

EK6

WITH CONICAL CLAMPING RING

4 - 2,150 Nm



PROPERTIES

FEATURES

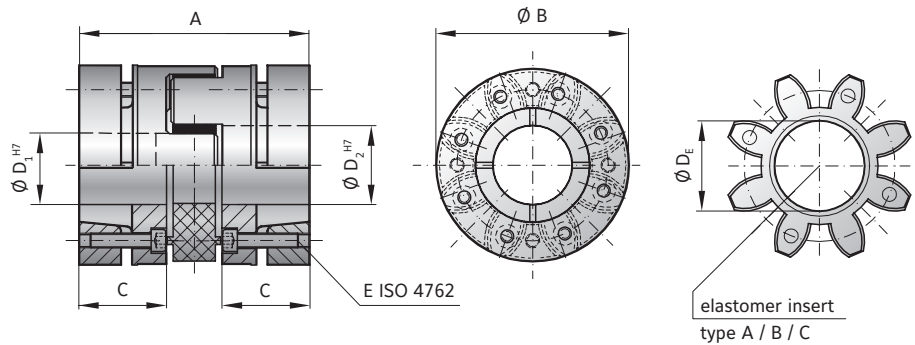
- ▶ high clamping pressure
- ▶ self centering on shaft
- ▶ very high concentricity

DESIGN

Two concentrically machined hubs with curved jaws and conical clamping rings.

MATERIAL

- ▶ **Hubs:** up to size 450 high strength aluminum; size 800 steel
- ▶ **Elastomer:** wear resistant thermally stable TPU



MODEL EK6

| SIZE | 10 | | | 20 | | | 60 | | | 150 | | | 300 | | | 450 | | | 800 | | | |
|---|--------|----|----|--------|----|----|---------|-----|----|---------|-----|----|---------|-----|-----|---------|------|-----|---------|------|-----|--|
| | A | B | C | A | B | C | A | B | C | A | B | C | A | B | C | A | B | C | A | B | C | |
| Type (Elastomer insert) | | | | | | | | | | | | | | | | | | | | | | |
| Rated torque (Nm) T_{KN} | 12.5 | 16 | 4 | 17 | 21 | 6 | 60 | 75 | 20 | 160 | 200 | 42 | 325 | 405 | 84 | 530 | 660 | 95 | 950 | 1100 | 240 | |
| Max. torque (Nm) T_{Kmax} | 25 | 32 | 6 | 34 | 42 | 12 | 120 | 150 | 35 | 320 | 400 | 85 | 650 | 810 | 170 | 1060 | 1350 | 190 | 1900 | 2150 | 400 | |
| Overall length (mm) A | 42 | | | 56 | | | 64 | | | 76 | | | 96 | | | 110 | | | 138 | | | |
| Outside diameter (mm) B/B ₂ | 32 | | | 43 | | | 56 | | | 66.5 | | | 82 | | | 102 | | | 136.5 | | | |
| Mounting length (mm) C | 15 | | | 20 | | | 23 | | | 28 | | | 36 | | | 42 | | | 53 | | | |
| Inside diameter range H7 (mm) D _{1/2} | 6 - 16 | | | 8 - 24 | | | 12 - 32 | | | 19 - 35 | | | 20 - 45 | | | 28 - 55 | | | 32 - 80 | | | |
| Inside diameter of elastomer (mm) D _E | 14.2 | | | 19.2 | | | 26.2 | | | 29.2 | | | 36.2 | | | 46.2 | | | 60.5 | | | |
| Clamping screw (ISO 4762) | 3x M3 | | | 6x M4 | | | 4x M5 | | | 8x M5 | | | 8x M6 | | | 8x M8 | | | 8x M10 | | | |
| Tightening torque of the clamping screw (Nm) E | 2 | | | 3 | | | 6 | | | 7 | | | 12 | | | 35 | | | 55 | | | |
| Distance (mm) F | | | | | | | | | | | | | | | | | | | | | | |
| Moment of inertia per hub (10^{-3} kgm ²) J ₁ /J ₂ | 0.004 | | | 0.015 | | | 0.05 | | | 0.1 | | | 0.3 | | | 0.85 | | | 9.2 | | | |
| Approx. weight (kg) | 0.08 | | | 0.12 | | | 0.3 | | | 0.5 | | | 0.9 | | | 1.5 | | | 9.6 | | | |
| Speed standard (min ⁻¹) | 20,000 | | | 19,000 | | | 14,000 | | | 13,000 | | | 10,000 | | | 9,000 | | | 4,000 | | | |
| Speed balanced (10 ³ min ⁻¹) | 53 | 63 | 40 | 45 | 60 | 35 | 31 | 31 | 25 | 22 | 26 | 18 | 22 | 26 | 16 | 16 | 17 | 12 | 13 | 13 | 8 | |

For information on shaft misalignment, torsional stiffness, and other details about the elastomer inserts see handbook precision couplings pages 72 + 73.

| ORDERING EXAMPLE | EK6 | 60 | A | 19 | 22.23 | XX |
|-----------------------|-----|----|---|----|-------|---|
| Model | ● | | | | | Special designation only (e.g. special bore tolerance). |
| Size | | ● | | | | |
| Elastomer insert type | | | ● | | | |
| 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. EK6 / 60 / A / 19 / 22.23 / XX; XX=finely balanced ISO G2.5 / 30,000 rpm)