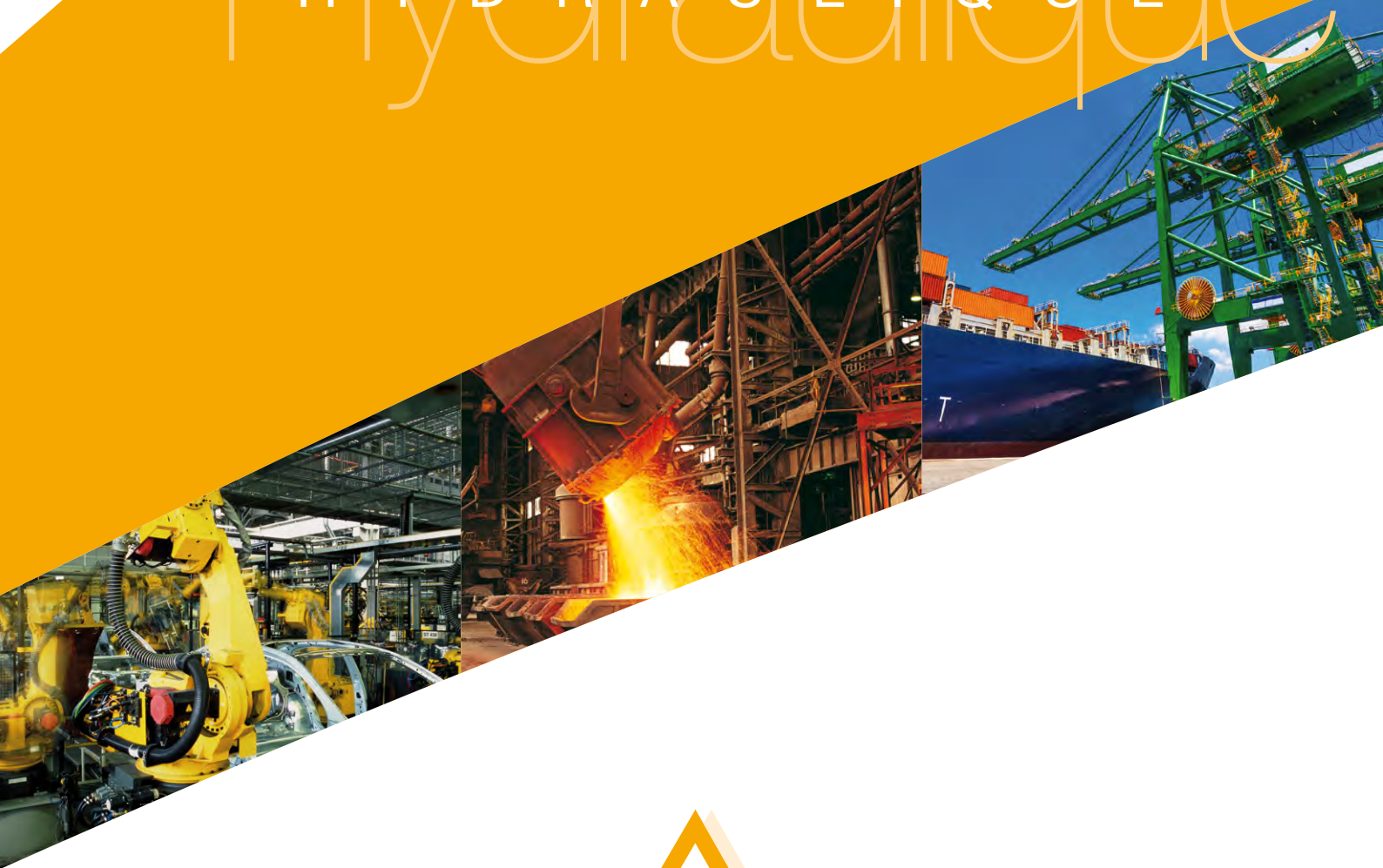


# HYDRAULIQUE



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# LA GARANTIE D'UNE ENTREPRISE LEADER... *MAIS DIFFÉRENTE*

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*Dans les entreprises, nous avons tendance à communiquer autour de valeurs comme "l'excellence", "la qualité", l'engagement", "l'honnêteté" ou "le service au client"... Mais très sincèrement, chez AirControl nous pensons que ce ne sont pas des valeurs à souligner, car elles doivent être inhérentes à notre travail.*

---

Quant à nous, nous voulons nous faire connaître au-delà de notre excellence, de notre qualité, de notre engagement, de notre honnêteté et de notre service au client. Nous sommes **AirControl**, nous sommes **proches** et **interactifs** dans notre communication avec le client. Nous sommes **audacieux** face à tous les défis, **souples** et **surprenants** dans la présentation de solutions.

Et comme nous continuons à surprendre depuis 1962, nous nous considérons **leaders** en matière de fabrication de produits spéciaux et de produits sur mesure, faits pour répondre à des besoins spécifiques. Nous sommes **rigoureux**, tant au niveau du processus de fabrication que dans notre organisation en tant qu'entreprise, grâce à l'application de contrôles qualité exhaustifs.

Nous sommes **jeunes**, dans nos équipes, notre style et notre identité en tant qu'entreprise, dans notre façon de travailler et de traiter nos clients. Mais par dessus tout, nous sommes des **personnes**, comme vous. Nous savons que nous traitons avec des entreprises, mais surtout avec des personnes. Nous voulons que le client sente qu'il nous importe vraiment, que nous sommes à son écoute, du lancement d'un projet au service après-vente.



## 8 raisons de faire confiance à AirControl

- Un savoir-faire vaste et complet qui nous permet d'aborder tout type de projet.
- Nous sommes fabricants, distributeurs et plus encore : conseillers. **Nous conseillons** nos clients afin de leur offrir toujours la solution la plus **performante en termes techniques et économiques**.
- Nous avons la **maîtrise totale** des procédés de conception et de fabrication.
- Nous n'appartenons à aucun groupe international. Étant une **marque indépendante**, nous pouvons prendre nos propres décisions pour un **plus de souplesse**.
- Nous défendons une **communication directe et fluide** avec nos clients.
- Nous travaillons en **groupes de projet** afin que toutes les personnes impliquées dans la chaîne de livraison soient informées à tout moment.
- Nous utilisons **uniquement des composants de haute qualité** et nous soumettons nos fournisseurs à de rigoureux contrôles de qualité.
- Nous lions directement notre succès entrepreneurial au **succès de nos clients**.



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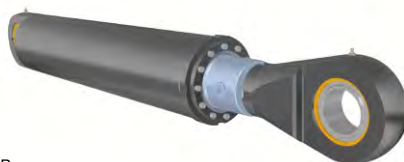
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# Série HR

Vérins ronds / ISO 6020/1 - 160 bar



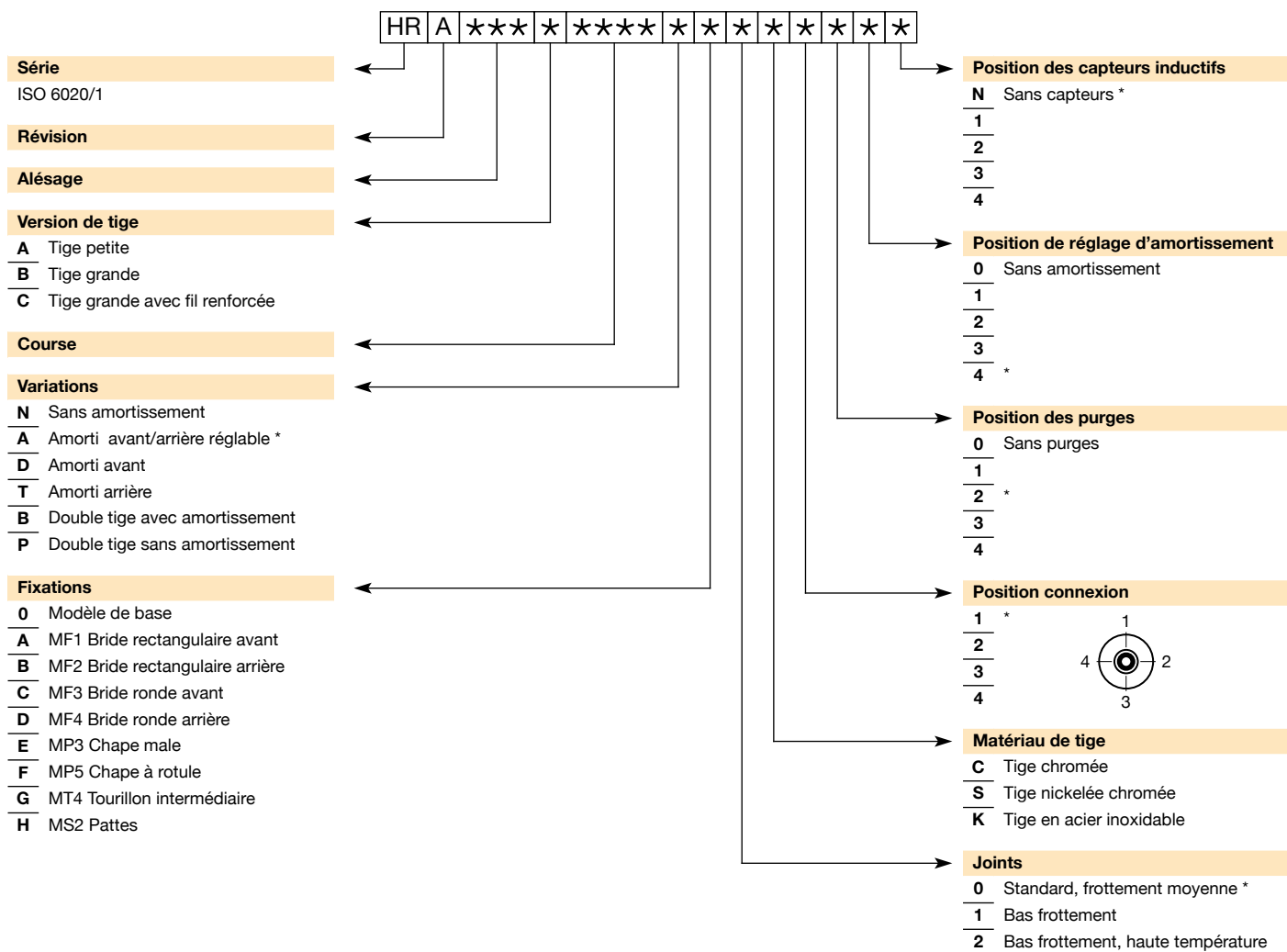
## Caractéristiques techniques

|                                                 |                                              |    |    |    |    |    |    |    |     |    |    |    |     |    |     |    |     |     |     |     |     |     |     |  |
|-------------------------------------------------|----------------------------------------------|----|----|----|----|----|----|----|-----|----|----|----|-----|----|-----|----|-----|-----|-----|-----|-----|-----|-----|--|
| Norme                                           | ISO6020/1                                    |    |    |    |    |    |    |    |     |    |    |    |     |    |     |    |     |     |     |     |     |     |     |  |
| Type de construction                            | Avec bride et vis                            |    |    |    |    |    |    |    |     |    |    |    |     |    |     |    |     |     |     |     |     |     |     |  |
| Pression nominale                               | 160 bar                                      |    |    |    |    |    |    |    |     |    |    |    |     |    |     |    |     |     |     |     |     |     |     |  |
| Pression d'épreuve                              | 240 bar                                      |    |    |    |    |    |    |    |     |    |    |    |     |    |     |    |     |     |     |     |     |     |     |  |
| Température ambiante                            | -20°C → +80°C                                |    |    |    |    |    |    |    |     |    |    |    |     |    |     |    |     |     |     |     |     |     |     |  |
| Température fluide                              | -20°C → +160°C avec joints viton             |    |    |    |    |    |    |    |     |    |    |    |     |    |     |    |     |     |     |     |     |     |     |  |
|                                                 | -20°C → +80°C                                |    |    |    |    |    |    |    |     |    |    |    |     |    |     |    |     |     |     |     |     |     |     |  |
|                                                 | -20°C → +160°C avec joints viton             |    |    |    |    |    |    |    |     |    |    |    |     |    |     |    |     |     |     |     |     |     |     |  |
| Fluide                                          | Huile minérale - Autres fluides sur commande |    |    |    |    |    |    |    |     |    |    |    |     |    |     |    |     |     |     |     |     |     |     |  |
| Alésages (mm)                                   | 25                                           |    | 32 |    | 40 |    | 50 |    | 63  |    | 80 |    | 100 |    | 125 |    | 160 |     | 200 |     | 250 |     | 320 |  |
| Tige (mm)                                       | 14                                           | 18 | 18 | 22 | 22 | 28 | 28 | 36 | 36  | 45 | 45 | 56 | 56  | 70 | 70  | 90 | 90  | 110 | 140 | 140 | 180 | 180 | 220 |  |
| Vitesse maximale (m/s) - joints standard        | 0,5                                          |    |    |    |    |    |    |    | 0,4 |    |    |    |     |    |     |    |     |     |     |     |     |     |     |  |
| Vitesse maximale (m/s) - joints faible friction | 1                                            |    |    |    |    |    |    |    |     |    |    |    |     |    |     |    |     |     |     |     |     |     |     |  |

# Série HR

## Vérins hydrauliques ISO 6020/1

### Codification



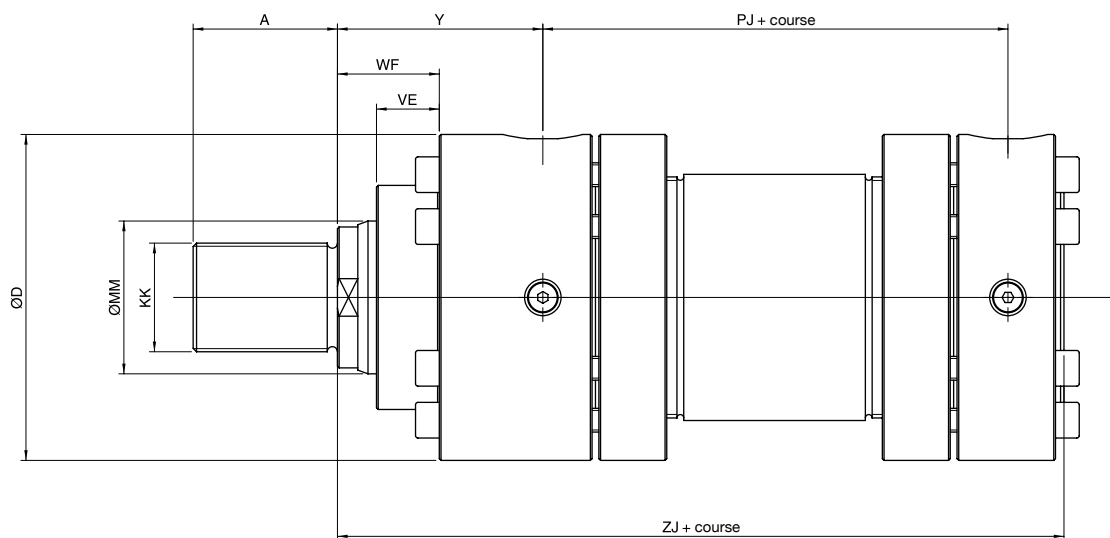
Une entretoise est disposée pour les courses supérieures à 1000mm  
 Elle augmente la longueur du vérin de :  
 1001-1500 : +50mm longueur totale  
 1501-2000 : +100mm longueur totale  
 2001-2500 : +150mm longueur totale  
 2501-3000 : +200mm longueur totale

\* Option par défaut

## Série HR

### Vérins Hydrauliques ISO 6020/1

#### Modèle de base

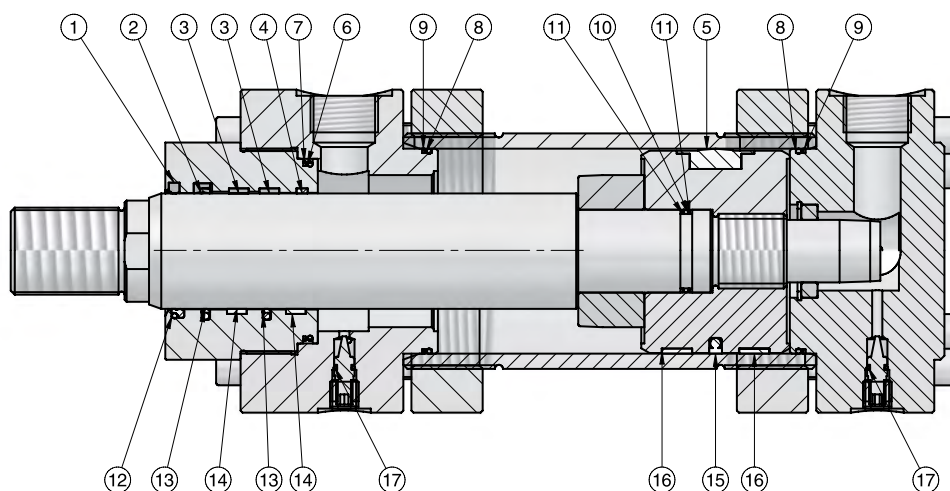


| Ø   | ØMM | ZJ  | KK<br>6g | A<br>máx. | Y   | PJ  | ØD<br>máx. | VE<br>máx. | WF  |
|-----|-----|-----|----------|-----------|-----|-----|------------|------------|-----|
| 25  | 14  | 150 | M12x1,25 | 16        | 58  | 77  | 56         | 15         | 28  |
|     | 18  |     | M12x1,25 | 16        |     |     |            |            |     |
|     | 18  |     | M14x1,5  | 18        |     |     |            |            |     |
| 32  | 18  | 170 | M14x1,5  | 18        | 64  | 89  | 67         | 19         | 32  |
|     | 22  |     | M14x1,5  | 18        |     |     |            |            |     |
|     | 22  |     | M16x1,5  | 22        |     |     |            |            |     |
| 40  | 22  | 190 | M16x1,5  | 22        | 71  | 97  | 78         | 19         | 32  |
|     | 28  |     | M16x1,5  | 22        |     |     |            |            |     |
|     | 28  |     | M20x1,5  | 28        |     |     |            |            |     |
| 50  | 28  | 205 | M20x1,5  | 28        | 72  | 111 | 95         | 24         | 38  |
|     | 36  |     | M20x1,5  | 28        |     |     |            |            |     |
|     | 36  |     | M27x2    | 36        |     |     |            |            |     |
| 63  | 36  | 224 | M27x2    | 36        | 82  | 117 | 116        | 29         | 45  |
|     | 45  |     | M27x2    | 36        |     |     |            |            |     |
|     | 45  |     | M33x2    | 45        |     |     |            |            |     |
| 80  | 45  | 250 | M33x2    | 45        | 91  | 134 | 130        | 36         | 54  |
|     | 56  |     | M33x2    | 45        |     |     |            |            |     |
|     | 56  |     | M42x2    | 56        |     |     |            |            |     |
| 100 | 56  | 300 | M42x2    | 56        | 108 | 162 | 158        | 37         | 57  |
|     | 70  |     | M42x2    | 56        |     |     |            |            |     |
|     | 70  |     | M48x2    | 63        |     |     |            |            |     |
| 125 | 70  | 325 | M48x2    | 63        | 121 | 174 | 192        | 37         | 60  |
|     | 90  |     | M48x2    | 63        |     |     |            |            |     |
|     | 90  |     | M64x3    | 85        |     |     |            |            |     |
| 160 | 90  | 370 | M64x3    | 85        | 143 | 191 | 238        | 41         | 66  |
|     | 110 |     | M64x3    | 85        |     |     |            |            |     |
|     | 110 |     | M80x3    | 95        |     |     |            |            |     |
| 200 | 110 | 450 | M80x3    | 95        | 190 | 224 | 285        | 45         | 75  |
|     | 140 |     | M80x3    | 95        |     |     |            |            |     |
|     | 140 |     | M100x3   | 112       |     |     |            |            |     |
| 250 | 140 | 550 | M100x3   | 112       |     |     | 365        | 64         | 96  |
|     | 180 |     | M100x3   | 112       |     |     |            |            |     |
|     | 180 |     | M125x4   | 125       |     |     |            |            |     |
| 320 | 180 | 660 | M125x4   | 125       |     |     | 455        | 71         | 108 |
|     | 220 |     | M125x4   | 125       |     |     |            |            |     |
|     | 220 |     | M160x4   | 160       |     |     |            |            |     |

## Série HR

### Vérins Hydrauliques ISO 6020/1

#### Kit de joints



| Position | Description                                |
|----------|--------------------------------------------|
| 1        | Racleur                                    |
| 2        | Joint tige                                 |
| 3        | Bague guidage piston-tige                  |
| 4        | Bande guidage piston-tige                  |
| 5        | Joint piston                               |
| 6        | Joint torique                              |
| 7        | Joint anti-extrusion                       |
| 8        | Joint torique                              |
| 9        | Joint anti-extrusion                       |
| 10       | Joint torique                              |
| 11       | Joint anti-extrusion                       |
| 12       | Racleur (bas frottement)                   |
| 13       | Joint tige (bas frottement)                |
| 14       | Bande guidage piston-tige (bas frottement) |
| 15       | Joint piston (bas frottement)              |
| 16       | Bande guidage piston-tige (bas frottement) |
| 17       | Joint torique                              |

|                  |              |              |                                       |   |
|------------------|--------------|--------------|---------------------------------------|---|
|                  | KHR          | ***          | ***                                   | * |
|                  | ↓            | ↓            | ↓                                     | ↓ |
| Série ISO 6020/1 | Alésages     | Tige         | Type de joints                        |   |
|                  | 025 = 25 mm  | 014 = 14 mm  | 0 = Standard, frottement moyenne      |   |
|                  | 032 = 32 mm  | 018 = 18 mm  | 1 = Bas frottement                    |   |
|                  | 040 = 40 mm  | 022 = 22 mm  | 2 = Bas frottement, haute température |   |
|                  | 050 = 50 mm  | 028 = 28 mm  |                                       |   |
|                  | 063 = 63 mm  | 036 = 36 mm  |                                       |   |
|                  | 080 = 80 mm  | 045 = 45 mm  |                                       |   |
|                  | 100 = 100 mm | 056 = 56 mm  |                                       |   |
|                  | 125 = 125 mm | 070 = 70 mm  |                                       |   |
|                  | 160 = 160 mm | 090 = 90 mm  |                                       |   |
|                  | 200 = 200 mm | 110 = 110 mm |                                       |   |
|                  | 250 = 250 mm | 140 = 140 mm |                                       |   |
|                  | 320 = 320 mm | 180 = 180 mm |                                       |   |
|                  |              | 220 = 220 mm |                                       |   |

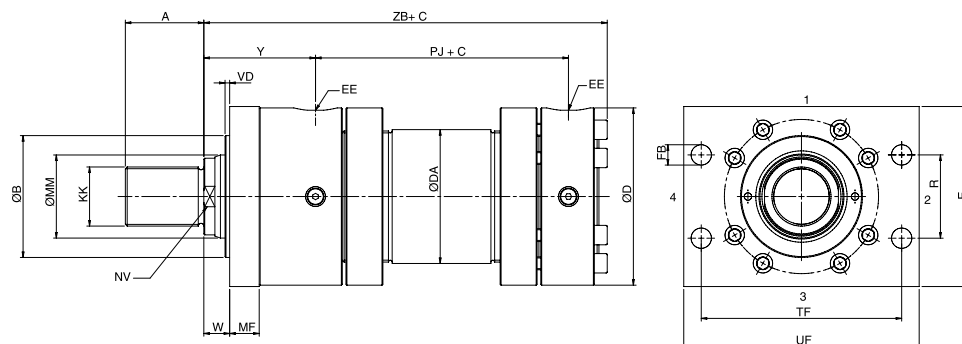
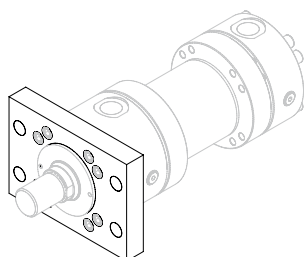


# Série HR

## Vérins Hydrauliques ISO 6020/1

### Accessoires de fixation

#### Bride rectangulaire avant ISO MF1



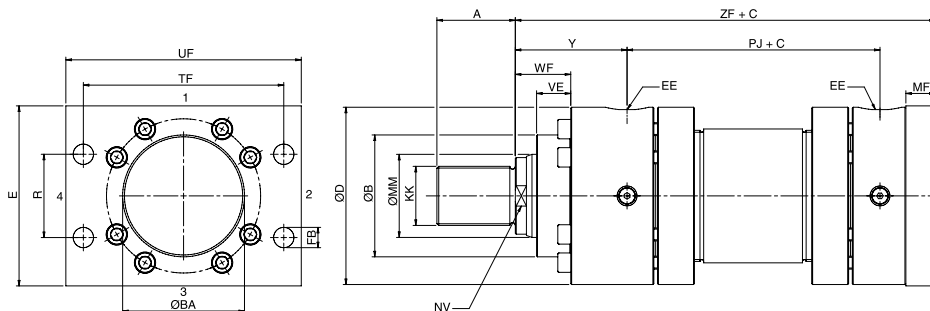
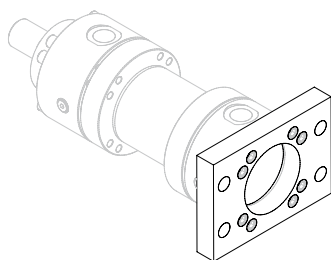
| Ø   | ØMM | A  | B   | ØD  | ØDA | E   | EE    | FB   | KK       | MF | NV | PJ  | R    | TF    | UF  | VD | W  | Y   | ZB  |
|-----|-----|----|-----|-----|-----|-----|-------|------|----------|----|----|-----|------|-------|-----|----|----|-----|-----|
| 25  | 14  | 16 |     |     |     |     |       |      |          |    |    |     |      |       |     |    |    |     |     |
|     | 18  | 16 | 32  | 56  | 35  | 60  | 1/4"G | 6,6  | M12x1,25 | 12 | 12 | 77  | 28,7 | 69,2  | 85  | 3  | 16 | 58  | 155 |
| 32  | 18  | 18 |     |     |     |     |       |      |          |    |    |     |      |       |     |    |    |     |     |
|     | 22  | 18 | 40  | 67  | 42  | 70  | 3/8"G | 9    | M14x1,5  | 16 | 15 | 89  | 35,2 | 85    | 105 | 3  | 16 | 64  | 176 |
| 40  | 22  | 22 |     |     |     |     |       |      |          |    |    |     |      |       |     |    |    |     |     |
|     | 28  | 22 | 50  | 78  | 50  | 80  | 1/2"G | 9    | M16x1,5  | 16 | 17 | 97  | 40,6 | 98    | 115 | 3  | 16 | 71  | 198 |
| 50  | 28  | 28 |     |     |     |     |       |      |          |    |    |     |      |       |     |    |    |     |     |
|     | 36  | 28 | 60  | 95  | 60  | 100 | 1/2"G | 11   | M20x1,5  | 20 | 22 | 111 | 48,2 | 116,4 | 140 | 4  | 18 | 72  | 213 |
| 63  | 36  | 36 |     |     |     |     |       |      |          |    |    |     |      |       |     |    |    |     |     |
|     | 45  | 36 | 70  | 116 | 73  | 120 | 3/4"G | 13,5 | M27x2    | 25 | 28 | 117 | 55,5 | 134   | 160 | 4  | 20 | 82  | 234 |
| 80  | 45  | 45 |     |     |     |     |       |      |          |    |    |     |      |       |     |    |    |     |     |
|     | 56  | 45 | 85  | 130 | 95  | 135 | 3/4"G | 17,5 | M33x2    | 32 | 36 | 134 | 63,1 | 152,5 | 185 | 4  | 22 | 91  | 260 |
| 100 | 56  | 56 |     |     |     |     |       |      |          |    |    |     |      |       |     |    |    |     |     |
|     | 70  | 56 | 106 | 158 | 115 | 160 | 1"G   | 22   | M42x2    | 32 | 46 | 162 | 76,5 | 184,8 | 225 | 5  | 25 | 108 | 310 |
| 125 | 70  | 63 |     |     |     |     |       |      |          |    |    |     |      |       |     |    |    |     |     |
|     | 90  | 63 | 132 | 192 | 145 | 195 | 1"G   | 22   | M48x2    | 32 | 60 | 174 | 90,2 | 217,1 | 255 | 5  | 28 | 121 | 335 |
|     |     | 85 |     |     |     |     |       |      | M64x3    |    | 75 |     |      |       |     |    |    |     |     |

## Série HR

### Vérins Hydrauliques ISO 6020/1

#### Accessoires de fixation

##### Bride rectangulaire arrière ISO MF2



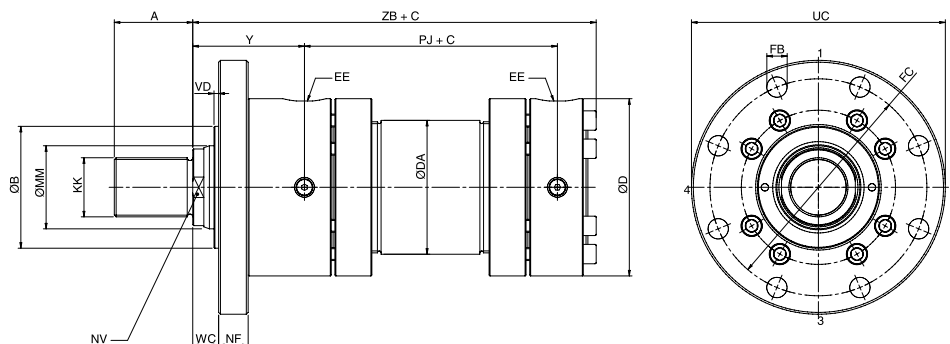
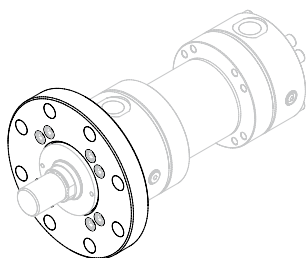
| Ø   | ØMM | A  | ØB  | ØBA | ØD  | ØDA | E   | EE    | FB   | KK       | MF | NV | PJ  | R    | TF    | UF  | VE | WF | Y   | ZF  |
|-----|-----|----|-----|-----|-----|-----|-----|-------|------|----------|----|----|-----|------|-------|-----|----|----|-----|-----|
| 25  | 14  | 16 |     |     |     |     |     |       |      | M12x1,25 |    | 12 |     |      |       |     |    |    |     |     |
|     | 18  | 16 | 32  | 32  | 56  | 35  | 60  | 1/4"G | 6,6  | M12x1,25 | 12 | 15 | 77  | 28,7 | 69,2  | 85  | 15 | 28 | 58  | 162 |
| 32  | 18  | 18 |     |     |     |     |     |       |      | M14x1,5  |    | 15 |     |      |       |     |    |    |     |     |
|     | 22  | 18 | 40  | 40  | 67  | 42  | 70  | 3/8"G | 9    | M14x1,5  | 16 | 17 | 89  | 35,2 | 85    | 105 | 19 | 32 | 64  | 186 |
| 40  | 22  | 22 |     |     |     |     |     |       |      | M16x1,5  |    | 17 |     |      |       |     |    |    |     |     |
|     | 28  | 22 | 50  | 50  | 78  | 50  | 80  | 1/2"G | 9    | M16x1,5  | 16 | 22 | 97  | 40,6 | 98    | 115 | 19 | 32 | 71  | 206 |
| 50  | 28  | 28 |     |     |     |     |     |       |      | M20x1,5  |    | 22 |     |      |       |     |    |    |     |     |
|     | 36  | 28 | 60  | 60  | 95  | 60  | 100 | 1/2"G | 11   | M20x1,5  | 20 | 28 | 111 | 48,2 | 116,4 | 140 | 24 | 38 | 72  | 225 |
| 63  | 36  | 36 |     |     |     |     |     |       |      | M27x2    |    | 28 |     |      |       |     |    |    |     |     |
|     | 45  | 36 | 70  | 70  | 116 | 73  | 120 | 3/4"G | 13,5 | M27x2    | 25 | 36 | 117 | 55,5 | 134   | 160 | 29 | 45 | 82  | 249 |
| 80  | 45  | 45 |     |     |     |     |     |       |      | M33x2    |    | 36 |     |      |       |     |    |    |     |     |
|     | 56  | 45 | 85  | 85  | 130 | 95  | 135 | 3/4"G | 17,5 | M33x2    | 32 | 46 | 134 | 63,1 | 152,5 | 185 | 36 | 54 | 91  | 282 |
| 100 | 56  | 56 |     |     |     |     |     |       |      | M42x2    |    | 46 |     |      |       |     |    |    |     |     |
|     | 70  | 56 | 106 | 106 | 158 | 115 | 160 | 1"G   | 22   | M42x2    | 32 | 60 | 162 | 76,5 | 184,8 | 225 | 37 | 57 | 108 | 332 |
| 125 | 70  | 63 |     |     |     |     |     |       |      | M48x2    |    | 60 |     |      |       |     |    |    |     |     |
|     | 90  | 63 | 132 | 132 | 192 | 145 | 195 | 1"G   | 22   | M48x2    | 32 | 75 | 174 | 90,2 | 217,1 | 255 | 37 | 60 | 121 | 357 |
|     |     | 85 |     |     |     |     |     |       |      | M64x3    |    |    |     |      |       |     |    |    |     |     |

# Série HR

## Vérins Hydrauliques ISO 6020/1

### Accessoires de fixation

#### Bride ronde avant ISO MF3



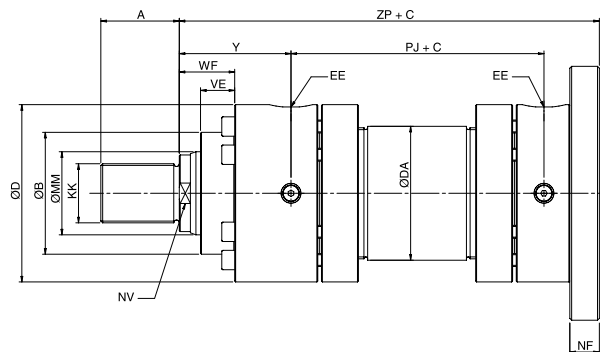
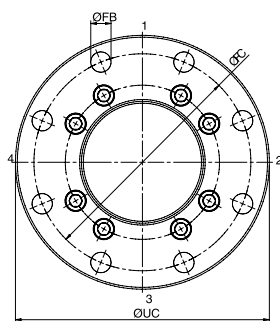
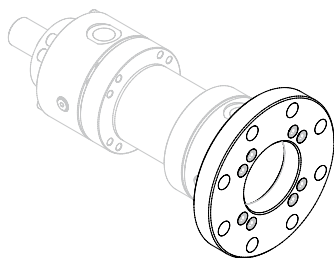
| Ø   | ØMM | A   | B   | ØD  | ØDA | EE      | FB   | FC  | KK       | NF | NV  | PJ  | UC  | VD | WC | Y   | ZB  |
|-----|-----|-----|-----|-----|-----|---------|------|-----|----------|----|-----|-----|-----|----|----|-----|-----|
| 25  | 14  | 16  |     |     |     |         |      |     | M12x1,25 |    | 12  |     |     |    |    |     |     |
|     | 18  | 16  | 32  | 56  | 35  | 1/4"G   | 6,6  | 75  | M12x1,25 | 12 | 15  | 77  | 90  | 3  | 16 | 58  | 155 |
| 32  | 18  | 18  |     |     |     |         |      |     | M14x1,5  |    | 15  |     |     |    |    |     |     |
|     | 22  | 18  | 40  | 67  | 42  | 3/8"G   | 9    | 92  | M14x1,5  | 16 | 17  | 89  | 110 | 3  | 16 | 64  | 176 |
| 40  | 22  | 22  |     |     |     |         |      |     | M16x1,5  |    | 17  |     |     |    |    |     |     |
|     | 28  | 22  | 50  | 78  | 50  | 1/2"G   | 9    | 106 | M16x1,5  | 16 | 22  | 97  | 125 | 3  | 16 | 71  | 198 |
| 50  | 28  | 28  |     |     |     |         |      |     | M20x1,5  |    | 22  |     |     |    |    |     |     |
|     | 36  | 28  | 60  | 95  | 60  | 1/2"G   | 11   | 126 | M20x1,5  | 20 | 28  | 111 | 148 | 4  | 18 | 72  | 213 |
| 63  | 36  | 36  |     |     |     |         |      |     | M27x2    |    | 28  |     |     |    |    |     |     |
|     | 45  | 36  | 70  | 116 | 73  | 3/4"G   | 13,5 | 145 | M27x2    | 25 | 36  | 117 | 170 | 4  | 20 | 82  | 234 |
| 80  | 45  | 45  |     |     |     |         |      |     | M33x2    |    | 36  |     |     |    |    |     |     |
|     | 56  | 45  | 85  | 130 | 95  | 3/4"G   | 17,5 | 165 | M33x2    | 32 | 46  | 134 | 195 | 4  | 22 | 91  | 260 |
| 100 | 56  | 56  |     |     |     |         |      |     | M42x2    |    | 46  |     |     |    |    |     |     |
|     | 70  | 56  | 106 | 158 | 115 | 1"G     | 22   | 200 | M42x2    | 32 | 60  | 162 | 238 | 5  | 25 | 108 | 310 |
| 125 | 70  | 63  |     |     |     |         |      |     | M48x2    |    | 60  |     |     |    |    |     |     |
|     | 90  | 63  | 132 | 192 | 145 | 1"G     | 22   | 235 | M48x2    | 32 | 75  | 174 | 272 | 5  | 28 | 121 | 335 |
| 160 | 90  | 85  |     |     |     |         |      |     | M64x3    |    | 75  |     |     |    |    |     |     |
|     | 110 | 85  | 160 | 232 | 185 | 1 1/4"G | 22   | 280 | M64x3    | 36 | 90  | 191 | 316 | 5  | 30 | 143 | 380 |
| 200 | 110 | 95  |     |     |     |         |      |     | M80x3    |    | 90  |     |     |    |    |     |     |
|     | 140 | 95  | 200 | 285 | 230 | 1 1/4"G | 26   | 340 | M80x3    | 40 | 120 | 224 | 385 | 5  | 35 | 190 | 474 |
| 250 | 140 | 112 |     |     |     |         |      |     | M100x3   |    | 120 |     |     |    |    |     |     |
|     | 180 | 112 | 250 | 365 | 298 | 1 1/2"G | 33   | 420 | M100x3   | 56 | 160 | 290 | 500 | 8  | 40 | 205 | 580 |
| 320 | 180 | 125 |     |     |     |         |      |     | M125x4   |    | 160 |     |     |    |    |     |     |
|     | 220 | 125 | 320 | 450 | 368 | 1 1/2"G | 39   | 520 | M125x4   | 63 | 200 | 358 | 620 | 8  | 45 | 250 | 696 |
|     |     | 160 |     |     |     |         |      |     | M160x4   |    |     |     |     |    |    |     |     |

## Série HR

### Vérins Hydrauliques ISO 6020/1

#### Accessoires de fixation

##### Bride ronde arrière ISO MF4



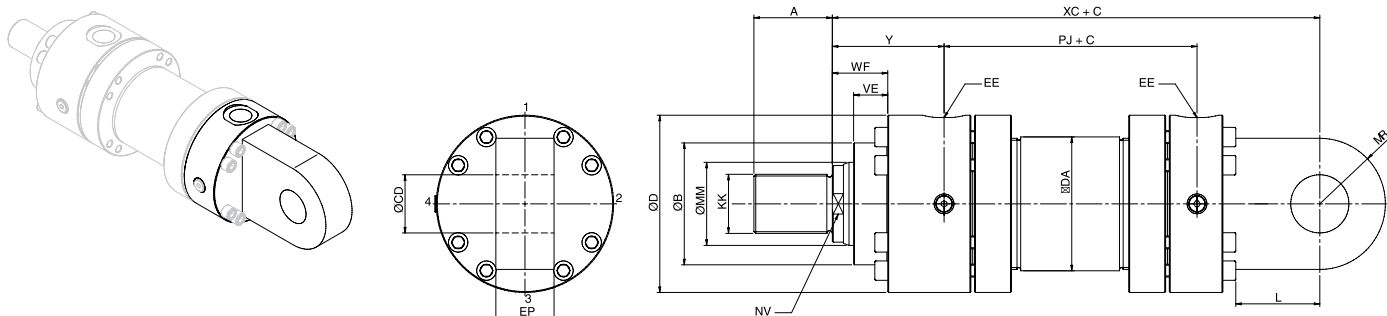
| Ø   | ØMM | A   | B   | ØD  | ØDA | EE      | FB   | FC  | KK       | NF | NV  | PJ  | UC  | VE | WF | Y   | ZP  |
|-----|-----|-----|-----|-----|-----|---------|------|-----|----------|----|-----|-----|-----|----|----|-----|-----|
| 25  | 14  | 16  |     |     |     |         |      |     | M12x1,25 |    | 12  |     |     |    |    |     |     |
|     | 18  | 16  | 32  | 56  | 35  | 1/4"G   | 6,6  | 75  | M12x1,25 | 12 | 15  | 77  | 90  | 15 | 16 | 58  | 162 |
| 32  | 18  | 18  |     |     |     |         |      |     | M14x1,5  |    | 15  |     |     |    |    |     |     |
|     | 22  | 18  | 40  | 67  | 42  | 3/8"G   | 9    | 92  | M14x1,5  | 16 | 17  | 89  | 110 | 19 | 16 | 64  | 186 |
| 40  | 22  | 22  |     |     |     |         |      |     | M16x1,5  |    | 17  |     |     |    |    |     |     |
|     | 28  | 22  | 50  | 78  | 50  | 1/2"G   | 9    | 106 | M16x1,5  | 16 | 22  | 97  | 125 | 19 | 16 | 71  | 206 |
| 50  | 28  | 28  |     |     |     |         |      |     | M20x1,5  |    | 22  |     |     |    |    |     |     |
|     | 36  | 28  | 60  | 95  | 60  | 1/2"G   | 11   | 126 | M20x1,5  | 20 | 28  | 111 | 148 | 24 | 18 | 72  | 225 |
| 63  | 36  | 36  |     |     |     |         |      |     | M27x2    |    | 28  |     |     |    |    |     |     |
|     | 45  | 36  | 70  | 116 | 73  | 3/4"G   | 13,5 | 145 | M27x2    | 25 | 36  | 117 | 170 | 29 | 20 | 82  | 249 |
| 80  | 45  | 45  |     |     |     |         |      |     | M33x2    |    | 36  |     |     |    |    |     |     |
|     | 56  | 45  | 85  | 130 | 95  | 3/4"G   | 17,5 | 165 | M33x2    | 32 | 46  | 134 | 195 | 36 | 22 | 91  | 282 |
| 100 | 56  | 56  |     |     |     |         |      |     | M42x2    |    | 46  |     |     |    |    |     |     |
|     | 70  | 56  | 106 | 158 | 115 | 1"G     | 22   | 200 | M42x2    | 32 | 60  | 162 | 238 | 37 | 25 | 108 | 332 |
| 125 | 70  | 63  |     |     |     |         |      |     | M48x2    |    | 60  |     |     |    |    |     |     |
|     | 90  | 63  | 132 | 192 | 145 | 1"G     | 22   | 235 | M48x2    | 32 | 75  | 174 | 272 | 37 | 28 | 121 | 357 |
| 160 | 90  | 85  |     |     |     |         |      |     | M64x3    |    | 75  |     |     |    |    |     |     |
|     | 110 | 85  | 160 | 232 | 185 | 1 1/4"G | 22   | 280 | M64x3    | 36 | 90  | 191 | 316 | 41 | 30 | 143 | 406 |
| 200 | 110 | 95  |     |     |     |         |      |     | M80x3    |    | 90  |     |     |    |    |     |     |
|     | 140 | 95  | 200 | 285 | 230 | 1 1/4"G | 26   | 340 | M80x3    | 40 | 120 | 224 | 385 | 45 | 35 | 190 | 490 |
| 250 | 140 | 112 |     |     |     |         |      |     | M100x3   |    | 120 |     |     |    |    |     |     |
|     | 180 | 112 | 250 | 365 | 298 | 1 1/2"G | 33   | 420 | M100x3   | 56 | 160 | 290 | 500 | 64 | 40 | 205 | 606 |
| 320 | 180 | 125 |     |     |     |         |      |     | M125x4   |    | 160 |     |     |    |    |     |     |
|     | 220 | 125 | 320 | 450 | 368 | 1 1/2"G | 39   | 520 | M125x4   | 63 | 200 | 358 | 620 | 71 | 45 | 250 | 723 |
|     |     | 160 |     |     |     |         |      |     | M160x4   |    |     |     |     |    |    |     |     |

## Série HR

### Vérins Hydrauliques ISO 6020/1

#### Accessoires de fixation

#### Chape male ISO MP3



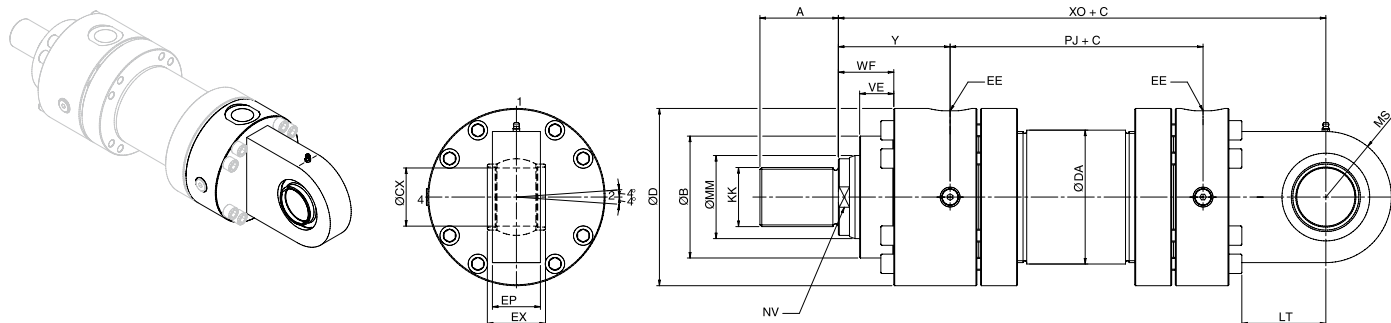
| Ø   | ØMM | A   | B   | ØD  | ØDA | EE      | CD  | EP  | KK       | L   | MR  | NV  | PJ  | VE | WF  | Y   | XC  |
|-----|-----|-----|-----|-----|-----|---------|-----|-----|----------|-----|-----|-----|-----|----|-----|-----|-----|
| 25  | 14  | 16  |     |     |     |         |     |     | M12x1,25 |     |     | 12  |     |    |     |     |     |
|     | 18  | 16  | 32  | 56  | 35  | 1/4"G   | 12  | 12  | M12x1,25 | 20  | 16  | 15  | 77  | 15 | 28  | 58  | 178 |
| 32  | 18  | 18  |     |     |     |         |     |     | M14x1,5  |     |     | 15  |     |    |     |     |     |
|     | 22  | 18  | 40  | 67  | 42  | 3/8"G   | 16  | 16  | M14x1,5  | 28  | 20  | 17  | 89  | 19 | 32  | 64  | 206 |
| 40  | 22  | 22  |     |     |     |         |     |     | M16x1,5  |     |     | 17  |     |    |     |     |     |
|     | 28  | 22  | 50  | 78  | 50  | 1/2"G   | 20  | 20  | M16x1,5  | 35  | 25  | 22  | 97  | 19 | 32  | 71  | 231 |
| 50  | 28  | 28  |     |     |     |         |     |     | M20x1,5  |     |     | 22  |     |    |     |     |     |
|     | 36  | 28  | 60  | 95  | 60  | 1/2"G   | 25  | 25  | M20x1,5  | 44  | 32  | 28  | 111 | 24 | 38  | 72  | 257 |
| 63  | 36  | 36  |     |     |     |         |     |     | M27x2    |     |     | 28  |     |    |     |     |     |
|     | 45  | 36  | 70  | 116 | 73  | 3/4"G   | 32  | 32  | M27x2    | 55  | 40  | 36  | 117 | 29 | 45  | 82  | 289 |
| 80  | 45  | 45  |     |     |     |         |     |     | M33x2    |     |     | 36  |     |    |     |     |     |
|     | 56  | 45  | 85  | 130 | 95  | 3/4"G   | 40  | 40  | M33x2    | 70  | 50  | 46  | 134 | 36 | 54  | 91  | 332 |
| 100 | 56  | 56  |     |     |     |         |     |     | M42x2    |     |     | 46  |     |    |     |     |     |
|     | 70  | 56  | 106 | 158 | 115 | 1"G     | 50  | 50  | M42x2    | 81  | 63  | 60  | 162 | 37 | 57  | 108 | 395 |
| 125 | 70  | 63  |     |     |     |         |     |     | M48x2    |     |     | 60  |     |    |     |     |     |
|     | 90  | 63  | 132 | 192 | 145 | 1"G     | 63  | 63  | M48x2    | 91  | 80  | 75  | 174 | 37 | 60  | 121 | 428 |
| 160 | 90  | 85  |     |     |     |         |     |     | M64x3    |     |     | 75  |     |    |     |     |     |
|     | 110 | 85  | 160 | 232 | 185 | 1 1/4"G | 80  | 80  | M64x3    | 121 | 100 | 90  | 191 | 41 | 66  | 143 | 505 |
| 200 | 110 | 95  |     |     |     |         |     |     | M80x3    |     |     | 90  |     |    |     |     |     |
|     | 140 | 95  | 200 | 285 | 230 | 1 1/4"G | 100 | 100 | M80x3    | 149 | 125 | 120 | 224 | 45 | 75  | 190 | 615 |
| 250 | 140 | 112 |     |     |     |         |     |     | M100x3   |     |     | 120 |     |    |     |     |     |
|     | 180 | 112 | 250 | 365 | 298 | 1 1/2"G | 125 | 125 | M100x3   | 203 | 160 | 160 | 290 | 64 | 96  | 205 | 773 |
| 320 | 180 | 125 |     |     |     |         |     |     | M125x4   |     |     | 160 |     |    |     |     |     |
|     | 220 | 125 | 320 | 450 | 368 | 1 1/2"G | 160 | 160 | M125x4   | 242 | 200 | 200 | 358 | 71 | 108 | 250 | 930 |

## Série HR

### Vérins Hydrauliques ISO 6020/1

#### Accessoires de fixation

##### Chape à rotule ISO MP5



| Ø   | ØMM | A   | CX  | B   | ØD  | ØDA | EE      | EX  | EP   | KK       | LT  | MS  | NV  | PJ  | VE | WF  | Y   | XO  |
|-----|-----|-----|-----|-----|-----|-----|---------|-----|------|----------|-----|-----|-----|-----|----|-----|-----|-----|
| 25  | 14  | 16  |     |     |     |     |         |     |      | M12x1,25 |     |     | 12  |     |    |     |     |     |
|     | 18  | 16  | 12  | 32  | 56  | 35  | 1/4"G   | 12  | 10,6 | M12x1,25 | 20  | 16  | 15  | 77  | 15 | 28  | 58  | 178 |
| 32  | 18  | 18  |     |     |     |     |         |     |      | M14x1,5  |     |     | 15  |     |    |     |     |     |
|     | 22  | 18  | 16  | 40  | 67  | 42  | 3/8"G   | 16  | 14   | M14x1,5  | 28  | 20  | 17  | 89  | 19 | 32  | 64  | 206 |
| 40  | 22  | 22  |     |     |     |     |         |     |      | M16x1,5  |     |     | 17  |     |    |     |     |     |
|     | 28  | 22  | 20  | 50  | 78  | 50  | 1/2"G   | 20  | 18   | M16x1,5  | 35  | 25  | 22  | 97  | 19 | 32  | 71  | 231 |
| 50  | 28  | 28  |     |     |     |     |         |     |      | M20x1,5  |     |     | 22  |     |    |     |     |     |
|     | 36  | 28  | 25  | 60  | 95  | 60  | 1/2"G   | 25  | 22   | M20x1,5  | 44  | 32  | 28  | 111 | 24 | 38  | 72  | 257 |
| 63  | 36  | 36  |     |     |     |     |         |     |      | M27x2    |     |     | 28  |     |    |     |     |     |
|     | 45  | 36  | 32  | 70  | 116 | 73  | 3/4"G   | 32  | 27   | M27x2    | 55  | 40  | 36  | 117 | 29 | 45  | 82  | 289 |
| 80  | 45  | 45  |     |     |     |     |         |     |      | M33x2    |     |     | 36  |     |    |     |     |     |
|     | 56  | 45  | 40  | 85  | 130 | 95  | 3/4"G   | 40  | 35   | M33x2    | 70  | 50  | 46  | 134 | 36 | 54  | 91  | 332 |
| 100 | 56  | 56  |     |     |     |     |         |     |      | M42x2    |     |     | 46  |     |    |     |     |     |
|     | 70  | 56  | 50  | 106 | 158 | 115 | 1"G     | 50  | 40   | M42x2    | 81  | 63  | 60  | 162 | 37 | 57  | 108 | 395 |
| 125 | 70  | 63  |     |     |     |     |         |     |      | M48x2    |     |     | 60  |     |    |     |     |     |
|     | 90  | 63  | 63  | 132 | 192 | 145 | 1"G     | 63  | 52   | M48x2    | 91  | 80  | 75  | 174 | 37 | 60  | 121 | 428 |
| 160 | 90  | 85  |     |     |     |     |         |     |      | M64x3    |     |     | 75  |     |    |     |     |     |
|     | 110 | 85  | 80  | 160 | 232 | 185 | 1 1/4"G | 80  | 66   | M64x3    | 121 | 100 | 90  | 191 | 41 | 66  | 143 | 505 |
| 200 | 110 | 95  |     |     |     |     |         |     |      | M80x3    |     |     | 90  |     |    |     |     |     |
|     | 140 | 95  | 100 | 200 | 285 | 230 | 1 1/4"G | 100 | 84   | M80x3    | 149 | 125 | 120 | 224 | 45 | 75  | 190 | 615 |
| 250 | 140 | 112 |     |     |     |     |         |     |      | M100x3   |     |     | 120 |     |    |     |     |     |
|     | 180 | 112 | 125 | 250 | 365 | 298 | 1 1/2"G | 125 | 102  | M100x3   | 203 | 160 | 160 | 290 | 64 | 96  | 205 | 773 |
| 320 | 180 | 125 |     |     |     |     |         |     |      | M125x4   |     |     | 160 |     |    |     |     |     |
|     | 220 | 125 | 160 | 320 | 450 | 368 | 1 1/2"G | 160 | 130  | M125x4   | 242 | 200 | 200 | 358 | 71 | 108 | 250 | 930 |

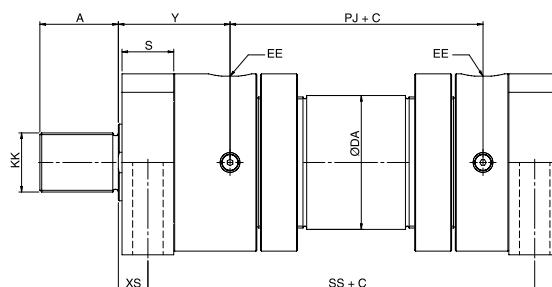
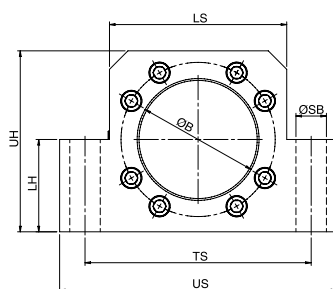
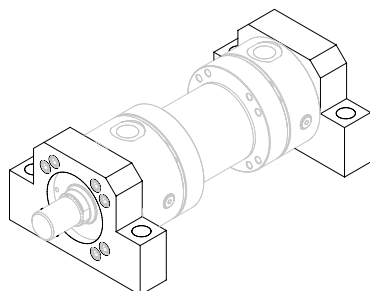


## Série HR

### Vérins Hydrauliques ISO 6020/1

### Accessoires de fixation

#### Pattes ISO MS2



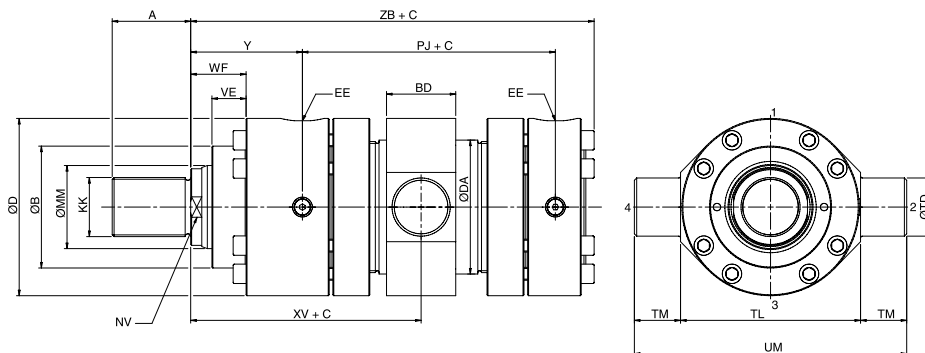
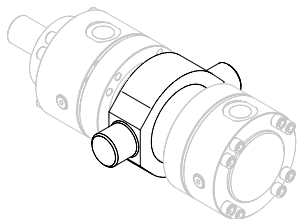
| Ø   | ØMM | A   | ØB  | ØDA | EE      | KK       | LH  | LS  | PJ  | S  | ØSB | SS  | TS  | UH  | US  | XS  | Y   |
|-----|-----|-----|-----|-----|---------|----------|-----|-----|-----|----|-----|-----|-----|-----|-----|-----|-----|
| 25  | 14  | 16  |     |     |         | M12x1,25 |     |     |     |    |     |     |     |     |     |     |     |
|     | 18  | 16  | 32  | 35  | 1/4"G   | M12x1,25 | 32  | 56  | 77  | 20 | 9   | 142 | 63  | 83  | 92  | 58  | 58  |
| 32  | 18  | 18  |     |     |         | M14x1,5  |     |     |     |    |     |     |     |     |     |     |     |
|     | 22  | 18  | 40  | 42  | 3/8"G   | M14x1,5  | 38  | 67  | 89  | 25 | 11  | 163 | 75  | 99  | 110 | 64  | 64  |
| 40  | 22  | 22  |     |     |         | M16x1,5  |     |     |     |    |     |     |     |     |     |     |     |
|     | 28  | 22  | 50  | 50  | 1/2"G   | M16x1,5  | 43  | 78  | 97  | 25 | 11  | 183 | 90  | 122 | 120 | 71  | 71  |
| 50  | 28  | 28  |     |     |         | M20x1,5  |     |     |     |    |     |     |     |     |     |     |     |
|     | 36  | 28  | 60  | 60  | 1/2"G   | M20x1,5  | 52  | 95  | 111 | 32 | 14  | 199 | 105 | 145 | 145 | 72  | 72  |
| 63  | 36  | 36  |     |     |         | M27x2    |     |     |     |    |     |     |     |     |     |     |     |
|     | 45  | 36  | 70  | 73  | 3/4"G   | M27x2    | 62  | 116 | 117 | 32 | 18  | 211 | 120 | 170 | 180 | 82  | 82  |
| 80  | 45  | 45  |     |     |         | M33x2    |     |     |     |    |     |     |     |     |     |     |     |
|     | 56  | 45  | 85  | 95  | 3/4"G   | M33x2    | 70  | 130 | 134 | 40 | 22  | 236 | 135 | 199 | 210 | 91  | 91  |
| 100 | 56  | 56  |     |     |         | M42x2    |     |     |     |    |     |     |     |     |     |     |     |
|     | 70  | 56  | 106 | 115 | 1"G     | M42x2    | 82  | 158 | 162 | 50 | 26  | 293 | 160 | 240 | 250 | 108 | 108 |
| 125 | 70  | 63  |     |     |         | M48x2    |     |     |     |    |     |     |     |     |     |     |     |
|     | 90  | 63  | 132 | 145 | 1"G     | M48x2    | 100 | 192 | 174 | 56 | 33  | 321 | 195 | 295 | 300 | 121 | 121 |
| 160 | 90  | 85  |     |     |         | M64x3    |     |     |     |    |     |     |     |     |     |     |     |
|     | 110 | 85  | 160 | 185 | 1 1/4"G | M64x3    | 119 | 238 | 191 | 60 | 33  | 364 | 240 | 321 | 350 | 143 | 143 |
| 200 | 110 | 95  |     |     |         | M80x3    |     |     |     |    |     |     |     |     |     |     |     |
|     | 140 | 95  | 200 | 230 | 1 1/4"G | M80x3    | 145 | 285 | 224 | 72 | 39  | 447 | 295 | 455 | 415 | 190 | 190 |
|     |     | 112 |     |     |         | M100x3   |     |     |     |    |     |     |     |     |     |     |     |

## Série HR

### Vérins Hydrauliques ISO 6020/1

#### Accessoires de fixation

##### Tourillon intermédiaire ISO MT4



| $\varnothing$ | $\varnothing MM$ | A   | B   | $\varnothing D$ | $\varnothing DA$ | BD  | EE      | KK       | NV  | PJ  | $\varnothing TD$ | TL  | TM  | UM  | VE | WF  | Y   | XV <sub>(min)</sub> | ZB  |
|---------------|------------------|-----|-----|-----------------|------------------|-----|---------|----------|-----|-----|------------------|-----|-----|-----|----|-----|-----|---------------------|-----|
| 25            | 14               | 16  |     |                 |                  |     |         | M12x1,25 | 12  |     |                  |     |     |     |    |     |     |                     |     |
|               | 18               | 16  | 32  | 56              | 35               | 20  | 1/4"G   | M12x1,25 | 15  | 77  | 12               | 63  | 10  | 83  | 15 | 28  | 58  | 107                 | 135 |
| 32            | 18               | 18  |     |                 |                  |     |         | M14x1,5  | 15  |     |                  |     |     |     |    |     |     |                     |     |
|               | 22               | 18  | 40  | 67              | 42               | 25  | 3/8"G   | M14x1,5  | 17  | 89  | 16               | 75  | 12  | 99  | 19 | 32  | 64  | 120                 | 153 |
| 40            | 22               | 22  |     |                 |                  |     |         | M16x1,5  | 17  |     |                  |     |     |     |    |     |     |                     |     |
|               | 28               | 22  | 50  | 78              | 50               | 30  | 1/2"G   | M16x1,5  | 22  | 97  | 20               | 90  | 16  | 122 | 19 | 32  | 71  | 135                 | 148 |
| 50            | 28               | 28  |     |                 |                  |     |         | M20x1,5  | 22  |     |                  |     |     |     |    |     |     |                     |     |
|               | 36               | 28  | 60  | 95              | 60               | 35  | 1/2"G   | M20x1,5  | 28  | 111 | 25               | 105 | 20  | 145 | 24 | 38  | 72  | 145                 | 183 |
| 63            | 36               | 36  |     |                 |                  |     |         | M27x2    | 28  |     |                  |     |     |     |    |     |     |                     |     |
|               | 45               | 36  | 70  | 116             | 73               | 45  | 3/4"G   | M27x2    | 36  | 117 | 32               | 120 | 25  | 170 | 29 | 45  | 82  | 165                 | 199 |
| 80            | 45               | 45  |     |                 |                  |     |         | M33x2    | 36  |     |                  |     |     |     |    |     |     |                     |     |
|               | 56               | 45  | 85  | 130             | 95               | 50  | 3/4"G   | M33x2    | 46  | 134 | 40               | 135 | 32  | 199 | 36 | 54  | 91  | 178                 | 225 |
| 100           | 56               | 56  |     |                 |                  |     |         | M42x2    | 46  |     |                  |     |     |     |    |     |     |                     |     |
|               | 70               | 56  | 106 | 158             | 115              | 60  | 1"G     | M42x2    | 60  | 162 | 50               | 160 | 40  | 240 | 37 | 57  | 108 | 215                 | 270 |
| 125           | 70               | 63  |     |                 |                  |     |         | M48x2    | 60  |     |                  |     |     |     |    |     |     |                     |     |
|               | 90               | 63  | 132 | 192             | 145              | 75  | 1"G     | M48x2    | 75  | 174 | 63               | 195 | 50  | 295 | 37 | 60  | 121 | 240                 | 295 |
| 160           | 90               | 85  |     |                 |                  |     |         | M64x3    | 75  |     |                  |     |     |     |    |     |     |                     |     |
|               | 110              | 85  | 160 | 232             | 185              | 90  | 1 1/4"G | M64x3    | 90  | 191 | 80               | 240 | 63  | 321 | 41 | 66  | 143 | 280                 | 334 |
| 200           | 110              | 95  |     |                 |                  |     |         | M80x3    | 90  |     |                  |     |     |     |    |     |     |                     |     |
|               | 140              | 95  | 200 | 285             | 230              | 110 | 1 1/4"G | M80x3    | 120 | 224 | 100              | 295 | 80  | 455 | 45 | 75  | 190 | 350                 | 414 |
| 250           | 140              | 112 |     |                 |                  |     |         | M100x3   | 120 |     |                  |     |     |     |    |     |     |                     |     |
|               | 180              | 112 | 250 | 365             | 298              | 135 | 1 1/2"G | M100x3   | 160 | 290 | 125              | 370 | 100 | 570 | 64 | 96  | 205 | 395                 | 495 |
| 320           | 180              | 125 |     |                 |                  |     |         | M125x4   | 160 |     |                  |     |     |     |    |     |     |                     |     |
|               | 220              | 125 | 320 | 450             | 368              | 175 | 1 1/2"G | M125x4   | 200 | 358 | 160              | 470 | 125 | 720 | 71 | 108 | 250 | 495                 | 608 |

# Série HT

Vérins à tirants / ISO 6020/2 - 160 bar



## Caractéristiques techniques

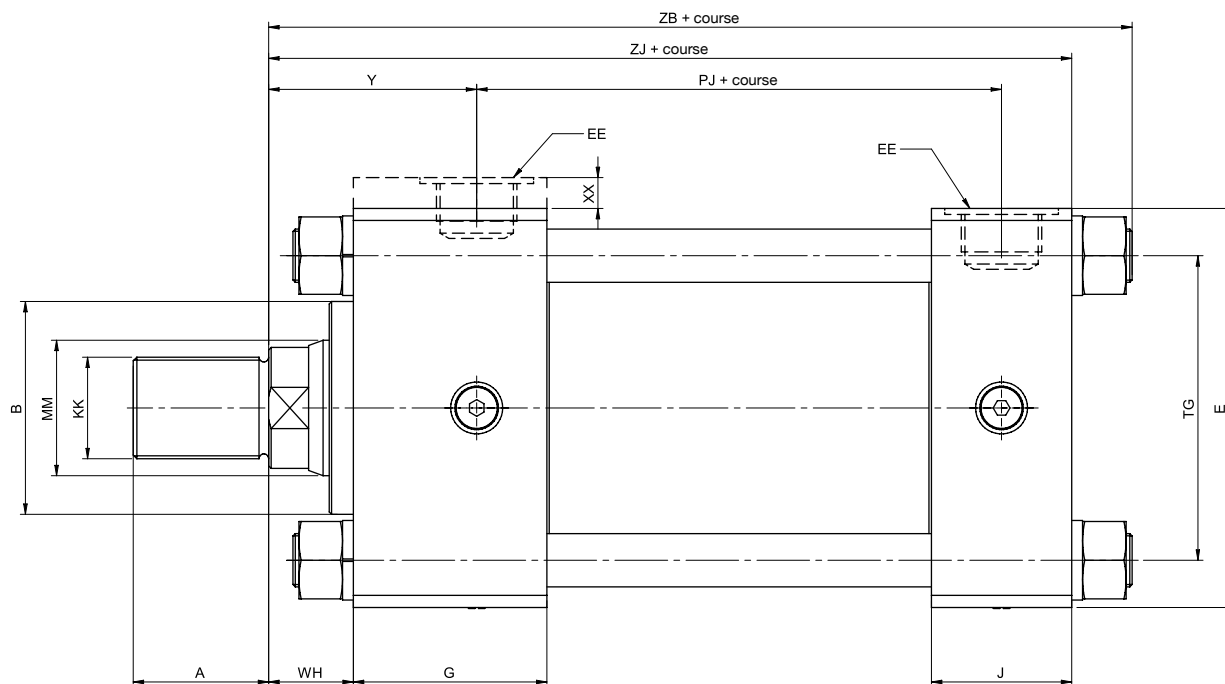
|                                                 |                                              |    |    |    |    |    |    |    |    |     |    |    |     |    |     |    |     |     |     |     |
|-------------------------------------------------|----------------------------------------------|----|----|----|----|----|----|----|----|-----|----|----|-----|----|-----|----|-----|-----|-----|-----|
| Norme                                           | ISO 6020/2                                   |    |    |    |    |    |    |    |    |     |    |    |     |    |     |    |     |     |     |     |
| Type de construction                            | Á tirants                                    |    |    |    |    |    |    |    |    |     |    |    |     |    |     |    |     |     |     |     |
| Pression nominale                               | 160 bar                                      |    |    |    |    |    |    |    |    |     |    |    |     |    |     |    |     |     |     |     |
| Pression d'épreuve                              | 240 bar                                      |    |    |    |    |    |    |    |    |     |    |    |     |    |     |    |     |     |     |     |
| Température ambiante                            | -20°C → +80°C                                |    |    |    |    |    |    |    |    |     |    |    |     |    |     |    |     |     |     |     |
| Température fluide                              | -20°C → +160°C avec joints viton             |    |    |    |    |    |    |    |    |     |    |    |     |    |     |    |     |     |     |     |
|                                                 | -20°C → +80°C                                |    |    |    |    |    |    |    |    |     |    |    |     |    |     |    |     |     |     |     |
| Fluide                                          | -20°C → +160°C avec joints viton             |    |    |    |    |    |    |    |    |     |    |    |     |    |     |    |     |     |     |     |
|                                                 | Huile minérale - Autres fluides sur commande |    |    |    |    |    |    |    |    |     |    |    |     |    |     |    |     |     |     |     |
| Alésages (mm)                                   | 25                                           |    | 32 |    | 40 |    | 50 |    | 63 |     | 80 |    | 100 |    | 125 |    | 160 |     | 200 |     |
| Tige (mm)                                       | 12                                           | 18 | 14 | 22 | 18 | 28 | 22 | 36 | 28 | 45  | 36 | 56 | 45  | 70 | 56  | 90 | 70  | 110 | 90  | 140 |
| Vitesse maximale (m/s) - joints standard        | 0,5                                          |    |    |    |    |    |    |    |    | 0,4 |    |    |     |    |     |    |     |     |     |     |
| Vitesse maximale (m/s) - joints faible friction | 1                                            |    |    |    |    |    |    |    |    |     |    |    |     |    |     |    |     |     |     |     |



## Série HT

### Vérins Hydrauliques ISO 6020/2

#### Modèle de base

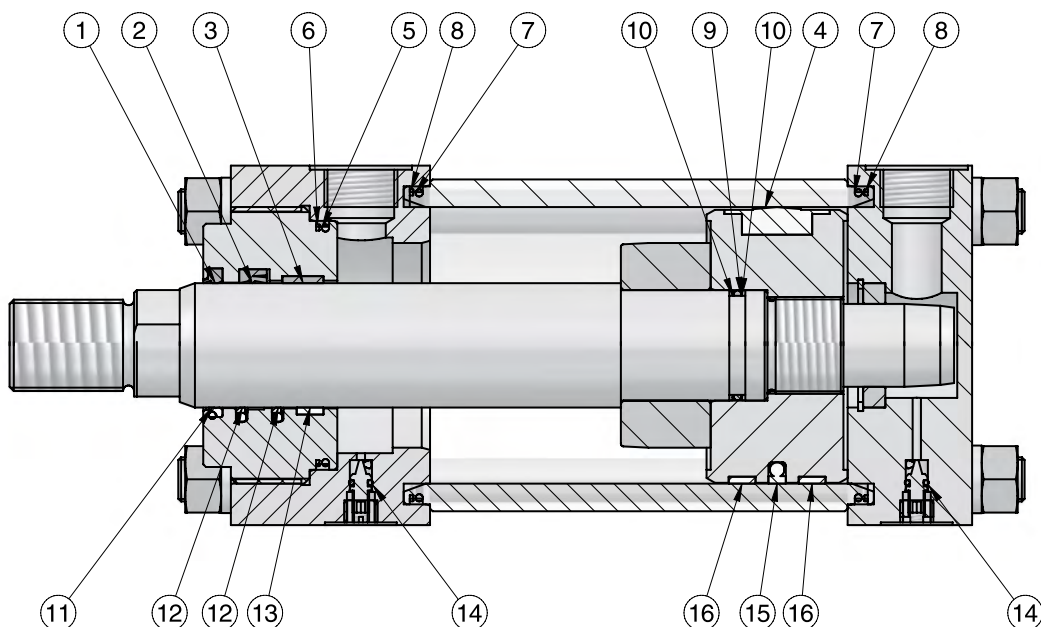


| Ø   | ØMM | A   | B <sup>19</sup> Ø | XX | E   | EE      | G   | J  | KK       | PJ  | TG    | WH | Y  | ZB  | ZJ  |
|-----|-----|-----|-------------------|----|-----|---------|-----|----|----------|-----|-------|----|----|-----|-----|
| 25  | 12  | 14  | 24                | 5  | 40  | 1/4"G   | 50  | 25 | M10x1,25 | 54  | 28,3  | 15 | 50 | 121 | 114 |
|     | 18  | 14  | 30                |    |     |         |     |    | M10x1,25 |     |       |    |    |     |     |
| 32  | 14  | 16  | 26                | 5  | 45  | 1/4"G   | 50  | 25 | M12x1,5  | 57  | 33,2  | 25 | 60 | 137 | 128 |
|     | 22  | 16  | 34                |    |     |         |     |    | M12x1,5  |     |       |    |    |     |     |
|     | 22  | 22  | 34                |    |     |         |     |    | M16x1,5  |     |       |    |    |     |     |
| 40  | 18  | 18  | 30                | -  | 63  | 3/8"G   | 55  | 38 | M14x1,5  | 74  | 41,7  | 25 | 62 | 166 | 153 |
|     | 28  | 18  | 42                |    |     |         |     |    | M14x1,5  |     |       |    |    |     |     |
|     | 28  | 28  | 42                |    |     |         |     |    | M20x1,5  |     |       |    |    |     |     |
| 50  | 22  | 22  | 34                | -  | 75  | 1/2"G   | 60  | 38 | M16x1,5  | 76  | 52,3  | 26 | 68 | 176 | 159 |
|     | 36  | 22  | 50                |    |     |         |     |    | M16x1,5  |     |       |    |    |     |     |
|     | 36  | 36  | 50                |    |     |         |     |    | M27x2    |     |       |    |    |     |     |
| 63  | 28  | 28  | 42                | -  | 90  | 1/2"G   | 60  | 38 | M20x1,5  | 80  | 64,3  | 33 | 71 | 185 | 168 |
|     | 45  | 28  | 60                |    |     |         |     |    | M33x2    |     |       |    |    |     |     |
|     | 45  | 45  | 60                |    |     |         |     |    | M27x2    |     |       |    |    |     |     |
| 80  | 36  | 36  | 50                | -  | 115 | 3/4"G   | 70  | 45 | M27x2    | 93  | 82,7  | 31 | 77 | 212 | 190 |
|     | 56  | 36  | 72                |    |     |         |     |    | M42x2    |     |       |    |    |     |     |
|     | 56  | 56  | 72                |    |     |         |     |    | M33x2    |     |       |    |    |     |     |
| 100 | 45  | 45  | 60                | -  | 130 | 3/4"G   | 72  | 45 | M33x2    | 101 | 96,9  | 35 | 82 | 225 | 203 |
|     | 70  | 45  | 88                |    |     |         |     |    | M48x2    |     |       |    |    |     |     |
|     | 63  | 63  | 88                |    |     |         |     |    | M42x2    |     |       |    |    |     |     |
| 125 | 56  | 56  | 72                | -  | 165 | 1"G     | 80  | 58 | M42x2    | 117 | 125,9 | 35 | 86 | 260 | 232 |
|     | 90  | 56  | 108               |    |     |         |     |    | M64x3    |     |       |    |    |     |     |
|     | 85  | 85  | 108               |    |     |         |     |    | M48x2    |     |       |    |    |     |     |
| 160 | 70  | 63  | 88                | -  | 205 | 1"G     | 83  | 58 | M48x2    | 130 | 154,9 | 32 | 86 | 279 | 245 |
|     | 110 | 63  | 133               |    |     |         |     |    | M80x3    |     |       |    |    |     |     |
|     | 95  | 95  | 133               |    |     |         |     |    | M64x3    |     |       |    |    |     |     |
| 200 | 90  | 85  | 108               | -  | 245 | 1 1/4"G | 101 | 76 | M64x3    | 165 | 190,2 | 32 | 98 | 336 | 299 |
|     | 140 | 85  | 163               |    |     |         |     |    | M64x3    |     |       |    |    |     |     |
|     | 112 | 112 | 163               |    |     |         |     |    | M100x3   |     |       |    |    |     |     |

## Série HT

### Vérins Hydrauliques ISO 6020/2

#### Kit de joints



| Position | Description                                |
|----------|--------------------------------------------|
| 1        | Racleur                                    |
| 2        | Joint tige                                 |
| 3        | Bague guidage piston-tige                  |
| 4        | Joint piston                               |
| 5        | Joint torique                              |
| 6        | Joint anti-extrusion                       |
| 7        | Joint torique                              |
| 8        | Joint anti-extrusion                       |
| 9        | Joint torique                              |
| 10       | Joint anti-extrusion                       |
| 11       | Racleur (bas frottement)                   |
| 12       | Joint tige (bas frottement)                |
| 13       | Bande guidage piston-tige (bas frottement) |
| 14       | Joint torique                              |
| 15       | Joint piston (bas frottement)              |
| 16       | Bande guidage piston-tige (bas frottement) |

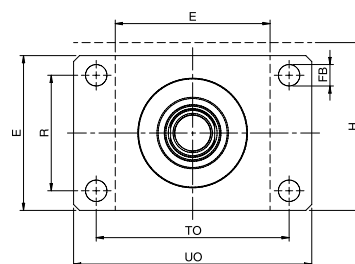
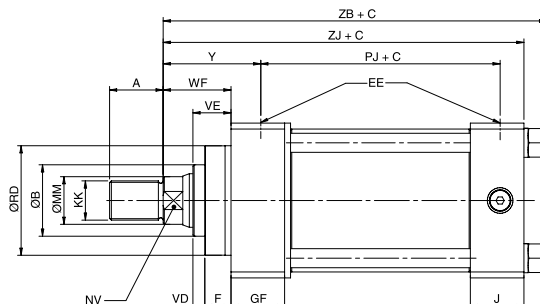
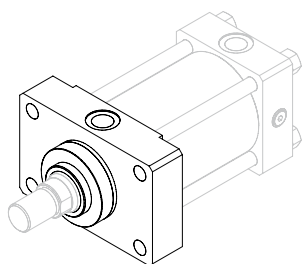
|                  |              |              |                                       |
|------------------|--------------|--------------|---------------------------------------|
| KHT              | ***          | ***          | *                                     |
| Série ISO 6020/2 | Alésages     | Tige         | Type de joints                        |
|                  | 025 = 25 mm  | 014 = 14 mm  | 0 = Standard, frottement moyenne      |
|                  | 032 = 32 mm  | 018 = 18 mm  | 1 = Bas frottement                    |
|                  | 040 = 40 mm  | 022 = 22 mm  | 2 = Bas frottement, haute température |
|                  | 050 = 50 mm  | 028 = 28 mm  |                                       |
|                  | 063 = 63 mm  | 036 = 36 mm  |                                       |
|                  | 080 = 80 mm  | 045 = 45 mm  |                                       |
|                  | 100 = 100 mm | 056 = 56 mm  |                                       |
|                  | 125 = 125 mm | 070 = 70 mm  |                                       |
|                  | 160 = 160 mm | 090 = 90 mm  |                                       |
|                  | 200 = 200 mm | 110 = 110 mm |                                       |
|                  |              | 140 = 140 mm |                                       |

# Série HT

## Vérins Hydrauliques ISO 6020/2

### Accessoires de fixation

#### Bride rectangulaire avant ISO ME5



| Ø   | ØMM | A  | B   | E   | EE      | F  | FB  | GF | H  | J  | KK       | NV  | PJ  | R   | RD  | TO  | UO  | VD | VE | WF | Y  | ZB  | ZJ  |
|-----|-----|----|-----|-----|---------|----|-----|----|----|----|----------|-----|-----|-----|-----|-----|-----|----|----|----|----|-----|-----|
| 25  | 12  | 14 | 24  | 40  | 1/4"G   | 10 | 5,5 | 25 | 45 | 25 | M10x1,25 | 10  | 53  | 27  | 38  | 51  | 65  | 6  | 16 | 25 | 50 | 121 | 114 |
|     | 18  | 14 | 30  |     |         |    |     |    |    |    | M10x1,25 | 15  |     |     |     |     |     |    |    |    |    |     |     |
| 32  | 14  | 16 | 26  | 45  | 1/4"G   | 10 | 6,6 | 25 | 50 | 25 | M14x1,5  | 12  | 56  | 33  | 42  | 58  | 70  | 12 | 22 | 35 | 60 | 136 | 128 |
|     | 22  | 16 | 34  |     |         |    |     |    |    |    | M12x1,5  | 18  |     |     |     |     |     |    |    |    |    |     |     |
| 40  | 18  | 18 | 30  | 63  | 3/8"G   | 10 | 11  | 38 |    | 38 | M16x1,5  | 15  | 73  | 41  | 62  | 87  | 110 | 12 | 22 | 35 | 62 | 163 | 153 |
|     | 28  | 18 | 42  |     |         |    |     |    |    |    | M14x1,5  | 22  |     |     |     |     |     |    |    |    |    |     |     |
| 50  | 22  | 22 | 34  | 75  | 1/2"G   | 16 | 14  | 38 |    | 38 | M20x1,5  | 18  | 74  | 52  | 74  | 105 | 130 | 9  | 25 | 41 | 67 | 173 | 159 |
|     | 36  | 22 | 50  |     |         |    |     |    |    |    | M16x1,5  | 30  |     |     |     |     |     |    |    |    |    |     |     |
| 63  | 28  | 28 | 42  | 90  | 1/2"G   | 16 | 14  | 38 |    | 38 | M27x2    | 22  | 80  | 65  | 75  | 117 | 145 | 13 | 29 | 48 | 71 | 182 | 168 |
|     | 45  | 28 | 60  |     |         |    |     |    |    |    | M20x1,5  | 36  |     |     | 88  |     |     |    |    |    |    |     |     |
| 80  | 36  | 36 | 50  | 115 | 3/4"G   | 20 | 18  | 45 |    | 45 | M33x2    | 30  | 93  | 83  | 82  | 149 | 180 | 9  | 29 | 51 | 77 | 209 | 190 |
|     | 56  | 36 | 72  |     |         |    |     |    |    |    | M27x2    | 46  |     |     | 105 |     |     |    |    |    |    |     |     |
| 100 | 45  | 45 | 60  | 130 | 3/4"G   | 22 | 18  | 45 |    | 45 | M42x2    | 36  | 101 | 97  | 92  | 162 | 200 | 10 | 32 | 57 | 82 | 222 | 203 |
|     | 70  | 45 | 88  |     |         |    |     |    |    |    | M33x2    | 60  |     |     | 125 |     |     |    |    |    |    |     |     |
| 125 | 56  | 56 | 72  | 165 | 1"G     | 22 | 22  | 58 |    | 58 | M48x2    | 46  | 117 | 126 | 105 | 208 | 250 | 10 | 32 | 57 | 86 | 257 | 232 |
|     | 90  | 56 | 108 |     |         |    |     |    |    |    | M42x2    | 80  |     |     | 150 |     |     |    |    |    |    |     |     |
| 160 | 70  | 63 | 88  | 205 | 1"G     | 25 | 26  | 58 |    | 58 | M64x3    | 60  | 130 | 155 | 125 | 253 | 300 | 7  | 32 | 57 | 86 | 277 | 245 |
|     | 110 | 63 | 133 |     |         |    |     |    |    |    | M48x2    | 100 |     |     | 170 |     |     |    |    |    |    |     |     |
| 200 | 90  | 85 | 108 | 245 | 1 1/4"G | 25 | 33  | 76 |    | 76 | M80x3    | 80  | 165 | 190 | 150 | 300 | 360 | 7  | 32 | 57 | 98 | 334 | 299 |
|     | 140 | 85 | 163 |     |         |    |     |    |    |    | M64x3    | 120 |     |     | 210 |     |     |    |    |    |    |     |     |

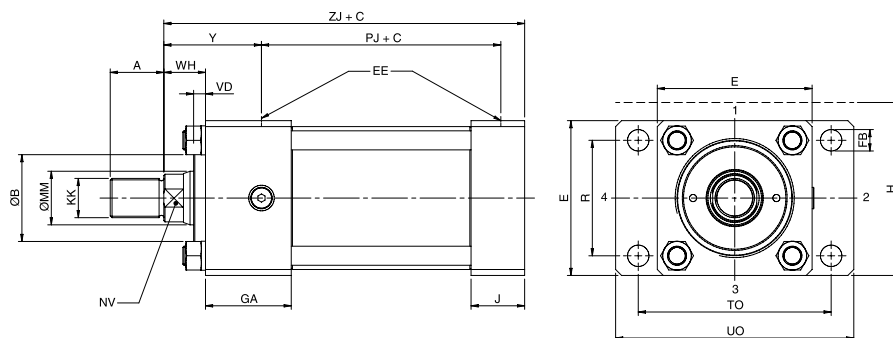
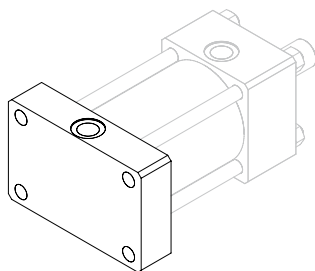


## Série HT

### Vérins Hydrauliques ISO 6020/2

#### Accessoires de fixation

##### Bride rectangulaire arrière ISO ME6



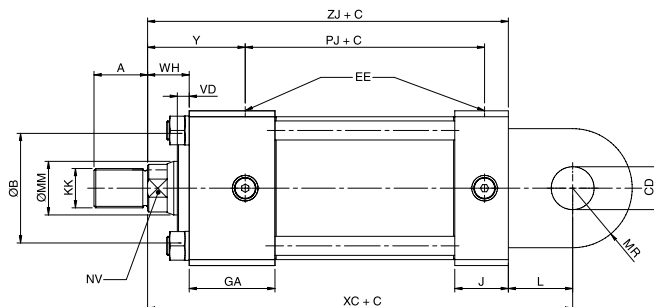
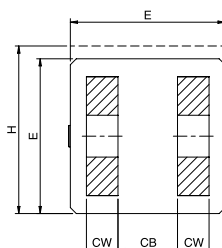
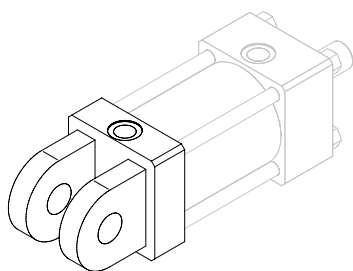
| Ø   | ØMM | A   | B   | E   | EE      | FB  | GA  | H  | J  | KK       | NV  | PJ  | R   | TO  | UO  | VD | WH | Y  | ZJ  |
|-----|-----|-----|-----|-----|---------|-----|-----|----|----|----------|-----|-----|-----|-----|-----|----|----|----|-----|
| 25  | 12  | 14  | 24  | 40  | 1/4"G   | 5,5 | 50  | 45 | 25 | M10x1,25 | 10  | 53  | 27  | 51  | 65  | 6  | 15 | 50 | 114 |
|     | 18  | 14  | 30  |     |         |     |     |    |    | M10x1,25 | 15  |     |     |     |     |    |    |    |     |
| 32  | 14  | 16  | 26  | 45  | 1/4"G   | 6,6 | 50  | 50 | 25 | M14x1,5  | 12  | 56  | 33  | 58  | 70  | 12 | 25 | 60 | 128 |
|     | 22  | 16  | 34  |     |         |     |     |    |    | M12x1,5  | 18  |     |     |     |     |    |    |    |     |
| 40  | 18  | 18  | 30  | 63  | 3/8"G   | 11  | 55  |    | 38 | M16x1,5  | 15  | 73  | 41  | 87  | 110 | 12 | 25 | 62 | 153 |
|     | 28  | 18  | 42  |     |         |     |     |    |    | M14x1,5  | 22  |     |     |     |     |    |    |    |     |
| 50  | 22  | 22  | 34  | 75  | 1/2"G   | 14  | 61  |    | 38 | M20x1,5  | 18  | 74  | 52  | 105 | 130 | 9  | 25 | 67 | 159 |
|     | 36  | 22  | 50  |     |         |     |     |    |    | M16x1,5  | 30  |     |     |     |     |    |    |    |     |
| 63  | 28  | 28  | 42  | 90  | 1/2"G   | 14  | 61  |    | 38 | M27x2    | 22  | 80  | 65  | 117 | 145 | 13 | 32 | 71 | 168 |
|     | 45  | 28  | 60  |     |         |     |     |    |    | M20x1,5  | 36  |     |     |     |     |    |    |    |     |
| 80  | 36  | 36  | 50  | 115 | 3/4"G   | 18  | 70  |    | 45 | M33x2    | 30  | 93  | 83  | 149 | 180 | 9  | 31 | 77 | 190 |
|     | 56  | 36  | 72  |     |         |     |     |    |    | M27x2    | 46  |     |     |     |     |    |    |    |     |
| 100 | 45  | 45  | 60  | 130 | 3/4"G   | 18  | 72  |    | 45 | M42x2    | 36  | 101 | 97  | 162 | 200 | 10 | 35 | 82 | 203 |
|     | 70  | 45  | 88  |     |         |     |     |    |    | M33x2    | 60  |     |     |     |     |    |    |    |     |
| 125 | 56  | 56  | 72  | 165 | 1"G     | 22  | 80  |    | 58 | M48x2    | 46  | 117 | 126 | 208 | 250 | 10 | 35 | 86 | 232 |
|     | 90  | 56  | 108 |     |         |     |     |    |    | M42x2    | 80  |     |     |     |     |    |    |    |     |
| 160 | 70  | 63  | 88  | 205 | 1"G     | 26  | 83  |    | 58 | M64x3    | 60  | 130 | 155 | 253 | 300 | 7  | 32 | 86 | 245 |
|     | 110 | 63  | 133 |     |         |     |     |    |    | M48x2    | 100 |     |     |     |     |    |    |    |     |
| 200 | 90  | 85  | 108 | 245 | 1 1/4"G | 33  | 101 |    | 76 | M80x3    | 80  | 165 | 190 | 300 | 360 | 7  | 32 | 98 | 299 |
|     | 140 | 85  | 163 |     |         |     |     |    |    | M64x3    | 120 |     |     |     |     |    |    |    |     |
|     |     | 112 |     |     |         |     |     |    |    | M100x3   |     |     |     |     |     |    |    |    |     |

## Série HT

### Vérins Hydrauliques ISO 6020/2

#### Accessoires de fixation

#### Chape femelle ISO MP1



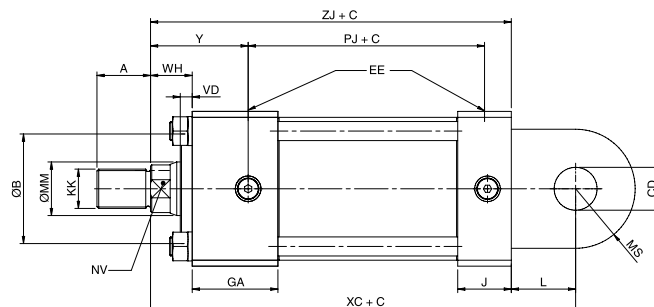
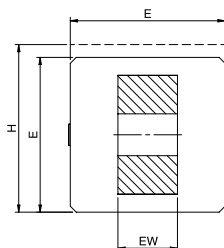
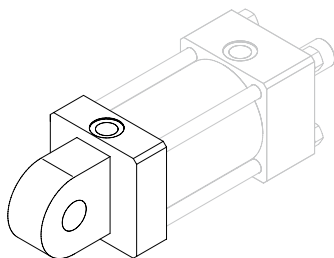
| Ø   | ØMM | A  | B   | CB | CD | CW | E   | EE      | GA  | H  | J  | KK       | L  | MR | NV  | PJ  | VD | WH | XC  | Y  | ZJ  |
|-----|-----|----|-----|----|----|----|-----|---------|-----|----|----|----------|----|----|-----|-----|----|----|-----|----|-----|
| 25  | 12  | 14 | 24  |    |    |    |     |         |     |    |    | M10x1,25 |    |    | 10  |     |    |    |     |    |     |
|     | 18  | 14 | 30  | 12 | 10 | 6  | 40  | 1/4"G   | 50  | 45 | 25 | M10x1,25 | 13 | 12 | 15  | 53  | 6  | 15 | 127 | 50 | 114 |
| 32  | 14  | 16 | 26  |    |    |    |     |         |     |    |    | M14x1,5  |    |    | 12  |     |    |    |     |    |     |
|     | 22  | 16 | 34  | 16 | 12 | 8  | 45  | 1/4"G   | 50  | 50 | 25 | M12x1,5  | 19 | 17 | 18  | 56  | 12 | 25 | 147 | 60 | 128 |
| 40  | 18  | 18 | 30  |    |    |    |     |         |     |    |    | M16x1,5  |    |    | 15  |     |    |    |     |    |     |
|     | 28  | 18 | 42  | 20 | 14 | 10 | 63  | 3/8"G   | 55  |    | 38 | M14x1,5  | 19 | 17 | 22  | 73  | 12 | 25 | 172 | 62 | 153 |
| 50  | 22  | 22 | 34  |    |    |    |     |         |     |    |    | M20x1,5  |    |    | 18  |     |    |    |     |    |     |
|     | 36  | 22 | 50  | 30 | 20 | 15 | 75  | 1/2"G   | 61  |    | 38 | M16x1,5  | 32 | 29 | 30  | 74  | 9  | 25 | 191 | 67 | 159 |
| 63  | 28  | 28 | 42  |    |    |    |     |         |     |    |    | M27x2    |    |    | 22  |     |    |    |     |    |     |
|     | 45  | 28 | 60  | 30 | 20 | 15 | 90  | 1/2"G   | 61  |    | 38 | M20x1,5  | 32 | 29 | 36  | 80  | 13 | 32 | 200 | 71 | 168 |
| 80  | 36  | 36 | 50  |    |    |    |     |         |     |    |    | M33x2    |    |    | 30  |     |    |    |     |    |     |
|     | 56  | 36 | 72  | 40 | 28 | 20 | 115 | 3/4"G   | 70  |    | 45 | M27x2    | 39 | 34 | 46  | 93  | 9  | 31 | 229 | 77 | 190 |
| 100 | 45  | 45 | 60  |    |    |    |     |         |     |    |    | M42x2    |    |    | 36  |     |    |    |     |    |     |
|     | 70  | 45 | 88  | 50 | 36 | 25 | 130 | 3/4"G   | 72  |    | 45 | M33x2    | 54 | 44 | 60  | 101 | 10 | 35 | 257 | 82 | 203 |
| 125 | 56  | 56 | 72  |    |    |    |     |         |     |    |    | M48x2    |    |    | 46  |     |    |    |     |    |     |
|     | 90  | 56 | 108 | 60 | 45 | 30 | 165 | 1"G     | 80  |    | 58 | M42x2    | 57 | 53 | 80  | 117 | 10 | 35 | 289 | 86 | 232 |
| 160 | 70  | 63 | 88  |    |    |    |     |         |     |    |    | M64x3    |    |    | 60  |     |    |    |     |    |     |
|     | 110 | 63 | 133 | 70 | 56 | 35 | 205 | 1"G     | 83  |    | 58 | M48x2    | 63 | 59 | 100 | 130 | 7  | 32 | 308 | 86 | 245 |
| 200 | 90  | 85 | 108 |    |    |    |     |         |     |    |    | M80x3    |    |    | 80  |     |    |    |     |    |     |
|     | 140 | 85 | 163 | 80 | 70 | 40 | 245 | 1 1/4"G | 101 |    | 76 | M64x3    | 82 | 78 | 120 | 165 | 7  | 32 | 381 | 98 | 299 |

## Série HT

### Vérins Hydrauliques ISO 6020/2

#### Accessoires de fixation

##### Chape male ISO MP3



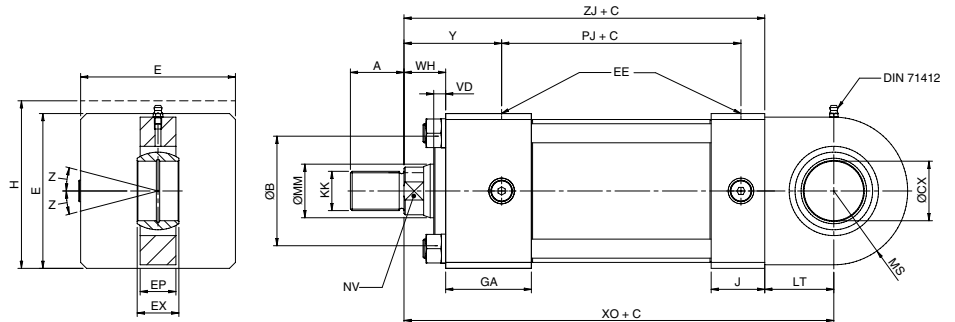
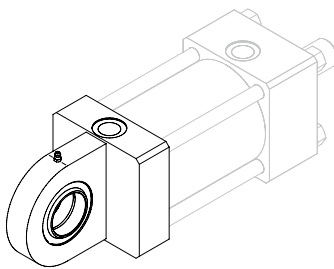
| Ø   | ØMM | A   | B   | CD | E   | EE      | EW | GA  | H  | J  | KK       | L  | MS | NV  | PJ  | VD | WH | XC  | Y  | ZJ  |
|-----|-----|-----|-----|----|-----|---------|----|-----|----|----|----------|----|----|-----|-----|----|----|-----|----|-----|
| 25  | 12  | 14  | 24  | 10 | 40  | 1/4"G   | 12 | 50  | 45 | 25 | M10x1,25 | 13 | 12 | 10  | 53  | 6  | 15 | 127 | 50 | 114 |
|     | 18  | 14  | 30  |    |     |         |    |     |    |    | M10x1,25 |    |    | 15  |     |    |    |     |    |     |
| 32  | 14  | 16  | 26  | 12 | 45  | 1/4"G   | 16 | 50  | 50 | 25 | M14x1,5  | 19 | 17 | 12  | 56  | 12 | 25 | 147 | 60 | 128 |
|     | 22  | 16  | 34  |    |     |         |    |     |    |    | M12x1,5  |    |    | 18  |     |    |    |     |    |     |
| 40  | 18  | 18  | 30  | 14 | 63  | 3/8"G   | 20 | 55  |    | 38 | M16x1,5  | 19 | 17 | 15  | 73  | 12 | 25 | 172 | 62 | 153 |
|     | 28  | 18  | 42  |    |     |         |    |     |    |    | M14x1,5  |    |    | 22  |     |    |    |     |    |     |
| 50  | 22  | 22  | 34  | 20 | 75  | 1/2"G   | 30 | 61  |    | 38 | M20x1,5  | 32 | 29 | 18  | 74  | 9  | 25 | 191 | 67 | 159 |
|     | 36  | 22  | 50  |    |     |         |    |     |    |    | M16x1,5  |    |    | 30  |     |    |    |     |    |     |
| 63  | 28  | 28  | 42  | 20 | 90  | 1/2"G   | 30 | 61  |    | 38 | M27x2    | 32 | 29 | 22  | 80  | 13 | 32 | 200 | 71 | 168 |
|     | 45  | 28  | 60  |    |     |         |    |     |    |    | M20x1,5  |    |    | 36  |     |    |    |     |    |     |
| 80  | 36  | 36  | 50  | 28 | 115 | 3/4"G   | 40 | 70  |    | 45 | M33x2    | 39 | 34 | 30  | 93  | 9  | 31 | 229 | 77 | 190 |
|     | 56  | 36  | 72  |    |     |         |    |     |    |    | M27x2    |    |    | 46  |     |    |    |     |    |     |
| 100 | 45  | 45  | 60  | 36 | 130 | 3/4"G   | 50 | 72  |    | 45 | M42x2    | 54 | 44 | 36  | 101 | 10 | 35 | 257 | 82 | 203 |
|     | 70  | 45  | 88  |    |     |         |    |     |    |    | M33x2    |    |    | 60  |     |    |    |     |    |     |
| 125 | 56  | 56  | 72  | 45 | 165 | 1"G     | 60 | 80  |    | 58 | M48x2    | 57 | 53 | 46  | 117 | 10 | 35 | 289 | 86 | 232 |
|     | 90  | 56  | 108 |    |     |         |    |     |    |    | M42x2    |    |    | 80  |     |    |    |     |    |     |
| 160 | 70  | 63  | 88  | 56 | 205 | 1"G     | 70 | 83  |    | 58 | M64x3    | 63 | 59 | 60  | 130 | 7  | 32 | 308 | 86 | 245 |
|     | 110 | 63  | 133 |    |     |         |    |     |    |    | M48x2    |    |    | 100 |     |    |    |     |    |     |
| 200 | 90  | 85  | 108 | 70 | 245 | 1 1/4"G | 80 | 101 |    | 76 | M80x3    | 82 | 78 | 80  | 165 | 7  | 32 | 381 | 98 | 299 |
|     | 140 | 85  | 163 |    |     |         |    |     |    |    | M64x3    |    |    | 120 |     |    |    |     |    |     |
|     |     | 112 |     |    |     |         |    |     |    |    | M100x3   |    |    |     |     |    |    |     |    |     |

# Série HT

## Vérins Hydrauliques ISO 6020/2

### Accessoires de fixation

#### Chape à rotule ISO MP5



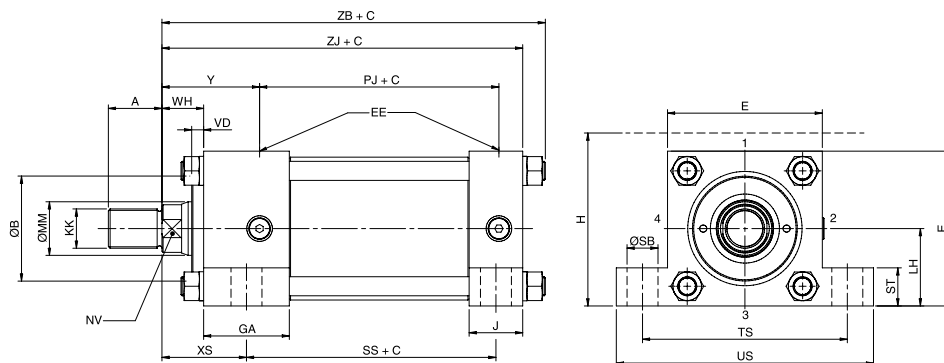
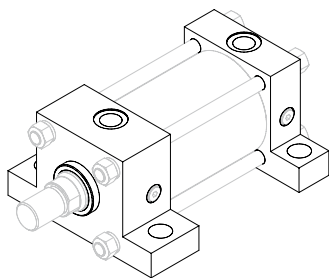
| Ø   | ØMM | A  | B   | CX  | E   | EE      | EP | EX | GA  | H  | J  | KK       | LT  | MS   | NV  | PJ  | VD | WH | XO  | Y  | Z  | ZJ  |
|-----|-----|----|-----|-----|-----|---------|----|----|-----|----|----|----------|-----|------|-----|-----|----|----|-----|----|----|-----|
| 25  | 12  | 14 | 24  | 12  | 40  | 1/4"G   | 8  | 10 | 50  | 45 | 25 | M10x1,25 | 16  | 20   | 10  | 53  | 6  | 15 | 130 | 50 | 4° | 114 |
|     | 18  | 14 | 30  |     |     |         |    |    |     |    |    | M10x1,25 |     |      | 15  |     |    |    |     |    |    |     |
| 32  | 14  | 16 | 26  | 16  | 45  | 1/4"G   | 11 | 14 | 50  | 50 | 25 | M14x1,5  | 20  | 22,5 | 12  | 56  | 12 | 25 | 148 | 60 | 4° | 128 |
|     | 22  | 16 | 34  |     |     |         |    |    |     |    |    | M12x1,5  |     |      | 18  |     |    |    |     |    |    |     |
| 40  | 18  | 18 | 30  | 20  | 63  | 3/8"G   | 13 | 16 | 55  |    | 38 | M14x1,5  | 25  | 29   | 15  | 73  | 12 | 25 | 178 | 62 | 4° | 153 |
|     | 28  | 18 | 42  |     |     |         |    |    |     |    |    | M14x1,5  |     |      | 22  |     |    |    |     |    |    |     |
| 50  | 22  | 22 | 34  | 25  | 75  | 1/2"G   | 17 | 20 | 61  |    | 38 | M20x1,5  | 31  | 33   | 18  | 74  | 9  | 25 | 190 | 67 | 4° | 159 |
|     | 36  | 22 | 50  |     |     |         |    |    |     |    |    | M16x1,5  |     |      | 30  |     |    |    |     |    |    |     |
| 63  | 28  | 28 | 42  | 30  | 90  | 1/2"G   | 19 | 22 | 61  |    | 38 | M27x2    | 38  | 40   | 22  | 80  | 13 | 32 | 206 | 71 | 4° | 168 |
|     | 45  | 28 | 60  |     |     |         |    |    |     |    |    | M20x1,5  |     |      | 36  |     |    |    |     |    |    |     |
| 80  | 36  | 36 | 50  | 40  | 115 | 3/4"G   | 23 | 28 | 70  |    | 45 | M33x2    | 48  | 50   | 30  | 93  | 9  | 31 | 238 | 77 | 4° | 190 |
|     | 56  | 36 | 72  |     |     |         |    |    |     |    |    | M27x2    |     |      | 46  |     |    |    |     |    |    |     |
| 100 | 45  | 45 | 60  | 50  | 130 | 3/4"G   | 30 | 35 | 72  |    | 45 | M42x2    | 58  | 62   | 36  | 101 | 10 | 35 | 261 | 82 | 4° | 203 |
|     | 70  | 45 | 88  |     |     |         |    |    |     |    |    | M33x2    |     |      | 60  |     |    |    |     |    |    |     |
| 125 | 56  | 56 | 72  | 60  | 165 | 1"G     | 38 | 44 | 80  |    | 58 | M48x2    | 72  | 80   | 46  | 117 | 10 | 35 | 304 | 86 | 4° | 232 |
|     | 90  | 56 | 108 |     |     |         |    |    |     |    |    | M42x2    |     |      | 80  |     |    |    |     |    |    |     |
| 160 | 70  | 63 | 88  | 80  | 205 | 1"G     | 47 | 55 | 83  |    | 58 | M64x3    | 92  | 100  | 60  | 130 | 7  | 32 | 337 | 86 | 4° | 245 |
|     | 110 | 63 | 133 |     |     |         |    |    |     |    |    | M48x2    |     |      | 100 |     |    |    |     |    |    |     |
| 200 | 90  | 85 | 108 | 100 | 245 | 1 1/4"G | 57 | 70 | 101 |    | 76 | M80x3    | 116 | 120  | 80  | 165 | 7  | 32 | 415 | 98 | 4° | 299 |
|     | 140 | 85 | 163 |     |     |         |    |    |     |    |    | M64x3    |     |      | 120 |     |    |    |     |    |    |     |

## Série HT

### Vérins Hydrauliques ISO 6020/2

#### Accessoires de fixation

##### Pattes ISO MS2



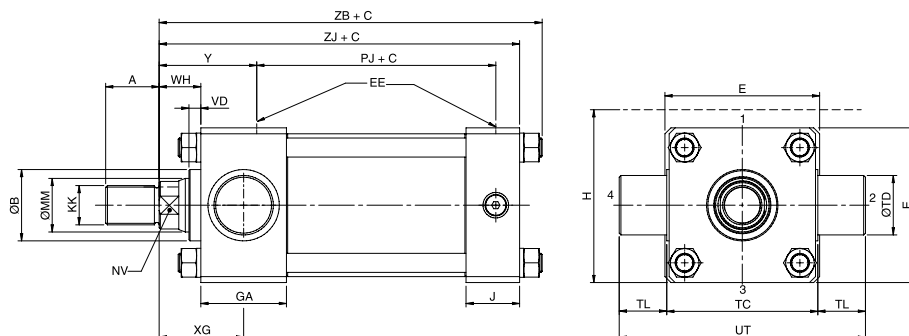
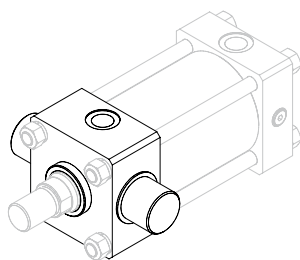
| Ø   | ØMM | A  | B   | E   | EE      | GA  | H  | J  | KK       | LH  | NV | PJ  | SB  | SS  | ST   | TS  | US  | VD | WH | XS | Y  | ZB  | ZJ  |
|-----|-----|----|-----|-----|---------|-----|----|----|----------|-----|----|-----|-----|-----|------|-----|-----|----|----|----|----|-----|-----|
| 25  | 12  | 14 | 24  | 40  | 1/4"G   | 50  | 45 | 25 | M10x1,25 | 19  | 10 | 53  | 6,6 | 73  | 8,5  | 54  | 72  | 6  | 15 | 33 | 50 | 121 | 114 |
|     | 18  | 14 | 30  |     |         |     |    |    | M10x1,25 |     |    |     |     |     |      |     |     |    |    |    |    |     |     |
| 32  | 14  | 16 | 26  | 45  | 1/4"G   | 50  | 50 | 25 | M14x1,5  | 22  | 12 | 56  | 9   | 73  | 12,5 | 63  | 84  | 12 | 25 | 45 | 60 | 136 | 128 |
|     | 22  | 16 | 34  |     |         |     |    |    | M12x1,5  |     |    |     |     |     |      |     |     |    |    |    |    |     |     |
| 40  | 18  | 18 | 30  | 63  | 3/8"G   | 55  |    | 38 | M16x1,5  | 31  | 15 | 73  | 11  | 98  | 12,5 | 83  | 103 | 12 | 25 | 45 | 62 | 163 | 153 |
|     | 28  | 18 | 42  |     |         |     |    |    | M20x1,5  |     |    |     |     |     |      |     |     |    |    |    |    |     |     |
| 50  | 22  | 22 | 34  | 75  | 1/2"G   | 61  |    | 38 | M16x1,5  | 37  | 18 | 74  | 14  | 92  | 19   | 102 | 127 | 9  | 25 | 54 | 67 | 173 | 159 |
|     | 36  | 22 | 50  |     |         |     |    |    | M27x2    |     |    |     |     |     |      |     |     |    |    |    |    |     |     |
| 63  | 28  | 28 | 42  | 90  | 1/2"G   | 61  |    | 38 | M20x1,5  | 44  | 22 | 80  | 18  | 86  | 26   | 124 | 161 | 13 | 32 | 65 | 71 | 182 | 168 |
|     | 45  | 28 | 60  |     |         |     |    |    | M33x2    |     |    |     |     |     |      |     |     |    |    |    |    |     |     |
| 80  | 36  | 36 | 50  | 115 | 3/4"G   | 70  |    | 45 | M27x2    | 57  | 30 | 93  | 18  | 105 | 26   | 149 | 186 | 9  | 31 | 68 | 77 | 209 | 190 |
|     | 56  | 36 | 72  |     |         |     |    |    | M42x2    |     |    |     |     |     |      |     |     |    |    |    |    |     |     |
| 100 | 45  | 45 | 60  | 130 | 3/4"G   | 72  |    | 45 | M33x2    | 63  | 36 | 101 | 26  | 102 | 32   | 172 | 216 | 10 | 35 | 79 | 82 | 222 | 203 |
|     | 70  | 45 | 88  |     |         |     |    |    | M48x2    |     |    |     |     |     |      |     |     |    |    |    |    |     |     |
| 125 | 56  | 56 | 72  | 165 | 1"G     | 80  |    | 58 | M42x2    | 82  | 46 | 117 | 26  | 131 | 32   | 210 | 254 | 10 | 35 | 79 | 86 | 257 | 232 |
|     | 90  | 56 | 108 |     |         |     |    |    | M64x3    |     |    |     |     |     |      |     |     |    |    |    |    |     |     |
| 160 | 70  | 63 | 88  | 205 | 1"G     | 83  |    | 58 | M48x2    | 101 | 60 | 130 | 33  | 130 | 38   | 260 | 318 | 7  | 32 | 86 | 86 | 277 | 245 |
|     | 110 | 63 | 133 |     |         |     |    |    | M80x3    |     |    |     |     |     |      |     |     |    |    |    |    |     |     |
| 200 | 90  | 85 | 108 | 245 | 1 1/4"G | 101 |    | 76 | M64x3    | 122 | 80 | 165 | 39  | 172 | 44   | 311 | 381 | 7  | 32 | 92 | 98 | 334 | 299 |
|     | 140 | 85 | 163 |     |         |     |    |    | M100x3   |     |    |     |     |     |      |     |     |    |    |    |    |     |     |

# Série HT

## Vérins Hydrauliques ISO 6020/2

### Accessoires de fixation

#### Tourillon avant ISO MT1



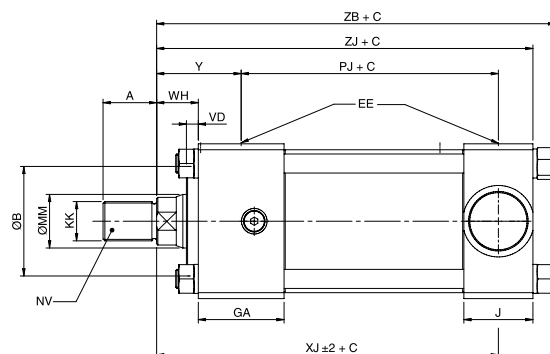
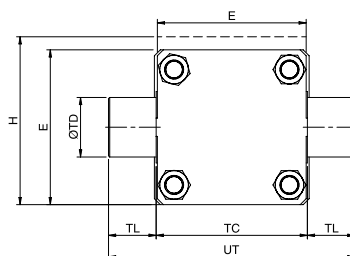
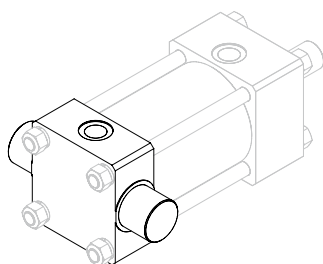
| Ø   | ØMM | A  | B   | E   | EE      | GA  | H  | J  | KK       | NV  | PJ  | TC  | TD  | TL | UT  | VD | WH | XG | Y  | ZB  | ZJ  |
|-----|-----|----|-----|-----|---------|-----|----|----|----------|-----|-----|-----|-----|----|-----|----|----|----|----|-----|-----|
| 25  | 12  | 14 | 24  | 40  | 1/4"G   | 50  | 45 | 25 | M10x1,25 | 10  | 53  | 38  | 12  | 10 | 58  | 6  | 15 | 44 | 50 | 121 | 114 |
|     | 18  | 14 | 30  |     |         |     |    |    | M10x1,25 | 15  |     |     |     |    |     |    |    |    |    |     |     |
| 32  | 14  | 16 | 26  | 45  | 1/4"G   | 50  | 50 | 25 | M14x1,5  | 12  | 56  | 44  | 16  | 12 | 68  | 12 | 25 | 54 | 60 | 136 | 128 |
|     | 22  | 16 | 34  |     |         |     |    |    | M12x1,5  | 18  |     |     |     |    |     |    |    |    |    |     |     |
| 40  | 18  | 18 | 30  | 63  | 3/8"G   | 55  |    | 38 | M16x1,5  | 15  | 73  | 63  | 20  | 16 | 95  | 12 | 25 | 57 | 62 | 163 | 153 |
|     | 28  | 18 | 42  |     |         |     |    |    | M14x1,5  | 22  |     |     |     |    |     |    |    |    |    |     |     |
| 50  | 22  | 22 | 34  | 75  | 1/2"G   | 61  |    | 38 | M20x1,5  | 18  | 74  | 76  | 25  | 20 | 116 | 9  | 25 | 64 | 67 | 173 | 159 |
|     | 36  | 22 | 50  |     |         |     |    |    | M16x1,5  | 30  |     |     |     |    |     |    |    |    |    |     |     |
| 63  | 28  | 28 | 42  | 90  | 1/2"G   | 61  |    | 38 | M27x2    | 22  | 80  | 89  | 32  | 25 | 139 | 13 | 32 | 70 | 71 | 182 | 168 |
|     | 45  | 28 | 60  |     |         |     |    |    | M20x1,5  | 36  |     |     |     |    |     |    |    |    |    |     |     |
| 80  | 36  | 36 | 50  | 115 | 3/4"G   | 70  |    | 45 | M33x2    | 30  | 93  | 114 | 40  | 32 | 178 | 9  | 31 | 76 | 77 | 209 | 190 |
|     | 56  | 36 | 72  |     |         |     |    |    | M27x2    | 46  |     |     |     |    |     |    |    |    |    |     |     |
| 100 | 45  | 45 | 60  | 130 | 3/4"G   | 72  |    | 45 | M42x2    | 36  | 101 | 127 | 50  | 40 | 207 | 10 | 35 | 71 | 82 | 222 | 203 |
|     | 70  | 45 | 88  |     |         |     |    |    | M33x2    | 60  |     |     |     |    |     |    |    |    |    |     |     |
| 125 | 56  | 56 | 72  | 165 | 1"G     | 80  |    | 58 | M48x2    | 46  | 117 | 165 | 63  | 50 | 265 | 10 | 35 | 75 | 86 | 257 | 232 |
|     | 90  | 56 | 108 |     |         |     |    |    | M42x2    | 80  |     |     |     |    |     |    |    |    |    |     |     |
| 160 | 70  | 63 | 88  | 205 | 1"G     | 83  |    | 58 | M64x3    | 60  | 130 | 203 | 80  | 63 | 329 | 7  | 32 | 75 | 86 | 277 | 245 |
|     | 110 | 63 | 133 |     |         |     |    |    | M48x2    | 100 |     |     |     |    |     |    |    |    |    |     |     |
| 200 | 90  | 85 | 108 | 245 | 1 1/4"G | 101 |    | 76 | M80x3    | 80  | 165 | 241 | 100 | 80 | 401 | 7  | 32 | 85 | 98 | 334 | 299 |
|     | 140 | 85 | 163 |     |         |     |    |    | M64x3    | 120 |     |     |     |    |     |    |    |    |    |     |     |

## Série HT

### Vérins Hydrauliques ISO 6020/2

#### Accessoires de fixation

##### Tourillon arrière ISO MT2



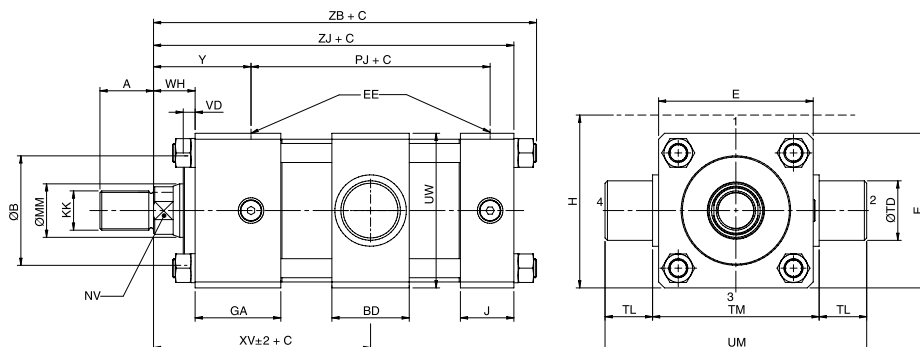
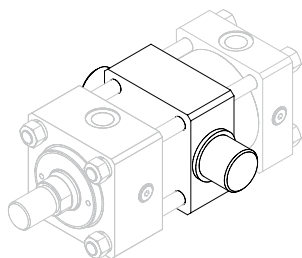
| Ø   | ØMM | A  | B   | E   | EE      | GA  | H  | J  | KK       | NV  | PJ  | TC  | TD  | TL | UT  | VD | WH | XJ  | Y  | ZB  | ZJ  |
|-----|-----|----|-----|-----|---------|-----|----|----|----------|-----|-----|-----|-----|----|-----|----|----|-----|----|-----|-----|
| 25  | 12  | 14 | 24  | 40  | 1/4"G   | 50  | 45 | 25 | M10x1,25 | 10  | 53  | 38  | 12  | 10 | 58  | 6  | 15 | 101 | 50 | 121 | 114 |
|     | 18  | 14 | 30  |     |         |     |    |    | M10x1,25 | 15  |     |     |     |    |     |    |    |     |    |     |     |
| 32  | 14  | 16 | 26  | 45  | 1/4"G   | 50  | 50 | 25 | M12x1,5  | 12  | 56  | 44  | 16  | 12 | 68  | 12 | 25 | 115 | 60 | 136 | 128 |
|     | 22  | 16 | 34  |     |         |     |    |    | M12x1,5  | 18  |     |     |     |    |     |    |    |     |    |     |     |
| 40  | 18  | 18 | 30  | 63  | 3/8"G   | 55  |    | 38 | M14x1,5  | 15  | 73  | 63  | 20  | 16 | 95  | 12 | 25 | 134 | 62 | 163 | 153 |
|     | 28  | 18 | 42  |     |         |     |    |    | M14x1,5  | 22  |     |     |     |    |     |    |    |     |    |     |     |
| 50  | 22  | 22 | 34  | 75  | 1/2"G   | 61  |    | 38 | M16x1,5  | 18  | 74  | 76  | 25  | 20 | 116 | 9  | 25 | 140 | 67 | 173 | 159 |
|     | 36  | 22 | 50  |     |         |     |    |    | M16x1,5  | 30  |     |     |     |    |     |    |    |     |    |     |     |
| 63  | 28  | 28 | 42  | 90  | 1/2"G   | 61  |    | 38 | M20x1,5  | 22  | 80  | 89  | 32  | 25 | 139 | 13 | 32 | 149 | 71 | 182 | 168 |
|     | 45  | 28 | 60  |     |         |     |    |    | M20x1,5  | 36  |     |     |     |    |     |    |    |     |    |     |     |
| 80  | 36  | 36 | 50  | 115 | 3/4"G   | 70  |    | 45 | M27x2    | 30  | 93  | 114 | 40  | 32 | 178 | 9  | 31 | 168 | 77 | 209 | 190 |
|     | 56  | 36 | 72  |     |         |     |    |    | M27x2    | 46  |     |     |     |    |     |    |    |     |    |     |     |
| 100 | 45  | 45 | 60  | 130 | 3/4"G   | 72  |    | 45 | M42x2    | 36  | 101 | 127 | 50  | 40 | 207 | 10 | 35 | 187 | 82 | 222 | 203 |
|     | 70  | 45 | 88  |     |         |     |    |    | M33x2    | 60  |     |     |     |    |     |    |    |     |    |     |     |
| 125 | 56  | 56 | 72  | 165 | 1"G     | 80  |    | 58 | M48x2    | 46  | 117 | 165 | 63  | 50 | 265 | 10 | 35 | 209 | 86 | 257 | 232 |
|     | 90  | 56 | 108 |     |         |     |    |    | M42x2    | 80  |     |     |     |    |     |    |    |     |    |     |     |
| 160 | 70  | 63 | 88  | 205 | 1"G     | 83  |    | 58 | M64x3    | 60  | 130 | 203 | 80  | 63 | 329 | 7  | 32 | 230 | 86 | 277 | 245 |
|     | 110 | 63 | 133 |     |         |     |    |    | M48x2    | 100 |     |     |     |    |     |    |    |     |    |     |     |
| 200 | 90  | 85 | 108 | 245 | 1 1/4"G | 101 |    | 76 | M80x3    | 80  | 165 | 241 | 100 | 80 | 401 | 7  | 32 | 276 | 98 | 334 | 299 |
|     | 140 | 85 | 163 |     |         |     |    |    | M64x3    | 120 |     |     |     |    |     |    |    |     |    |     |     |

# Série HT

## Vérins Hydrauliques ISO 6020/2

### Accessoires de fixation

#### Tourillon intermédiaire ISO MT4



| Ø   | ØMM | A  | B   | BD  | E   | EE      | GA  | H  | J  | KK       | NV  | PJ  | TD  | TL | TM  | UM  | UW  | VD | WH | XV <sub>(min)</sub> | Y  | ZB  | ZJ  |
|-----|-----|----|-----|-----|-----|---------|-----|----|----|----------|-----|-----|-----|----|-----|-----|-----|----|----|---------------------|----|-----|-----|
| 25  | 12  | 14 | 24  | 20  | 40  | 1/4"G   | 50  | 45 | 25 | M10x1,25 | 10  | 53  | 12  | 10 | 48  | 68  | 45  | 6  | 15 | 77                  | 50 | 121 | 114 |
|     | 18  | 14 | 30  |     |     |         |     |    |    | M10x1,25 | 15  |     |     |    |     |     |     |    |    |                     |    |     |     |
| 32  | 14  | 16 | 26  | 25  | 45  | 1/4"G   | 50  | 50 | 25 | M14x1,5  | 12  | 56  | 16  | 12 | 55  | 79  | 50  | 12 | 25 | 90                  | 60 | 136 | 128 |
|     | 22  | 16 | 34  |     |     |         |     |    |    | M12x1,5  | 18  |     |     |    |     |     |     |    |    |                     |    |     |     |
| 40  | 18  | 18 | 30  | 30  | 63  | 3/8"G   | 55  |    | 38 | M16x1,5  | 15  | 73  | 20  | 16 | 76  | 108 | 70  | 12 | 25 | 97                  | 62 | 163 | 153 |
|     | 28  | 18 | 42  |     |     |         |     |    |    | M14x1,5  | 22  |     |     |    |     |     |     |    |    |                     |    |     |     |
| 50  | 22  | 22 | 34  | 40  | 75  | 1/2"G   | 61  |    | 38 | M20x1,5  | 18  | 74  | 25  | 20 | 89  | 129 | 83  | 9  | 25 | 108                 | 67 | 173 | 159 |
|     | 36  | 22 | 50  |     |     |         |     |    |    | M16x1,5  | 30  |     |     |    |     |     |     |    |    |                     |    |     |     |
| 63  | 28  | 28 | 42  | 48  | 90  | 1/2"G   | 61  |    | 38 | M27x2    | 22  | 80  | 32  | 25 | 100 | 150 | 94  | 13 | 32 | 119                 | 71 | 182 | 168 |
|     | 45  | 28 | 60  |     |     |         |     |    |    | M20x1,5  | 36  |     |     |    |     |     |     |    |    |                     |    |     |     |
| 80  | 36  | 36 | 50  | 55  | 115 | 3/4"G   | 70  |    | 45 | M33x2    | 30  | 93  | 40  | 32 | 127 | 191 | 118 | 9  | 31 | 131                 | 77 | 209 | 190 |
|     | 56  | 36 | 72  |     |     |         |     |    |    | M27x2    | 46  |     |     |    |     |     |     |    |    |                     |    |     |     |
| 100 | 45  | 45 | 60  | 65  | 130 | 3/4"G   | 72  |    | 45 | M42x2    | 36  | 101 | 50  | 40 | 140 | 220 | 128 | 10 | 35 | 142                 | 82 | 222 | 203 |
|     | 70  | 45 | 88  |     |     |         |     |    |    | M33x2    | 60  |     |     |    |     |     |     |    |    |                     |    |     |     |
| 125 | 56  | 56 | 72  | 85  | 165 | 1"G     | 80  |    | 58 | M48x2    | 46  | 117 | 63  | 50 | 178 | 278 | 168 | 10 | 35 | 160                 | 86 | 257 | 232 |
|     | 90  | 56 | 108 |     |     |         |     |    |    | M42x2    | 80  |     |     |    |     |     |     |    |    |                     |    |     |     |
| 160 | 70  | 63 | 88  | 105 | 205 | 1"G     | 83  |    | 58 | M64x3    | 60  | 130 | 80  | 63 | 215 | 341 | 205 | 7  | 32 | 170                 | 86 | 277 | 245 |
|     | 110 | 63 | 133 |     |     |         |     |    |    | M48x2    | 100 |     |     |    |     |     |     |    |    |                     |    |     |     |
| 200 | 90  | 85 | 108 | 125 | 245 | 1 1/4"G | 101 |    | 76 | M80x3    | 80  | 165 | 100 | 80 | 279 | 439 | 250 | 7  | 32 | 198                 | 98 | 334 | 299 |
|     | 140 | 85 | 163 |     |     |         |     |    |    | M64x3    | 120 |     |     |    |     |     |     |    |    |                     |    |     |     |

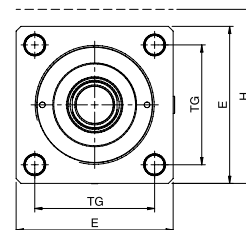
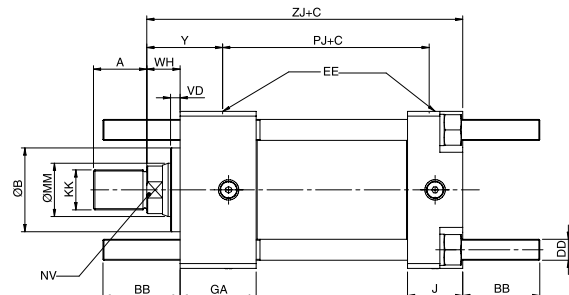
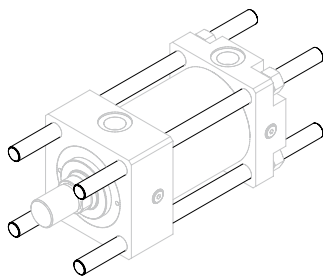


## Série HT

### Vérins Hydrauliques ISO 6020/2

#### Accessoires de fixation

##### Tirants dépassants avant/arrière ISO MX1



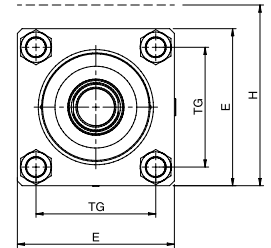
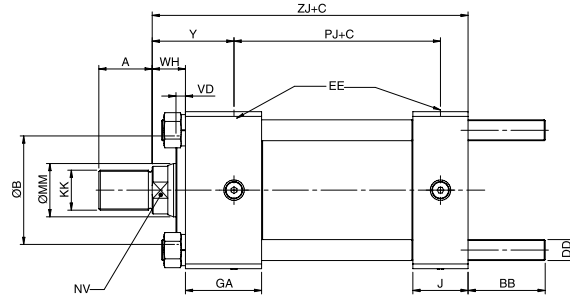
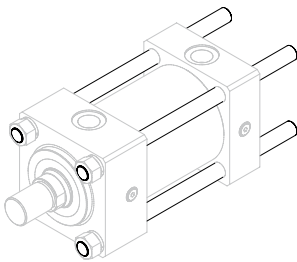
| Ø   | ØMM | A  | B   | BB  | DD       | E   | EE      | GA  | H  | J  | KK       | NV  | PJ  | TG    | VD | WH | Y  | ZJ  |
|-----|-----|----|-----|-----|----------|-----|---------|-----|----|----|----------|-----|-----|-------|----|----|----|-----|
| 25  | 12  | 14 | 24  | 19  | M5x0,8   | 40  | 1/4"G   | 50  | 45 | 25 | M10x1,25 | 10  | 53  | 28,3  | 6  | 15 | 50 | 114 |
|     | 18  | 14 | 30  |     |          |     |         |     |    |    | M10x1,25 | 15  |     |       |    |    |    |     |
| 32  | 14  | 16 | 26  | 24  | M6x1     | 45  | 1/4"G   | 50  | 50 | 25 | M14x1,5  | 12  | 56  | 33,2  | 12 | 25 | 60 | 128 |
|     | 22  | 16 | 34  |     |          |     |         |     |    |    | M12x1,5  | 18  |     |       |    |    |    |     |
| 40  | 18  | 18 | 30  | 35  | M8x1     | 63  | 3/8"G   | 55  |    | 38 | M16x1,5  | 15  | 73  | 41,7  | 12 | 25 | 62 | 153 |
|     | 28  | 18 | 42  |     |          |     |         |     |    |    | M14x1,5  | 22  |     |       |    |    |    |     |
| 50  | 22  | 22 | 34  | 46  | M12x1,25 | 75  | 1/2"G   | 61  |    | 38 | M20x1,5  | 18  | 74  | 52,3  | 9  | 25 | 67 | 159 |
|     | 36  | 22 | 50  |     |          |     |         |     |    |    | M16x1,5  | 30  |     |       |    |    |    |     |
| 63  | 28  | 28 | 42  | 46  | M12x1,25 | 90  | 1/2"G   | 61  |    | 38 | M27x2    | 22  | 80  | 64,3  | 13 | 32 | 71 | 168 |
|     | 45  | 28 | 60  |     |          |     |         |     |    |    | M20x1,5  | 36  |     |       |    |    |    |     |
| 80  | 36  | 36 | 50  | 59  | M16x1,5  | 115 | 3/4"G   | 70  |    | 45 | M33x2    | 30  | 93  | 82,7  | 9  | 31 | 77 | 190 |
|     | 56  | 36 | 72  |     |          |     |         |     |    |    | M27x2    | 46  |     |       |    |    |    |     |
| 100 | 45  | 45 | 60  | 59  | M16x1,5  | 130 | 3/4"G   | 72  |    | 45 | M42x2    | 36  | 101 | 96,9  | 10 | 35 | 82 | 203 |
|     | 70  | 45 | 88  |     |          |     |         |     |    |    | M33x2    | 60  |     |       |    |    |    |     |
| 125 | 56  | 56 | 72  | 81  | M22x1,5  | 165 | 1"G     | 80  |    | 58 | M48x2    | 46  | 117 | 125,9 | 10 | 35 | 86 | 232 |
|     | 90  | 56 | 108 |     |          |     |         |     |    |    | M42x2    | 80  |     |       |    |    |    |     |
| 160 | 70  | 63 | 88  | 92  | M27x2    | 205 | 1"G     | 83  |    | 58 | M64x3    | 60  | 130 | 154,9 | 7  | 32 | 86 | 245 |
|     | 110 | 63 | 133 |     |          |     |         |     |    |    | M48x2    | 100 |     |       |    |    |    |     |
| 200 | 90  | 85 | 108 | 115 | M30x2    | 245 | 1 1/4"G | 101 |    | 76 | M80x3    | 80  | 165 | 190,2 | 7  | 32 | 98 | 299 |
|     | 140 | 85 | 163 |     |          |     |         |     |    |    | M64x3    | 120 |     |       |    |    |    |     |

# Série HT

## Vérins Hydrauliques ISO 6020/2

### Accessoires de fixation

#### Tirants dépassants arrière ISO MX2



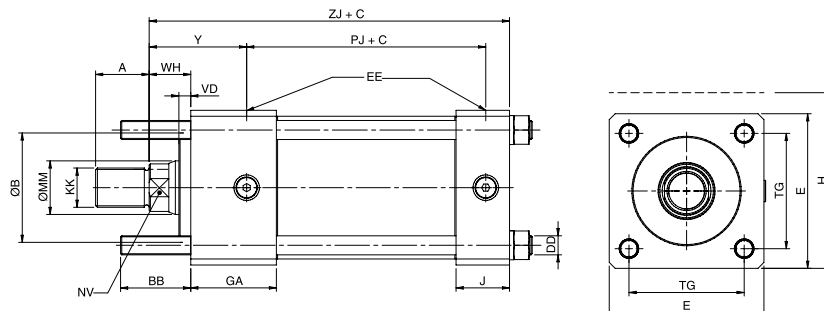
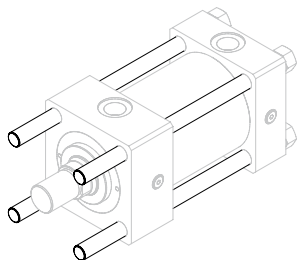
| Ø   | ØMM | A  | B   | BB  | DD       | E   | EE      | GA  | H  | J  | KK       | NV  | PJ  | TG    | VD | WH | Y  | ZJ  |
|-----|-----|----|-----|-----|----------|-----|---------|-----|----|----|----------|-----|-----|-------|----|----|----|-----|
| 25  | 12  | 14 | 24  | 19  | M5x0,8   | 40  | 1/4"G   | 50  | 45 | 25 | M10x1,25 | 10  | 53  | 28,3  | 6  | 15 | 50 | 114 |
|     | 18  | 14 | 30  |     |          |     |         |     |    |    | M10x1,25 | 15  |     |       |    |    |    |     |
| 32  | 14  | 16 | 26  | 24  | M6x1     | 45  | 1/4"G   | 50  | 50 | 25 | M12x1,5  | 12  | 56  | 33,2  | 12 | 25 | 60 | 128 |
|     | 22  | 16 | 34  |     |          |     |         |     |    |    | M12x1,5  | 18  |     |       |    |    |    |     |
| 40  | 18  | 18 | 30  | 35  | M8x1     | 63  | 3/8"G   | 55  |    | 38 | M14x1,5  | 15  | 73  | 41,7  | 12 | 25 | 62 | 153 |
|     | 28  | 18 | 42  |     |          |     |         |     |    |    | M14x1,5  | 22  |     |       |    |    |    |     |
| 50  | 22  | 22 | 34  | 46  | M12x1,25 | 75  | 1/2"G   | 61  |    | 38 | M16x1,5  | 18  | 74  | 52,3  | 9  | 25 | 67 | 159 |
|     | 36  | 22 | 50  |     |          |     |         |     |    |    | M16x1,5  | 30  |     |       |    |    |    |     |
| 63  | 28  | 28 | 42  | 46  | M12x1,25 | 90  | 1/2"G   | 61  |    | 38 | M20x1,5  | 22  | 80  | 64,3  | 13 | 32 | 71 | 168 |
|     | 45  | 28 | 60  |     |          |     |         |     |    |    | M20x1,5  | 36  |     |       |    |    |    |     |
| 80  | 36  | 36 | 50  | 59  | M16x1,5  | 115 | 3/4"G   | 70  |    | 45 | M27x2    | 30  | 93  | 82,7  | 9  | 31 | 77 | 190 |
|     | 56  | 36 | 72  |     |          |     |         |     |    |    | M27x2    | 46  |     |       |    |    |    |     |
| 100 | 45  | 45 | 60  | 59  | M16x1,5  | 130 | 3/4"G   | 72  |    | 45 | M33x2    | 36  | 101 | 96,9  | 10 | 35 | 82 | 203 |
|     | 70  | 45 | 88  |     |          |     |         |     |    |    | M33x2    | 60  |     |       |    |    |    |     |
| 125 | 56  | 56 | 72  | 81  | M22x1,5  | 165 | 1"G     | 80  |    | 58 | M48x2    | 46  | 117 | 125,9 | 10 | 35 | 86 | 232 |
|     | 90  | 56 | 108 |     |          |     |         |     |    |    | M42x2    | 80  |     |       |    |    |    |     |
| 160 | 70  | 63 | 88  | 92  | M27x2    | 205 | 1"G     | 83  |    | 58 | M48x2    | 60  | 130 | 154,9 | 7  | 32 | 86 | 245 |
|     | 110 | 63 | 133 |     |          |     |         |     |    |    | M48x2    | 100 |     |       |    |    |    |     |
| 200 | 90  | 85 | 108 | 115 | M30x2    | 245 | 1 1/4"G | 101 |    | 76 | M64x3    | 80  | 165 | 190,2 | 7  | 32 | 98 | 299 |
|     | 140 | 85 | 163 |     |          |     |         |     |    |    | M64x3    | 120 |     |       |    |    |    |     |

## Série HT

### Vérins Hydrauliques ISO 6020/2

#### Accessoires de fixation

##### Tirants dépassants avant ISO MX3



| Ø   | ØMM | A  | B   | BB  | DD       | E   | EE      | GA  | H  | J  | KK       | NV  | PJ  | TG    | VD | WH | Y  | ZJ  |
|-----|-----|----|-----|-----|----------|-----|---------|-----|----|----|----------|-----|-----|-------|----|----|----|-----|
| 25  | 12  | 14 | 24  | 19  | M5x0,8   | 40  | 1/4"G   | 50  | 45 | 25 | M10x1,25 | 10  | 53  | 28,3  | 6  | 15 | 50 | 114 |
|     | 18  | 14 | 30  |     |          |     |         |     |    |    | M10x1,25 | 15  |     |       |    |    |    |     |
| 32  | 14  | 16 | 26  | 24  | M6x1     | 45  | 1/4"G   | 50  | 50 | 25 | M12x1,5  | 12  | 56  | 33,2  | 12 | 25 | 60 | 128 |
|     | 22  | 16 | 34  |     |          |     |         |     |    |    | M12x1,5  | 18  |     |       |    |    |    |     |
| 40  | 18  | 18 | 30  | 35  | M8x1     | 63  | 3/8"G   | 55  |    | 38 | M14x1,5  | 15  | 73  | 41,7  | 12 | 25 | 62 | 153 |
|     | 28  | 18 | 42  |     |          |     |         |     |    |    | M14x1,5  | 22  |     |       |    |    |    |     |
| 50  | 22  | 22 | 34  | 46  | M12x1,25 | 75  | 1/2"G   | 61  |    | 38 | M16x1,5  | 18  | 74  | 52,3  | 9  | 25 | 67 | 159 |
|     | 36  | 22 | 50  |     |          |     |         |     |    |    | M16x1,5  | 30  |     |       |    |    |    |     |
| 63  | 28  | 28 | 42  | 46  | M12x1,25 | 90  | 1/2"G   | 61  |    | 38 | M20x1,5  | 22  | 80  | 64,3  | 13 | 32 | 71 | 168 |
|     | 45  | 28 | 60  |     |          |     |         |     |    |    | M20x1,5  | 36  |     |       |    |    |    |     |
| 80  | 36  | 36 | 50  | 59  | M16x1,5  | 115 | 3/4"G   | 70  |    | 45 | M27x2    | 30  | 93  | 82,7  | 9  | 31 | 77 | 190 |
|     | 56  | 36 | 72  |     |          |     |         |     |    |    | M27x2    | 46  |     |       |    |    |    |     |
| 100 | 45  | 45 | 60  | 59  | M16x1,5  | 130 | 3/4"G   | 72  |    | 45 | M33x2    | 36  | 101 | 96,9  | 10 | 35 | 82 | 203 |
|     | 70  | 45 | 88  |     |          |     |         |     |    |    | M33x2    | 60  |     |       |    |    |    |     |
| 125 | 56  | 56 | 72  | 81  | M22x1,5  | 165 | 1"G     | 80  |    | 58 | M48x2    | 46  | 117 | 125,9 | 10 | 35 | 86 | 232 |
|     | 90  | 56 | 108 |     |          |     |         |     |    |    | M42x2    | 80  |     |       |    |    |    |     |
| 160 | 70  | 63 | 88  | 92  | M27x2    | 205 | 1"G     | 83  |    | 58 | M64x3    | 60  | 130 | 154,9 | 7  | 32 | 86 | 245 |
|     | 110 | 63 | 133 |     |          |     |         |     |    |    | M48x2    | 100 |     |       |    |    |    |     |
| 200 | 90  | 85 | 108 | 115 | M30x2    | 245 | 1 1/4"G | 101 |    | 76 | M80x3    | 80  | 165 | 190,2 | 7  | 32 | 98 | 299 |
|     | 140 | 85 | 163 |     |          |     |         |     |    |    | M64x3    | 120 |     |       |    |    |    |     |

# Série HV

## Vérins hydrauliques ISO 3320



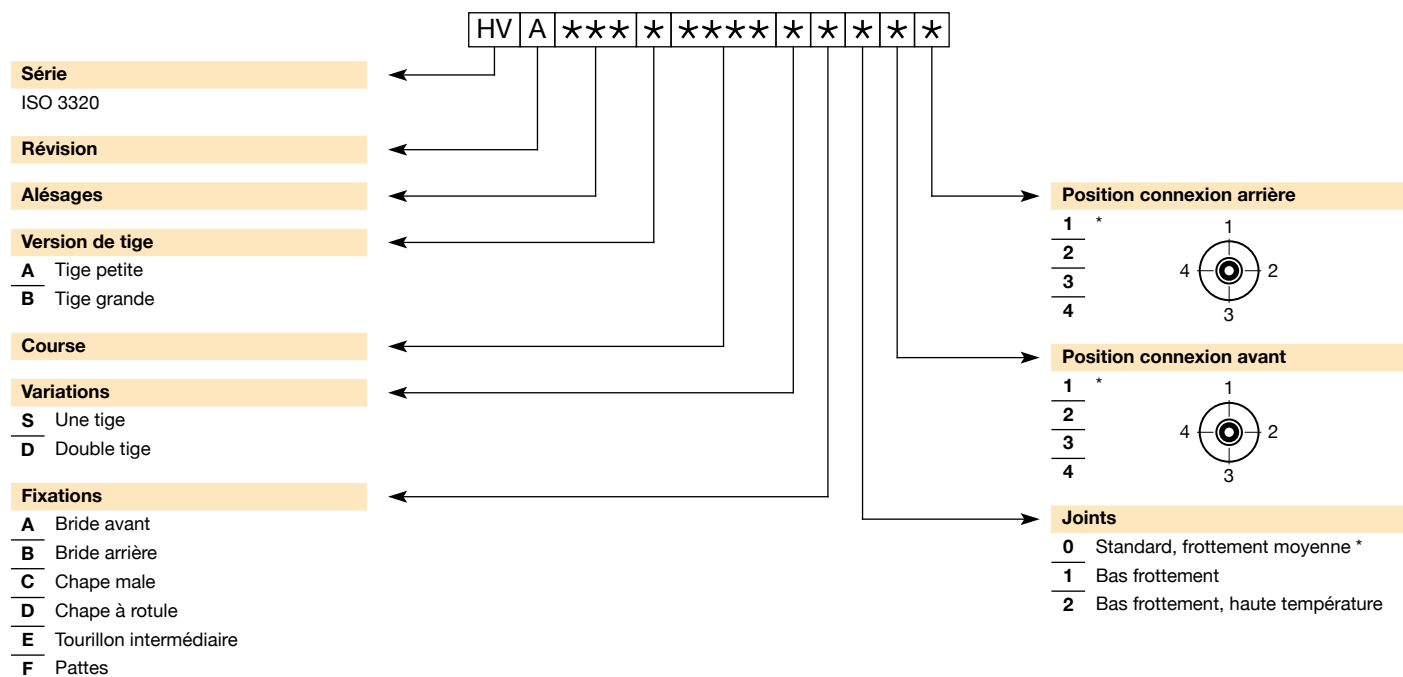
### Caractéristiques techniques

|                                                 |                                              |    |    |    |    |     |    |    |    |     |    |     |    |     |     |     |     |         |
|-------------------------------------------------|----------------------------------------------|----|----|----|----|-----|----|----|----|-----|----|-----|----|-----|-----|-----|-----|---------|
| Norme                                           | ISO 3320                                     |    |    |    |    |     |    |    |    |     |    |     |    |     |     |     |     |         |
| Pression nominale                               | 160 bar                                      |    |    |    |    |     |    |    |    |     |    |     |    |     |     |     |     |         |
| Pression d'épreuve                              | 240 bar                                      |    |    |    |    |     |    |    |    |     |    |     |    |     |     |     |     |         |
| Température ambiante                            | -20°C → +80°C                                |    |    |    |    |     |    |    |    |     |    |     |    |     |     |     |     |         |
| Température fluide                              | -20°C → +160°C avec joints viton             |    |    |    |    |     |    |    |    |     |    |     |    |     |     |     |     |         |
|                                                 | -20°C → +80°C                                |    |    |    |    |     |    |    |    |     |    |     |    |     |     |     |     |         |
| Fluide                                          | Huile minérale - Autres fluides sur commande |    |    |    |    |     |    |    |    |     |    |     |    |     |     |     |     |         |
| Piston (mm)                                     | 32                                           | 40 |    | 50 |    | 63  |    | 80 |    | 100 |    | 125 |    | 160 |     | 200 |     | 250     |
| Tige (mm)                                       | 20                                           | 22 | 28 | 28 | 36 | 36  | 45 | 45 | 56 | 56  | 70 | 70  | 90 | 90  | 110 | 110 | 140 | 140 180 |
| Vitesse maximale (m/s) - joints standard        | 0,5                                          |    |    |    |    | 0,4 |    |    |    |     |    |     |    |     |     |     |     |         |
| Vitesse maximale (m/s) - joints faible friction | 1                                            |    |    |    |    |     |    |    |    |     |    |     |    |     |     |     |     |         |

# Série HV

## Vérins Hydrauliques ISO 3320

### Codification



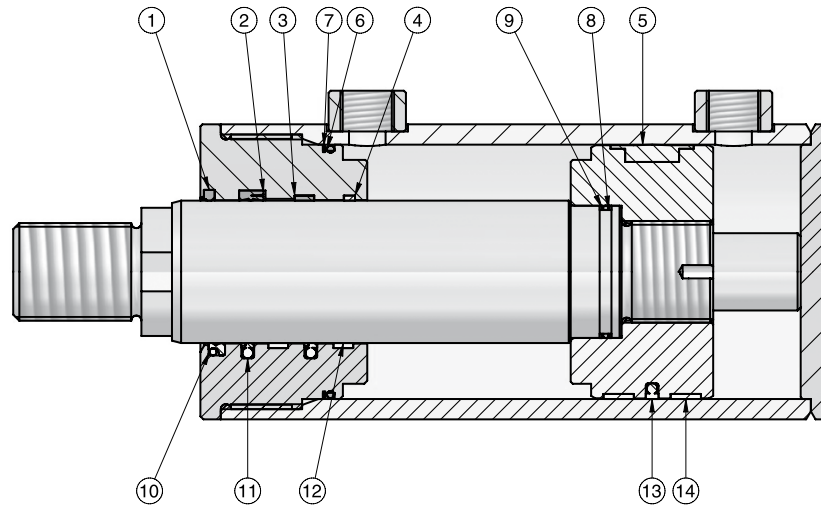
Une entretoise est disposée pour les courses supérieures à 1000mm  
 Elle augmente la longueur du vérin de :  
 1001-1500 : +50mm longueur totale  
 1501-2000 : +100mm longueur totale  
 2001-2500 : +150mm longueur totale  
 2501-3000 : +200mm longueur totale

\* Option par défaut

## Série HV

### Vérins Hydrauliques ISO 3320

#### Kit de joints



| Position | Description                                |
|----------|--------------------------------------------|
| 1        | Racleur                                    |
| 2        | Joint tige                                 |
| 3        | 3 Bague guidage piston-tige                |
| 4        | Bande guidage piston-tige                  |
| 5        | Joint piston                               |
| 6        | Joint torique                              |
| 7        | Joint anti-extrusion                       |
| 8        | Joint torique                              |
| 9        | Joint anti-extrusion                       |
| 10       | Racleur (bas frottement)                   |
| 11       | Bande guidage piston-tige (bas frottement) |
| 12       | Joint piston (bas frottement)              |
| 13       | Bande guidage piston-tige (bas frottement) |
| 14       | Banda guía pistón-vástago (bas frottement) |

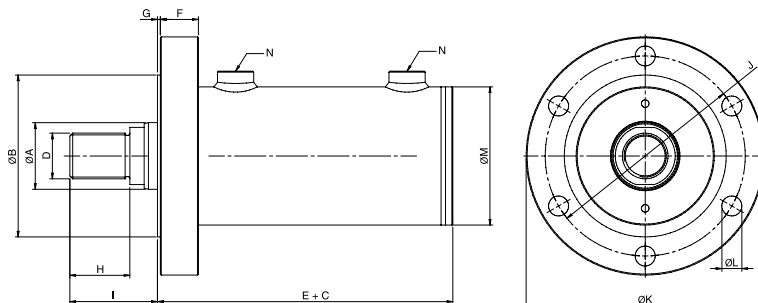
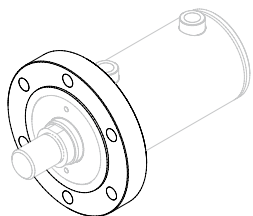
|               |              |              |                                       |
|---------------|--------------|--------------|---------------------------------------|
| KHV           | ***          | ***          | *                                     |
| Série ISO3320 | Alésage      | Tige         | Type de joints                        |
|               | 032 = 32 mm  | 020 = 20 mm  | 0 = Standard frottement moyenne       |
|               | 040 = 40 mm  | 022 = 22 mm  | 1 = Bas frottement                    |
|               | 050 = 50 mm  | 028 = 28 mm  | 2 = bas frottement, haute température |
|               | 063 = 63 mm  | 036 = 36 mm  |                                       |
|               | 080 = 80 mm  | 045 = 45 mm  |                                       |
|               | 100 = 100 mm | 056 = 56 mm  |                                       |
|               | 125 = 125 mm | 070 = 70 mm  |                                       |
|               | 160 = 160 mm | 090 = 90 mm  |                                       |
|               | 200 = 200 mm | 110 = 110 mm |                                       |
|               | 250 = 250 mm | 140 = 140 mm |                                       |
|               |              | 180 = 180 mm |                                       |

## Série HV

### Vérins Hydrauliques ISO 3320

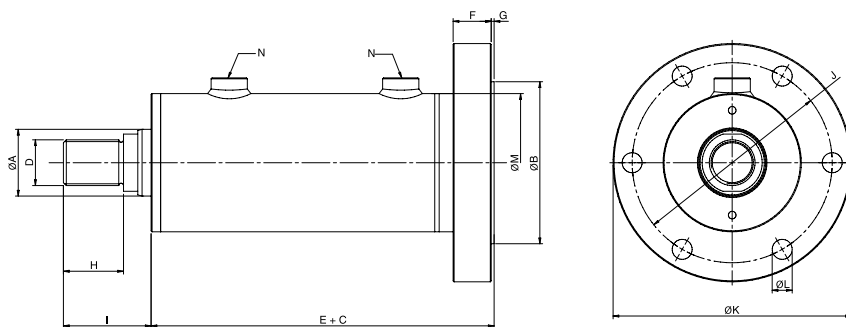
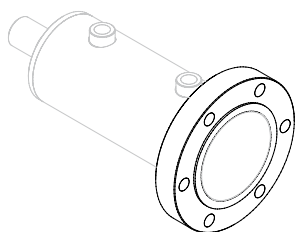
#### Accessoires de fixation

##### Bride ronde avant



| Ø   | ØA  | E   | B   | D         | F  | G | H   | I   | J   | K   | L  | M   | N       |
|-----|-----|-----|-----|-----------|----|---|-----|-----|-----|-----|----|-----|---------|
| 32  | 20  | 107 | 52  | M14 x 1,5 | 15 | 2 | 18  | 35  | 67  | 80  | 7  | 42  | 1/4"G   |
| 40  | 22  | 97  | 60  | M16 x 1,5 | 15 | 2 | 22  | 40  | 82  | 100 | 9  | 50  | 3/8"G   |
|     | 28  |     |     |           |    |   |     |     |     |     |    |     |         |
| 50  | 28  | 104 | 75  | M20 x 1,5 | 18 | 2 | 28  | 48  | 103 | 125 | 11 | 60  | 3/8"G   |
|     | 36  |     |     |           |    |   |     |     |     |     |    |     |         |
| 63  | 36  | 106 | 90  | M27 x 2   | 20 | 2 | 36  | 58  | 120 | 145 | 13 | 75  | 3/8"G   |
|     | 45  |     |     |           |    |   |     |     |     |     |    |     |         |
| 80  | 45  | 126 | 110 | M33 x 2   | 28 | 2 | 45  | 68  | 142 | 170 | 15 | 95  | 3/8"G   |
|     | 56  |     |     |           |    |   |     |     |     |     |    |     |         |
| 100 | 56  | 138 | 135 | M42 x 2   | 30 | 3 | 56  | 85  | 170 | 202 | 17 | 115 | 1/2"G   |
|     | 70  |     |     |           |    |   |     |     |     |     |    |     |         |
| 125 | 70  | 210 | 170 | M48 x 2   | 40 | 3 | 63  | 92  | 210 | 250 | 21 | 145 | 3/4"G   |
|     | 90  |     |     |           |    |   |     |     |     |     |    |     |         |
| 160 | 90  | 238 | 215 | M80 x 3   | 54 | 3 | 95  | 130 | 270 | 320 | 29 | 185 | 1"G     |
|     | 110 |     |     |           |    |   |     |     |     |     |    |     |         |
| 200 | 110 | 278 | 270 | M80 x 3   | 65 | 3 | 95  | 130 | 330 | 385 | 32 | 230 | 1 1/4"G |
|     | 140 |     |     |           |    |   |     |     |     |     |    |     |         |
| 250 | 140 | 338 | 330 | M110 x 3  | 65 | 5 | 110 | 150 | 390 | 440 | 29 | 298 | 1 1/4"G |
|     | 180 |     |     |           |    |   |     |     |     |     |    |     |         |

##### Bride ronde arrière



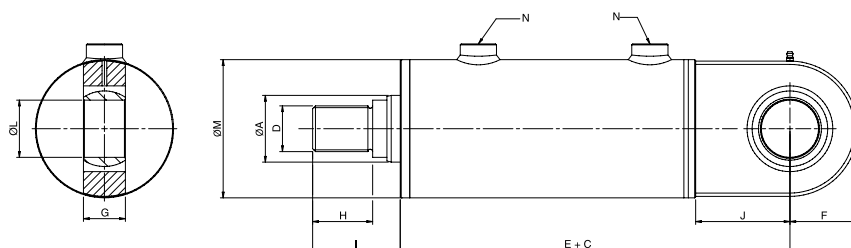
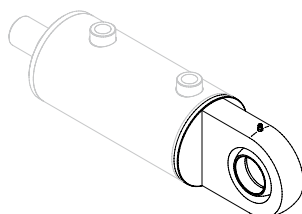
| Ø   | ØA  | E   | B   | D         | F  | G | H   | I   | J   | K   | L  | M   | N       |
|-----|-----|-----|-----|-----------|----|---|-----|-----|-----|-----|----|-----|---------|
| 32  | 20  | 125 | 52  | M14 x 1,5 | 15 | 2 | 18  | 35  | 67  | 80  | 7  | 42  | 1/4"G   |
| 40  | 22  | 130 | 60  | M16 x 1,5 | 15 | 2 | 22  | 40  | 82  | 100 | 9  | 50  | 3/8"G   |
|     | 28  |     |     |           |    |   |     |     |     |     |    |     |         |
| 50  | 28  | 139 | 75  | M20 x 1,5 | 18 | 2 | 28  | 48  | 103 | 125 | 11 | 60  | 3/8"G   |
|     | 36  |     |     |           |    |   |     |     |     |     |    |     |         |
| 63  | 36  | 149 | 90  | M27 x 2   | 20 | 2 | 36  | 58  | 120 | 145 | 13 | 75  | 3/8"G   |
|     | 45  |     |     |           |    |   |     |     |     |     |    |     |         |
| 80  | 45  | 171 | 110 | M33 x 2   | 28 | 2 | 45  | 68  | 142 | 170 | 15 | 95  | 3/8"G   |
|     | 56  |     |     |           |    |   |     |     |     |     |    |     |         |
| 100 | 56  | 185 | 135 | M42 x 2   | 30 | 3 | 56  | 85  | 170 | 202 | 17 | 115 | 1/2"G   |
|     | 70  |     |     |           |    |   |     |     |     |     |    |     |         |
| 125 | 70  | 260 | 170 | M48 x 2   | 40 | 3 | 63  | 92  | 210 | 250 | 21 | 145 | 3/4"G   |
|     | 90  |     |     |           |    |   |     |     |     |     |    |     |         |
| 160 | 90  | 308 | 215 | M80 x 3   | 54 | 3 | 95  | 130 | 270 | 320 | 29 | 185 | 1"G     |
|     | 110 |     |     |           |    |   |     |     |     |     |    |     |         |
| 200 | 110 | 363 | 270 | M80 x 3   | 65 | 3 | 95  | 130 | 330 | 385 | 32 | 230 | 1 1/4"G |
|     | 140 |     |     |           |    |   |     |     |     |     |    |     |         |
| 250 | 140 | 408 | 330 | M110 x 3  | 65 | 5 | 110 | 150 | 390 | 440 | 29 | 298 | 1 1/4"G |
|     | 180 |     |     |           |    |   |     |     |     |     |    |     |         |

## Série HV

### Vérins Hydrauliques ISO 3320

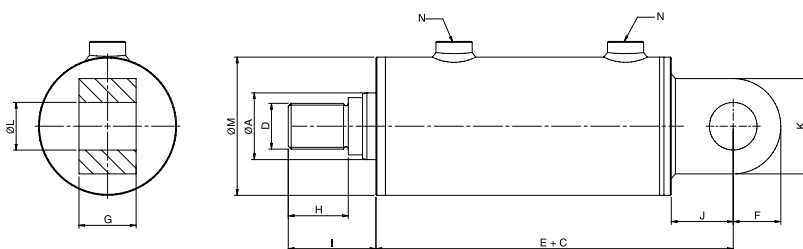
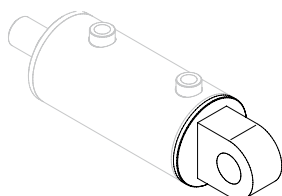
#### Accessoires de fixation

#### Chape à rotule



| Ø   | ØA         | E   | D         | F     | G  | H   | I   | J   | L   | M   | N       |
|-----|------------|-----|-----------|-------|----|-----|-----|-----|-----|-----|---------|
| 32  | 20         | 145 | M14 x 1,5 | 22,8  | 16 | 18  | 35  | 38  | 20  | 42  | 1/4"G   |
| 40  | 22<br>28   | 142 | M16 x 1,5 | 27,5  | 20 | 22  | 40  | 45  | 25  | 50  | 3/8"G   |
| 50  | 28<br>36   | 157 | M20 x 1,5 | 32,5  | 22 | 36  | 48  | 51  | 29  | 60  | 3/8"G   |
| 63  | 36<br>45   | 167 | M27 x 2   | 41,5  | 25 | 36  | 58  | 61  | 35  | 75  | 3/8"G   |
| 80  | 45<br>56   | 195 | M33 x 2   | 50    | 28 | 45  | 68  | 69  | 40  | 95  | 3/8"G   |
| 100 | 56<br>70   | 226 | M42 x 2   | 61,5  | 35 | 56  | 85  | 88  | 50  | 115 | 1/2"G   |
| 125 | 70<br>90   | 310 | M48 x 2   | 71    | 44 | 63  | 92  | 99  | 60  | 145 | 3/4"G   |
| 160 | 90<br>110  | 379 | M80 x 3   | 90    | 55 | 95  | 130 | 141 | 80  | 185 | 1"G     |
| 200 | 110<br>140 | 433 | M80 x 3   | 115   | 70 | 95  | 130 | 155 | 100 | 230 | 1 1/4"G |
| 250 | 140<br>180 | 468 | M110 x 3  | 147,5 | 70 | 110 | 150 | 165 | 110 | 298 | 1 1/4"G |

#### Chape male



| Ø   | ØA         | E   | D         | F   | G   | H   | I   | J   | K   | L   | M   | N       |
|-----|------------|-----|-----------|-----|-----|-----|-----|-----|-----|-----|-----|---------|
| 32  | 20         | 127 | M14 x 1,5 | 13  | 16  | 18  | 35  | 20  | 26  | 12  | 42  | 1/4"G   |
| 40  | 22<br>28   | 122 | M16 x 1,5 | 16  | 20  | 22  | 40  | 25  | 32  | 16  | 50  | 3/8"G   |
| 50  | 28<br>36   | 132 | M20 x 1,5 | 20  | 25  | 36  | 48  | 28  | 40  | 20  | 60  | 3/8"G   |
| 63  | 36<br>45   | 138 | M27 x 2   | 25  | 32  | 36  | 58  | 32  | 50  | 25  | 75  | 3/8"G   |
| 80  | 45<br>56   | 171 | M33 x 2   | 32  | 40  | 45  | 68  | 45  | 64  | 32  | 95  | 3/8"G   |
| 100 | 56<br>70   | 193 | M42 x 2   | 40  | 50  | 56  | 85  | 55  | 80  | 40  | 115 | 1/2"G   |
| 125 | 70<br>90   | 275 | M48 x 2   | 50  | 60  | 63  | 92  | 65  | 100 | 50  | 145 | 3/4"G   |
| 160 | 90<br>110  | 313 | M80 x 3   | 63  | 80  | 95  | 130 | 75  | 126 | 63  | 185 | 1"G     |
| 200 | 110<br>140 | 373 | M80 x 3   | 80  | 100 | 95  | 130 | 95  | 160 | 80  | 230 | 1 1/4"G |
| 250 | 140<br>180 | 468 | M110 x 3  | 100 | 120 | 110 | 150 | 130 | 200 | 100 | 298 | 1 1/4"G |

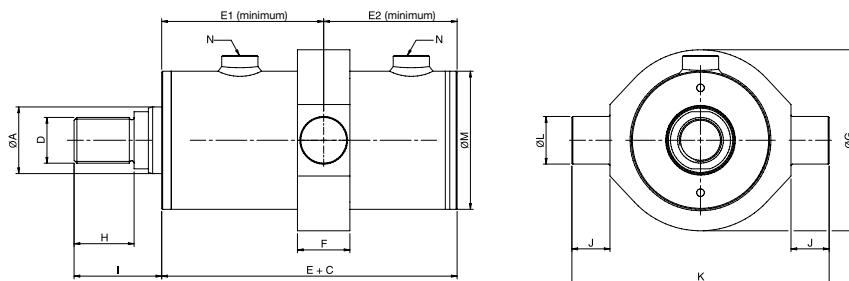
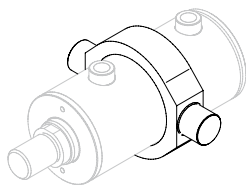


## Série HV

### Vérins Hydrauliques ISO 3320

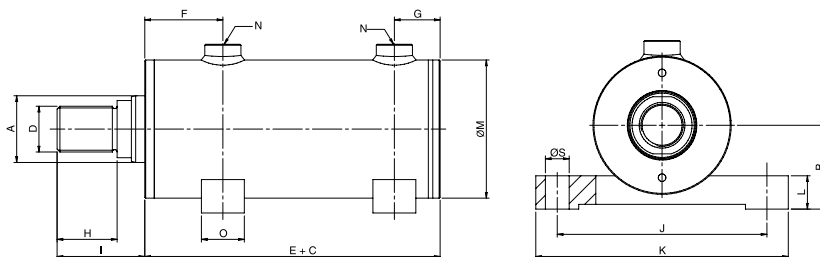
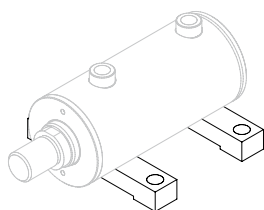
#### Accessoires de fixation

##### Tourillon intermédiaire



| Ø   | ØA         | E   | E1  | E2  | D         | F   | G   | H   | I   | J  | K   | L   | M   | N       |
|-----|------------|-----|-----|-----|-----------|-----|-----|-----|-----|----|-----|-----|-----|---------|
| 32  | 20         | 107 | 65  | 58  | M14 x 1,5 | 20  | 56  | 18  | 35  | 12 | 80  | 16  | 42  | 1/4"G   |
| 40  | 22<br>28   | 97  | 74  | 64  | M16 x 1,5 | 24  | 70  | 22  | 40  | 16 | 102 | 20  | 50  | 3/8"G   |
| 50  | 28<br>36   | 104 | 80  | 69  | M20 x 1,5 | 30  | 85  | 28  | 48  | 20 | 125 | 25  | 60  | 3/8"G   |
| 63  | 36<br>45   | 106 | 84  | 70  | M27 x 2   | 40  | 105 | 36  | 58  | 25 | 155 | 32  | 75  | 3/8"G   |
| 80  | 45<br>56   | 126 | 95  | 75  | M33 x 2   | 40  | 125 | 45  | 68  | 25 | 175 | 32  | 95  | 3/8"G   |
| 100 | 56<br>70   | 138 | 106 | 82  | M42 x 2   | 45  | 156 | 56  | 85  | 32 | 220 | 40  | 115 | 1/2"G   |
| 125 | 70<br>90   | 210 | 140 | 115 | M48 x 2   | 55  | 190 | 63  | 92  | 40 | 270 | 50  | 145 | 3/4"G   |
| 160 | 90<br>110  | 238 | 175 | 130 | M80 x 3   | 70  | 250 | 95  | 130 | 50 | 350 | 63  | 185 | 1"G     |
| 200 | 110<br>140 | 278 | 190 | 145 | M80 x 3   | 90  | 300 | 95  | 130 | 63 | 426 | 80  | 230 | 1 1/4"G |
| 250 | 140<br>180 | 338 | 257 | 210 | M110 x 3  | 110 | 345 | 110 | 150 | 80 | 520 | 100 | 298 | 1 1/4"G |

##### Pattes



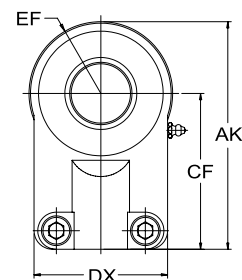
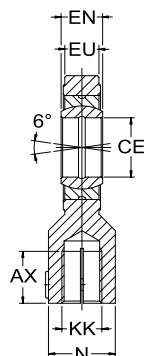
| Ø   | ØA         | E   | B   | D         | H   | I   | J   | K   | L  | M   | N       | O  | S  |
|-----|------------|-----|-----|-----------|-----|-----|-----|-----|----|-----|---------|----|----|
| 32  | 20         | 107 | 28  | M14 x 1,5 | 18  | 35  | 75  | 95  | 16 | 42  | 1/4"G   | 20 | 11 |
| 40  | 22<br>28   | 97  | 35  | M16 x 1,5 | 22  | 40  | 94  | 118 | 20 | 50  | 3/8"G   | 25 | 13 |
| 50  | 28<br>36   | 104 | 40  | M20 x 1,5 | 36  | 48  | 105 | 130 | 20 | 60  | 3/8"G   | 25 | 15 |
| 63  | 36<br>45   | 106 | 50  | M27 x 2   | 36  | 58  | 130 | 160 | 25 | 75  | 3/8"G   | 30 | 17 |
| 80  | 45<br>56   | 126 | 62  | M33 x 2   | 45  | 68  | 160 | 195 | 30 | 95  | 3/8"G   | 40 | 19 |
| 100 | 56<br>70   | 138 | 73  | M42 x 2   | 56  | 85  | 185 | 225 | 30 | 115 | 1/2"G   | 40 | 23 |
| 125 | 70<br>90   | 210 | 88  | M48 x 2   | 63  | 92  | 220 | 265 | 35 | 145 | 3/4"G   | 45 | 25 |
| 160 | 90<br>110  | 238 | 100 | M80 x 3   | 95  | 130 | 295 | 355 | 40 | 185 | 1"G     | 60 | 35 |
| 200 | 110<br>140 | 278 | 115 | M80 x 3   | 95  | 130 | 355 | 425 | 50 | 230 | 1 1/4"G | 70 | 41 |
| 250 | 140<br>180 | 338 | 140 | M110 x 3  | 110 | 150 | 425 | 510 | 65 | 298 | 1 1/4"G | 78 | 47 |

# Accessoires

## Vérins hydrauliques

### Embout à rotule ISO 8133

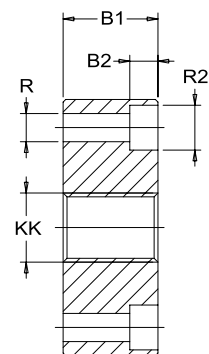
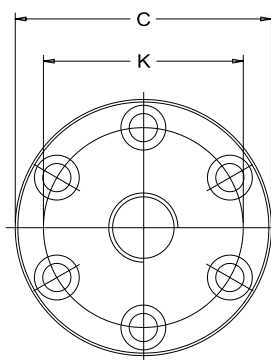
Valable pour séries  
HR, HT et HV



| Tige | KK<br>(métrique) | EN              | EU | CE<br>$\varnothing_{-0,008}^0$ | EF<br>max. | N<br>max. | DX  | CF <sup>js13</sup> | AK    | AX <sub>min.</sub> | Référence |
|------|------------------|-----------------|----|--------------------------------|------------|-----------|-----|--------------------|-------|--------------------|-----------|
| 14   | M12x1,25         | 14 $_{-0,12}^0$ | 11 | 16 $_{-0,008}^0$               | 21         | 21        | 45  | 48                 | 69    | 17                 | HRT014AH  |
| 18   | M14x1,5          | 16 $_{-0,12}^0$ | 13 | 20 $_{-0,010}^0$               | 25         | 25        | 55  | 58                 | 83    | 19                 | HRT018AH  |
| 22   | M16x1,5          | 20 $_{-0,12}^0$ | 17 | 25 $_{-0,010}^0$               | 31         | 30        | 62  | 68                 | 99    | 23                 | HRT022AH  |
| 28   | M20x1,5          | 22 $_{-0,12}^0$ | 19 | 30 $_{-0,010}^0$               | 38         | 36        | 80  | 85                 | 123   | 29                 | HRT028AH  |
| 36   | M27x2            | 28 $_{-0,12}^0$ | 23 | 40 $_{-0,012}^0$               | 48         | 45        | 90  | 105                | 153   | 37                 | HRT036AH  |
| 45   | M33x2            | 35 $_{-0,15}^0$ | 30 | 50 $_{-0,012}^0$               | 58         | 55        | 105 | 130                | 188   | 46                 | HRT045AH  |
| 56   | M42x2            | 44 $_{-0,15}^0$ | 38 | 60 $_{-0,015}^0$               | 75         | 68        | 134 | 150                | 225   | 57                 | HRT056AH  |
| 70   | M48x2            | 55 $_{-0,15}^0$ | 47 | 80 $_{-0,015}^0$               | 97,5       | 78        | 156 | 185                | 282,2 | 64                 | HRT070AH  |
| 90   | M64x3            | 70 $_{-0,20}^0$ | 57 | 100 $_{-0,020}^0$              | 117,5      | 100       | 190 | 240                | 357,5 | 86                 | HRT090AH  |

### Bride tige ISO 8132

Valable pour séries  
HR, HT et HV



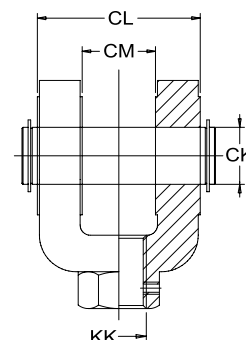
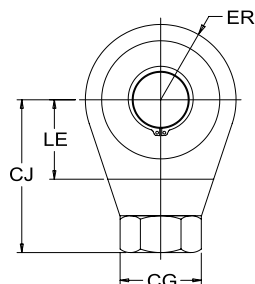
| Tige | KK<br>(métrique) | B1 | B2   | C<br>$\varnothing$ | K<br>$\varnothing$ | R x N°<br>$\varnothing$ Q.ty | R2   | Référence |
|------|------------------|----|------|--------------------|--------------------|------------------------------|------|-----------|
| 14   | M12x1,25         | 17 | 6,8  | 56                 | 40                 | 6,6 4                        | 11   | HRT014AA  |
| 18   | M14x1,5          | 19 | 9    | 63                 | 45                 | 9 4                          | 14,5 | HRT018AA  |
| 22   | M16x1,5          | 23 | 9    | 72                 | 54                 | 9 6                          | 14,5 | HRT022AA  |
| 28   | M20x1,5          | 29 | 9    | 82                 | 63                 | 9 6                          | 14,5 | HRT028AA  |
| 36   | M27x2            | 37 | 11   | 100                | 78                 | 11 6                         | 17,5 | HRT036AA  |
| 45   | M33x2            | 46 | 13   | 120                | 95                 | 13,5 8                       | 20   | HRT045AA  |
| 56   | M42x2            | 57 | 17,5 | 150                | 120                | 17,5 8                       | 26   | HRT056AA  |
| 70   | M48x2            | 64 | 21,5 | 190                | 150                | 22 8                         | 33   | HRT070AA  |
| 90   | M64x3            | 86 | 25   | 230                | 180                | 26 8                         | 40   | HRT090AA  |

## Accessoires

### Vérins Hydrauliques

#### Extrémité à chape avec axe ISO 8133

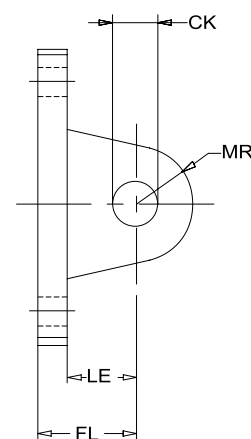
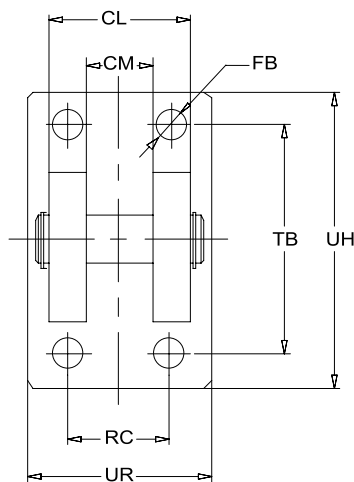
Valable pour séries  
HR, HT et HV



| Tige | KK<br>(métrique) | CK <sup>H9</sup><br>Ø | CL <sub>máx.</sub> | CM <sup>h12</sup> | CJ <sup>js13</sup> | LE <sub>min.</sub> | ER <sub>máx.</sub> | CG  | Référence |
|------|------------------|-----------------------|--------------------|-------------------|--------------------|--------------------|--------------------|-----|-----------|
| 14   | M12x1,25         | 12                    | 32                 | 16                | 36                 | 19                 | 17                 | 21  | HRT014AG  |
| 18   | M14x1,5          | 14                    | 40                 | 20                | 38                 | 19                 | 17                 | 21  | HRT018AG  |
| 22   | M16x1,5          | 20                    | 60                 | 30                | 54                 | 32                 | 29                 | 32  | HRT022AG  |
| 28   | M20x1,5          | 20                    | 60                 | 30                | 60                 | 32                 | 29                 | 32  | HRT028AG  |
| 36   | M27x2            | 28                    | 80                 | 40                | 75                 | 39                 | 34                 | 40  | HRT036AG  |
| 45   | M33x2            | 36                    | 100                | 50                | 99                 | 54                 | 50                 | 56  | HRT045AG  |
| 56   | M42x2            | 45                    | 120                | 60                | 113                | 57                 | 53                 | 56  | HRT056AG  |
| 70   | M48x2            | 56                    | 140                | 70                | 126                | 63                 | 59                 | 75  | HRT070AG  |
| 90   | M64x3            | 70                    | 160                | 80                | 168                | 83                 | 78                 | 95  | HRT090AG  |
| 110  | M80x3            | 70                    | 160                | 80                | 168                | 83                 | 78                 | 95  | HRT110AG  |
| 140  | M100x3           | 100                   | 230                | 100               | 250                | 90                 | 95                 | 160 | HRT140AG  |

#### Chape femelle ISO 8132

Valable pour séries  
HR, HT et HV

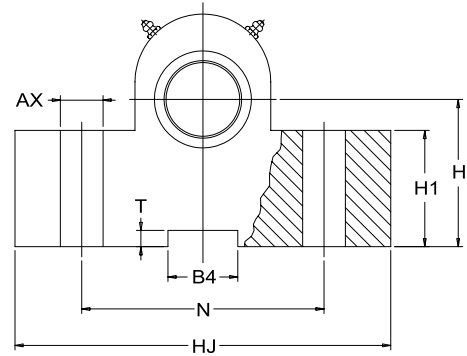
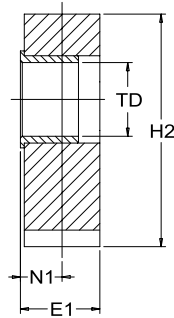


| CK <sup>H9</sup><br>Ø | CM <sup>A16</sup> | CL <sup>h13</sup> | FL <sup>js14</sup> | LE | FB<br>Ø | TB <sup>js14</sup> | UH  | RC <sup>js14</sup> | UR  | MR | Référence |
|-----------------------|-------------------|-------------------|--------------------|----|---------|--------------------|-----|--------------------|-----|----|-----------|
| 12                    | 12                | 28                | 34                 | 22 | 9       | 50                 | 70  | 20                 | 40  | 12 | HRT012AC  |
| 16                    | 16                | 36                | 40                 | 27 | 11      | 65                 | 90  | 26                 | 50  | 16 | HRT016AC  |
| 20                    | 20                | 45                | 45                 | 30 | 11      | 75                 | 98  | 32                 | 58  | 20 | HRT020AC  |
| 25                    | 25                | 56                | 55                 | 37 | 13,5    | 85                 | 113 | 40                 | 70  | 25 | HRT025AC  |
| 32                    | 32                | 70                | 65                 | 43 | 17,5    | 110                | 143 | 50                 | 85  | 32 | HRT032AC  |
| 40                    | 40                | 90                | 76                 | 52 | 22      | 130                | 170 | 65                 | 108 | 40 | HRT040AC  |
| 50                    | 50                | 110               | 95                 | 65 | 26      | 170                | 220 | 80                 | 130 | 50 | HRT050AC  |
| 63                    | 63                | 140               | 112                | 75 | 33      | 210                | 270 | 100                | 160 | 63 | HRT063AC  |
| 80                    | 80                | 170               | 140                | 95 | 39      | 250                | 320 | 125                | 210 | 80 | HRT080AC  |

## Accessoires Vérins Hydrauliques

### Fixation support tourillons ISO 8132

Valable pour séries  
HR et HT



| Alésage | AX <sup>H13</sup><br>Ø | H <sup>A16</sup> | H1  | H2 <sub>max.</sub> | TD <sup>H7</sup> | HJ  | E1 | N   | N1 | B4 <sup>N9</sup> | T <sup>+0,3<br/>+0</sup> | Référence |
|---------|------------------------|------------------|-----|--------------------|------------------|-----|----|-----|----|------------------|--------------------------|-----------|
| 25      | 9                      | 34               | 25  | 49                 | 12               | 63  | 17 | 40  | 8  | 10               | 3,3                      | HRT025AF  |
| 32      | 11                     | 40               | 30  | 59                 | 16               | 80  | 21 | 50  | 10 | 16               | 4,3                      | HRT032AF  |
| 40      | 11                     | 45               | 38  | 69                 | 20               | 90  | 21 | 60  | 10 | 16               | 4,3                      | HRT040AF  |
| 50      | 13,5                   | 55               | 45  | 80                 | 25               | 110 | 26 | 80  | 12 | 25               | 5,4                      | HRT050AF  |
| 63      | 17,5                   | 65               | 52  | 100                | 32               | 150 | 33 | 110 | 15 | 25               | 5,4                      | HRT063AF  |
| 80      | 22                     | 76               | 60  | 120                | 40               | 170 | 41 | 125 | 16 | 36               | 8,4                      | HRT080AF  |
| 100     | 26                     | 95               | 75  | 140                | 50               | 210 | 51 | 160 | 20 | 36               | 8,4                      | HRT100AF  |
| 125     | 33                     | 112              | 85  | 177                | 63               | 265 | 61 | 200 | 25 | 50               | 11,4                     | HRT125AF  |
| 160     | 39                     | 140              | 112 | 220                | 80               | 325 | 81 | 250 | 31 | 50               | 11,4                     | HRT160AF  |



## Vérins spéciaux

Étude, conception et fabrication spéciaux.

Mesures, fonctions, matériaux et accessoires sur mesure.

Notre bureau d'étude est à votre disposition pour vous conseiller et concevoir le vérin que s'adapte le mieux à vos besoins.

Application dans d'innombrables secteurs: le transbordement en mer, équipes de manutention des marchandises dans les ports, les grues, les infrastructures, les presses, l'acier, les remorques ....



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- DONOSTIA-SAN SEBASTIÁN  
Paseo Sarroeta, 4  
E-20014 Donostia-San Sebastián  
Tel.: (+34) 943 44 50 80  
Fax: (+34) 943 44 51 53  
E-mail: info@aircontrol.es

## SUCCURSALES

- BILBAO  
Tel.: (+34) 943 44 50 80  
Fax: (+34) 943 44 51 53  
E-mail: info@aircontrol.es
- MADRID  
Tel.: (+34) 943 44 50 80  
Fax: (+34) 943 44 51 53  
E-mail: info@aircontrol.es
- BARCELONA  
Ramón Albó 71-73  
E-08027 Barcelona  
Tel.: (+34) 93 498 81 30  
Fax: (+34) 93 408 41 08  
E-mail: info@aircontrol.es
- SEVILLA  
REINSUR S.L.  
Avda. Alcalde Luis Uruñuela s/n  
Edificio Congreso, Mod. 421  
E-41020 Sevilla  
Tel.: (+34) 95 425 85 17  
Fax: (+34) 95 425 85 17  
E-mail: reinsur\_sl@yahoo.es
- LISBOA (PORTUGAL)  
Alameda Fernão Lopes 31 A, Torre 2 - Miraflores  
P-1495-136 Algés (Lisboa)  
Tel.: (+351) 21 410 13 57  
Fax: (+351) 21 410 56 08  
E-mail: geral@air-control.pt



**Distribué par :**

