

LP1

WITH KEYWAY MOUNTING

350 - 5,000 Nm



PROPERTIES

FEATURES

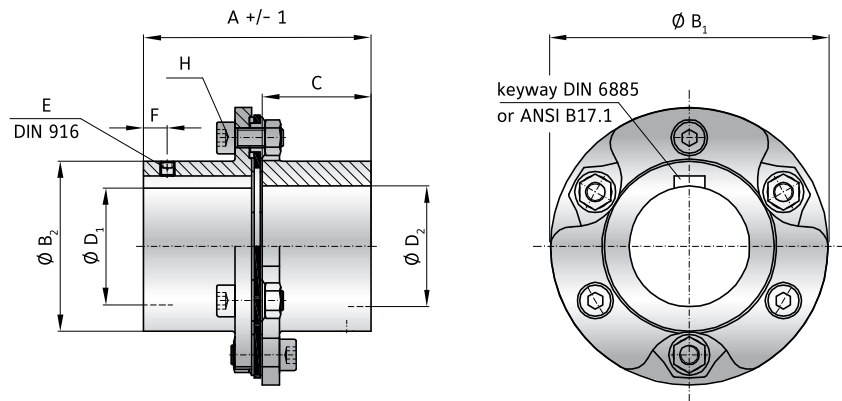
- ▶ very high torsional stiffness
- ▶ single flex design
- ▶ wear and maintenance free

MATERIAL

- ▶ **Disc pack:** highly elastic spring steel
- ▶ **Hubs:** high strength steel

DESIGN

Two precision machined coupling hubs mounted to the disc pack by means of high strength screws and bushings for alignment and frictional clamping of the assembly. Axial retention of the hubs with DIN 916 set screws



MODEL LP1 | SIZE 300 - 2500

SIZE			300	500	700	800	2000	2500
Rated torque	(Nm)	T_{KN}	350	500	700	800	2000	2500
Maximum torque	(Nm)	T_{Kmax}	700	1000	1400	1600	4000	5000
Overall length	(mm)	A	95	95	116	116	158	160
Outside diameter	(mm)	B_1	99	115	128	141	150	188
Hub diameter	(mm)	B_2	63	71	78	84	86	102
Hub fit length	(mm)	C	45	45	55	55	75	76
Bore diameter available from \emptyset to \emptyset H7	(mm)	$D_{1/2}$	18-48	23 - 50	25-58	25 - 60	28-64	31 - 75
Set screw (DIN 916)		E	M5	M6	M5	M6	M5	M8
Distance to screw	(mm)	F	15	7	15	10	20	14
Assembly screw (ISO 4762) Nut (DIN 934)		H	M8	M8	M10	M10	M16	M16
Tightening torque	(Nm)		41	41	83	83	355	355
Moment of inertia (10^{-3}kgm^2)		J_{ges}	1.8	3.1	5.6	8.1	13.9	30
Material			Steel	Steel	Steel	Steel	Steel	Steel
Approximate weight	(kg)		2	2.7	3.8	4.8	6.7	10.5
Torsional stiffness (10^3Nm/rad)		C_T	470	500	1200	1250	1500	1700
Axial \pm	(mm)		0.5	0.6	0.75	0.8	1	1.1
Angular \pm	(degree)		0.7	0.7	0.7	0.7	0.7	0.7
Maximum speed	(1/min.)		10000	10000	8000	8000	6000	6000

ORDERING EXAMPLE	LP1	800	116	25	56	XX
Model	●					Special designation only (e.g. special bore tolerance).
Size		●				
Overall length mm			●			
Bore D1 H7				●		
Bore D2 H7					●	
For custom features place an XX at the end of the part number and describe the special requirements (e.g. LP1 / 800 / 116 / 25 / 56 / XX)						

LP1

WITH KEYWAY MOUNTING

4,500 - 24,000 Nm



PROPERTIES

FEATURES

- ▶ very high torsional stiffness
- ▶ single flex design
- ▶ wear and maintenance free

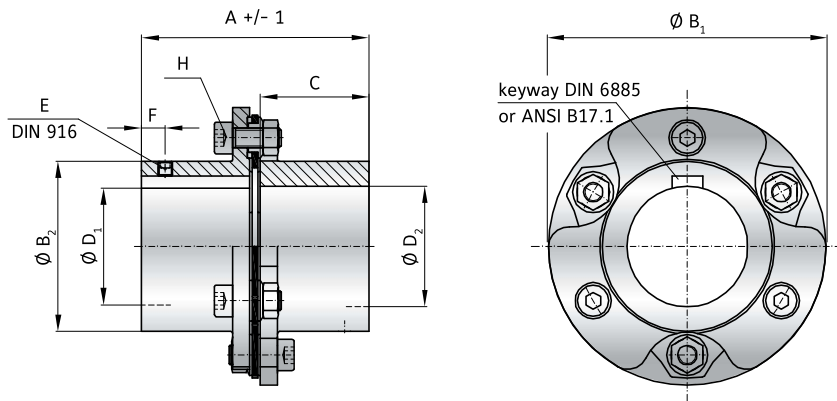
MATERIAL

- ▶ **Disc pack:** highly elastic spring steel
- ▶ **Hubs:** high strength steel

DESIGN

Two precision machined coupling hubs mounted to the disc pack by means of high strength screws and bushings for alignment and frictional clamping of the assembly.

Axial retention of the hubs with DIN 916 set screws



MODEL LP1 | SIZE 4000 - 12000

SIZE			4000	5000	7000	8000	10000	12000
Rated torque (Nm)	T _{KN}		4500	5000	7600	8000	10000	12000
Maximum torque (Nm)	T _{Kmax}		9000	10000	15200	16000	20000	24000
Overall length (mm)	A		193	193	216	216	268	268
Outside diameter (mm)	B ₁		198	227	238	294	298	320
Hub diameter (mm)	B ₂		120	130	140	160	194	192
Hub fit length (mm)	C		90	90	100	100	125	125
Bore diameter available from Ø to Ø H7 (mm)	D _{1/2}		38-90	39 - 95	50-102	50 - 115	70-140	70 - 140
Set screw (DIN 916)	E		M8	M10	M10	M10	M12	M12
Distance to screw (mm)	F		20	15	25	15	30	20
Assembly screw (ISO 4762) Nut (DIN 934)	H		M20	M20	M24	M24	M24	M24
Tightening torque (Nm)			690	690	1200	1200	1200	1200
Moment of inertia (10 ⁻³ kgm ²)	J _{ges.}		52.2	90	127	278	412	534
Material			Steel	Steel	Steel	Steel	Steel	Steel
Approximate weight (kg)			13.3	20	20.9	37	41.4	57.8
Torsional stiffness (10 ³ Nm/rad)	C _r		3600	4000	6000	6000	13300	14000
Axial ± (mm)			1.25	1.25	1.25	1.25	1.5	1.5
Angular ± (degree)			0.7	0.7	0.7	0.7	0.7	0.7
Maximum speed (1/min.)			5000	5000	4500	4500	4000	4000

ORDERING EXAMPLE	LP1	7000	216	58	88	XX
Model	●					
Size		●				
Overall length mm			●			
Bore D1 H7				●		
Bore D2 H7					●	

Special designation only (e.g. special bore tolerance).

For custom features place an XX at the end of the part number and describe the special requirements (e.g. LP1 / 7000 / 216 / 58 / 88 / XX)