

**BK1**

# WITH FLANGE MOUNTING

15 - 10,000 Nm



## PROPERTIES

### FEATURES

- For simple flange mounting to special drive components
- custom flange patterns available

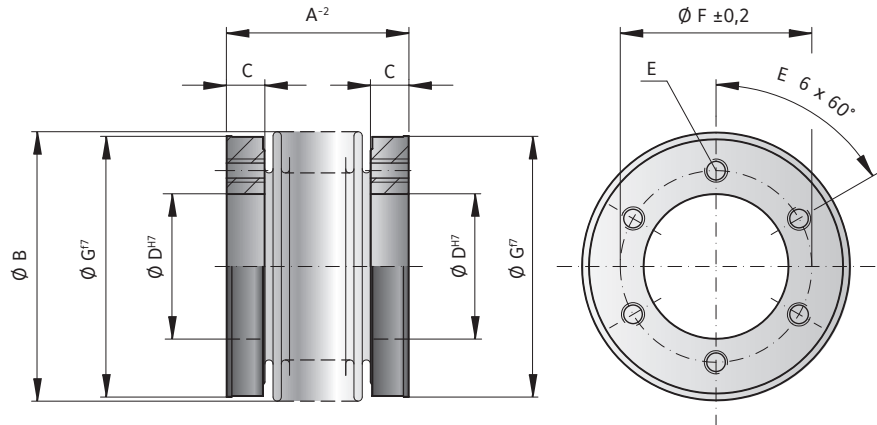
### MATERIAL

- **Bellows:** high grade stainless steel

- **Hubs:** steel

### DESIGN

Two mounting flanges concentrically assembled to the flexible bellows. Brief overloads of up to 1.5x the rated torque are acceptable.



BELLOWS  
COUPLINGS BK

## MODEL BK1

SIZE		15	30	60	150	200	300	500	800	1500	4000	6000	10000	
Rated torque (Nm)	$T_{KN}$	15	30	60	150	200	300	500	800	1500	4000	6000	10000	
Overall length (mm)	$A^2$	30   37	36   44	43   53	50   62	53   65	56   70	64   77	81	100	145	138	150	
Outside diameter of bellows (mm)	B	49	55	66	81	90	110	124	133	157	200	253	303	
Fit length/thread depth (mm)	C	7.5	10	11	13	14.5	15	16	18	22	30	30	36	
Inside diameter H7 (mm)	D	25	28	38	50	58	65	70	75	85	100	145	190	
Fastening threads	E	6 x M5	6 x M5	6 x M6	6 x M6	6 x M6	6 x M8	6 x M8	6 x M10	6 x M16	6 x M20	8 x M20	8 x M24	
Bolt circle diameter $\pm 0.2$ (mm)	F	35	37	46	62	70	80	94	90	110	140	190	234	
Outside diameter f7 (mm)	G	49	55	66	81	90	110	122	116	140	182	235	295	
Moment of inertia ( $10^{-3}$ kgm <sup>2</sup> )	$J_{ges}$	0.07   0.08	0.14   0.15	0.30   0.32	0.90   0.95	1.30   1.40	1.95   2.10	3.0   3.4	4.3	10.6	46	132	350	
Approximate weight (kg)		0.15	0.2	0.3	0.6	0.8	1.35	1.8	1.9	3.3	8.9	13.9	23.7	
Torsional stiffness ( $10^3$ Nm/rad)	$C_T$	20   15	39   28	76   55	175   110	191   140	450   350	510   500	780	1304	3400	5700	10950	
Axial $\pm$ (mm)	Max. values	1   2	1   2	1.5   2	2   3	2   3	2.5   3.5	2.5   3.5	3.5	3.5	3.5	3	3	
Lateral $\pm$ (mm)		0.15   0.2	0.2   0.25	0.2   0.25	0.2   0.25	0.25   0.3	0.25   0.3	0.3   0.35	0.35	0.35	0.35	0.4	0.4	0.4
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   1.5	1.5	1.5	1.5	1.5	1.5
Axial spring stiffness (N/mm)	$C_s$	25   15	50   30	72   48	82   52	90   60	105   71	70   48	100	320	565	1030	985	
Lateral spring stiffness (N/mm)	$C_r$	475   137	900   270	1200   420	1550   435	2040   610	3750   1050	2500   840	2000	3600	6070	19200	21800	

ORDERING EXAMPLE	BK1	150	62	XX
Model	●			
Size		●		
Overall length mm			●	
Special designation only (e.g. high speed balancing).				
For custom features place an XX at the end of the part number and describe the special requirements (e.g. BK1 / 150 / 62 / XX; XX=finely balanced for 25,000 rpm)				