

EKL

Compact version with clamping hub

0.5 – 2,150 Nm



Features

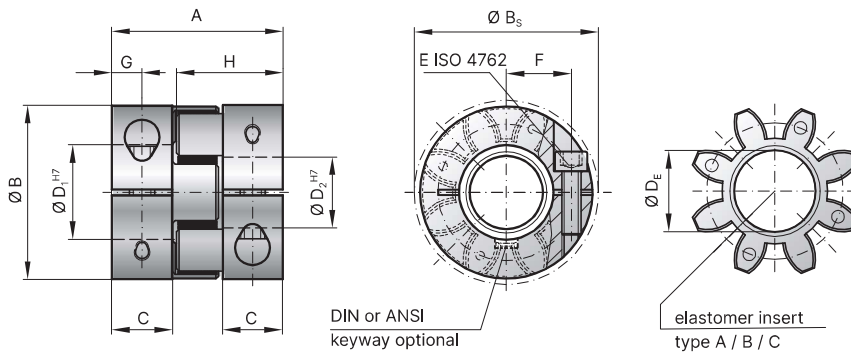
- Short overall length
- Easy mounting
- Vibration damping

Material

- **Hubs:** up to size 600 high strength aluminum; size 800 steel
- **Elastomer:** wear resistant thermally stable TPU

Design

Two concentrically machined hubs with curved jaws and clamping screws.



Model EKL

| Size | | 2 | | | 5 | | | 10 | | | 20 | | | 60 | | | 150 | | | 300 | | | 400 | | | 450 | | | 600 | | | 800 | | | |
|--|------------|---|----------|--------|--------|---------|---------|---------|---------|---------|---------|---------|----|-----|-----|----|-----|-----|----|-----|-----|-----|-----|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|--|
| Type (Elastomer insert) | | A | B | C | A | B | C | A | B | C | A | B | C | A | B | C | A | B | C | A | B | C | A | B | C | A | B | C | A | B | C | A | B | C | |
| Rated torque (Nm) | T_{KN} | 2 | 2.4 | 0.5 | 9 | 12 | 2 | 12.5 | 16 | 4 | 17 | 21 | 6 | 60 | 75 | 20 | 160 | 200 | 42 | 325 | 405 | 84 | 410 | 520 | 90 | 530 | 660 | 95 | 700 | 840 | 150 | 950 | 1,100 | 240 | |
| Max. torque* (Nm) | T_{Kmax} | 4 | 4.8 | 1 | 18 | 24 | 4 | 25 | 32 | 6 | 34 | 42 | 12 | 120 | 150 | 35 | 320 | 400 | 85 | 650 | 810 | 170 | 820 | 1,040 | 180 | 1,060 | 1,350 | 190 | 1,400 | 1,680 | 300 | 1,900 | 2,150 | 400 | |
| Overall length (mm) | A | 20 | 26 | 32 | 50 | 58 | 62 | 86 | 90 | 94 | 111 | 123 | | | | | | | | | | | | | | | | | | | | | | | |
| Outside diameter (mm) | B | 16 | 25 | 32 | 42 | 56 | 66.5 | 82 | 95 | 102 | 120 | 136.5 | | | | | | | | | | | | | | | | | | | | | | | |
| Outside diameter with screw head (mm) | B_s | 17 | 25 | 32 | 44.5 | 57 | 68 | 85 | 98 | 105 | 122 | 139 | | | | | | | | | | | | | | | | | | | | | | | |
| Mounting length (mm) | C | 6 | 8 | 10.3 | 17 | 20 | 21 | 31 | 32 | 34 | 40 | 46 | | | | | | | | | | | | | | | | | | | | | | | |
| Inside diameter range H7 (mm) | $D_{1/2}$ | 3 - 8 | 4 - 12.7 | 4 - 16 | 8 - 25 | 12 - 32 | 19 - 36 | 20 - 45 | 25 - 50 | 28 - 60 | 30 - 70 | 35 - 80 | | | | | | | | | | | | | | | | | | | | | | | |
| Inside diameter of elastomer (mm) | D_e | 6.2 | 10.2 | 14.2 | 19.2 | 26.2 | 29.2 | 36.2 | 43 | 46.2 | 55 | 60.5 | | | | | | | | | | | | | | | | | | | | | | | |
| Clamping screw (ISO 4762) | E | M2 | M3 | M4 | M5 | M6 | M8 | M10 | M12 | M12 | M12 | M16 | | | | | | | | | | | | | | | | | | | | | | | |
| Tightening torque of the clamping screw (Nm) | E | 0.6 | 2 | 4 | 8 | 15 | 35 | 70 | 120 | 120 | 120 | 290 | | | | | | | | | | | | | | | | | | | | | | | |
| Distance between centers (mm) | F | 5.5 | 8 | 10.5 | 15.5 | 21 | 24 | 29 | 33.5 | 38 | 47 | 50.5 | | | | | | | | | | | | | | | | | | | | | | | |
| Distance (mm) | G | 3 | 4 | 5 | 8.5 | 10 | 11 | 15 | 16 | 17.5 | 20 | 23 | | | | | | | | | | | | | | | | | | | | | | | |
| Hub length (mm) | H | 12 | 16.7 | 20.7 | 31 | 36 | 39 | 52 | 55 | 57 | 68 | 74 | | | | | | | | | | | | | | | | | | | | | | | |
| Moment of inertia per hub (10^{-3} kgm ²) | J_1/J_2 | 0.0003 | 0.002 | 0.003 | 0.01 | 0.04 | 0.08 | 0.5 | 0.8 | 1.1 | 2.66 | 14 | | | | | | | | | | | | | | | | | | | | | | | |
| Approx. weight (kg) | | 0.008 | 0.02 | 0.05 | 0.12 | 0.3 | 0.5 | 0.9 | 1.1 | 1.5 | 2.5 | 9 | | | | | | | | | | | | | | | | | | | | | | | |
| Speed standard (min ⁻¹) | | 15,000 | 15,000 | 13,000 | 12,500 | 11,000 | 10,000 | 9,000 | 8,500 | 8,000 | 6,800 | 4,000 | | | | | | | | | | | | | | | | | | | | | | | |
| Speed balanced (10^3 min ⁻¹) | | 60 67 45 57 65 43 53 63 40 45 60 35 31 31 25 22 26 18 22 26 16 17 18 13 16 17 12 14 14 10 13 13 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

For information on shaft misalignment, torsional stiffness, and other details about the elastomer inserts see pages 64.

* Maximum transmittable torque of the clamping hub depends on the bore diameter

| Size | Ø 3 | Ø 4 | Ø 5 | Ø 8 | Ø 16 | Ø 19 | Ø 25 | Ø 30 | Ø 32 | Ø 35 | Ø 45 | Ø 50 | Ø 55 | Ø 60 | Ø 65 | Ø 70 | Ø 75 | Ø 80 |
|------|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 2 | 0.2 | 0.8 | 1.5 | 2.5 | | | | | | | | | | | | | | |
| 5 | | 1.5 | 2 | 8 | | | | | | | | | | | | | | |
| 10 | | | 4 | 12 | 32 | | | | | | | | | | | | | |
| 20 | | | | 20 | 35 | 45 | 60 | | | | | | | | | | | |
| 60 | | | | | 50 | 80 | 100 | 110 | 120 | | | | | | | | | |
| 150 | | | | | | 120 | 160 | 180 | 200 | 220 | | | | | | | | |
| 300 | | | | | | 200 | 230 | 300 | 350 | 380 | 420 | | | | | | | |
| 450 | | | | | | | | 420 | 480 | 510 | 600 | 660 | 750 | 850 | | | | |
| 800 | | | | | | | | | | 700 | 750 | 800 | 835 | 865 | 900 | 925 | 950 | 1,000 |

Higher torque possible with keyways.

ELASTOMER COUPLINGS EK | SP