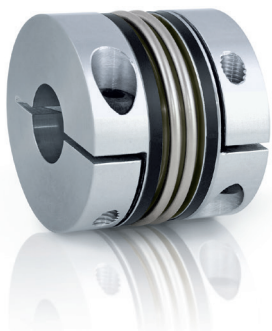


PROPERTIES



FEATURES

- ▶ extremely compact
- ▶ high torque density
- ▶ high torsional stiffness

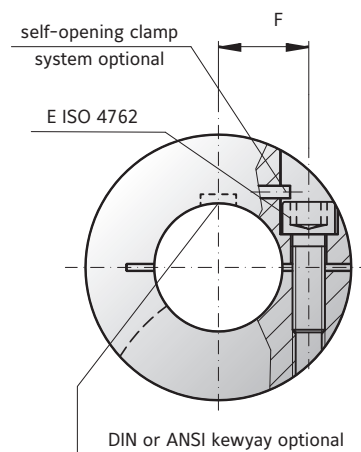
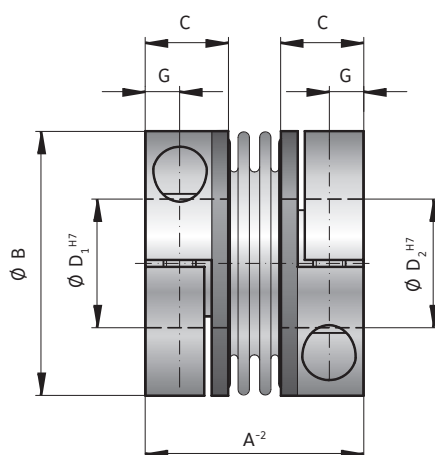
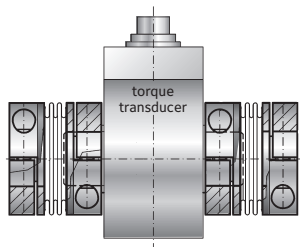
MATERIAL

- ▶ **Bellows:** high grade stainless steel
- ▶ **Hubs:** see table

DESIGN

Two clamping hubs concentrically mounted to flexible bellows. Brief overloads of up to 1.5x the rated torque are acceptable.

Key application:
For mounting on a torque transducer.



MODEL BKM

| SIZE | | | 20 | 200 | 400 | 1000 |
|---|--------------------------------|-------------|--------|--------|--------|--------|
| Rated torque | (Nm) | T_{KN} | 20 | 200 | 400 | 1000 |
| Overall length | (mm) | A^{-2} | 40 | 59 | 75 | 89 |
| Outside diameter | (mm) | B | 49 | 66 | 82 | 110 |
| Fit length | (mm) | C | 16.5 | 23 | 27.5 | 34 |
| Inside diameter possible from \varnothing to \varnothing H7 | (mm) | $D_{1/2}$ | 15-28 | 24-35 | 32-42 | 40-60 |
| Fastening screw ISO 4762 | | E | M5 | M8 | M10 | M12 |
| Tightening torque of the fastening screw | (Nm) | | 8 | 40 | 60 | 130 |
| Distance between centerlines | (mm) | F | 17 | 23 | 27 | 39 |
| Distance | (mm) | G | 6 | 9.5 | 11 | 13 |
| Moment of inertia | (10^{-3} kgm ²) | $J_{ges.}$ | 0.05 | 0.18 | 0.62 | 7.2 |
| Hub material | | | AL | AL | AL | steel |
| Approximate weight | (kg) | | 0.13 | 0.4 | 0.7 | 3.5 |
| Torsional stiffness | (10^3 Nm/rad) | C_t | 41.9 | 138 | 170 | 570 |
| Axial | \pm (mm) | Max. values | 1 | 1.5 | 1 | 2 |
| Lateral | \pm (mm) | | 0.06 | 0.08 | 0.1 | 0.1 |
| Angular | \pm (degree) | | 0.5 | 0.5 | 0.5 | 0.5 |
| Axial spring stiffness | (N/mm) | C_s | 55.8 | 153 | 114 | 148 |
| Lateral spring stiffness | (N/mm) | C_r | 3,710 | 11,000 | 6,058 | 9,010 |
| Speed max. with balancing | (min ⁻¹) | | 80,000 | 60,000 | 50,000 | 40,000 |

| ORDERING EXAMPLE | BKM | 20 | 20 | 19.05 | XX |
|--|-----|----|----|-------|---|
| Model | ● | | | | Special designation only (e.g. special bore tolerance). |
| Size | | ● | | | |
| Bore D1 H7 | | | ● | | |
| Bore D2 H7 | | | | ● | |
| For custom features place an XX at the end of the part number and describe the special requirements (e.g. BKM / 20 / 20 / 19.05 / XX; XX=finely balanced for 25,000 rpm) | | | | | |