

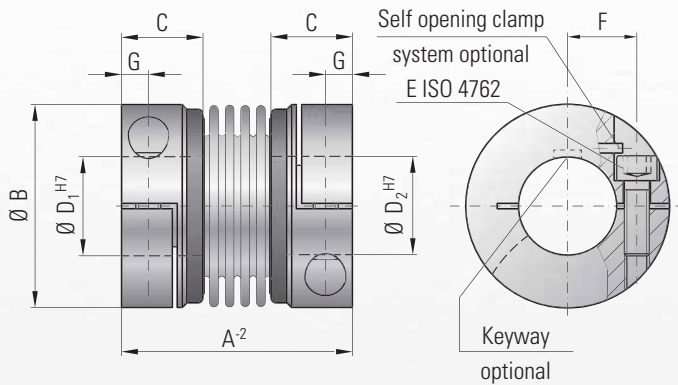


MODEL BKL

BACKLASH-FREE, TORSIONALLY STIFF METAL BELLOWS COUPLINGS



with clamping hub



Properties:

- easy to mount
- low moment of inertia
- economically priced

Material:

Bellows made of highly flexible high-grade stainless steel. Hub material see table

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 will force the clamp into the open position for easy mounting and dismounting.

Absolutely backlash-free due to frictional clamped connection.

Temperature range:

-30 to +100° C (-22 F to 212 F)

Speeds:

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

Brief overloads:

Acceptable up to 1.5 times the value specified.

Service life:

These couplings have an infinite life and are maintenance-free if the technical ratings are not exceeded.

Tolerance:

On the hub/shaft connection 0.01 to 0.05 mm.

Non standard:

Custom designs with varied tolerances, keyways, non-standard material, bellows and ATEX designs are available upon request.

Ordering example

BKL / 80 / 26 / 22 / XX

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

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
Outer 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
Inner 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)	E	2.3	4	4.5	8	15	40	70	85	120	200
Distance between centers (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
Approx. 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	360	410
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 \approx 8.85 in lbs)