

LP3

WITH CONICAL CLAMPING RING

500 - 24,000 Nm



PROPERTIES

FEATURES

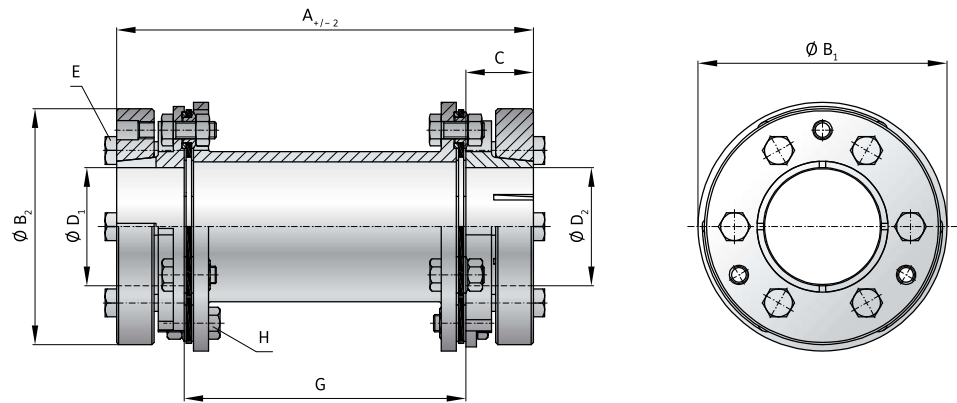
- ▶ high torsional stiffness
- ▶ high clamping pressure
- ▶ backlash free torque transmission
- ▶ good for high speed, reversing and intermittent loading

DESIGN

Two precision machined conical clamping ring hubs and precision spacer tube mounted to the disc packs by means of high strength screws and bushings for alignment and frictional clamping of the assembly.

MATERIAL

- ▶ **Disc packs:** highly elastic spring steel
- ▶ **Hubs and spacer:** high strength steel



MODEL LP3 | SIZE 500 - 12000

SIZE			500	800	2500	5000	8000	12000
Rated torque (Nm)	T_{KN}		500	800	2500	5000	8000	12000
Maximum torque (Nm)	T_{Kmax}		1000	1600	5000	10000	16000	24000
Overall length (mm)	A		143	180	265	316	410	440
Outside diameter (mm)	B_1		116	142	190	231	298	324
Hub diameter (mm)	B_2		110	130	165	205	260	290
Hub fit length (mm)	C		31.5	42	64	78	105	112
Bore diameter* available from ϕ to ϕ H7 (mm)	$D_{1/2}$		24-55	30-65	35-80	50-110	60-130	70-170
Clamping screws (ISO 4017)	E		6 x M8	6 x M10	6 x M12	6 x M12	6 x M20	6 x M20
Tightening torque (Nm)			35	69	120	295	580	580
Distance (mm)	G		80	96	137	160	200	220
Assembly screw (ISO 4762) Nut (DIN 934)	H		M8	M10	M16	M20	M24	M24
Tightening torque (Nm)			41	83	355	690	1200	1200
Moment of inertia (10^{-3}kgm^2)	J_{ges}		8	22	85	244	881	1393
Material			Steel	Steel	Steel	Steel	Steel	Steel
Approximate weight (kg)			4.6	8.5	20.3	36	81.5	98.2
Torsional stiffness (10^3Nm/rad)	C_t		230	570	900	1900	3100	7000
Axial \pm (mm)			1	1.5	2	2.5	2.5	3
Lateral \pm (mm)			0.8	1	1.4	1.5	1.6	2.2
Angular \pm (degree)			1	1	1	1	1	1
Maximum speed (1/min.)			10000	8000	6000	5000	4500	4000

* transmittable torque can depend on the bore diameter (contact supplier for details)

ORDERING EXAMPLE	LP3	500	143	42	38	XX
Model	●					Special designation only (e.g. special bore tolerance).
Size		●				
Overall length			●			
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. LP3 / 500 / 143 / 42 / 38 / XX)