

# BK4

## FOR TAPERED SHAFTS 15 - 150 Nm



### ABOUT

#### FEATURES

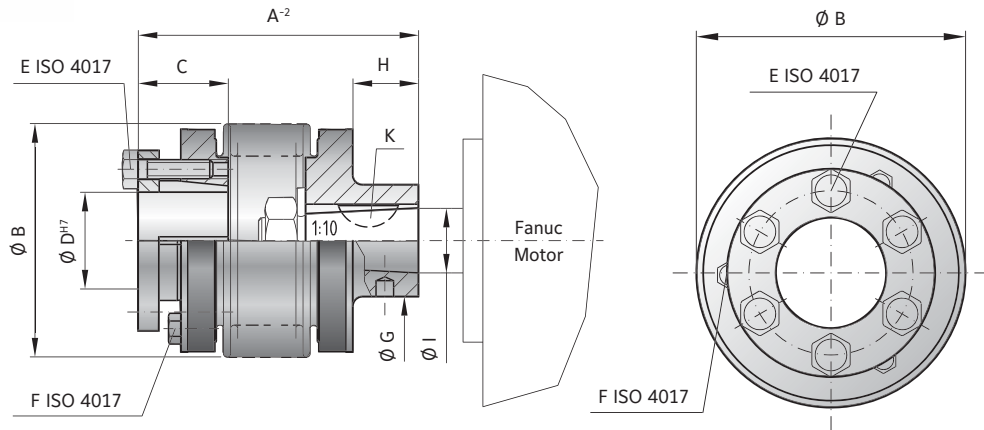
- ▶ for tapered shafts
- ▶ easy to mount and dismount
- ▶ high installed concentricity

#### 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.



BELLOWS  
COUPLINGS BK

## MODEL BK4

SIZE			15		30		60		150	
Rated torque (Nm)	$T_{KN}$		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 $\varnothing$ to $\varnothing$ H7 (mm)	D		10-22		12-23		12-29		15-37	
Fastening screw ISO 4017			6 x M4		6 x M5		6 x M5		6 x M6	
Tightening torque of the fastening screw (Nm)	E		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 <sup>2</sup> )	$J_{RES}$		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)	$C_r$		475	137	900	270	1200	420	1500	435
Cone $\varnothing$ (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)					