# Metal bellows coupling I Series KGH-VA

- easy-to-install clamping hubs in half-shell design
- stainless steel version up to 350°C
- wear-free and maintenance-free
- variable lengths - three standard types with 2W/4W/6W metal bellows

stainless steel

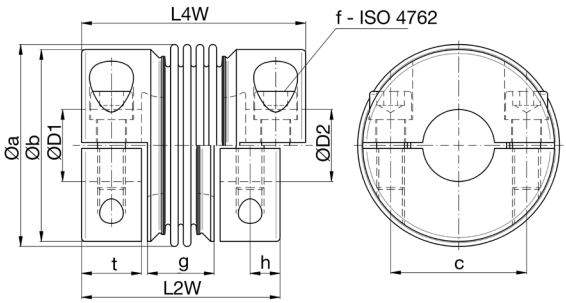
**technical data:**

| KGH -VA size | $T_N$ [Nm] | Trägheits-moment [$10^{-3}$kgm²] | moment of inertia [$10^{-3}$kgm²] | | | max. shaft misalignment [mm] axial± | | | max. shaft misalignment [mm] lateral | | | axial spring rate [N/mm] | | | lateral spring rate [N/mm] | | | nmax [upm] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2W | 4W | 6W | 2W | 4W | 6W | 2W | 4W | 6W | 2W | 4W | 6W | 2W | 4W | 6W | |
| **10** | 10 | 0,03 | 3,3 | 2,1 | 1,3 | 0,2 | 0,3 | 0,5 | 0,1 | 0,15 | 0,25 | 150 | 85 | 60 | 2300 | 400 | 130 | 28000 |
| **50** | 50 | 0,3 | 16 | 9 | 6 | 0,3 | 0,6 | 0,8 | 0,1 | 0,2 | 0,3 | 130 | 70 | 50 | 2500 | 450 | 190 | 17000 |
| **120** | 120 | 1,2 | 32 | 20 | 13 | 0,3 | 0,6 | 1 | 0,1 | 0,2 | 0,3 | 210 | 110 | 80 | 7000 | 1200 | 400 | 13000 |
| **200** | 200 | 2,2 | 50 | 28 | 17 | 0,4 | 0,7 | 1 | 0,1 | 0,2 | 0,3 | 170 | 95 | 70 | 5000 | 1000 | 470 | 11000 |
| **350** | 350 | 4,9 | 93 | 52 | 47 | 0,4 | 0,8 | 1 | 0,1 | 0,2 | 0,3 | 170 | 90 | 95 | 7000 | 1300 | 500 | 9500 |
| **600** | 600 | 12 | 190 | 106 | 68 | 0,4 | 0,8 | 1 | 0,1 | 0,2 | 0,3 | 260 | 140 | 100 | 15000 | 2800 | 980 | 8000 |
| **1200** | 1200 | 39 | 400 | 225 | 210 | 0,4 | 0,7 | 1 | 0,1 | 0,2 | 0,3 | 310 | 160 | 200 | 13000 | 2100 | 1400 | 6000 |

maximum temperature range: -40°C up to +350°C

*material:*
*bellows: stainless steel 1.4571 / A4*
*hubs: 1.4301 / A2*
*screws: ISO 4762*
*stainless steel / A4-80*





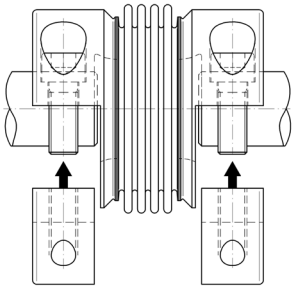

**note:** connection between bellows and hub by plasma welding

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

| KGH -VA | Øa | Øb | c | f | g 2W | g 4W | g 6W | h | L 2W | L 4W | L 6W | t | mass ~ [kg] | ØD1/2 min | ØD1/2 max |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **10** | 34 | 33 | 21 | M5 - 5Nm | 18 | 23 | 30 | 6,5 | 48 | 53 | 60 | 13 | 0,2 | 7 | 15 |
| **50** | 56 | 55 | 38 | M8 - 24Nm | 22 | 32 | 42 | 9 | 60 | 70 | 80 | 17 | 0,7 | 12 | 28 |
| **120** | 71 | 71 | 50 | M10 - 45Nm | 32 | 42 | 53 | 12 | 82 | 92 | 103 | 23 | 1,7 | 19 | 38 |
| **200** | 82 | 82 | 56 | M12 - 80Nm | 35 | 45 | 57 | 13 | 91 | 101 | 113 | 25,5 | 2,5 | 22 | 42 |
| **350** | 101 | 96 | 68 | M14 - 110Nm | 35 | 46 | 65 | 15 | 101 | 112 | 131 | 30 | 3,9 | 30 | 50 |
| **600** | 122 | 116 | 80 | M16 - 180Nm | 37,5 | 53,6 | 68 | 18 | 115,5 | 131,5 | 146 | 36 | 6,7 | 32 | 60 |
| **1200** | 157 | 152 | 110 | M20 - 350Nm | 43 | 59,5 | 76 | 20,5 | 129 | 145,5 | 162 | 40 | 12,6 | 48 | 85 |

## Mounting Instructions:

The half-shell design enables simple, radial operation and a backlash-free, non-positive clamp connection. This is a significant advantage, especially with fixed shaft journals. Misalignments between the input and output shaft can thus be easily checked and corrected. To facilitate assembly, the fixed hub halves can be placed on the shaft journals and the loose half-shell pieces can be screwed on. In the event of service, the cumbersome dismantling of the drive and output units is no longer necessary.



**note:** the distance between input and output shaft must be greater than the coupling dimension „g“!

**order example: KGH - VA 200 / 4W - D1 = 32 $^{G7}$ D2 = 35 $^{G7}$ - stainless steel screws**