

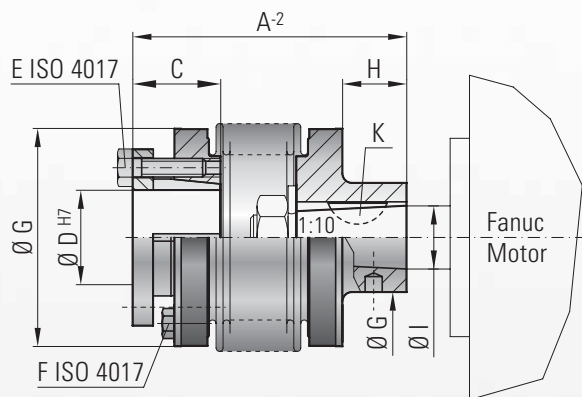


MODEL BK4

TECHNICAL SPECIFICATIONS



for Fanuc-Motors



Properties:

- for conical shafts
- easy mounting and dismounting
- high degree of operating dependability

Material:

Bellows made of highly flexible high-grade stainless steel, the hub material is steel.

Design:

Spindle-side:
With conical sleeve and strong captive ISO 4017 draw-off screws

Motor-side:
Conical hub 1 : 10 and a keyway.

Temperature range:

-30 to +120° C (3.6 F - 270 F)

Speeds:

Up to 10,000 rpm, over 10,000 rpm available with a finely balanced version.

Service life:

These couplings are maintenance-free if the technical ratings are not exceeded.

Backlash:

Absolutely backlash-free due to frictional clamp connection.

Brief overloads:

Acceptable up to 1.5 times the value specified.

Tolerance:

On the hub/shaft connection 0.01 to 0.05 mm

Custom Designs:

With varied tolerances, keyways, non-standard material, and bellows are available upon request.

Ordering example

BK4/150 / 82 / 20 / XX

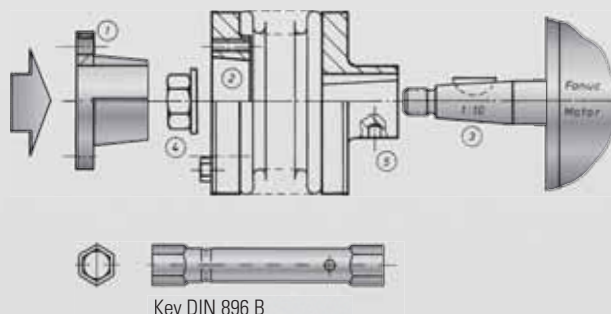
Model
Series / Nm
Overall length
Ø D H7
Non standard e.g. stainless steel

Model BK 4		Series			
		15	30	60	150
Rated torque (Nm)	T_{KN}	15	30	60	150
Overall length (mm)	A	47 54	68 76	72 82	82 94
Outer diameter of bellows (mm)	B	49	55	66	81
Fit length (mm)	C	19	22	27	32
Inner diameter from Ø to Ø H7 (mm)	D	10-22	12-23	12-29	15-37
Fastening screws 6x	E	M4	M5	M5	M6
Tightening torque of the fastening screws (Nm)		4	6	8	12
DIN 933 draw-off screw 3x	F	M4	M4	M5	M5
Shaft diameter (mm)	G	20	27	30	30
Shaft length (mm)	H	8.5	22	18	20
Moment of inertia (10^{-3} kgm ²)	J_{total}	0.10 0.12	0.22 0.27	0.58 0.61	1.1 1.4
Approx. 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	Max. values	1 2	1 2	1.5 2	2 3
lateral		0.15 0.2	0.2 0.25	0.2 0.25	0.2 0.25
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 Ø (Fanuc Motor)	I	11	16	16	16
Keyway wide (mm)	K	4	5	5	5

Technical instructions:

Before mounting the coupling, the conical sleeve (1) has to be removed. After sliding the coupling on to the motor shaft (3) the nut (4) can be put on through the bellows body (4).

To tighten the nut a special DIN 896 B key is used. The bore (5) is used for holding the coupling while tightening the nut.



(1Nm $\hat{=}$ 8.85 in lbs) Higher torques on request max. angular misalignment see BK 1