

BK5

BLIND MATE WITH CLAMPING HUB 15 - 1,500 Nm

PROPERTIES

FEATURES

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

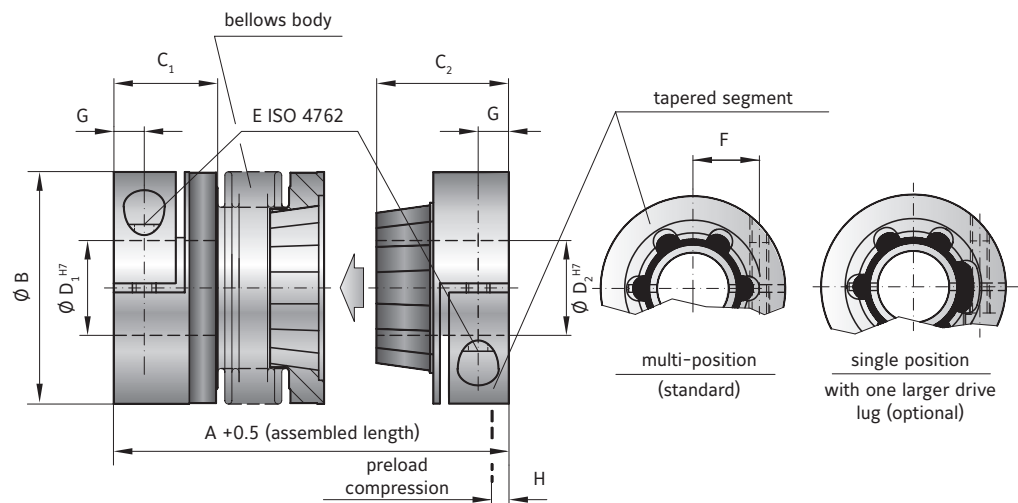
- ▶ **Tapered male segment:** high strength plastic

MATERIAL

- ▶ **Bellows:** high grade stainless steel
- ▶ **Hubs:** up through size 80 Aluminum, size 150 and up steel

DESIGN

Two clamping hubs, one of which has a tapered male projection for blind 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)	$A^{+0.5}$		60 67	71 79	85 95	94 106	95 107	114 128	136 149	150 176	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 \emptyset to \emptyset 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 \emptyset to \emptyset 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			M5	M6	M8	M10	M10	M12	M16	2 x M16**	2 x M20**
Tightening torque of the fastening screw (Nm)	E		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)			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)	H		20 12	50 30	70 45	48 32	82 52	157 106	140 96	200	650
Moment of inertia (10^{-3} kgm ²)	J_{ges}		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* \pm (mm)			0.5 1	0.5 1	0.5 1	1 2	1 2	1.5 2	2 2.5	3.5	2
Lateral \pm (mm)	Max. values		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 \pm (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_r		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	●					
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)						