

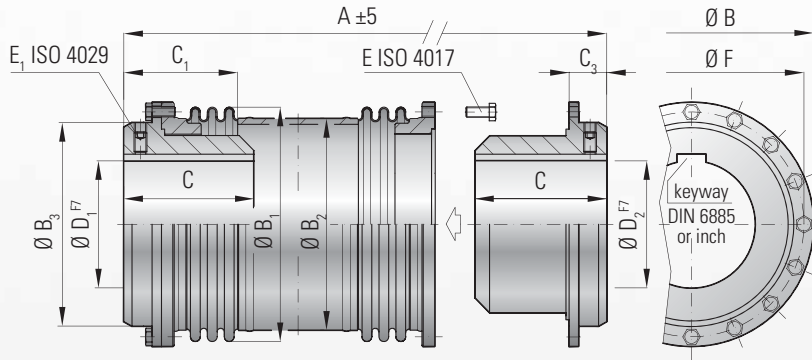
optional
stainless steel

MODEL BX 4

BACKLASH-FREE, TORSIONALLY STIFF METAL BELLOWS COUPLINGS



with keyway connection



Ordering example

BX 4 / 50 / 120 / 200 / XX

Model
Series / KNm
Bore Ø D1 F7
Bore Ø D2 F7
Non standard e.g. stainless steel

Features:

- for high torque applications
- compact, simple design
- easy mounting and dismounting
- torsionally rigid
- various overall lengths available
- high misalignment compensation

Material:

Bellows made from highly flexible, high grade stainless steel; hubs made from steel

Design:

With removable coupling hubs with keyway on both sides; 2x bellows with intermediate tube (Series 10 without intermediate tube); welded connection between hubs and bellows

Fit tolerance:

Overall clearance between hub and shaft
0.03-0.08 mm

Temperature range:

-40 to +300° C (-40 to +572° F)

Non standard applications:

Custom designs with various tolerances, keyways, materials, dimensions, etc. available upon request

Model BX 4		Series				
		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)	$A_{±5}$	210	470	545	730	830
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	290	340	410
Fit length (mm)	C	95	130	200	240	280
Length ±3 (mm)	C_1	-	160	175	240	250
Distance (mm)	C_3	42	50	70	90	97
Inside diameter possible from Ø to Ø F7 (mm)	D_1/D_2	50 - 180	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 kgm ²)	J_{DSS}	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 bellows (10 ³ Nm/rad)		20,000	21,120	36,600	57,300	81,800
Torsional stiffness coupling (10 ³ Nm/rad)		20,000	9,000	15,500	23,000	35,000