

BK4

FOR TAPERED SHAFTS

15 – 150 Nm

PROPERTIES

FEATURES

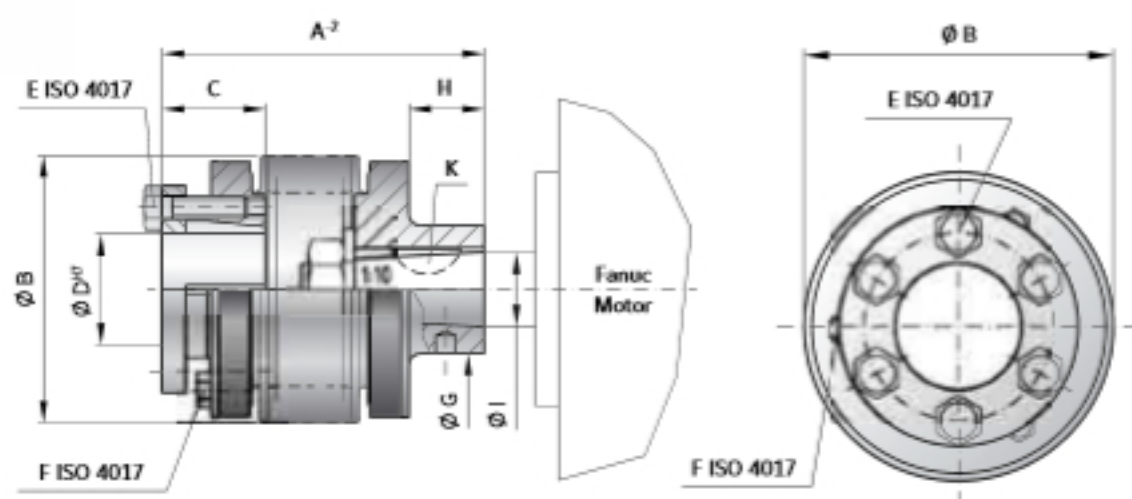
- ▶ for tapered shafts
- ▶ easy to mount and dismount
- ▶ high installed concentricity

MATERIAL

- ▶ **Bellows:** high grade stainless steel
- ▶ **Hubs:** steel

DESIGN

Conical clamping system opposite 1:10 tapered bore with feather keyway. Brief overloads of up to 1.5x the rated torque acceptable.



MODEL BK4

SIZE			15		30		60		150	
Rated torque	(Nm)	T_{RK}	15		30		60		150	
Overall length	(mm)	A^2	47	54	68	76	72	82	82	94
Outside diameter	(mm)	B	49		55		66		81	
Fit length	(mm)	C	19		22		27		32	
Inside diameter possible from $\emptyset$ to $\emptyset$ H7	(mm)	D	10–22		12–23		12–29		15–37	
Fastening screw ISO 4017		E	6 x M4		6 x M5		6 x M5		6 x M6	
Tightening torque of the fastening screw	(Nm)		4		6		8		12	
Jack screw ISO 4017		F	3 x M4		3 x M4		3 x M5		3 x M5	
Outside diameter of hub	(mm)	G	20		27		30		30	
Hub length	(mm)	H	8.5		22		18		20	
Moment of inertia	(10^{-3} kgm ²)	J_{ges}	0.10	0.12	0.22	0.27	0.58	0.61	1.1	1.4
Approximate weight	(kg)		0.25		0.4		0.8		1.35	
Torsional stiffness	(10^3 Nm/rad)	C_t	20	15	39	28	76	55	175	110
Axial	$\pm$ (mm)	Max. values	1	2	1	2	1.5	2	2	3
Lateral	$\pm$ (mm)		0.15	0.2	0.2	0.25	0.2	0.25	0.2	0.25
Angular	$\pm$ (degree)		1	1.5	1	1.5	1	1.5	1	1.5
Axial spring stiffness	(N/mm)	C_a	25	15	50	30	72	48	82	52
Lateral spring stiffness	(N/mm)	C_l	475	137	900	270	1200	420	1500	435
Cone $\emptyset$ (Fanuc-Motor)	(mm)	I	11		16		16		16	
Key width	(mm)	K	4		5		5		5	

ORDERING EXAMPLE	BK4	150	82	20	XX
Model	●				Special designation only (e.g. non-standard bore tolerance)
Size		●			
Overall length mm			●		
Bore D1 H7				●	

For custom features place an XX at the end of the part number and describe the special requirements (e.g. BK4 / 150 / 82 / 20 / XX; XX=finely balanced for 25,000 rpm)