

PROPERTIES

FEATURES

- ▶ extremely compact
- ▶ high torque density
- ▶ high torsional stiffness

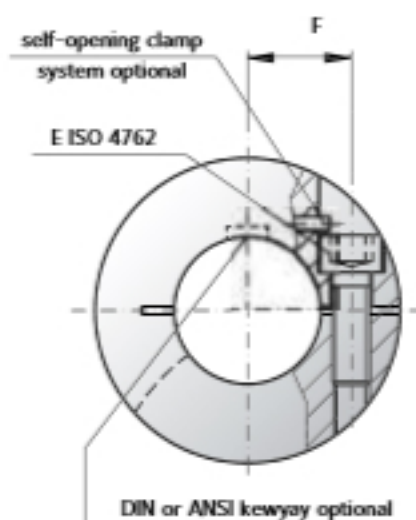
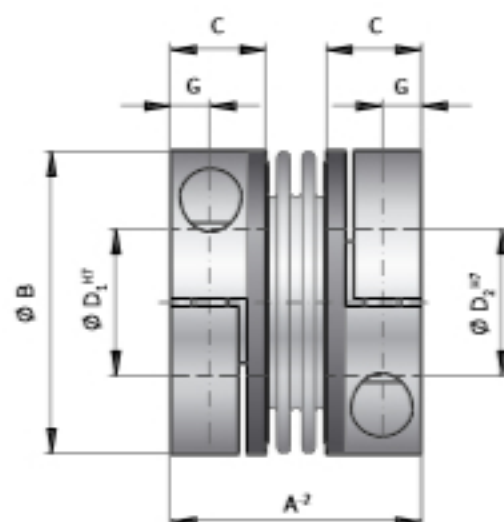
MATERIAL

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

DESIGN

Two clamping hubs concentrically mounted to flexible bellows. Brief overloads of up to 1.5x the rated torque are acceptable.

Key application:
For mounting on a torque transducer.



MODEL BKM

SIZE			20	200	400	1000
Rated torque	(Nm)	T_{RN}	20	200	400	1000
Overall length	(mm)	A^2	40	59	75	89
Outside diameter	(mm)	B	49	66	82	110
Fit length	(mm)	C	16.5	23	27.5	34
Inside diameter possible from $\emptyset$ to $\emptyset$ H7	(mm)	$D_{1/2}$	15–28	24–35	32–42	40–60
Fastening screw ISO 4762			M5	M8	M10	M12
Tightening torque of the fastening screw	(Nm)	E	8	40	60	130
Distance between centerlines	(mm)	F	17	23	27	39
Distance	(mm)	G	6	9.5	11	13
Moment of inertia	(10^{-3} kgm ²)	J_{ges}	0.05	0.18	0.62	7.2
Hub material			AL	AL	AL	steel
Approximate weight	(kg)		0.13	0.4	0.7	3.5
Torsional stiffness	(10^3 Nm/rad)	C_T	41.9	138	170	570
Axial	$\pm$ (mm)	Max. values	1	1.5	1	2
Lateral	$\pm$ (mm)		0.06	0.08	0.1	0.1
Angular	$\pm$ (degree)		0.5	0.5	0.5	0.5
Axial spring stiffness	(N/mm)	C_A	55.8	153	114	148
Lateral spring stiffness	(N/mm)	C_L	3,710	11,000	6,058	9,010
Speed max. with balancing	(min ⁻¹)		80,000	60,000	50,000	40,000

ORDERING EXAMPLE	BKM	20	20	19.05	XX
Model	•				
Size		•			
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. BKM / 20 / 20 / 19.05 / XX; XX—finely balanced for 25,000 rpm)