

**BK6**

# BLIND MATE WITH CONICAL CLAMPING RING

## 15 - 1,500 Nm

### PROPERTIES

#### FEATURES

- ▶ axial mounting possible
- ▶ easy installation and removal
- ▶ naturally very well balanced due to self centering clamping ring system
- ▶ absolutely backlash free assembly

#### MATERIAL

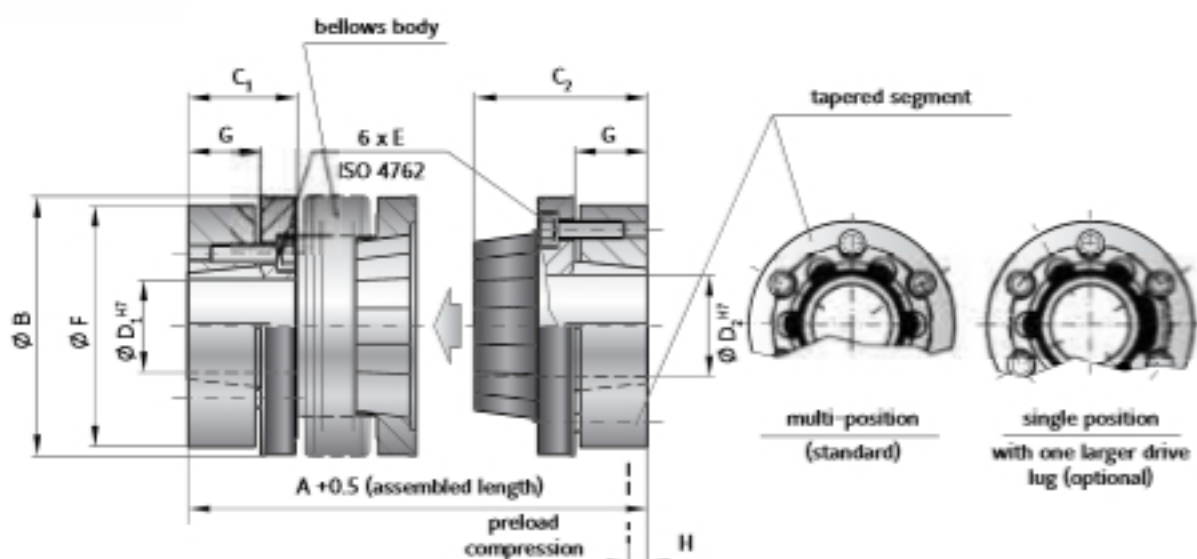
- ▶ **Bellows:** high grade stainless steel
- ▶ **Hubs:** steel

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

#### DESIGN

Two conical clamping ring 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 BK6

SIZE		15	30	60	150	300	500	800	1500
Rated torque (Nm)	$T_{OH}$	15	30	60	150	300	500	800	1500
Overall length (gesteckt) (mm)	$A^{+0.5}$	58   65	68   76	79   89	97   109	113   127	132   145	140	158
Outside diameter (mm)	B	49	55	66	81	110	124	133	157
Fit length (mm)	$C_1$	13.5	21.5	18	23.5	27	32	42	53
Fit length (mm)	$C_2$	29	34	39	49.5	59	68	74	90.5
Inside diameter possible from $\emptyset$ to $\emptyset$ H7 (mm)	$D_1$	10-22	12-24	12-32	15-40	24-56	30-60	40-62	50-75
Inside diameter possible from $\emptyset$ to $\emptyset$ H7 (mm)	$D_2$	10-22	12-24	12-32	15-40	24-56	30-60	40-62	50-75
Fastening screw ISO 4762		M4	M5	M5	M6	M8	M8	M10	M12
Tightening torque of the fastening screw (Nm)	E	3.5	6.5	8	12	30	32	55	110
Diameter of clamping ring (mm)	F	46.5	51	60	74	102	114	126	146
Clamping ring length (mm)	G	9.5	10.5	11.5	17.5	20	23	27	32
Preload compression (mm)		0.2 - 1.0	0.5 - 1.0	0.5 - 1.5	0.5 - 1.5	0.5 - 1.5	1.0 - 2.0	1.0 - 2.0	0.5 - 1.5
Axial recovery force at maximum pretensioning (N)	H	20   12	50   30	70   45	82   52	157   106	140   96	400	650
Moment of inertia ( $10^{-3}$ kgm <sup>2</sup> )	$J_{pol}$	0.1   0.12	0.2   0.25	0.4   0.45	2.0   2.5	5.4   6.1	8.4   9.1	17.5	44
Approximate weight (kg)		0.3   0.32	0.5   0.52	0.82   0.84	1.6   1.7	4.1   4.2	6.0   6.3	8.1	16.2
Torsional stiffness ( $10^3$ Nm/rad)	$C_1$	10	8	20	14	38	28	88	55
Axial* $\pm$ (mm)		0.5	1	0.5	1	0.5	1	1	2
Lateral $\pm$ (mm)	Max. values	0.15	0.2	0.2	0.25	0.2	0.25	0.25	0.3
Angular $\pm$ (degree)		1	1.5	1	1.5	1	1.5	1	1.5
Lateral spring stiffness (N/mm)	$C_2$	475	137	900	270	1200	420	1550	435

\* in addition to maximum allowable pretension

Higher torques upon request

ORDERING EXAMPLE	BK6	30	76	18	19	XX
Model	●					
Size		●				
Overall length mm			●			
Bore D1 H7				●		
Bore D2 H7					●	
Special designation only (e.g. special bore tolerance).						

For custom features place an XX at the end of the part number and describe the special requirements (e.g. BK6 / 30 / 76 / 18 / 19 / XX; XX-finely balanced for 25,000 rpm)