

**BK7**

# WITH EXPANDING SHAFT

15 – 300 Nm



## PROPERTIES

### FEATURES

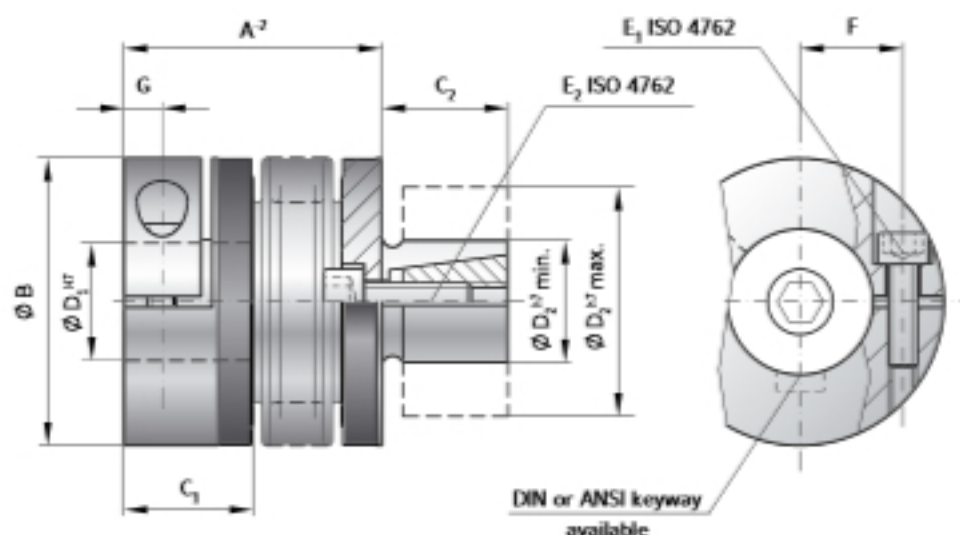
- ▶ for hollow shaft mounting
- ▶ short design saves installation space
- ▶ solution for mismatched shaft / bore

### MATERIAL

- ▶ **Bellows:** high grade stainless steel
- ▶ **Hubs:** see table
- ▶ **Expanding mandrel system:** steel

### DESIGN

One clamping hub on one end with an expanding shaft on the other end. Brief overloads of up to 1.5x the rated torque are acceptable.



## MODEL BK7

SIZE		15		30		60		150		300	
Rated torque	(Nm)	15		30		60		150		300	
Overall length	(mm)	A²		53		61		71		84	
Outside diameter	(mm)	B		55		66		81		110	
Fit length	(mm)	C₁		27		31		36		43	
Fit length	(mm)	C₂		25		27		32		45	
Inside diameter possible from $\phi$ to $\phi$ H7	(mm)	D₁		10-30		12-35		19-42		30-60	
Shaft diameter from $\phi$ to $\phi$ h7	(mm)	D₂		14-30		23-38		26-42		38-60	
Fastening screw ISO 4762		E₁		M6		M8		M10		M12	
Tightening torque of the fastening screw	(Nm)	E₂		14		38		65		120	
Distance between centerlines	(mm)	F		19		23		27		39	
Distance	(mm)	G		7.5		9.5		11		13	
Moment of inertia	(10⁻³ kgm²)	J <sub>ext</sub>		0.14		0.23		2.2		6.5	
Hub material		Al		Al		Al		steel		steel	
Approximate weight	(kg)	0.15		0.3		0.4		1.7		4	
Torsional stiffness	(10³ Nm/rad)	C₃		39		76		175		450	
Axial	± (mm)	1		1		1.5		2		2.5	
Lateral	± (mm)	Max. values		0.2		0.2		0.2		0.25	
Angular	± (degree)	1		1		1		1		1	
Axial spring stiffness	(N/mm)	C₄		50		72		82		105	
Lateral spring stiffness	(N/mm)	C₅		730		1200		1550		3750	

ORDERING EXAMPLE	BK7	150	71	32	22.23	XX
Model	●					
Size		●				
Overall length mm			●			
Bore D1 H7				●		
Shaft D2 f7					●	

Special designation only (e.g. special bore tolerance).

For custom features place an XX at the end of the part number and describe the special requirements (e.g. BK7 / 150 / 71 / 32 / 22.23 / XX; XX-finely balanced for 25,000 rpm)