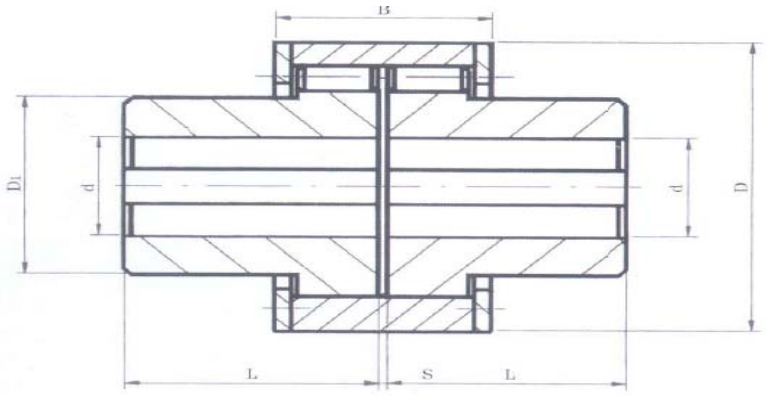
Flexible Pin Bush Coupling (ZL Series)

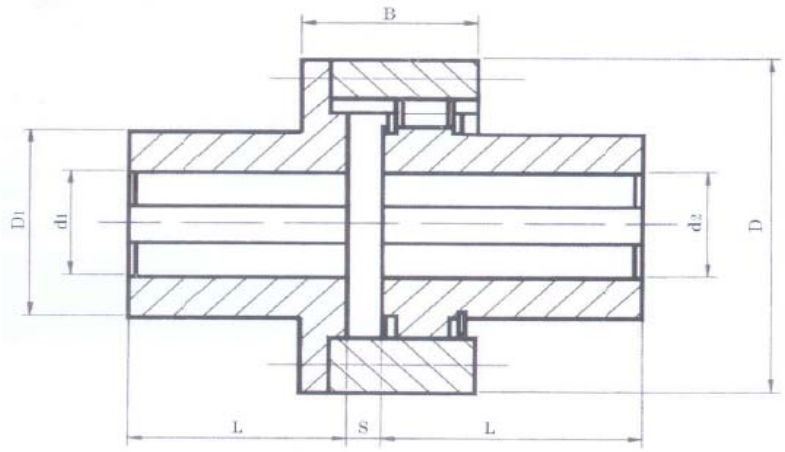
Description

This shaft coupling is suited to coaxial transmission shafting. It can transmit large torsion by utilizing vertical section shear strength of the nylon rod. Elastic pin gear coupling can partially substitute tooth gear coupling with certain axial direction displacement compensation capability and vibration reduction performance. Temperature of operating environment is -20℃ to 70℃ and nominal torque is 0.112 to 2800 KN.m.

Dimensions



LZ basic type elastic plug tooth coupling



LZJ type elastic plug tooth coupling connecting with the intermediate axle

1. LZ type is applicable to ordinary column axle hole and LZD type is applicable to conical bore.
2. Allowable compensation rate: axial direction is ±0.5 to 5 mm, radical direction is 0.3 mm to 1.5 mm and angular direction is 0.5°.

Parameters

Model	Nominal Torque Tn/N.m	Limited rotational Speed [n] (r/min)	Shaft Hole Diameter	Shaft Hole Length	D	B	S	Rotational Inertia ($kg.m^2$)	Weigh (kg)
			d1,d2,dz	Y,J1 L,L1					
ZL1	100	4000	12-24	27-52	76	42	2.5	0.0004	0.86
ZL2	250	4000	16-32	30-82	92	50	2.5	0.003	3.23
ZL3	630	4000	25-42	44-112	118	69	3	0.011	6.57
ZL4	1600	4000	40-60	84-142	158	89	4	0.046	14.8
ZL5	4000	4000	50-80	84-172	192	89	4	0.114	24.8
ZL6	6300	3300	60-95	107-172	230	111	5	0.28	42.5
ZL7	10000	2900	70-110	107-212	260	113	5	0.56	66.3
ZL8	16000	2500	80-130	132-252	300	136	6	1.21	107.3
ZL9	25000	2300	90-150	132-252	335	149	7	1.98	140.9
ZL10	31500	2100	100-170	167-302	355	151	8	2.85	180.9
ZL11	40000	2000	110-180	167-302	380	170	8	3.9	219.3
ZL12	63000	1700	130-200	202-352	445	183	8	9.2	371.4
ZL13	100000	1500	150-240	202-410	515	218	8	15.6	470.0
ZL14	125000	1400	170-260	242-410	560	218	8	27.8	708.0
ZL15	160000	1300	190-300	282-470	590	238	10	33.4	768.0
ZL16	250000	1000	220-340	282-550	695	262	10	69.9	1169
ZL17	315000	950	240-380	330-550	768	282	10	122.7	1664
ZL18	400000	850	250-420	330-650	860	300	13	202.7	2193
ZL19	630000	750	280-450	380-650	970	320	14	341.2	2901
ZL20	1000000	650	320-500	380-650	1156	351	15	710	4251
ZL21	1600000	530	380-630	450-800	1440	355	18	1948	7514
ZL22	2000000	500	420-750	540-900	1520	396	19	2931	10148
ZL23	2500000	460	480-850	540-1000	1638	430	20	4379	13026

Note

1. Weight and rotational inertia are calculated according to combination type of Y/J_1 axle holes and the minimal axle hole.
2. During short-time overload, the value shall not be more than 2 times of nominal torque Tn.