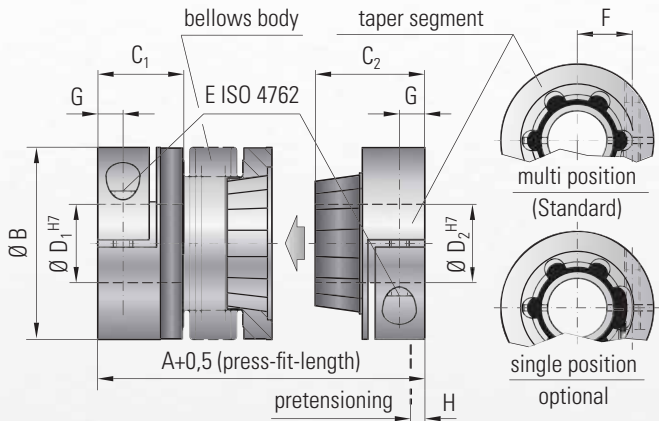




MODEL BK5



Press-fit, with clamping hub



Ordering example BK 5 / BK 6

BK5 / 30 / 71 / 18 / 19 / XX

Model	
Series / Nm	
Overall length mm	
Ø D1 H7	
Ø D2 H7	
Non standard e.g. hub/single position	

Properties:

Design details BK 5 / BK 6

- absolutely backlash-free and torsionally rigid
- easy mounting and dismounting
- electrically and thermally insulated
- wear-free and maintenance-free
- low moment of inertia
- compensation for misalignment

Temperature range:
range:

-30 to +100° C (-22 F to 212 F)

Speeds:

Up to 10,000 rpm, over 10,000 rpm available with a finely balanced version. (up to G = 2.5)

Service life:

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

Backlash:

Absolutely backlash-free due to frictional clamp connection and axial pretensioning of the tapered press-fit segments.

Brief overloads:

Acceptable up to 1.5 times the value specified.

Tolerance:

On the hub/shaft connection 0.01 to 0.05 mm

Material BK 5:

Bellows made of highly flexible, high-grade stainless steel; clamping hubs up to series 80 aluminium, and 150 and up steel. Tapered segment on hub face: glass-fiber reinforced plastic molded onto an aluminium hub.

Design BK 5:

One side with a single radial clamping screw ISO 4762. One side with a single radial clamping screw ISO 4762 and includes backlash-free clamping hub and tapered press-fit device.

Model BK 5	Series																	
	15		30		60		80		150		300		500		800		1500	
Rated torque (Nm)	15		30		60		80		150		300		500		800		1500	
Overall length (inserted) (mm)	A ^{+0,5} 60 67		71 79		85 95		94 106		95 107		114 128		136 149		150		172	
Outer diameter (mm)	B 49		55		66		81		81		110		124		133		157	
Fit length (mm)	C ₁ 22		27		32		36		36		43		51		45		55	
Fit length (mm)	C ₂ 28		33		39		43		43		52		61		74		94	
Inner diameter from from Ø to Ø H7 (mm)	D ₁ 8-28		10-30		12-32		14-42		14-42		24-60		35-60		40-75		50-80	
Inner diameter from from Ø to Ø H7 (mm)	D ₂ 8-22		10-25		12-32		14-38		14-38		24-58		35-60		40-62		50-75	
Fastening screw ISO 4762	E M5		M6		M8		M10		M10		M12		M16		2xM16*		2xM20*	
Tightening torque (Nm)	8		15		40		50		70		130		200		250		470	
Distance between centers (mm)	F 17		19		23		27		27		39		41		2x48*		2x55*	
Distance (mm)	G 6.5		7.5		9.5		11		11		13		16.5		18		22.5	
Pretensioning approx. (mm)	H 0.2 up to 1.0		0.5 up to 1.0		0.5 up to 1.5		0.5 up to 1.5		0.5 up to 1.5		0.5 up to 1.5		1.0 up to 2.0		1.0 up to 2.5		0.5 up to 1.5	
Axial recovery force of coupling max. (N)	20 12		50 30		70 45		48 32		82 52		157 106		140 96		200		650	
Mass moment of inertia (10 ⁻³ kgm ²)	J _{total} 0.07 0.08		0.14 0.15		0.23 0.26		0.65 0.67		2.2 2.4		7.4 7.9		13.7 14.4		26.2		51.4	
Approx. weight (kg)	0.1 0.1		0.3 0.3		0.4 0.4		0.9 0.9		1.8 1.8		4 4		6.5 6.7		8.2		15.3	
Torsional stiffness (10 ⁻³ Nm/rad)	C _T 10 8		20 14		38 28		65 43		88 55		225 175		255 245		400		650	
axial* ± (mm)	Max. values 0.5 1		0.5 1		0.5 1		1 1		2 1		2 1.5		2 2.5		3 3.5		3 2	
lateral ± (mm)	0.15 0.2		0.2 0.25		0.2 0.25		0.2 0.25		0.2 0.25		0.25 0.3		0.3 0.35		0.35		0.35	
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	
Lateral spring stiffness (N/mm)	C _r 475 137		900 270		1200 420		920 290		1550 435		3750 1050		2500 840		2000		3600	

(1Nm ± 8.85 in lbs)

* allowed following maximum pretensioning

* two screws each hub, 180° apart
Higher torques on request