

SK1

WITH CONICAL CLAMPING BUSHING

0.1 - 2,800 Nm



Timing belt or chain sprocket only included upon request.

ABOUT

MATERIAL

- **Clutch system:** hardened steel
- **Clamping ring size 1.5 - 10:** aluminum
- **Conical clamping bushing size 15 - 2500:** steel

DESIGN

Size 1.5 - 10 with clamping ring and a single clamping screw.
Size 15 - 2500 with conical clamping bushing and six screws.

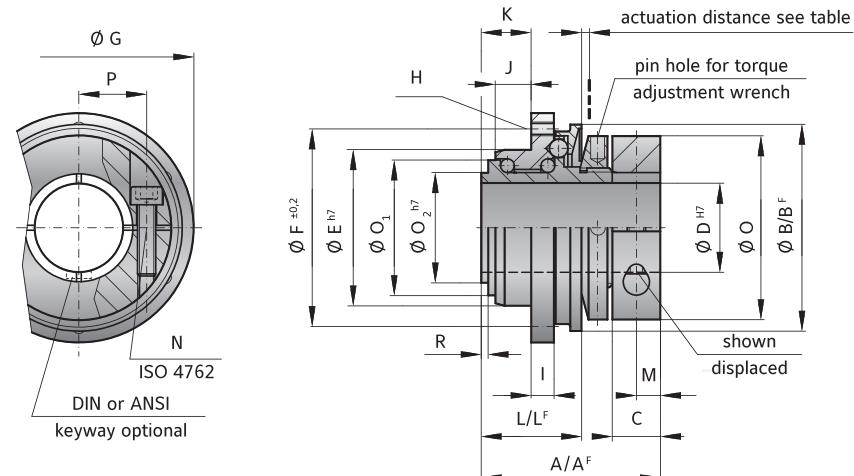
Clutch system: spring loaded ball-detent principle. Operable temperature range from -30 to +120° C.

AVAILABLE FUNCTION SYSTEMS

- W = Single position / automatic re-engagement (standard)
- D = Multi-position / automatic re-engagement
- G = Load holding / load blocking
- F = Full disengagement / manual re-engagement

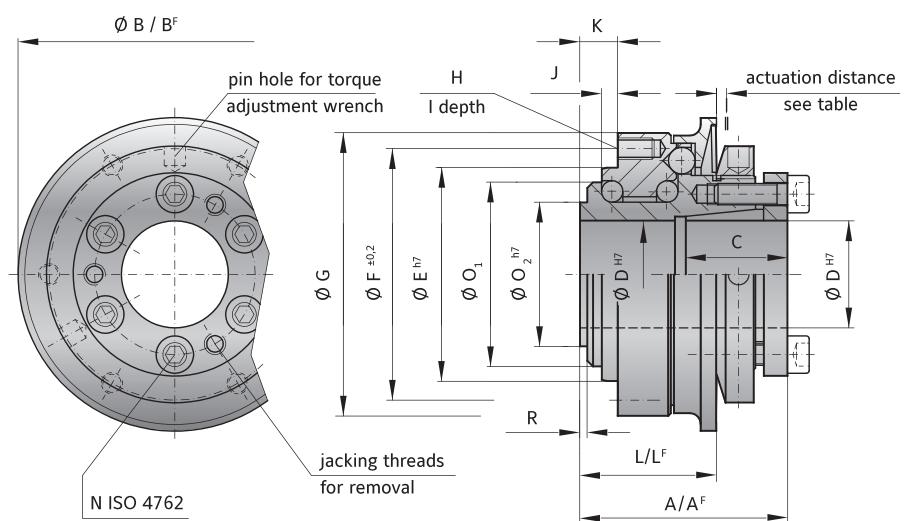
MINIATURE DESIGN | SIZE 1.5 - 10

Standard with clamping collar



STANDARD DESIGN | SIZE 15 - 2,500

Standard with conical clamping bushing



MODEL SK1

| | | MINIATURE DESIGN | | | | | | | | | | | | | | |
|---|------------------|------------------|---------------------------|-------------------------------|---------------------|---------------------|---------------------------------|----------------------------------|--------------------------|---------------------------|---------------------------------------|-------------------------------|------------------------------|-------------------------------|----------------------------------|-------------------------------------|
| SIZE | | | 1.5 | 2 | 4.5 | 10 | 15 | 30 | 60 | 150 | 200 | 300 | 500 | 800 | 1500 | 2500 |
| Adjustment range available from - to (approx. values) | (Nm) | T _{KN} | 0.1-0.6 0.4-1 0.8-2 | 0.2-1.5 0.5-2.2 1.5-3.5 | 1-3 2-4.5 3-7 | 2-6 4-12 7-18 | 5-15 12-25 20-40 35-70 | 5-20 10-30 20-60 50-100 | 10-30 25-80 50-115 | 20-70 45-150 80-225 | 30-90 60-160 140-280 250-400 | 100-200 150-240 220-440 | 80-200 200-350 320-650 | 400-650 500-800 650-950 | 600-800 700-1200 1000-1800 | 1500-2000 2000-2500 2300-2800 |
| Adjustment range available from - to (approx. values) ("F" Version) | (Nm) | T _{KN} | 0.3-0.8 or 0.6-1.3 | 0.5-2 | 2.5-4.5 | 2-5 4-10 8-15 | 7-15 | 8-20 or 16-30 | 10-30 20-40 30-60 | 20-60 40-80 80-150 | 80-140 or 130-200 | 120-180 160-300 300-450 | 50-150 100-300 250-500 | 200-400 or 450-850 | 1000-1250 or 1250-1500 | 1400-2200 or 1800-2700 |
| Overall length | (mm) | A | 23 | 28 | 32 | 39 | 40 | 50 | 54 | 58 | 63 | 70 | 84 | 95 | 109 | 146 |
| Overall length ("F" Version) (mm) | A ^F | | 23 | 28 | 32 | 39 | 40 | 50 | 54 | 58 | 66 | 73 | 88 | 95 | 117 | 152 |
| Actuation ring Ø | (mm) | B | 23 | 29 | 35 | 45 | 55 | 65 | 73 | 92 | 99 | 120 | 135 | 152 | 174 | 242 |
| Actuation ring Ø, ("F" Version) | (mm) | B ^F | 24 | 32 | 42 | 51.5 | 62 | 70 | 83 | 98 | 117 | 132 | 155 | 177 | 187 | 258 |
| Clamping fit length | (mm) | C | 7 | 8 | 11 | 11 | 19 | 22 | 27.5 | 32 | 32 | 41 | 41 | 49 | 61 | 80 |
| Inner diameter from Ø to Ø H7 | (mm) | D | 4-8 | 4-12 | 5-14 | 6-20 | 8-22 | 12-22 | 12-29 | 15-37 | 20-44 | 25-56 | 25-56 | 30-60 | 35-70 | 50-100 |
| Pilot diameter h7 | (mm) | E | 14 | 22 | 25 | 34 | 40 | 47 | 55 | 68 | 75 | 82 | 90 | 100 | 125 | 168 |
| Bolt-hole circle diameter ± 0.2 | (mm) | F | 22 | 28 | 35 | 43 | 47 | 54 | 63 | 78 | 85 | 98 | 110 | 120 | 148 | 202 |
| Flange outside diameter -0.2 | (mm) | G | 26 | 32 | 40 | 50 | 53 | 63 | 72 | 87 | 98 | 112 | 128 | 140 | 165 | 240 |
| Thread | H | 4xM2 | 4xM2.5 | 6xM2.5 | 6xM3 | 6xM4 | 6xM5 | 6xM5 | 6xM6 | 6xM6 | 6xM8 | 6xM8 | 6xM10 | 6xM12 | 6xM16 | |
| Thread depth | (mm) | I | 3 | 4 | 4 | 5 | 6 | 8 | 9 | 10 | 10 | 10 | 12 | 15 | 16 | 24 |
| Centering length -0.2 | (mm) | J | 2.5 | 3.5 | 5 | 8 | 3 | 5 | 5 | 5 | 6 | 9 | 10 | 13.5 | 20 | |
| Distance | (mm) | K | 5 | 6 | 8 | 11 | 8 | 11 | 11 | 12 | 12 | 15 | 21 | 19 | 25 | 34 |
| Distance | (mm) | L | 11 | 15 | 17 | 22 | 27 | 35 | 37 | 39 | 44 | 47 | 59 | 67 | 82 | 112 |
| Distance, ("F" Version) | (mm) | L ^F | 11.5 | 16 | 18 | 24 | 27 | 37 | 39 | 41.5 | 47 | 51.5 | 68 | 75 | 94 | 120 |
| Distance | M | 3.5 | 4 | 5 | 5 | | | | | | | | | | | |
| Screw ISO 4762 | N | 1xM2.5 | 1xM3 | 1xM4 | 1xM4 | 6xM4 | 6xM5 | 6xM5 | 6xM6 | 6xM6 | 6xM8 | 6xM8 | 6xM10 | 6xM12 | 6xM16 | |
| Tightening torque | (Nm) | | 1 | 2 | 4 | 4.5 | 4 | 6 | 8 | 12 | 14 | 18 | 25 | 40 | 70 | 120 |
| Outside diameter clamp ring Ø | (mm) | O | 20 | 25 | 32 | 40 | | | | | | | | | | |
| Diameter | (mm) | O ₁ | 13 | 18 | 21 | 30 | 35 | 42 | 49 | 62 | 67 | 75 | 84 | 91 | 112 | 154 |
| Diameter h7 | (mm) | O ₂ | 11 | 14 | 17 | 24 | 27 | 32 | 39 | 50 | 55 | 65 | 72 | 75 | 92 | 128 |
| Distance between centers | (mm) | P | 6.5 | 8 | 10 | 15 | | | | | | | | | | |
| Distance | (mm) | R | 1 | 1.3 | 1.5 | 1.5 | 2.5 | 2.5 | 2.5 | 2.5 | 3 | 3 | 4 | 4 | 4.5 | 6 |
| Moment of inertia (10 ⁻³ kgm ²) | J _{ges} | 0.01 | 0.02 | 0.05 | 0.07 | 0.15 | 0.25 | 0.50 | 1.60 | 2.70 | 5.20 | 8.6 | 20 | 31.5 | 210 | |
| Approx. weight | (kg) | | 0.03 | 0.065 | 0.12 | 0.22 | 0.4 | 0.7 | 1.0 | 1.3 | 2.0 | 3.0 | 4.0 | 5.5 | 10 | 28 |
| Actuation distance | (mm) | | 0.7 | 0.8 | 0.8 | 1.2 | 1.5 | 1.7 | 1.7 | 1.9 | 2.2 | 2.2 | 2.2 | 3.0 | 3.0 | |

A^F, B^F, L^F = Full disengagement / manual re-engagement version (F)

| ORDERING EXAMPLE | SK1 | 10 | W | 12.7 | 4 | 2-6 | XX |
|--|-----|----|---|------|---|-----|----|
| Model | ● | | | | | | |
| Size | | ● | | | | | |
| Function system | | | ● | | | | |
| Bore D1 H7 | | | | ● | | | |
| Disengagement torque Nm | | | | | ● | | |
| Torque adjustment range Nm | | | | | | ● | |
| For custom features place an XX at the end of the part number and describe the special requirements (e.g. SK1 / 10 / W / 12.7 / 4 / 2-6 / XX; XX=stainless steel!) | | | | | | | |

Special designation only
(e.g. special bore / keyway dimensions).