



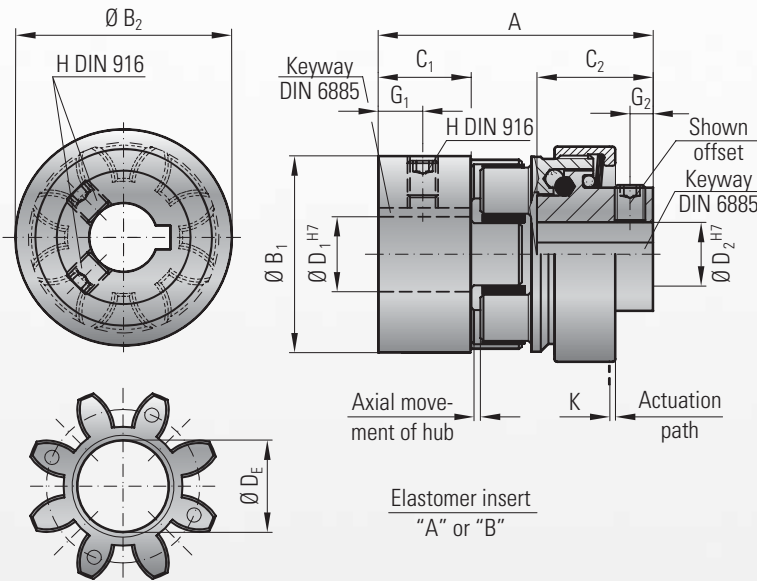
ratcheting



MODEL ESL

LOW BACKLASH TORQUE LIMITERS

with keyway connection



Material:

Torque limiting portion: high-strength steel
Clutching balls: hardened steel
Clamping hubs: high-strength aluminum
Elastomer insert: precision molded, wear-resistant, thermally stable polymer

Design:

Zero backlash elastomer coupling with integral torque limiter. All sizes available in standard multi-position design.

Speed:

Negligible abrasion with disengagement speeds up to 200 rpm
Higher speeds available upon request

Fit tolerance:

Tolerance between hub and shaft 0.01 – 0.05 mm

MODEL ESL		Series									
		5		10		20		60		150	
Type (Elastomer insert)		A	B	A	B	A	B	A	B	A	B
Rated torque (Nm)	T_{Kn}	9	12	12.5	16	17	21	60	75	160	200
Adjustment range* from - to (Nm)	T_{Kn}	1-6		1-12		3-19		5-60		20-150	
Overall length (mm)	A	34		45		64		80		90	
Diameter of the hub (mm)	B_1	25		32		42		56		66.5	
Diameter of the hub (mm)	B_2	29		32		46		59		75	
Clamping fit length (mm)	C_1	12.5		12		25		30		35	
Clamping fit length (mm)	C_2	11.5		20		22		31		35	
Inner diameter from \emptyset to \emptyset H7 (mm)	D_1	6-15		6-18		8-25		12-32		19-38	
Inner diameter from \emptyset to \emptyset H7 (mm)	D_2	6-10		6-12		8-19		12-24		19-32	
Inner diameter max. (elastomer) (mm)	D_E	10.5		14.2		19.2		26.2		29.2	
Distance (mm)	G_1	5		6		9		11		12	
Distance (mm)	G_2	2.5		3.5		4		4		4	
Screws DIN 916**	H	depending on bore diameter see below table									
Approx. weight (kg)		0.05		0.15		0.2		0.5		1	
Moment of inertia (10^{-3} kgm ²)	J_1/J_2	0.01		0.02		0.08		0.15		0.5	
Actuation path (mm)	K	0.6		0.6		0.7		1.1		1.4	

* Adjustment range preset by R+W. Information about static and dynamic torsional stiffness as well as max. possible misalignment see page 16

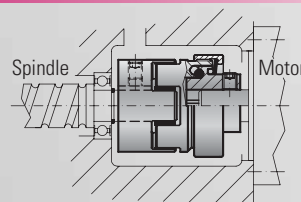
Ordering specifications

ESL / 10 / A / 14 / 12 / 10 / XX

Model _____
Series _____
Type of elastomer _____
Bore D1 H7 with keyway _____
Bore D2 H7 with keyway _____
Disengagement torque Nm (factory set – non-adjustable) _____
Non-standard e.g. Stainless steel _____

All data is subject to change without notice.

Installation instruction



Disengagement torque setting

The ESL torque limiter is factory preset at the required disengagement torque and is not adjustable.

** Set screw

D_1/D_2	H
- \emptyset 10	M3
\emptyset 11-12	M4
\emptyset 13-30	M5
\emptyset 31-58	M8
\emptyset 59-80	M10

Bore sizes < \emptyset 6 are manufactured without a keyway