BK5

BLIND MATE WITH CLAMPING HUB

15 – 1,500 Nm

PROPERTIES

FEATURES

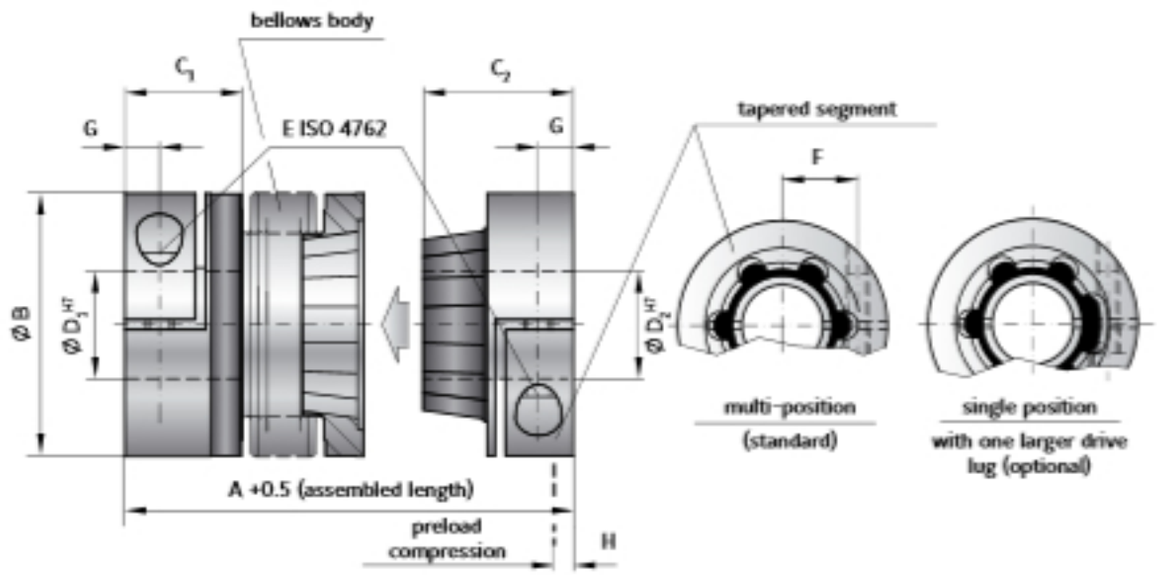
- easy installation and removal
- electrically and thermally isolating
- absolutely backlash free assembly

MATERIAL

- **Bellows:** high grade stainless steel
- **Hubs:** up through size 80 Aluminum, size 150 and up steel
- **Tapered male segment:** high strength plastic

DESIGN

Two clamping hubs, one of which has a tapered male projection for bind mate connection. Brief overloads of up to 1.5x the rated torque are acceptable.



MODEL BK5

SIZE			15		30		60		80		150		300		500		800	1500
Rated torque	(Nm)	T_{KN}	15		30		60		80		150		300		500		800	1500
Overall length (inserted)	(mm)	$A^{\pm 0.5}$	60	67	71	79	85	95	94	106	95	107	114	128	136	149	150	176
Outside diameter	(mm)	B	49		55		66		81		81		110		124		133	157
Fit length	(mm)	C_1	22		27		31		36		36		43		51		45	55
Fit length	(mm)	C_2	28		33		39		43		43		52		61		74	94
Inside diameter possible from Ø to Ø H7	(mm)	D_1	8-28		10-30		12-35		14-42		14-42		24-60		35-60		40-75	50-80
Inside diameter possible from Ø to Ø H7	(mm)	D_2	8-22		10-25		12-32		14-38		14-38		24-58		35-60		40-62	50-75
Fastening screw ISO 4762		E	M5		M6		M8		M10		M10		M12		M16		2 x M16**	2 x M20**
Tightening torque of the fastening screw	(Nm)		8		15		40		50		70		130		200		250	470
Distance between centerlines	(mm)	F	17		19		23		27		27		39		41		2 x 48**	2 x 55**
Distance	(mm)	G	6.5		7.5		9.5		11		11		13		16.5		18	22.5
Preload compression	(mm)	H	0.2 - 1.0		0.5 - 1.0		0.5 - 1.5		0.5 - 1.5		0.5 - 1.5		0.5 - 1.5		1.0 - 2.0		1.0 - 2.5	0.5 - 1.5
Axial recovery force at maximum pretensioning	(N)		20	12	50	30	70	45	48	32	82	52	157	106	140	96	200	650
Moment of inertia	(10^{-3} kgm²)	J_{em}	0.07	0.08	0.14	0.15	0.23	0.26	0.65	0.67	2.2	2.4	7.4	7.9	13.7	14.4	21.5	51.4
Approximate weight	(kg)		0.1	0.1	0.3	0.3	0.4	0.4	0.9	0.9	1.8	1.8	4	4	6.5	6.7	9	15.3
Torsional stiffness	(10^3 Nm/rad)	C_T	10	8	20	14	38	28	65	43	88	55	225	175	255	245	400	650
Axial*	± (mm)	Max. values	0.5	1	0.5	1	0.5	1	1	2	1	2	1.5	2	2.5	3.5	3	2
Lateral	± (mm)		0.15	0.2	0.2	0.25	0.2	0.25	0.2	0.25	0.2	0.25	0.25	0.3	0.3	0.35	0.35	0.35
Angular	± (degree)		1	1.5	1	1.5	1	1.5	1	1.5	1	1.5	1	1.5	1	1.5	1.5	1.5
Lateral spring stiffness	(N/mm)	C_q	475	137	900	270	1200	420	920	290	1550	435	3750	1050	2500	840	2000	3600

*in addition to maximum allowable pretension **180° opposed in each clamping hub.

ORDERING EXAMPLE	BK5	30	71	18	19	XX
Model	●					Special designation only (e.g. special bore tolerance).
Size		●				
Overall length mm			●			
Bore D1 H7				●		
Bore D2 H7					●	

For custom features place an XX at the end of the part number and describe the special requirements (e.g. BK5 / 30 / 71 / 18 / 19 / XX; XX=finely balanced for 25,000 rpm)