

EK1

With keyway connection

0.5 - 2,150 Nm



Features

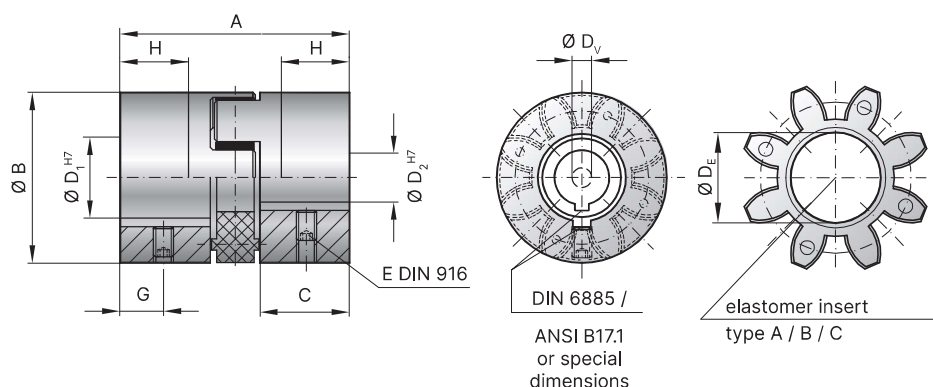
- Press fit design
- Readily modified for custom dimensions
- Low backlash (keyway)

Material

- **Hubs:** up to size 600 high strength aluminum; size 800 steel
- **Elastomer:** wear resistant thermally stable TPU

Design

Two concentrically machined hubs with curved jaws, keyways, and set screws.



Optional:
Conical bores for
Fanuc motors and
other tapered shafts
available.

Model EK1

Size	2			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}	2	2.4	0.5	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}	4	4.8	1	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	20			34			35			66			78			90			114			120			126			147			162		
Outside diameter	(mm)	B/B ₁	15			25			32			42			56			66.5			82			95			102			120			136.5		
Mounting length	(mm)	C	6.5			12			12			25			30			35			45			46			50			57			65		
Inside diameter (pilot bored)	(mm)	D _V	3			4			6			7			9			14			16			20			22			25			29		
Inside diameter range H7	(mm)	D _{1/2}	3 - 9			6 - 15			6 - 18			8 - 25			12 - 32			19 - 38			20 - 45			25-50			28 - 60			30-70			32 - 80		
Inside diameter of elastomer	(mm)	D _E	6.2			10.2			14.2			19.2			26.2			29.2			36.2			43			46.2			55			60.5		
Set screws (DIN 916)	E	see table (depending on bore Ø)**																																	
Distance	(mm)	G	3			5			6			9			11			12			15			16			17			23			30		
Possible shortening length(mm)	H	4			6			6			19			22			26			32			35			37			40			43			
Moment of inertia per hub (10 ⁻³ kgm ²)	J ₁ /J ₂	0.0001			0.001			0.003			0.02			0.06			0.2			0.6			1.1			1.5			3.5			19			
Approx. weight	(kg)	0.008			0.03			0.08			0.15			0.35			0.7			1.4			1.9			2.3			3.7			15.5			
Speed standard(min ⁻¹)		15,000			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)		60	67	45	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.

** set screw size

D ₁ /D ₂	- Ø 10	Ø 10.1 - 12	Ø 12.1 - 30	Ø 30.1 - 60	Ø 60.1 - 95	Ø 95.1 - 130	Ø 130.1 - 170
E	M4	M4	M5	M8	M10	M12	M16

EK1

With keyway connection

1,950 – 25,000 Nm

Features

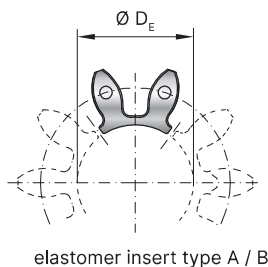
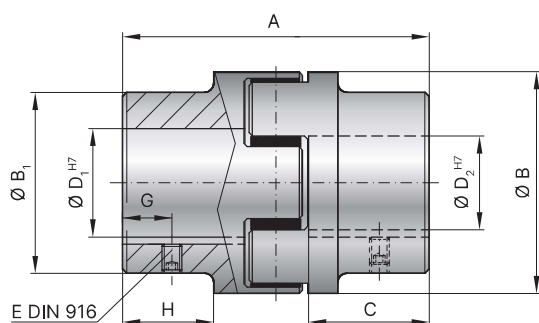
- Press fit design
- Readily modified for custom dimensions
- Low backlash (keyway)

Material

- **Hubs:** GGG40
- **Elastomer:** wear resistant thermally stable TPU

Design

Two concentrically machined hubs with curved jaws, keyways, and set screws. Elastomer insert consist of 5 segments.



Model EK1

Serie		2,500		4,500		9,500	
Type (Elastomer insert)		A	B	A	B	A	B
Rated torque (Nm)	T_{KN}	1,950	2,450	5,000	6,200	10,000	12,500
Max. torque (Nm)	T_{Kmax}	3,900	4,900	10,000	12,400	20,000	25,000
Overall length (mm)	A	213		272		341	
Outside diameter (mm)	B/B ₁	160 / 154		225 / 190		290 / 240	
Mounting length (mm)	C	88		113		142	
Inside diameter (pilot bored) (mm)	D _V	28		39		49	
Inside diameter range H7 (mm)	D _{1/2}	30 - 95		40 - 130		50 - 170	
Inside diameter of elastomer (mm)	D _E	80		111		145	
Set screws (DIN 916)	E	see table (depending on bore Ø)**					
Distance (mm)	G	25		30		40	
Possible shortening length (mm)	H	69		89		110	
Moment of inertia per hub (10 ⁻³ kgm ²)	J ₁ /J ₂	40		147		480	
Approx. weight (kg)		12.5		25		53	
Speed standard (min ⁻¹)		3,500		3,000		2,000	
Speed balanced (10 ³ min ⁻¹)		10	10	8	8	6.5	6.5

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