

Metal bellows coupling with intermediate pipe I Series WDB

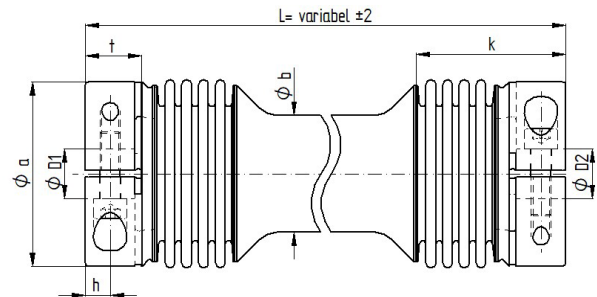
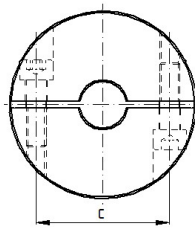
- /// variable lengths from 55 to 260 mm // without additional intermediate storage
- /// backlash-free, precise torque transmission // low mass moment of inertia
- /// special symmetrical clamping hub with high balancing quality and for high operating speeds

technical data:

| WDB | nominal torque | torsional stiffness | moment of inertia | mass. approx. | max. operating speed | max. lateral shaft misalignment [mm] | | f-tightening torque |
|-------|----------------|---------------------|--------------------------------------|---------------|----------------------|--------------------------------------|------------------|---------------------|
| Größe | [Nm] | [Nm/arcmin] | [10 ⁻³ kgm ²] | [kg] | [min ⁻¹] | L _{min} | L _{max} | |
| 4 | 4 | 0,3 | 0,008 | 0,1 | 20.000 | 0,4 | 2,9 | 2x M3 - 2 Nm |
| 16 | 16 | 1 | 0,04 | 0,3 | 20.000 | 0,5 | 2,7 | 2x M5 - 8 Nm |
| 40 | 40 | 4 | 0,4 | 1,0 | 17.000 | 0,7 | 2,6 | 2x M6 - 14 Nm |
| 100 | 100 | 7 | 0,9 | 1,5 | 14.000 | 0,9 | 2,8 | 2x M8 - 35 Nm |
| 200 | 200 | 13 | 2,4 | 2,7 | 12.000 | 0,9 | 2,9 | 2x M10 - 65 Nm |
| 400 | 400 | 22 | 5 | 4 | 10.000 | 1,1 | 3,0 | 2x M12 - 115 Nm |
| 1000 | 1000 | 62 | 15 | 6,8 | 8.000 | 1,3 | 3,7 | 2x M14 - 180 Nm |

max. permissible axial misalignment: $\Delta A = \pm 1,5 \text{ mm}$ / maximum angular shaft misalignment: $\alpha = 1^\circ$
 maximum temperature range: -40°C up to $+350^\circ\text{C}$

Two clamping screws per hub
with 180° arrangement



material:

Metal bellows: stainless steel 1.4571 / A4
 Hubs: size 4 - 16: stainless steel 1.4301 / size 40-400: steel (S 355)
 Intermediate pipe: stainless steel 1.4301
 Screws: ISO 4762 Q 12.9 - coated

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

| WDB | Øa | Øb | c | h | k ± 1 | t | L | | ØD1/2 | |
|------|-----|----|----|-----|-------|------|-----|-----|-------|-----|
| size | | | | | | | min | max | min | max |
| 4 | 26 | 15 | 16 | 5 | 24 | 10 | 55 | 200 | 6 | 12 |
| 16 | 37 | 22 | 22 | 6,5 | 35 | 13 | 75 | 200 | 8 | 16 |
| 40 | 57 | 35 | 40 | 7,5 | 45 | 15 | 95 | 200 | 10 | 32 |
| 100 | 68 | 48 | 46 | 9,5 | 49 | 18,5 | 110 | 220 | 12 | 35 |
| 200 | 84 | 58 | 58 | 12 | 59 | 22,5 | 125 | 240 | 14 | 45 |
| 400 | 101 | 70 | 65 | 13 | 68 | 26 | 145 | 260 | 17 | 50 |
| 1000 | 132 | 95 | 92 | 15 | 75 | 28 | 160 | 300 | 20 | 75 |

Øa: interfering edge – screw head

order example: WDB 200 L = 180 D1 = 32^{G7} D2 = 35^{G7}