



TORSIONALLY STIFF DISC PACK COUPLINGS

350 – 24,000 Nm



GENERAL INFORMATION ABOUT R+W DISC PACK COUPLINGS:



SERVICE LIFE

R+W disc pack couplings are fatigue resistant and wear free for an infinite service life, as long as the technical limits are not exceeded.

FIT CLEARANCE

Overall shaft / hub clearance of 0.01 – 0.05 mm

TEMPERATURE RANGE

-30 to +280° C

ROTATIONAL SPEED

see table

DELIVERY

LP couplings are delivered with the disc packs pre-assembled. They need only to be mounted to the hubs.

ATEX (Optional)

For use in hazardous areas available upon request.

TORSIONALLY STIFF DISC PACK COUPLINGS 350 – 24,000 Nm

MODEL		FEATURES	
LP1		with keyway mounting from 350 – 24,000 Nm ▶ very high torsional stiffness ▶ single flex design ▶ compact layout ▶ compensates for axial and angular misalignment	Page 68-69
LP2		with keyway mounting from 350 – 24,000 Nm ▶ high torsional stiffness ▶ double flex design ▶ customer specified length available ▶ compensates for axial, angular, and lateral misalignment	Page 70-71
LPA		with keyway mounting for API 610 pump systems from 500 – 24,000 Nm ▶ API 610 / 671 ▶ intermediate cartridge for lateral mounting ▶ safety catch for in case of disc pack rupture ▶ metric or imperial dimensions available	Page 72-73
LPAI			
LP3		with conical clamping ring from 500 – 24,000 Nm ▶ high torsional stiffness ▶ high clamping pressure ▶ backlash free torque transmission ▶ good for high speed, reversing and intermittent loading	Page 74
LP4		with conical clamping ring from 500 – 24,000 Nm ▶ very high torsional stiffness ▶ single flex design ▶ compact layout ▶ compensates for axial and angular misalignment	Page 75
LPZ		intermediate flange from 500 – 24,000 Nm ▶ very high torsional stiffness ▶ double flex design ▶ for use with various end hubs	Page 76
LP		Options / Special Solutions	Page 77

DESIGN

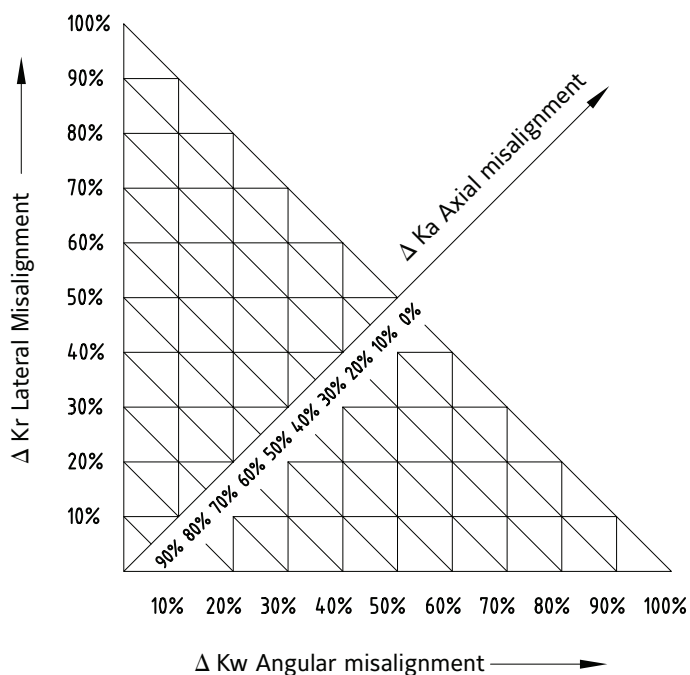
DISC PACK COUPLINGS

R+W disc pack couplings transmit torque across the disc pack assemblies purely by friction, thus avoiding stress concentration, backlash, and micro-movements resulting from transmitting torque across shoulder bolts. This aids in approaching infinite life in addition to making the complete coupling assembly more torsionally stiff.

R+W disc pack couplings are shipped as individual components. Assembly is required.



MISALIGNMENT COMPENSATION



$$\Delta K_{total} = \Delta K_r + \Delta K_w + \Delta K_a \leq 100\%$$

These couplings compensate for varying combinations of shaft misalignment types as percentages of the total allowable misalignment values listed in the data tables. The total sum of the three misalignment percentages must not exceed 100%.

Example: pump skid

axial misalignment: 20%
lateral misalignment: 40%
angular misalignment: 40%

$$\Delta K_{total} = 20\% + 40\% + 40\% \leq 100\%$$

➤ coupling is fatigue resistant

LP1

WITH KEYWAY MOUNTING

350 – 5,000 Nm



PROPERTIES

FEATURES

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

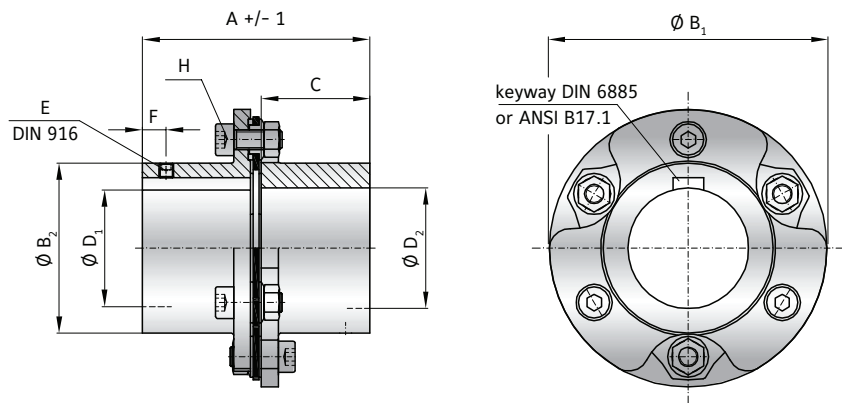
MATERIAL

- ▶ **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 Ø to Ø 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 ±	(mm)		0.5	0.6	0.75	0.8	1	1.1
Angular ±	(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

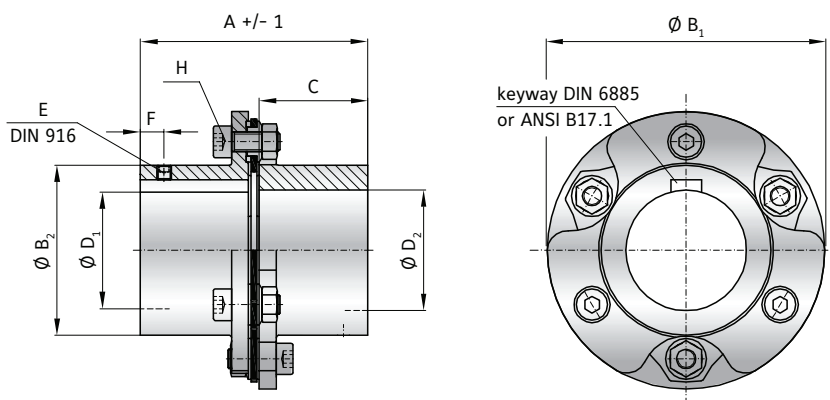
MATERIAL

- **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 $\emptyset$ to $\emptyset$ 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_{GKS}	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	(10^3Nm/rad)	C_T	3600	4000	6000	6000	13300	14000
Axial $\pm$	(mm)		1.25	1.25	1.25	1.25	1.5	1.5
Angular $\pm$	(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	●					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 / 7000 / 216 / 58 / 88 / XX)

LP2

WITH KEYWAY MOUNTING

350 – 5,000 Nm

PROPERTIES

FEATURES

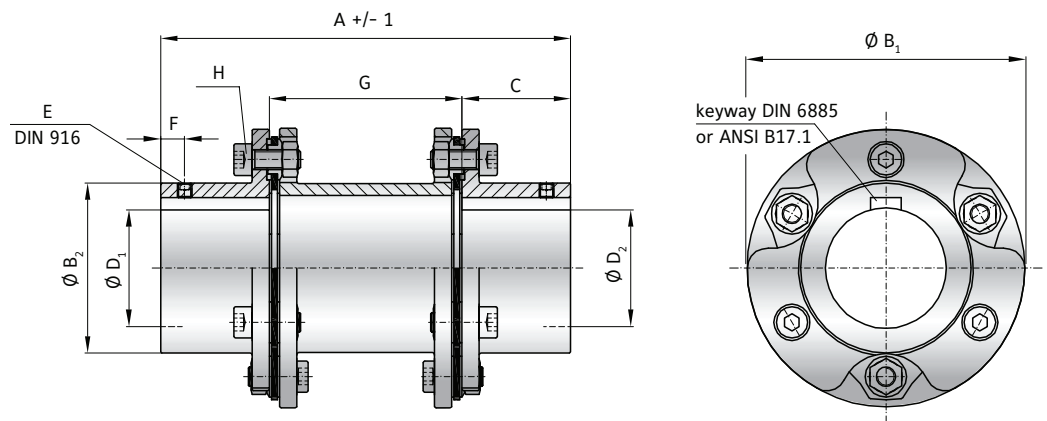
- ▶ high torsional stiffness
- ▶ double flex design
- ▶ customer specified length available

MATERIAL

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

DESIGN

Two precision machined coupling 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. Axial retention with DIN 916 set screws.



MODEL LP2 | 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		170	170	206	206	286	286
Outside diameter (mm)	B_1		99	116	128	142	150	190
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 $\varnothing$ to $\varnothing$ 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	M6	M8
Distance to screw (mm)	F		15	7	15	10	20	14
Distance (mm)	G		80	80	96	96	136	134
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)	$J_{ges.}$		3	6	7	15.3	25	55.5
Material			Steel	Steel	Steel	Steel	Steel	Steel
Approximate weight (kg)			3	4.4	4.7	7.6	11	16.2
Torsional stiffness (10^3Nm/rad)	C_T		220	230	550	570	700	900
Axial $\pm$ (mm)			1	1	1.5	1.5	2	2
Lateral $\pm$ (mm)			0.8	0.8	1	1	1.4	1.4
Angular $\pm$ (degree)			1	1	1	1	1	1
Maximum speed (1/min.)			10000	10000	8000	8000	6000	6000

ORDERING EXAMPLE	LP2	500	170	25	49	XX
Model	●					
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. LP2 / 500 / 170 / 25 / 49 / XX)

LP2

WITH KEYWAY MOUNTING

4,500 – 24,000 Nm

PROPERTIES

FEATURES

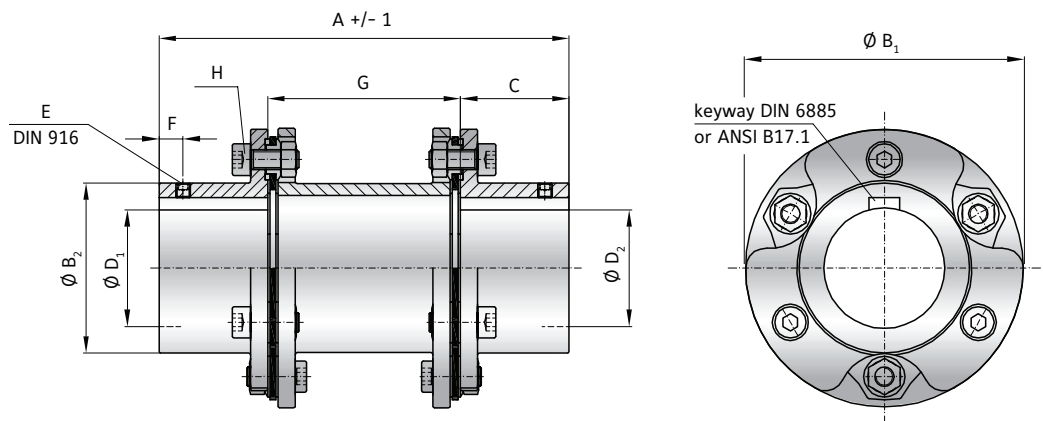
- high torsional stiffness
- double flex design
- customer specified length available

MATERIAL

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

DESIGN

Two precision machined coupling 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. Axial retention with DIN 916 set screws.



MODEL LP2 | 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	320	340	370	400	470	470
Outside diameter	(mm)	B_1	198	231	238	298	298	324
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 $\emptyset$ to $\emptyset$ 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
Distance	(mm)	G	140	160	170	200	220	220
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)	$J_{ges.}$	89.3	170	230	553	721	933
Material			Steel	Steel	Steel	Steel	Steel	Steel
Approximate weight	(kg)		20.7	31.9	35	60.3	68.8	85.4
Torsional stiffness	(10^3Nm/rad)	C_T	1700	1900	2800	3100	6200	7000
Axial $\pm$	(mm)		2.5	2.5	2.5	2.5	3	3
Lateral $\pm$	(mm)		1.4	1.5	1.6	1.6	2.2	2.2
Angular $\pm$	(degree)		1	1	1	1	1	1
Maximum speed	(1/min.)		5000	5000	4500	4500	4000	4000

ORDERING EXAMPLE	LP2	7000	370	52	88	XX
Model	●					Special designation only (e.g. special bore diameter tolerances).
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. LP2 / 7000 / 370 / 52 / 88 / XX)

PROPERTIES

FEATURES

- ▶ lateral mounting without moving hubs
- ▶ integral safety catch in case of disc pack rupture
- ▶ balanced in accordance with ANSI / AGMA 9000 class 9

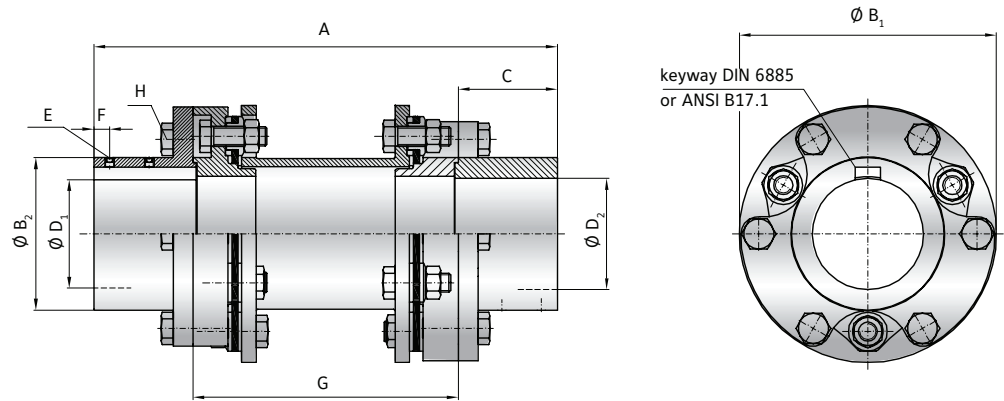
MATERIAL

- ▶ **Disc packs:** highly elastic, corrosion resistant spring steel

- ▶ **Hubs and spacer:** high strength steel

DESIGN

Two precision machined coupling 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. Axial retention with DIN 916 set screws (interference fit on request).



MODEL LPA | SIZE 500 - 12000

SIZE		500	800	2500	5000	8000	12000
Rated torque (kW/100rpm)	P _{KN}	5	8	26.2	52	84	126
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	190 230	250 290	332 402	360 430	450	500
Outside diameter (mm)	B ₁	116	142	190	231	298	324
Hub diameter (mm)	B ₂	71	84	102	130	160	192
Hub fit length (mm)	C	45	55	75	90	100	125
Bore diameter available from Ø to Ø H7 (mm)	D _{1/2}	23 - 50	25 - 60	31 - 75	39 - 95	50 - 115	70 - 140
Set screw (DIN 916)	E	2 × M6	2 × M6	2 × M8	2 × M10	2 × M10	2 × M12
Distance (mm)	F	7	10	14	15	15	20
Spacer length (mm)	G	100 140	140 180	180 250	180 250	250	250
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)		8 8.4	21.8 22.3	85.8 88.4	248 256	901	1350
Material		Steel	Steel	Steel	Steel	Steel	Steel
Approximate weight (kg)		5 5.4	9.2 9.6	20.8 22	39 41	83	105
Axial ± (mm)		0.75	1	1.3	1.5	1.7	2
Lateral ± (mm)		0.7 1.1	1 1.5	1.3 2	1.1 1.9	1.5	1.5
Angular ± (degree)		1°	1°	1°	1°	1°	1°
maximum speed (1/min.)		7600	6400	5300	3900	3100	2500
maximum speed (balanced) (1/min.)		18800	15100	12800	9800	8100	6200

ORDERING EXAMPLE	LPA	800	250	42	38	XX
Model	●					
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. LPA / 800 / 250 / 42 / 38 / XX)						

Special designation only
(e.g. special hub for large bore).

PROPERTIES

FEATURES

- ▶ lateral mounting without moving hubs
- ▶ integral safety catch in case of disc pack rupture
- ▶ balanced in accordance with ANSI / AGMA 9000 class 9

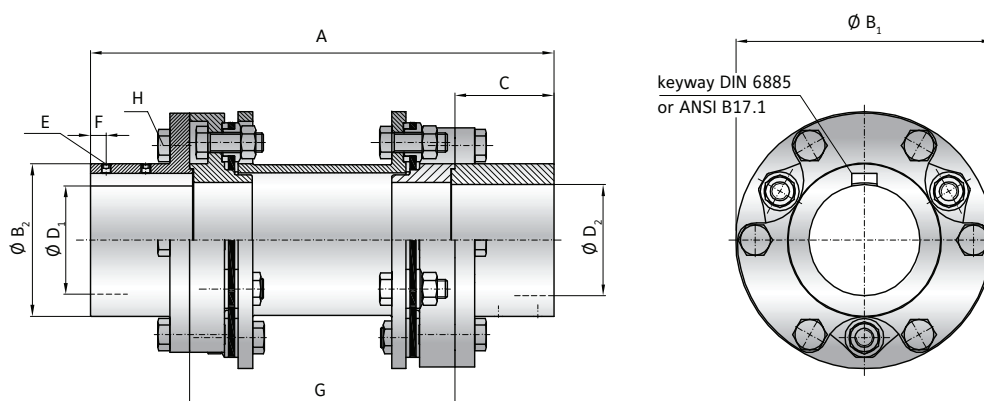
MATERIAL

- ▶ **Disc packs:** highly elastic, corrosion resistant spring steel

- ▶ **Hubs and spacer:** high strength steel

DESIGN

Two precision machined coupling 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. Axial retention with DIN 916 set screws (interference fit on request).



MODEL LPAI | SIZE 500 - 12000

SIZE		500	800	2500	5000	8000	12000
Rated torque (kW/100rpm)	P _{KN}	5	8	26.2	52	84	126
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	217 268	237 288	330 381	358 409	429	479
Outside diameter (mm)	B ₁	116	142	190	231	298	324
Hub diameter (mm)	B ₂	71	84	102	130	160	192
Hub fit length (mm)	C	45	55	75	90	100	125
Bore diameter available from Ø to Ø H7 (mm)	D _{1/2}	23 - 50	25 - 60	31 - 75	39 - 95	50 - 115	70 - 140
Set screw	E	2 × 1/4"-20	2 × 1/4"-20	2 × 5/8"-11	2 × 3/8"-16	2 × 1/2"-13	2 × 1/2"-13
Distance (mm)	F	7	10	14	15	15	20
Spacer length (mm)/(in.)	G	127/5" 178/7"	127/5" 178/7"	178/7" 229/9"	178/7" 229/9"	229/9"	229/9"
Assembly screw, bolt and nut (Grade 9)	H	5/16"-18	3/8"-16	5/8"-11	3/4"-10	1"-8	1"-8
Tightening torque (Nm)		38	68	320	595	1100	1100
Moment of inertia (10 ⁻³ kgm ²)		8.3 8.8	21 22.3	85 87	248 254	890	1344
Material		Steel	Steel	Steel	Steel	Steel	Steel
Approximate weight (kg)		5.3 5.7	9.1 9.6	20.8 21.6	38.9 40	82.3	104
Axial ± (mm)		0.75	1	1.3	1.5	1.7	2
Lateral ± (mm)		1 1.5	0.9 1.4	1.3 1.8	1.1 1.6	1.3	1.3
Angular ± (degree)		1°	1°	1°	1°	1°	1°
maximum speed (1/min.)		7600	6400	5300	3900	3100	2500
maximum speed (balanced) (1/min.)		18800	15100	12800	9800	8100	6200

ORDERING EXAMPLE	LPAI	800	237	25.4	50.8	XX
Model	●					
Size		●				
Overall length mm			●			
Bore D1 H7				●		
Bore D2 H7					●	
Special designation only (e.g. special hub for large bore).						
For custom features place an XX at the end of the part number and describe the special requirements (e.g. LPAI / 800 / 237 / 41.28 / 19 / XX; XX = D2 interference fit)						

LP3

WITH CONICAL CLAMPING RING

500 - 24,000 Nm



PROPERTIES

FEATURES

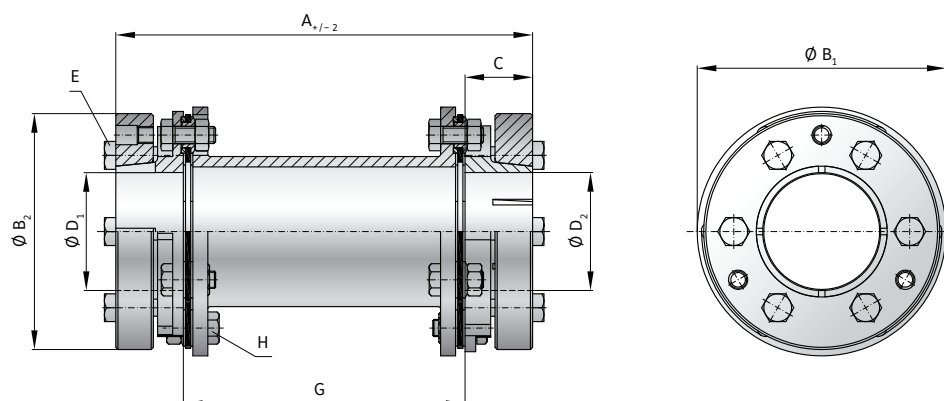
- ▶ high torsional stiffness
- ▶ high clamping pressure
- ▶ backlash free torque transmission
- ▶ good for high speed, reversing and intermittent loading

MATERIAL

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

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.



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 $\emptyset$ to $\emptyset$ 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)			25	50	100	250	470	500
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	●					
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)						

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

LP4

WITH CONICAL CLAMPING RING

500 - 24,000 Nm

**NEW**

PROPERTIES

FEATURES

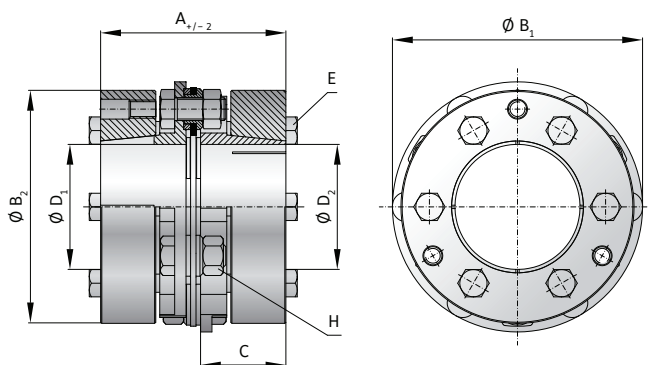
- ▶ very high torsional stiffness
- ▶ single flex design
- ▶ backlash free for reversing loads

MATERIAL

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

DESIGN

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



MODEL LP4 | 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	68	91	137	169	226	251.5
Outside diameter	(mm)	B_1	112	136	172	220	270	305
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 $\emptyset$ to $\emptyset$ H7	(mm)	$D_{1/2}$	24 - 55	30 - 65	35 - 80	50 - 110	60 - 130	70 - 170
Clamping screws (ISO 4017)	F		6 x M8	6 x M10	6 x M12	6 x M16	6 x M20	6 x M20
Tightening torque	(Nm)	E	25	50	100	250	470	500
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}	5	15	59	172	606	993
Material			Steel	Steel	Steel	Steel	Steel	Steel
Approximate weight	(kg)		2.9	5.8	14.4	25.4	58	70.6
Torsional stiffness	(10^3Nm/rad)	C_T	500	1250	1700	3800	6400	13800
Axial $\pm$	(mm)		0.6	0.8	1.1	1.25	1.25	1.5
Angular $\pm$	(degree)		0.7	0.7	0.7	0.7	0.7	0.7
Maximum speed	(1/min.)		10000	8000	6000	5000	4500	4000

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

ORDERING EXAMPLE	LP4	500	68	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. LP4 / 500 / 68 / 42 / 38 / XX)						

LPZ

INTERMEDIATE FLANGE

500 - 24,000 Nm



NEW

PROPERTIES

FEATURES

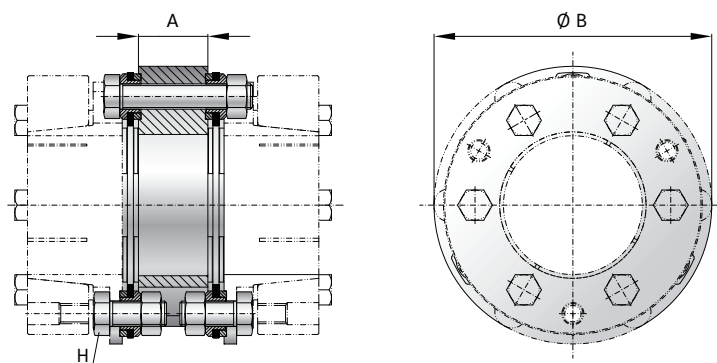
- ▶ very high torsional stiffness
- ▶ double flex design
- ▶ for use with various end hubs

MATERIAL

- ▶ **Disc packs:** highly elastic spring steel
- ▶ **Intermediate flange:** high strength steel

DESIGN

Intermediate flange mounted to the disc packs by means of high strength screws and bushings for alignment and frictional clamping of the assembly.



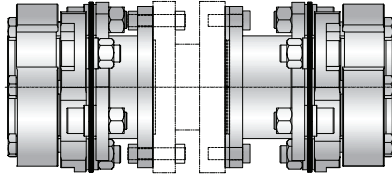
MODEL LPZ | SIZE 500 - 12000

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
Intermediate flange length (mm)	A	24	25	45	55	58	65
Outside diameter (mm)	B	112	135	172	220	270	305
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 ($10^{-3}kgm^2$)	$J_{ges.}$	1	6	28	82	230	398
Material		Steel	Steel	Steel	Steel	Steel	Steel
Approximate weight (kg)		1.2	2.1	6.2	11.3	20.7	27.2
Torsional stiffness ($10^3Nm/rad$)	C_T	410	1010	1520	3200	5730	12900
Axial $\pm$ (mm)		1	1.5	2	2.5	2.5	3
Lateral $\pm$ (mm)		0.2	0.3	0.4	0.5	0.6	0.7
Angular $\pm$ (degree)		1	1	1	1	1	1
Maximum speed (1/min.)		10000	8000	6000	5000	4500	4000

Additional sizes on request

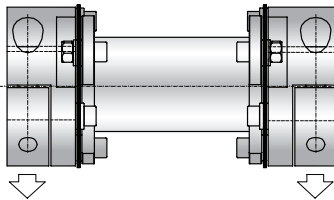
ORDERING EXAMPLE	LPZ	500	XX
Model	●		Special designation only (e.g. special material).
Size		●	
For custom features place an XX at the end of the part number and describe the special requirements (e.g. LPZ / 500 / XX)			

TORSIONALLY STIFF DISC PACK COUPLINGS – FURTHER POSSIBILITIES



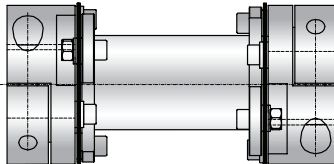
WITH CONICAL CLAMPING RING HUBS AND FLANGE MOUNTING FOR TORQUE TRANSDUCERS

- ▶ high torsional stiffness
- ▶ high clamping pressure
- ▶ backlash free precision torque transmission



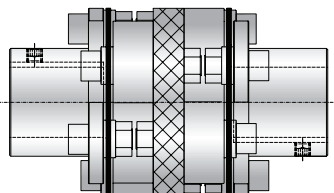
WITH FULLY SPLIT CLAMPING HUBS

- ▶ simple lateral installation and removal
- ▶ backlash free precision torque transmission
- ▶ single or double flex



WITH SINGLE SPLIT CLAMPING HUBS

- ▶ easy to mount
- ▶ backlash free precision torque transmission
- ▶ optional keyway
- ▶ single or double flex



WITH ELECTRICAL ISOLATION

- ▶ with keyed connection, conical clamping ring hub, clamping hub, or flange connection
- ▶ single flex, double flex, or rigid