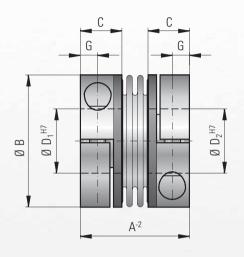
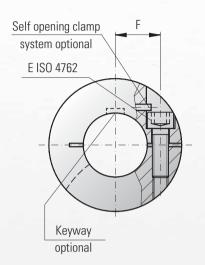


# MODEL **BKM**

# **BACKLASH-FREE, TORSIONALLY STIFF METAL BELLOWS COUPLINGS**





## **Ordering example**



		Series				
Model BKM		20	200	400	1000	
Rated torque (Nm)	T <sub>KN</sub>	20	200	400	1000	
Overall length (mm)	A-2	40	59	75	89	
Outside diameter (mm)	В	49	66	82	110	
Fit length (mm)	С	16.5	23	27.5	34	
Inside diameter possible from Ø to Ø H7 (mm)	D <sub>1/2</sub>	15-28	24-35	32-40	40-60	
Fastening screw ISO 4762		M5	M8	M10	M12	
Tightening torque of the fastening screw (Nm)	Е	8	40	75	130	
Distance between centerlines (mm)	F	17	23	27	39	
Distance (mm)	G	6	9.5	11	13	
Moment of inertia (10 <sup>-3</sup> kgm²)	J <sub>I</sub>	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 (103 Nm/rad)	C <sub>T</sub>	41.9	138	170	570	
Axial ± (mm)		1	1.5	1	2	
Lateral + (mm)	max. value	0.06	0.08	0.1	0.1	
Angular ± (degree)	value	0.5	0.5	0.5	0.5	
Axial spring stiffness (N/mm)	C <sub>a</sub>	55.8	153	114	148	
Lateral spring stiffness (N/mm)	C <sub>r</sub>	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



# rigid and compact, with clamping hubs

### **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

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:**  $-30 \text{ to } +100^{\circ} \text{ C} (-22 \text{ to } +212^{\circ} \text{ F})$ 

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

Maintenance free with infinite life when operated within the technical specifications

### **Brief overloads:**

Acceptable up to 1.5x the rated torque

### Fit tolerance:

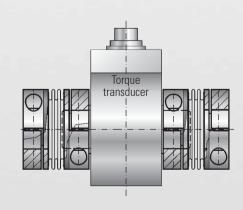
Overall clearance between hub and shaft 0.01-0.05 mm

### Non standard applications:

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

### **Mounting example:**

Possible mounting with a torque transducer



Smaller bore diameters at reduced torque capacities available upon request