

BK7

WITH EXPANDING SHAFT

15 - 300 Nm



PROPERTIES

FEATURES

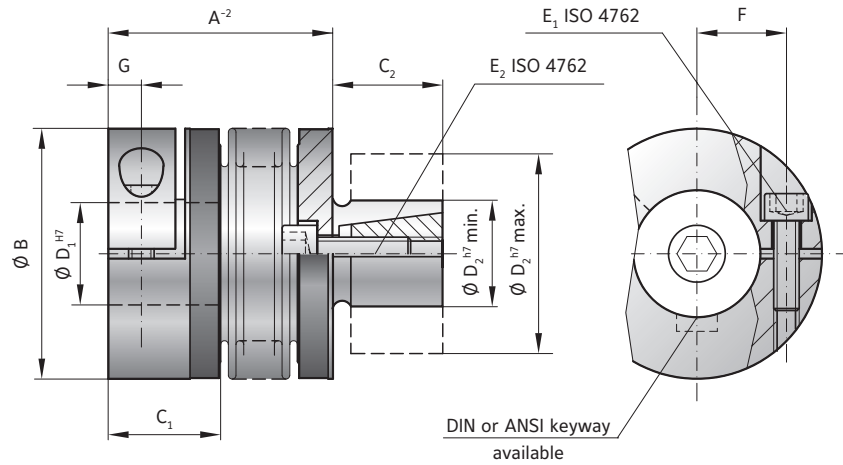
- ▶ for hollow shaft mounting
- ▶ short design saves installation space
- ▶ solution for mismatched shaft / bore

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)	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	31	36	43						
Fit length	(mm)	C_2	20	25	27	32	45						
Inside diameter possible from \emptyset to \emptyset H7	(mm)	D_1	8-28	10-30	12-35	19-42	30-60						
Shaft diameter from \emptyset to \emptyset 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	\pm (mm)	Max. values	1	2	1	2	1.5	2	2	3	2.5	3.5	
Lateral	\pm (mm)		0.15	0.2	0.2	0.25	0.2	0.25	0.2	0.25	0.25	0.25	0.3
Angular	\pm (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	●					Special designation only (e.g. special bore tolerance).
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)