# ESL

## WITH KEYWAY CONNECTION

1 - 150 Nm



#### **PROPERTIES**

#### MATERIAL

- ► Clutch system: high strength steel, drive balls made from hardened steel
- ▶ Hubs: high strength aluminum
- ► Elastomer insert: wear resistant, thermally stable TPU

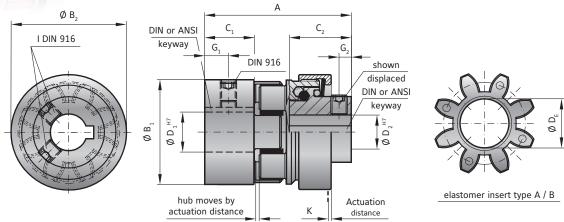
DETAILS FOR ELASTOMER INSERT see handbook page 72-73

#### **DESIGN**

Two hubs, each with keyway, set screw, and concave driving jaws. The clutch system is integrated into one of the hubs

#### DISENGAGEMENT

Negligible wear at up to 200 rpm. Contact R+W for higher speed applications.



### **MODEL ESL**

Size		5		10		20		60		150		
Type (Elastomer insert)			Α	В	Α	В	А	В	Α	В	А	В
Rated torque	(Nm)	T <sub>Kn</sub>	9	12	12.5	16	17	21	60	75	160	200
Torque setting possible* from - to	(Nm)	T <sub>Kn</sub>	1-6		1-12		3-19		5-60		20-150	
Overall length	(mm)	Α	34		45		64		80		90	
Diameter of the hub	(mm)	B <sub>1</sub>	25		32		42		56		66.5	
Diameter of the hub	(mm)	B <sub>2</sub>	29		32		46		59		75	
Clamping fit length	(mm)	C <sub>1</sub>	12.5		12		25		30		35	
Clamping fit length	(mm)	C <sub>2</sub>	11.5		20		22		31		35	
Inside diameter from Ø to Ø H7	(mm)	D <sub>1</sub>	6-15		6-18		8-25		12-32		19-38	
Inside diameter from Ø to Ø H7	(mm)	D <sub>2</sub>	6-10		6-12		8-19		12-24		19-32	
Inside diameter max. (elastomer)	(mm)	D <sub>E</sub>	10.5		14.2		19.2		26.2		29.2	
Distance	(mm)	G <sub>1</sub>	5		6		9		11		12	
Distance	(mm)	G <sub>2</sub>	2.	5	3.	5		4	4	1	4	4
Screws DIN 916**		1	depending on bore diameter see below table									
Approx. weight	(kg) 0.05		0.15		0.2		0.5		1			
Moment of inertia (10	³ kgm²)	$J_1/J_2$	0.01		0.02		0.08		0.15		0.5	
Actuation distance	(mm)	K	0.	6	0.	6	0	.7	1	.1	1	.4

<sup>\*</sup> Disengagement torque is permanently set at the factory. For information on shaft misalignment, torsional stiffness, and other details about the elastomer inserts see handbook page 73.

ORDERING EXAMPLE	ESL	10	Α	14	12	10	XX	
Model	•							
Size		•						
Elastomer insert type			•				Special	
Bore D1 H7 includes standard keyway				•			designation only (e.g. special bore tolerance).	
Bore D2 H7 includes standard keyway					•			
Disengagement torque Nm (not adjustable)						•	1	

For custom features place an XX at the end of the part number and describe the special requirements (e.g. ESL / 10 / A / 14 / 12 / 10 / XX; XX=stainless steel)

## FIXED DISENGAGEMENT TORQUE

The ESL coupling is unlike other R+W safety couplings in that the disengagement torque is permanently set and tamper proof.

** SET SCREWS									
D1/D2	- Ø 10	Ø 11-12	Ø 13-30	Ø 31-58	Ø 59-80				
I	М3	M4	M5	M8	M10				

Bores <6mm made without keyway.