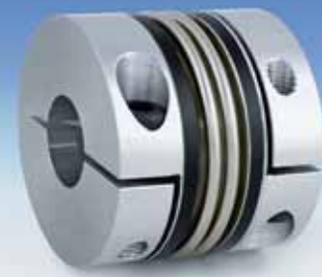


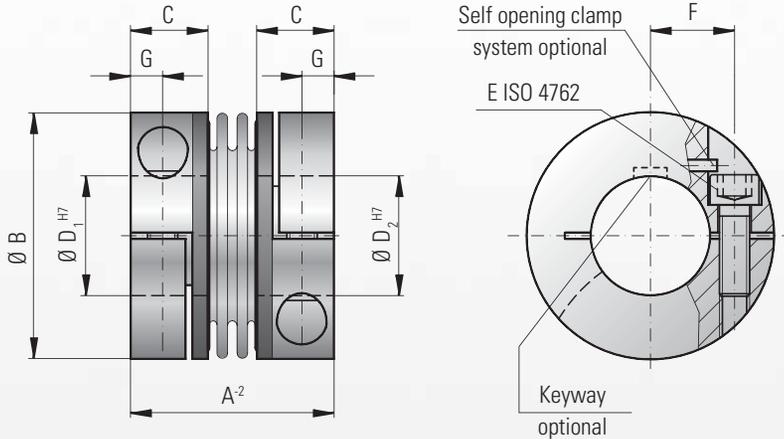


MODEL BKM

BACKLASH-FREE, TORSIONALLY STIFF METAL BELLOWS COUPLINGS



rigid and compact, with clamping hubs



Ordering example

BKM / 20 / 24 / 15 / XX

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

Features:

- ultra-compact design for high torques
- easy to mount
- suited for space restricted installations
- lowest moment of inertia

Material:

Bellows made from highly flexible, high grade stainless steel; see below for hub material

Design:

With a single ISO 4762 radial clamping screw per hub
Self opening clamp system optional: Loosening the clamping screw applies force to the pin, which forces the clamp into the open position for easy mounting and dismounting
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:

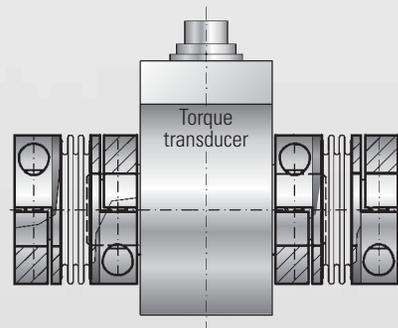
Custom designs with various tolerances, keyways, materials, dimensions, etc. available upon request

Model BKM		Series			
		20	200	400	1000
Rated torque (Nm)	T_{KN}	20	200	400	1000
Overall length (mm)	A^{-2}	40	59	75	89
Outside diameter (mm)	B	49	66	82	110
Fit length (mm)	C	16.5	23	27.5	34
Inside diameter possible from Ø to Ø H7 (mm)	$D_{1/2}$	15-28	24-35	32-40	40-60
Fastening screw ISO 4762	E	M5	M8	M10	M12
Tightening torque of the fastening screw (Nm)	E	8	40	60	130
Distance between centerlines (mm)	F	17	23	27	39
Distance (mm)	G	6	9.5	11	13
Moment of inertia (10^{-3} kgm ²)	J_I	0.05	0.18	0.62	7.2
Hub material		Al	Al	Al	steel
Approximate weight (kg)		0.13	0.4	0.7	3.5
Torsional stiffness (10^3 Nm/rad)	C_T	41.9	138	170	570
Axial ± (mm)	max. value	1	1.5	1	2
Lateral ± (mm)		0.06	0.08	0.1	0.1
Angular ± (degree)		0.5	0.5	0.5	0.5
Axial spring stiffness (N/mm)	C_a	55.8	153	114	148
Lateral spring stiffness (N/mm)	C_l	3,710	11,000	6,058	9,010
Speed max. with G = 2.5 balancing (rpm)		80,000	60,000	50,000	40,000

* 1 Nm = 8.85 in lbs

Mounting example:

Possible mounting with a torque transducer



Smaller bore diameters at reduced torque capacities available upon request