# Metal Bellows Couplings I Series KPH / KMH / KRH

**• simple installation • split-hub design • backlash-free • torsionally stiff • flexible**
**• stainless design • variable length**

technical data:

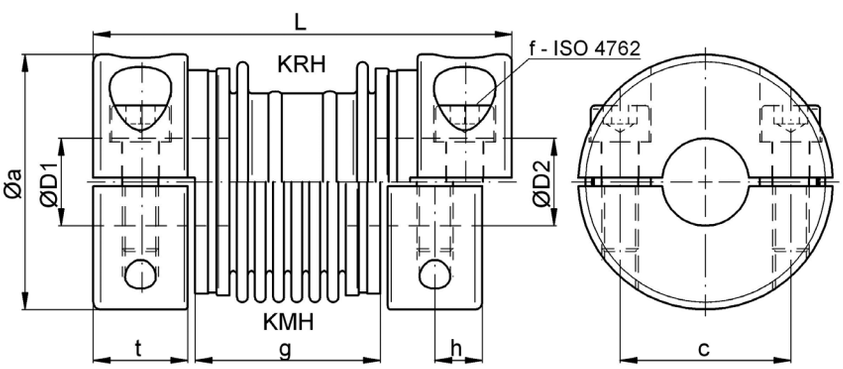
| KPH/KMH/ KRH Size | nominal torque [Nm] | moment of inertia [$10^{-3}$kgm$^2$] | torsional stiffness [Nm/arcmin] | | | max. lateral shaft misalign-ment [mm] | | | axial spring rate [N/mm] | | | lateral spring rate [N/mm] | | | nmax [upm] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | KPH | KMH | KRH | KPH | KMH | KRH | KPH | KMH | KRH | KPH | KMH | KRH | |
| **10** | 10 | 0,02 | 1,7 | 1,1 | - | 0,15 | 0,25 | - | 70 | 45 | - | 224 | 60 | - | 28000 |
| **40** | 40 | 0,2 | 9 | 5,8 | 10 | 0,2 | 0,25 | 0,2 | 70 | 51 | 170 | 450 | 190 | 170 | 17000 |
| **80** | 80 | 0,5 | 14 | 8,7 | 12 | 0,2 | 0,3 | 0,3 | 70 | 49 | 95 | 650 | 260 | 80 | 13000 |
| **200** | 200 | 1,2 | 25 | 17 | 30 | 0,2 | 0,3 | 0,3 | 98 | 80 | 120 | 1000 | 470 | 120 | 11000 |
| **400** | 400 | 3,0 | 74 | 47 | 80 | 0,2 | 0,3 | 0,3 | 135 | 100 | 260 | 1500 | 640 | 260 | 9500 |
| **900** | 900 | 8,0 | 156 | 105 | - | 0,2 | 0,3 | - | 210 | 145 | - | 3050 | 1000 | - | 7000 |

* KRH not available in this size
• three types: type **KPH** with 4-corrugation bellows / type **KMH** mit 6-corrugation bellows / type **KRH** mit 2x 1-corrugation bellows.
• note: for coupling types in split-hub design for higher torques and shorter length see series KGH.

***material:***
bellows*: stainless steel*
*hubs: high-tensile strength aluminum*
*screws: ISO 4762 / 12.9*
*temperature range: -40°C up to 200°C*



KMH



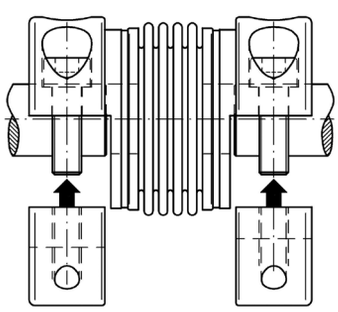

Dimensions [mm]: length dimensions according to DIN ISO 2768 cH

| KPH/KMH/ KRH | Øa** | c | f-TA | g | | | h | L | | | t | mass ~ [kg] | ØD1/2 min | ØD1/2 max |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | KPH | KMH | KRH | | KPH | KMH | KRH | | | | |
| **10** | 35 | 21 | M5 - 8 Nm | 33 | 43 | - | 9 | 73 | 83 | - | 18 | 0,1 | 6 | 15 |
| **40** | 58 | 36 | M8 - 30Nm | 39 | 48 | 51 | 13 | 95 | 104 | 107 | 26 | 0,5 | 9 | 25 |
| **80** | 75 | 47 | M10 - 50Nm | 41 | 51 | 59 | 13 | 97 | 107 | 115 | 26 | 0,8 | 12,5 | 35 |
| **200** | 89 | 56 | M12 - 90Nm | 45,5 | 57,5 | 73 | 14 | 106 | 118 | 134 | 28 | 1,2 | 19 | 42 |
| **400** | 109 | 72 | M14 - 140Nm | 52,5 | 67,5 | 84 | 15 | 117 | 132 | 149 | 30 | 2,0 | 24 | 55 |
| **900** | 132 | 94 | M14 - 140Nm | 62 | 78 | - | 16 | 132 | 148 | - | 31 | 3,3 | 32 | 75 |

** the projecting edge of the screw head is taken into consideration for outer diameter ‘a’

## Mounting Instructions:

The split-hub design allows for easy assembly. Further simplification during installation is provided because one half of the split hub can be put onto the shaft. The coupling can rest on the two shaft ends. The second half of the split-hub can then be mounted to the coupling by screwing it on from below with the specified tightening torque. This feature makes a “one man assembly” possible.



Important: the distance between the shafts must be bigger than ‘g’!

**order example:** **KPH 80 - D1 = 24 G7 D2 = 30 G7**
**KMH 400 - D1 = 38 F6 D2 = 48 F6**