

BK7

WITH EXPANDING SHAFT

15 - 300 Nm



ABOUT

FEATURES

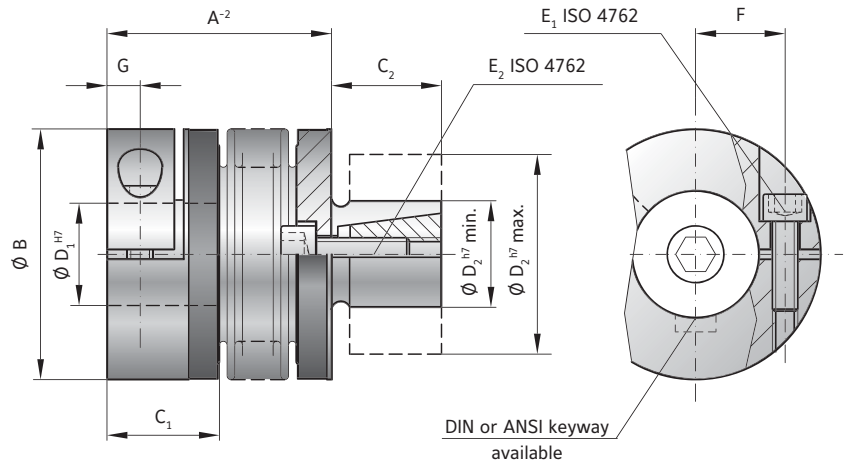
- ▶ for hollow shaft mounting
- ▶ short design saves installation space
- ▶ solution for mismatched shaft / bore

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)	T _{KN}		15	30	60	150	300					
Overall length (mm)	A ⁻²		45	52	53	61	62	72	71	83	84	98
Outside diameter (mm)	B		49	55	66	81	110					
Fit length (mm)	C ₁		22	27	32	36	43					
Fit length (mm)	C ₂		20	25	27	32	45					
Inside diameter possible from Ø to Ø H7 (mm)	D ₁		8-28	10-30	12-35	19-42	30-60					
Shaft diameter from Ø to Ø h7 (mm)	D ₂		13-25	14-30	23-38	26-42	38-60					
Fastening screw ISO 4762	E _{1/2}		M5	M6	M8	M10	M12					
Tightening torque of the fastening screw (Nm)	E _{1/2}		8	14	38	65	120					
Distance between centerlines (mm)	F		17	19	23	27	39					
Distance (mm)	G		6.5	7.5	9.5	11	13					
Moment of inertia (10 ⁻³ kgm ²)	J _{ges}		0.07	0.08	0.14	0.15	0.23	0.26	2.2	2.4	6.5	8.9
Hub material			Al	Al	Al	steel	steel					
Approximate weight (kg)			0.15	0.3	0.4	1.7	4					
Torsional stiffness (10 ³ Nm/rad)	C _T		20	15	39	28	76	55	175	110	450	350
Axial ± (mm)	Max. values		1	2	1	2	1.5	2	2	3	2.5	3.5
Lateral ± (mm)			0.15	0.2	0.2	0.25	0.2	0.25	0.2	0.25	0.25	0.3
Angular ± (degree)			1	1.5	1	1.5	1	1.5	1	1.5	1	1.5
Axial spring stiffness (N/mm)	C _a		20	12	50	30	72	48	82	52	105	71
Lateral spring stiffness (N/mm)	C _r		315	108	730	230	1200	380	1550	435	3750	1050

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

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)