1}$ | 1.01325 | 1.03323 | 1 | $1.03323\times10^{4}$ | $7.60000\times10^{2}$ |
| 9.80665 | $9.80665\times10^{-3}$ | $9.80665\times10^{-6}$ | $9.80665\times10^{-5}$ | $1\times10^{-4}$ | $9.67841\times10^{-5}$ | 1 | $7.35559\times10^{-2}$ |
| $1.33322\times10^{2}$ | $1.33322\times10^{-1}$ | $1.33322\times10^{-4}$ | $1.33322\times10^{-3}$ | $1.35951\times10^{-3}$ | $1.31579\times10^{-3}$ | $1.35951\times10$ | 1 |

Remarque 1) 1Pa=1N/m$^2$

### ●Effort

| **N** | dyn | kgf |
|---|---|---|
| 1 | $1\times10^{5}$ | $1.01972\times10^{-1}$ |
| $1\times10^{-5}$ | 1 | $1.01972\times10^{-6}$ |
| 9.80665 | $9.80665\times10^{5}$ | 1 |

### ●Fatigue

| **Pa** | **MPa** or **N/mm$^2$** | kgf/mm$^2$ | kgf/cm$^2$ |
|---|---|---|---|
| 1 | $1\times10^{-6}$ | $1.01972\times10^{-7}$ | $1.01972\times10^{-5}$ |
| $1\times10^{6}$ | 1 | $1.01972\times10^{-1}$ | $1.01972\times10$ |
| $9.80665\times10^{6}$ | 9.80665 | 1 | $1\times10^{2}$ |
| $9.80665\times10^{4}$ | $9.80665\times10^{-2}$ | $1\times10^{-2}$ | 1 |

Remarque 1) 1Pa=1N/m$^2$

### ●Travail / Énergie / Calorie

| **J** | kW•h | kgf•m | kcal |
|---|---|---|---|
| 1 | $2.77778\times10^{-7}$ | $1.01972\times10^{-1}$ | $2.38889\times10^{-4}$ |
| $3.600\times10^{6}$ | 1 | $3.67098\times10^{5}$ | $8.6000\times10^{2}$ |
| 9.80665 | $2.72407\times10^{-6}$ | 1 | $2.34270\times10^{-3}$ |
| $4.18605\times10^{3}$ | $1.16279\times10^{-3}$ | $4.26858\times10^{2}$ | 1 |

Remarque 1) 1J=1W•s, 1J=1N•m
1cal=4.18605J
(Par la loi des poids et des mesures)

### ●Puissance (taux / puissance motrice) / débit calorifique

| **W** | kgf•m/s | PS | kcal/h |
|---|---|---|---|
| 1 | $1.01972\times10^{-1}$ | $1.35962\times10^{-3}$ | $8.6000\times10^{-1}$ |
| 9.80665 | 1 | $1.33333\times10^{-2}$ | 8.43371 |
| $7.355\times10^{2}$ | $7.5\times10$ | 1 | $6.32529\times10^{2}$ |
| 1.16279 | $1.18572\times10^{-1}$ | $1.58095\times10^{-3}$ | 1 |

Remarque 1) 1W=1J/s, PS:Puissance en chevaux Français.
1PS=0.7355kW
1cal=4.18605J
(Par la loi des poids et mesures)

# Notes

# Notes

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