

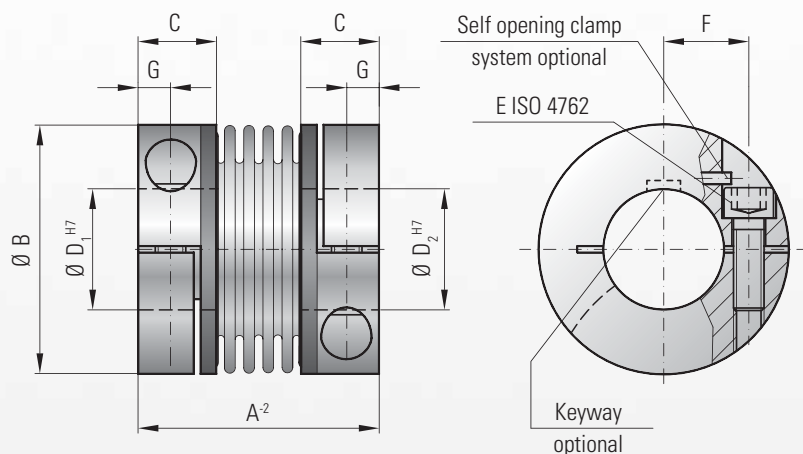
optional
stainless
steel

MODEL BKC

BACKLASH-FREE, TORSIONALLY STIFF METAL BELLOWS COUPLINGS



compact version with clamping hubs



Ordering example

BKC / 60 / 26 / 22 / XX

Model
Series / Nm
Bore Ø D1 H7
Bore Ø D2 H7
Non standard e.g. stainless steel

Features:

- high torsional rigidity
- easy to mount
- suited for space restricted installations
- low moment of inertia

Material:

Bellows made from highly flexible, high grade stainless steel; see below for hub material

Design:

With a single ISO 4762 radial clamping screw per hub

Self opening clamp system optional: Loosening the clamping screw applies force to the pin, which forces the clamp into the open position for easy mounting and dismounting

Absolutely backlash free due to frictional clamp connection

Temperature range: -30 to +100° C (-22 to +212° F)

Speeds:

Up to 10,000 rpm; in excess of 10,000 rpm with finely balanced version (up to G = 2.5)

Service life:

Maintenance free with infinite life when operated within the technical specifications

Brief overloads:

Acceptable up to 1.5x the rated torque

Fit tolerance:

Overall clearance between hub and shaft 0.01-0.05 mm

Non standard applications:

Custom designs with various tolerances, keyways, materials, dimensions, etc. available upon request

Model BKC		Series					
		15	30	60	150	300	500
Rated torque (Nm)	T_{KN}	18	30	60	150	300	500
Overall length (mm)	A^2	48	58	67	78	94	100
Outside diameter (mm)	B	49	56	66	82	110	123
Fit length (mm)	C	16.5	21	23	27.5	34	34
Inside diameter possible from Ø to Ø H7 (mm)	$D_{1/2}$	8-28	12-32	14-35	19-42	24-60	32-75
Fastening screw ISO 4762		M5	M6	M8	M10	M12	M12
Tightening torque of the fastening screw (Nm)	E	8	15	40	75	120	125
Distance between centerlines (mm)	F	17.5	20	23	27	39	45
Distance (mm)	G	6.5	7.5	9.5	11	13	13
Moment of inertia (10^{-3} kgm ²)	J_{total}	0.05	0.1	0.26	0.65	6.3	9
Hub material		Al	Al	Al	Al	steel	steel
Approximate weight (kg)		0.13	0.21	0.37	0.72	3.26	3.52
Torsional stiffness (10^9 Nm/rad)	C_T	23	31	72	141	360	410
Axial ± (mm)	Max. values	1	1	1.5	2	2	2.5
Lateral ± (mm)		0.2	0.2	0.2	0.2	0.2	0.2
Angular ± (degree)		1	1	1	1	1	1
Axial spring stiffness (N/mm)	C_a	30	50	67	77	112	72
Lateral spring stiffness (N/mm)	C_l	315	366	679	960	2940	2200
Speed max. with G = 2.5 balancing (rpm)		80,000	70,000	60,000	50,000	40,000	30,000

* 1 Nm = 8.85 in lbs