# BX4

# WITH SIMPLE KEYWAY MOUNTING

10 - 100 KNm

## ABOUT

### FEATURES

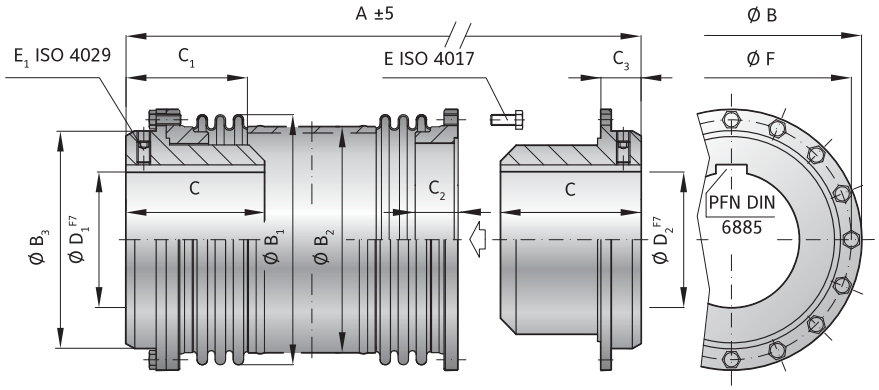
- compact, simple design
- high misalignment compensation
- integral support system (size 25 and up)

### MATERIAL

- **Hubs:** steel
- **Bellows: highly** flexible high grade stainless steel

### DESIGN

Both sides with removable coupling hubs, including keyway (splines optional)
Spacer between bellows
(optional variable length)
(size 10 without spacer)
welded bellows-hub connection




## MODEL BX4

| SIZE | | | 10 | 25 | 50 | 75 | 100 |
|---|---|---|---|---|---|---|---|
| Rated torque | (KNm) | $T_{KN}$ | 10 | 25 | 50 | 75 | 100 |
| Maximum torque | (KNm) | $T_{Kmax}$ | 15 | 38 | 75 | 113 | 150 |
| Overall length | (mm) | $A_{\pm5}$ | 210 | 480 | 590 | 760 | 840 |
| Outside diameter of flange | (mm) | B | 310 | 336 | 398 | 449 | 545 |
| Outside diameter of bellows ±2 | (mm) | $B_1$ | 300 | 323 | 370 | 412 | 520 |
| Outside diameter of tube | (mm) | $B_2$ | – | 273 | 324 | 360 | 460 |
| Hub diameter | (mm) | $B_3$ | 255 | 260 | 310 | 350 | 440 |
| Fit length | (mm) | C | 95 | 130 | 200 | 240 | 280 |
| Length ±3 | (mm) | $C_1$ | – | 170 | 200 | 257 | 260 |
| Hub length | (mm) | $C_2$ | 24 | 81 | 80 | 103 | 120 |
| Distance | (mm) | $C_3$ | 42 | 50 | 70 | 90 | 97 |
| Inside diameter possible from Ø to Ø F7 | (mm) | $D_1/D_2$ | 50 - 80 | 60 - 170 | 80 - 200 | 100 - 230 | 120 - 280 |
| Fastening screw ISO 4017 / Tightening torque | (Nm) | E | 20xM12 / 120 | 24xM16 / 300 | 24xM20 / 580 | 20xM24 / 1000 | 24xM24 / 1000 |
| Fastening screw ISO 4029 / Tightening torque | (Nm) | $E_1$ | M12 / 100 | M16 / 220 | M20 / 450 | M24 / 800 | M24 / 800 |
| Bolt circle diameter ±0.4 | (mm) | F | 290 | 304 | 361 | 404 | 500 |
| Moment of inertia | ($10^{-3}$ kgm²) | $J_{ges.}$ | 492 | 1272 | 3270 | 6754 | 19350 |
| Approximate weight | (kg) | | 44.7 | 85 | 164 | 260 | 477 |
| Axial | ± (mm) | Max. value | 3 | 5 | 6 | 7 | 8 |
| Lateral | ± (mm) | | 0.4 | 2.2 | 2.5 | 3 | 3.5 |
| Angular | ± (degree) | | 1.5 | 1 | 1 | 1 | 1 |
| Torsional stiffness coupling ($10^3$ Nm/rad) | | | 20,000 | 9,000 | 15,500 | 23,000 | 35,000 |

## MAXIMUM TRANSMITTABLE TORQUE OF KEYWAY CONNECTION

Data is in KNm. These values relate to metric DIN 6885 keyway dimensions with 100% contact through the hub.

| SIZE | Ø 60 | Ø 80 | Ø 100 | Ø 120 | Ø140 | Ø 160 | Ø 170 | Ø 180 | Ø 200 | Ø 220 | Ø 230 | Ø 240 | Ø 260 | Ø 280 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 25 | 7 | 12 | 18 | 26 | 34 | 44 | 46 | x | x | x | x | x | x | x |
| 50 | x | 19 | 28 | 40 | 52 | 67 | 71 | 84 | 94 | x | x | x | x | x |
| 75 | x | x | 34 | 47 | 62 | 81 | 85 | 101 | 112 | 136 | 142 | x | x | x |
| 100 | x | x | x | 55 | 74 | 94 | 100 | 118 | 131 | 159 | 166 | 189 | 205 | 220 |