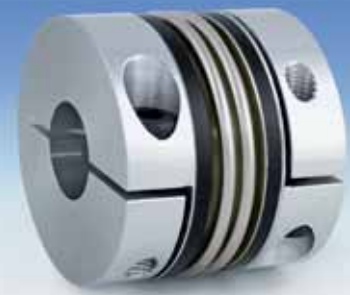


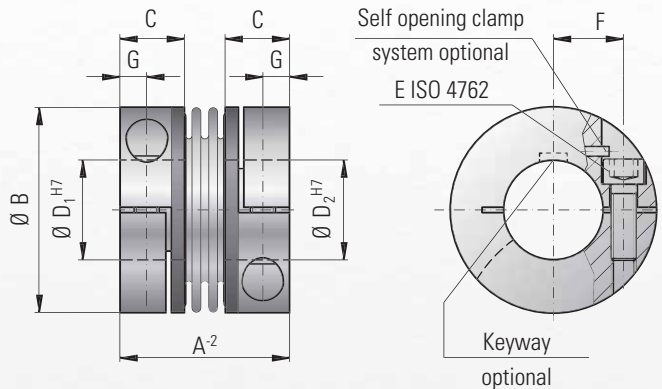


# MODEL BKM

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



rigid and compact, with clamping hub



### Ordering example

**BKM / 20 / 24 / 15 / XX**

Model  
Series Nm  
 $\emptyset D1 H7$   
 $\emptyset D2 H7$   
non standard e.g. stainless steel

### Properties:

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

### Material:

Bellows made of highly flexible high-grade stainless steel. Hub material see table.

### 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 will force the clamp into the open position for easy mounting and dismounting.**

Absolutely backlash-free due to frictional clamped connection.

### Temperature-range:

-30 to +100° C (-22 F to 212 F)

### Speeds:

Standard up to 10,000 rpm  
Option 1: In excess of 10,000 rpm with a finely balanced version  
Option 2: in excess of 30,000 rpm, with balancing grade G = 2.5 (see table)

### Service life:

These couplings have an infinite life and are maintenance-free if the technical ratings are not exceeded.

### Tolerance:

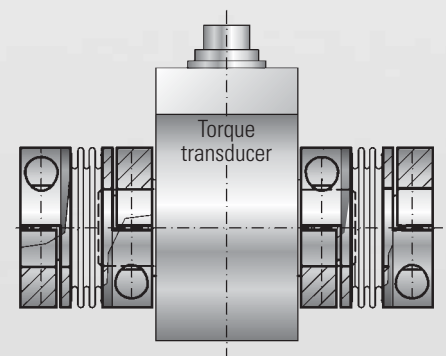
On the hub/shaft connection 0.01 to 0.05 mm.

### Non standard:

Custom designs with varied tolerances, keyways, non-standard material, bellows and ATEX designs are available upon request.

### Mounting example:

Possible mounting with a torque transducer



Smaller bores ( $D_{1/2}$ ) at reduced torque capacities on request.

Model BKM		Series			
		20	200	400	1000
Rated torque (Nm)	$T_{KN}$	20	200	400	1000
Overall length coupling (mm)	$A^{-2}$	40	59	75	89
Outer diameter (mm)	B	49	66	82	110
Fit length (mm)	C	16.5	23	27.5	34
Inner diameter possible from $\emptyset$ to $\emptyset H7$ (mm)	$D_{1/2}$	15-28	24-35	32-40	40-60
Fastening screw ISO 4762		M5	M8	M10	M12
Tightening torque of the fastening screw (Nm)	E	8	40	60	130
Distance between centers (mm)	F	17	23	27	39
Distance (mm)	G	6	9,5	11	13
Moment of inertia ( $10^{-3}$ kgm <sup>2</sup> )	$J_1$	0.05	0.18	0.62	7.2
Hub material		AL	AL	AL	steel
Approx. 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)	$C_r$	3,710	11,000	6,058	9,010
Speed max. with G = 2.5 balancing (rpm)		80000	60000	50000	40000