

EK7

WITH EXPANDING SHAFT

2 - 2,150 Nm



ABOUT

FEATURES

- ▶ for hollow shaft mounting
- ▶ short overall length
- ▶ solution for mismatched bore / shaft diameters

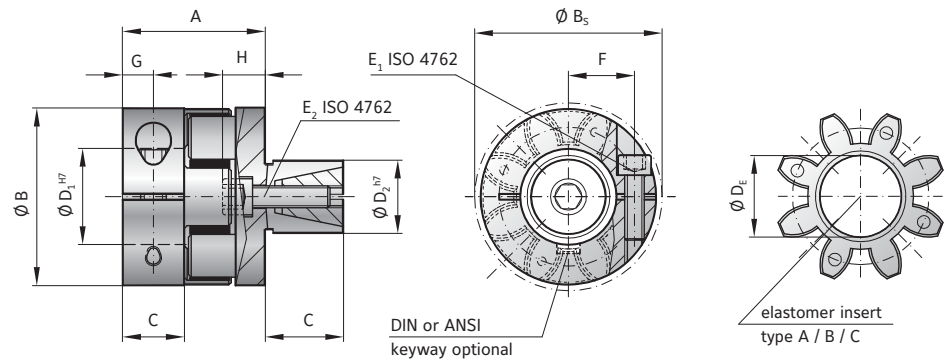
MATERIAL

- ▶ **Hubs:** up to size 450 high strength aluminum; size 800 steel
- ▶ **Expanding shaft hub:** steel

- ▶ **Elastomer:** wear resistant thermally stable TPU

DESIGN

One concentrically machined hub with clamping screw and curved jaws. One concentrically machined hub with expanding shaft system and curved jaws. Elastomer segment press fit for zero backlash; standard versions are electrically isolating.



MODEL EK7

SIZE	5			10			20			60			150			300			450			800		
Type (Elastomer insert)	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Rated torque (Nm) T_{KN}	9	12	2	12.5	16	4	17	21	6	60	75	20	160	200	42	325	405	84	530	660	95	950	1100	240
Max. torque* (Nm) T_{Kmax}	18	24	4	25	32	6	34	42	12	120	150	35	320	400	85	650	810	170	1060	1350	190	1900	2150	400
Overall length (mm) A	22			28			40			46			51			68			76			94		
Outside diameter (mm) B	25			32			42			56			66.5			82			102			136.5		
Outside diameter with screw head (mm) B_s	25			32			44.5			57			68			85			105			139		
Mounting length (mm) C_1	8			10.3			17			20			21			31			34			46		
Mounting length (mm) C_2	12			20			25			27			32			45			55			60		
Inside diameter range H7 (mm) D_1	4 - 12.7			5 - 16			8 - 25			12 - 32			19 - 36			20 - 45			28 - 60			35 - 80		
Outside diameter range h7 (mm) D_2	10 - 16			13 - 25			14 - 30			23 - 38			26 - 42			38 - 60			42 - 70			42 - 80		
Inside diameter of elastomer (mm) D_E	10.2			14.2			19.2			26.2			29.2			36.2			46.2			60.5		
Clamping screw (ISO 4762) E_1	M3			M4			M5			M6			M8			M10			M12			M16		
Tightening torque (Nm) E_1	2			4			8			15			35			70			120			290		
Clamping screw (ISO 4762) E_2	M4			M5			M6			M8			M10			M12			M16			M16		
Tightening torque (Nm) E_2	4			9			12			32			60			110			240			300		
Distance between centers (mm) F	8			10.5			15.5			21			24			29			38			50.5		
Distance (mm) G	4			5			8.5			10			11			15			17.5			23		
Length (mm) H	7			7			10			11			16			20			27			27		
Moment of inertia D_1 (10^{-3} kgm ²) J_1	0.002			0.003			0.01			0.04			0.08			0.3			0.66			8		
Moment of inertia D_2 (10^{-3} kgm ²) J_2	0.002			0.01			0.04			0.1			0.2			1			2.6			9		
Approx. weight (kg)	0.04			0.05			0.12			0.3			0.5			0.9			1.5			7.6		
Speed standard (min^{-1})	15,000			13,000			12,500			11,000			10,000			9,000			8,000			4,000		
Speed balanced (10^3min^{-1})	57	65	43	53	63	40	45	60	35	31	31	25	22	26	18	22	26	16	16	17	12	13	13	8

For information on shaft misalignment, torsional stiffness, and other details about the elastomer inserts see pages 66 + 67.

*Maximum transmittable torque of the clamping hub depends on the bore diameter (see EKL on page 68).

ORDERING EXAMPLE	EK7	20	A	24	19.05	XX
Model	●					Special designation only (e.g. special bore tolerance).
Size		●				
Elastomer insert type			●			
Bore D1 H7				●		
Expanding shaft D2 h7					●	

For custom features place an XX at the end of the part number and describe the special requirements (e.g. EK7 / 20 / A / 24 / 19.05 / XX; XX=stainless steel)