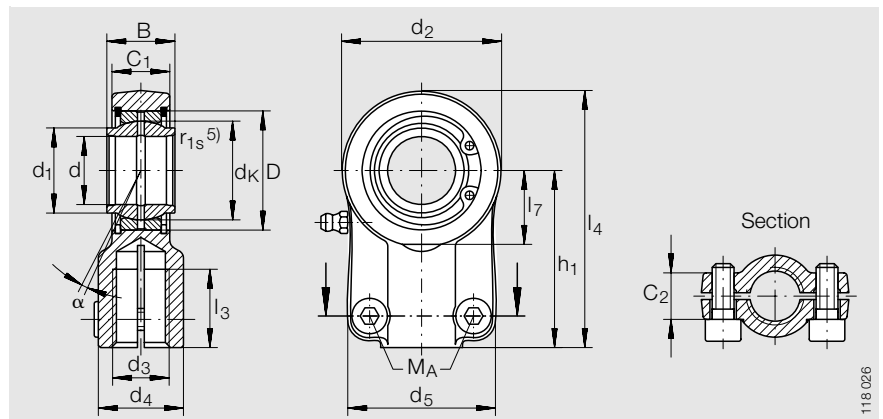


# Hydraulic rod ends

requiring maintenance  
DIN 24338, ISO 6982  
Sliding contact surface:  
Steel/steel

Series GIHN-K..LO



GIHN-K..LO ( $d \leq 50$  mm)

Dimension table · Dimensions in mm

| Shaft<br>diameter<br><br>d | Designation <sup>1)</sup>      | Mass<br><br>≈kg | Dimensions            |     |                      |                |                |                |                |                |                |                |
|----------------------------|--------------------------------|-----------------|-----------------------|-----|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|                            |                                |                 | d <sup>2)</sup>       | D   | B                    | d <sub>K</sub> | d <sub>1</sub> | d <sub>2</sub> | d <sub>3</sub> | d <sub>4</sub> | h <sub>1</sub> | C <sub>1</sub> |
| 12                         | GIHN-K 12 LO <sup>2)4)</sup>   | 0,1             | 12 <sup>+0,018</sup>  | 22  | 12 <sub>-0,18</sub>  | 18             | 15,5           | 32             | M 12×1,25      | 16,5           | 38             | 10,6           |
| 16                         | GIHN-K 16 LO <sup>4)</sup>     | 0,2             | 16 <sup>+0,018</sup>  | 28  | 16 <sub>-0,18</sub>  | 23             | 20             | 40             | M 14×1,5       | 21             | 44             | 13             |
| 20                         | GIHN-K 20 LO                   | 0,4             | 20 <sup>+0,021</sup>  | 35  | 20 <sub>-0,21</sub>  | 29             | 25             | 47             | M 16×1,5       | 25             | 52             | 17             |
| 25                         | GIHN-K 25 LO                   | 0,66            | 25 <sup>+0,021</sup>  | 42  | 25 <sub>-0,21</sub>  | 35,5           | 30,5           | 58             | M 20×1,5       | 30             | 65             | 21             |
| 32                         | GIHN-K 32 LO                   | 1,2             | 32 <sup>+0,025</sup>  | 52  | 32 <sub>-0,25</sub>  | 44             | 38             | 70             | M 27×2         | 38             | 80             | 27             |
| 40                         | GIHN-K 40 LO <sup>6)</sup>     | 2,1             | 40 <sup>+0,025</sup>  | 62  | 40 <sub>-0,25</sub>  | 53             | 46             | 89             | M 33×2         | 47             | 97             | 32             |
| 50                         | GIHN-K 50 LO <sup>6)</sup>     | 4,4             | 50 <sup>+0,025</sup>  | 75  | 50 <sub>-0,25</sub>  | 66             | 57             | 108            | M 42×2         | 58             | 120            | 40             |
| 63                         | GIHN-K 63 LO <sup>6)</sup>     | 7,6             | 63 <sup>+0,03</sup>   | 95  | 63 <sub>-0,3</sub>   | 83             | 71,5           | 132            | M 48×2         | 70             | 140            | 52             |
| 70                         | GIHN-K 70 LO <sup>3)6)7)</sup> | 9,5             | 70 <sup>+0,03</sup>   | 105 | 70 <sub>-0,3</sub>   | 92             | 79             | 155            | M 56×2         | 80             | 160            | 57             |
| 80                         | GIHN-K 80 LO <sup>6)</sup>     | 14,5            | 80 <sup>+0,03</sup>   | 120 | 80 <sub>-0,3</sub>   | 105            | 91             | 168            | M 64×3         | 90             | 180            | 66             |
| 90                         | GIHN-K 90 LO <sup>3)6)</sup>   | 17              | 90 <sup>+0,035</sup>  | 130 | 90 <sub>-0,35</sub>  | 115            | 99             | 185            | M 72×3         | 100            | 195            | 72             |
| 100                        | GIHN-K 100 LO                  | 28              | 100 <sup>+0,035</sup> | 150 | 100 <sub>-0,35</sub> | 130            | 113            | 210            | M 80×3         | 110            | 210            | 84             |
| 110                        | GIHN-K 110 LO <sup>3)</sup>    | 32              | 110 <sup>+0,035</sup> | 160 | 110 <sub>-0,35</sub> | 140            | 124            | 235            | M 90×3         | 125            | 235            | 88             |
| 125                        | GIHN-K 125 LO                  | 43              | 125 <sup>+0,04</sup>  | 180 | 125 <sub>-0,4</sub>  | 160            | 138            | 262            | M100×3         | 135            | 260            | 102            |
| 160                        | GIHN-K 160 LO <sup>7)</sup>    | 80              | 160 <sup>+0,04</sup>  | 230 | 160 <sub>-0,4</sub>  | 200            | 177            | 326            | M125×4         | 165            | 310            | 130            |
| 200                        | GIHN-K 200 LO <sup>7)</sup>    | 165             | 200 <sup>+0,046</sup> | 290 | 200 <sub>-0,46</sub> | 250            | 221            | 418            | M160×4         | 215            | 390            | 162            |

<sup>1)</sup> Bore tolerance: H7 (arithmetic mean value).

<sup>2)</sup> No relubrication facility.

<sup>3)</sup> Not included in DIN 24338.

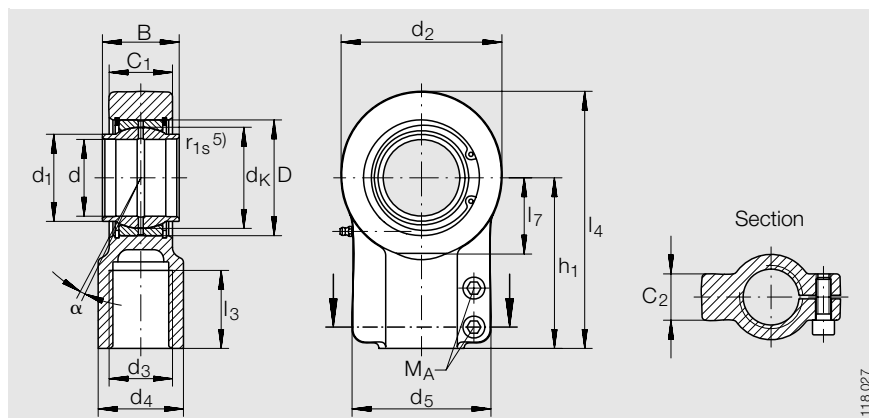
<sup>4)</sup> Cylindrical throughout.

<sup>5)</sup> Values in dimension table, page 113.

<sup>6)</sup> Thread runout or thread groove at manufacturer's discretion.

<sup>7)</sup> Price and delivery on request.

<sup>8)</sup> Basic load rating of housing.



GIHN-K..LO ( $d \geq 63$  mm)

|                     |           |            |           |           |           | Basic load ratings |                              | Radial internal clearance | Nominal cylinder force | Fixing screws<br>EN ISO 4 762 | Tightening torque<br>$M_A$<br>Nm | Shaft diameter<br>d |
|---------------------|-----------|------------|-----------|-----------|-----------|--------------------|------------------------------|---------------------------|------------------------|-------------------------------|----------------------------------|---------------------|
| $\alpha$<br>Degrees | $l_3$     | $l_4$      | $l_7$     | $d_5$     | $C_2$     | dyn.<br>$C_r$<br>N | stat.<br>$C_{0r}^{(8)}$<br>N |                           |                        |                               |                                  |                     |
| 4                   | 17        | 54         | 14        | 32        | 10,6      | 10 800             | 24 000                       | 0,023 – 0,068             | 8                      | M 5× 12                       | 8                                | <b>12</b>           |
| 4                   | 19        | 64         | 18        | 40        | 13        | 17 600             | 35 300                       | 0,030 – 0,082             | 12,5                   | M 6× 16                       | 13                               | <b>16</b>           |
| 4                   | 23        | 75,2       | 22        | 47        | 17        | 30 000             | 41 400                       | 0,030 – 0,082             | 20                     | M 8× 20                       | 32                               | <b>20</b>           |
| 4                   | 29        | 94         | 27        | 54        | 17        | 48 000             | 69 900                       | 0,037 – 0,1               | 32                     | M 8× 20                       | 32                               | <b>25</b>           |
| <b>4</b>            | <b>37</b> | <b>115</b> | <b>32</b> | <b>66</b> | <b>22</b> | <b>67 000</b>      | <b>98 800</b>                | <b>0,037 – 0,1</b>        | <b>50</b>              | <b>M10× 25</b>                | <b>64</b>                        | <b>32</b>           |
| 4                   | 46        | 141,5      | 41        | 80        | 26        | 100 000            | 175 000                      | 0,043 – 0,12              | 80                     | M10× 25                       | 64                               | <b>40</b>           |
| 4                   | 57        | 174        | 50        | 96        | 32        | 156 000            | 268 000                      | 0,043 – 0,12              | 125                    | M12× 30                       | 110                              | <b>50</b>           |
| 4                   | 64        | 211        | 62        | 114       | 38        | 255 000            | 320 000                      | 0,055 – 0,142             | 200                    | M12× 35                       | 80                               | <b>63</b>           |
| 4                   | 76        | 245        | 70        | 135       | 42        | 315 000            | 475 000                      | 0,055 – 0,142             | 250                    | M16× 40                       | 195                              | <b>70</b>           |
| 4                   | 86        | 270        | 78        | 148       | 48        | 400 000            | 527 000                      | 0,055 – 0,142             | 320                    | M16× 45                       | 195                              | <b>80</b>           |
| 4                   | 91        | 296        | 85        | 160       | 52        | 490 000            | 660 000                      | 0,055 – 0,142             | 400                    | M16× 50                       | 195                              | <b>90</b>           |
| 4                   | 96        | 322        | 98        | 178       | 62        | 610 000            | 840 000                      | 0,065 – 0,165             | 500                    | M20× 60                       | 385                              | <b>100</b>          |
| 4                   | 106       | 364        | 105       | 190       | 62        | 655 000            | 1 100 000                    | 0,065 – 0,165             | 635                    | M20× 60                       | 385                              | <b>110</b>          |
| 4                   | 113       | 405        | 120       | 200       | 72        | 950 000            | 1 393 000                    | 0,065 – 0,165             | 800                    | M20× 70                       | 385                              | <b>125</b>          |
| 4                   | 126       | 488        | 150       | 250       | 82        | 1 370 000          | 2 080 000                    | 0,065 – 0,192             | 1 250                  | M24× 80                       | 660                              | <b>160</b>          |
| 4                   | 161       | 620        | 195       | 320       | 102       | 2 120 000          | 3 456 000                    | 0,065 – 0,192             | 2 000                  | M30× 100                      | 1 350                            | <b>200</b>          |

