

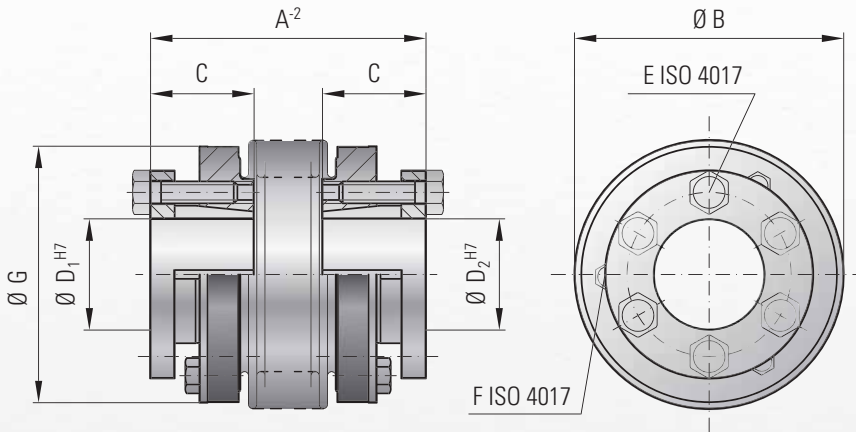
Optional:



MODEL BK3

BACKLASH-FREE, TORSIONALLY STIFF METAL BELLOWS COUPLINGS

with tapered conical sleeves



Ordering example

BK3 / 60 / 76 / 20 / 22 / XX

Model
Series / Nm
Overall length mm
Bore Ø D1 H7
Bore Ø D2 H7
Non standard e.g. stainless steel

Features:

- high clamping force
- rugged, high torque design
- new jack screw design suited for space restricted applications

Material:

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

Design:

With tapered conical sleeves and captive ISO 4017 jack screws
Absolutely backlash free due to frictional clamp connection

Temperature range:

-30 to +100° C (-22 to +212° F)

Speeds:

Up to 10,000 rpm; in excess of 10,000 rpm with finely balanced version (up to G = 2.5)

Service life:

Maintenance free with infinite life when operated within the technical specifications

Brief overloads:

Acceptable up to 1.5x the rated torque

Fit tolerance:

Overall clearance between hub and shaft 0.01-0.05 mm

Non standard applications:

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

Model BK 3		Series																							
		15		30		60		150		200		300		500		800		1500		4000		6000		10000	
Rated torque (Nm)	T _{KN}	15		30		60		150		200		300		500		800		1500		4000		6000		10000	
Overall length (mm)	A ⁻²	48	55	57	65	66	76	75	87	78	90	89	103	97	110	114	141	195	210	217					
Outside diameter of bellows (mm)	B	49		55		66		81		90		110		124		133		157		200		253		303	
Fit length (mm)	C	19		22		27		32		32		41		41		50		61		80		85		92	
Inside diameter possible from Ø to Ø H7 (mm)	D _{1/2}	10-22		12-23		12-29		15-38		15-44		24-56		24-60		30-60		35-70		50-100		60-140		70-180	
Fastening screws ISO 4017	E	6x M4		6x M5		6x M5		6x M6		6x M6		6x M8		6x M8		6x M10		6x M12		6x M16		6x M16		8x M16	
Tightening torque of the fastening screws (Nm)		4	6		8		12		14		18		25		40		70		120		150		160		
Jack screw ISO 4017	F	3x M4		3x M4		3x M5		3x M5		3x M6		3x M6		3x M6		3x M8		6xM8		6xM10		6xM10		8xM10	
Outside diameter of hub (mm)	G	49		55		66		81		90		110		122		116		135		180		246		295	
Moment of inertia (10 ⁻³ kgm²)	J _{total}	0.07	0.08	0.15	0.16	0.39	0.41	1.2	1.6	1.7	2.5	5.1	5.9	9.1	9.9	13.2	34.9	85.5	254	629					
Approximate weight (kg)		0.25	0.4		0.7		1.2		1.8		3		4.2		5.6		8.2		23		32.6		45.5		
Torsional stiffness (10 ⁻³ Nm/rad)	C _T	20	15	39	28	76	55	175	110	191	140	450	350	510	500	780	1304	3400	5700	10950					
Axial  ± (mm)	Max. values	1	2	1	2	1.5	2	2	3	2	3	2.5	3.5	2.5	3.5	3.5	3.5	3.5	3.5	3	3				
Lateral  ± (mm)		0.15	0.2	0.2	0.25	0.2	0.25	0.2	0.25	0.25	0.3	0.25	0.3	0.3	0.35	0.35	0.35	0.35	0.4	0.4	0.4				
Angular  ± (degree)		1	1.5	1	1.5	1	1.5	1	1.5	1	1.5	1	1.5	1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5			
Axial spring stiffness (N/mm)	C _a	25	15	50	30	72	48	82	52	90	60	105	71	70	48	100	320	565	1030	985					
Lateral spring stiffness (N/mm)	C _r	475	137	900	270	1200	420	1500	435	2040	610	3750	1050	2500	840	2000	3600	6070	19200	21800					

* 1 Nm = 8.85 in lbs