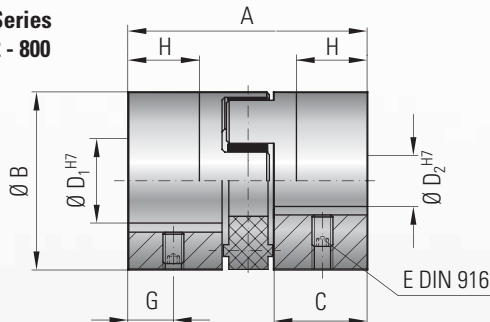




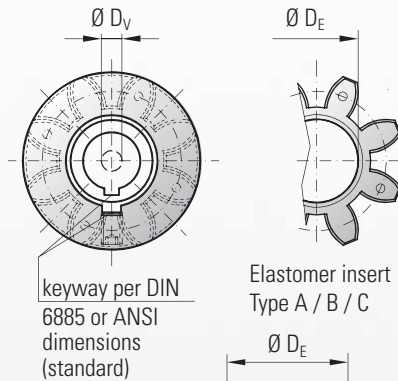
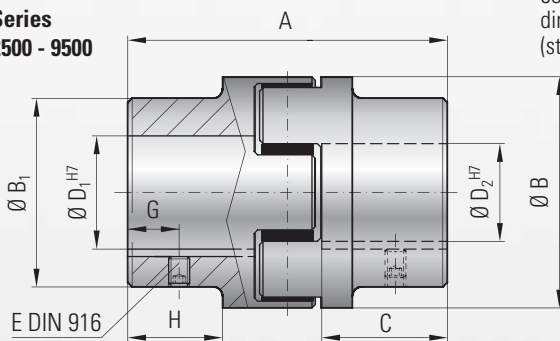
MODEL EK1

BACKLASH FREE ELASTOMER COUPLINGS

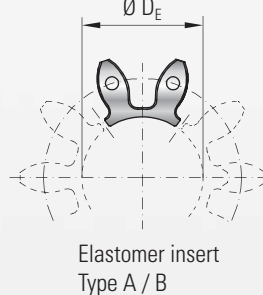
Series
2 - 800



Series
2500 - 9500



Elastomer insert
Type A / B / C



Elastomer insert
Type A / B



with keyway connection

Properties:

- economical design
- concentrically machined
- vibration damping
- electrically isolating
- press fit design
- low backlash, due to keyway connection

Material:

Coupling hub: up to series 450 high strength aluminum, series 800 and up steel
Elastomer insert: precision molded, wear resistant, and thermally stable polymer

Design:

Two coupling hubs are concentrically machined with curved jaws
Bore tolerance H7 + keyway + set screw per DIN 916
Optional pilot bore (D_v)

Speeds:

See table below
*Please contact R+W
ISO 2.5 balance grade available

Tolerance:

Overall clearance between shaft and hub
0.01 to 0.05 mm

Model EK 1		Series																																
		2			5			10			20			60			150			300			450			800			2500		4500		9500	
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	A	B	A	B
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	530	660	95	950	1100	240	1950	2450	5000	6200	10000	12500
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	1060	1350	190	1900	2150	400	3900	4900	10000	12400	20000	25000
Overall length (mm)	A	20			34			35			66			78			90			114			126			162			213		272		341	
Outside diameter (mm)	B/B ₁	15			25			32			42			56			66.5			82			102			136.5			160 / 155		225 / 190		290 / 240	
Mounting length (mm)	C	6.5			12			12			25			30			35			45			50			65			88		113		142	
Inside diameter (pilot bored) (mm)	D _V	3			4			6			7			9			14			18			22			29			30		40		50	
Inside diameter range H7 (mm)	D _{1/2}	3 - 9			6 - 15			6 - 18			8 - 25			12 - 32			19 - 38			20 - 45			28 - 60			32 - 80			30 - 95		40 - 130		50 - 170	
Inside diameter of elastomer (mm)	D _E	6.2			10.2			14.2			19.2			26.2			29.2			36.2			46.2			60.5			80		111		145	
Set screws (DIN 916)	E	see table (depending on bore Ø)**																																
Distance (mm)	G	3			5			6			9			11			12			15			17			30			25		30		40	
Possible shortening length (mm)	H	4			6			6			19			22			26			32			37			43			69		89		110	
Moment of inertia per Hub (10 ⁻³ kgm²)	J ₁ /J ₂	0.0001			0.001			0.003			0.02			0.06			0.1			0.4			1.1			12			40		147		480	
Approx. weight (kg)		0.008			0.03			0.08			0.15			0.35			0.6			1.1			1.7			11			12.5		25		53	
Speed standard (min ⁻¹)		15.000			15.000			13.000			12.500			11.000			10.000			9.000			8.000			4.000			3.500		3.000		2.000	
*Speed balanced (10³min ⁻¹)		60	67	45	57	65	43	53	63	40	45	60	35	31	31	25	22	26	18	22	26	16	16	17	12	13	13	8	10	10	8	8	6.5	6.5

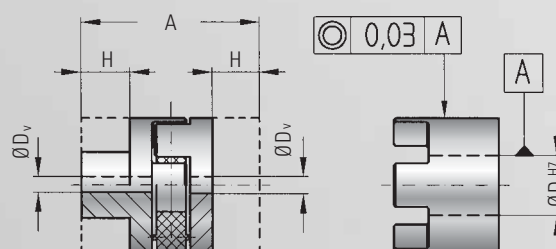
Information about static and dynamic torsional stiffness as well as max. possible misalignment see page 5

1 Nm = 8.85 in lbs

** Set screws	
D ₁ /D ₂	E
- Ø 10	M3
Ø 10.1 - 12	M4
Ø 12.1 - 30	M5
Ø 30.1 - 58	M8
Ø 58.1 - 95	M10
Ø 95.1 - 130	M12
Ø 130.1 - 170	M16

Hubs with bore diameter <6mm delivered without keyway.

Details of pilot bored coupling hubs (D_v)



EK1 hubs can be modified to customer specifications. They come with pilot bore D_v and no set screws. The coupling hub may be shortened by dimension H.

It's critical that modifications of the hub are machined concentrically and perpendicular to the through bore.

Ordering example

EK1 / 60 / A / 19 / 24 / XX
Model
Series
Type Elastomer insert
Bore Ø D1 H7
Bore Ø D2 H7
Non standard e.g. anodized

All data is subject to change without notice.