

Optional:

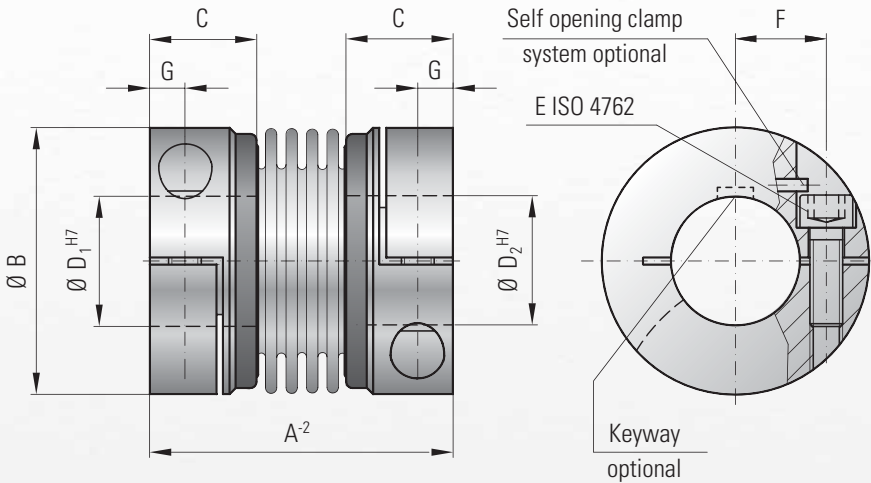


MODEL BKL

BACKLASH-FREE, TORSIONALLY STIFF METAL BELLOWS COUPLINGS



with clamping hubs



Ordering example

BKL / 80 / 26 / 22 / XX

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

Features:

- easy to mount
- low moment of inertia
- low cost

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 BKL		Series									
		2	4.5	10	15	30	60	80	150	300	500
Rated torque (Nm)	T_{KN}	2	4.5	10	18	30	60	80	150	300	500
Overall length (mm)	A	30	40	44	58	68	79	92	92	109	114
Outside diameter (mm)	B	25	32	40	49	56	66	82	82	110	123
Fit length (mm)	C	10.5	13	13	21.5	26	28	32.5	32.5	41	42.5
Inside diameter possible from Ø to Ø H7 (mm)	$D_{1/2}$	4-12.7	6-16	6-24	8-28	10-32	14-35	16-42	19-42	24-60	35-62
Fastening screw ISO 4762	E	M3	M4	M4	M5	M6	M8	M10	M10	M12	M16
Tightening torque of the fastening screw (Nm)		2.3	4	4.5	8	15	40	70	85	120	200
Distance between centerlines (mm)	F	8	11	14	17	20	23	27	27	39	41
Distance (mm)	G	4	5	5	6.5	7.5	9.5	11	11	13	17
Moment of inertia (10^{-3} kgm ²)	J_{total}	0.002	0.007	0.016	0.065	0.12	0.3	0.75	1.8 0.8	7.5 3.1	11.7 4.9
Hub material		Al optional steel	Al optional steel	Al optional steel	Al optional steel	Al optional steel	Al optional steel	Al optional steel	steel optional Al	steel optional Al	steel optional Al
Approximate weight (kg)		0.02	0.05	0.06	0.16	0.25	0.4	0.7	1.7 0.75	3.8 1.6	4.9 2.1
Torsional stiffness (10^3 Nm/rad)	C_T	1.5	7	9	23	31	72	80	141	157	290
Axial ± (mm)	Max. values	0.5	1	1	1	1	1.5	2	2	2	2.5
Lateral ± (mm)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Angular ± (degree)		1	1	1	1	1	1	1	1	1	1
Axial spring stiffness (N/mm)	C_a	8	35	30	30	50	67	44	77	112	72
Lateral spring stiffness (N/mm)	C_r	50	350	320	315	366	679	590	960	2940	1450

* 1 Nm = 8.85 in lbs