

EK7

With expanding shaft

2 – 2,150 Nm

Features

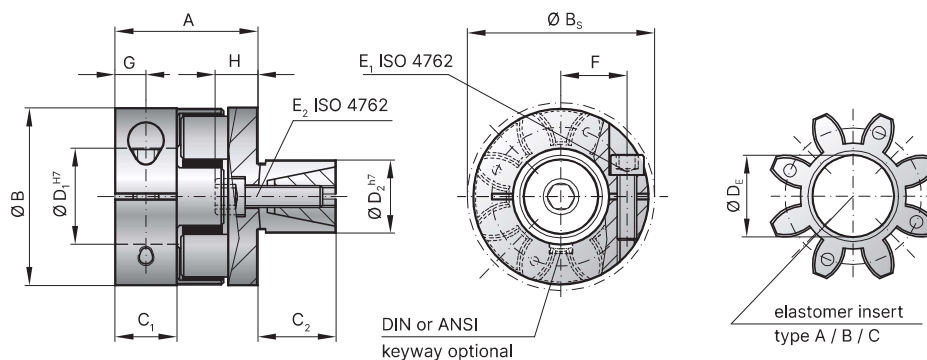
- For hollow shaft mounting
- Short overall length
- Solution for mismatched bore / shaft diameters

Material

- **Hubs:** up to size 600 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.



Model EK7

Size		5			10			20			60			150			300			400			450			600			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	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	410	520	90	530	660	95	700	840	150	950	1,100	240
Max. torque (Nm)	T_{Kmax}	18	24	4	25	32	6	34	42	12	120	150	35	320	400	85	650	810	170	820	1,040	180	1,060	1,350	190	1,400	1,680	300	1,900	2,150	400
Overall length (mm)	A	22.3			28			40			46			51			68			74			76			88			94		
Outside diameter (mm)	B	25			32			42			56			66.5			82			95			102			120			136.5		
Outside diameter with screw head (mm)	B_s	25			32			44.5			57			68			85			98			105			122			139		
Mounting length (mm)	C_1	8			10.3			17			20			21			31			32			34			40			46		
Mounting length (mm)	C_2	12			20			25			27			32			45			50			55			55			60		
Inside diameter range H7 (mm)	D_1	4 - 12.7			5 - 16			8 - 25			12 - 32			19 - 36			20 - 45			25 - 50			28 - 60			30 - 70			35 - 80		
Outside diameter range h7 (mm)	D_2	10 - 16			13 - 25			14 - 30			23 - 38			26 - 45			38 - 60			40 - 65			42 - 70			42 - 75			42 - 80		
Inside diameter of elastomer (mm)	D_e	10.2			14.2			19.2			26.2			29.2			36.2			43			46.2			55			60.5		
Clamping screw (ISO 4762)	E_1	M3			M4			M5			M6			M8			M10			M12			M12			M12			M16		
Tightening torque (Nm)		2			4			8			15			35			70			120			120			120			290		
Clamping screw (ISO 4762)	E_2	M4			M5			M6			M8			M10			M12			M16			M16			M16			M16		
Tightening torque (Nm)		4			9			12			32			60			110			240			240			240			300		
Distance between centers (mm)	F	8			10.5			15.5			21			24			29			33.5			38			47			50.5		
Distance (mm)	G	4			5			8.5			10			11			15			16			17.5			20			23		
Length (mm)	H	7			7			10			11			16			20			27			27			27			27		
Moment of inertia D_1 (10^{-3} kgm ²)	J_1	0.002			0.003			0.01			0.04			0.08			0.5			0.82			1.1			2.66			14		
Moment of inertia D_2 (10^{-3} kgm ²)	J_2	0.002			0.01			0.04			0.1			0.2			1			1.92			2.6			4.97			9		
Approx. weight (kg)		0.04			0.05			0.12			0.3			0.5			0.9			2.82			3.5			4.88			7.6		
Speed standard (min ⁻¹)		15,000			13,000			12,500			11,000			10,000			9,000			8,500			8,000			6,800			4,000		
Speed balanced (10^3 min ⁻¹)		57	65	43	53	63	40	45	60	35	31	31	25	22	26	18	22	26	16	17	18	13	16	17	12	14	14	10	13	13	8

For information on shaft misalignment, torsional stiffness, and other details about the elastomer inserts see pages 64.