
IKUSE NUP Flexible Pin-and-Bush Coupling

Overview

Pins and elastic bushes transmit torque. The elastic elements cushion shock loads in the drive.

Construction

Polyurethane bushes and pin connections. Select element stiffness according to load and torsional vibration.

Applications

Pumps, blowers, variable-frequency drives, diesel units and reciprocating compressors.

Selection

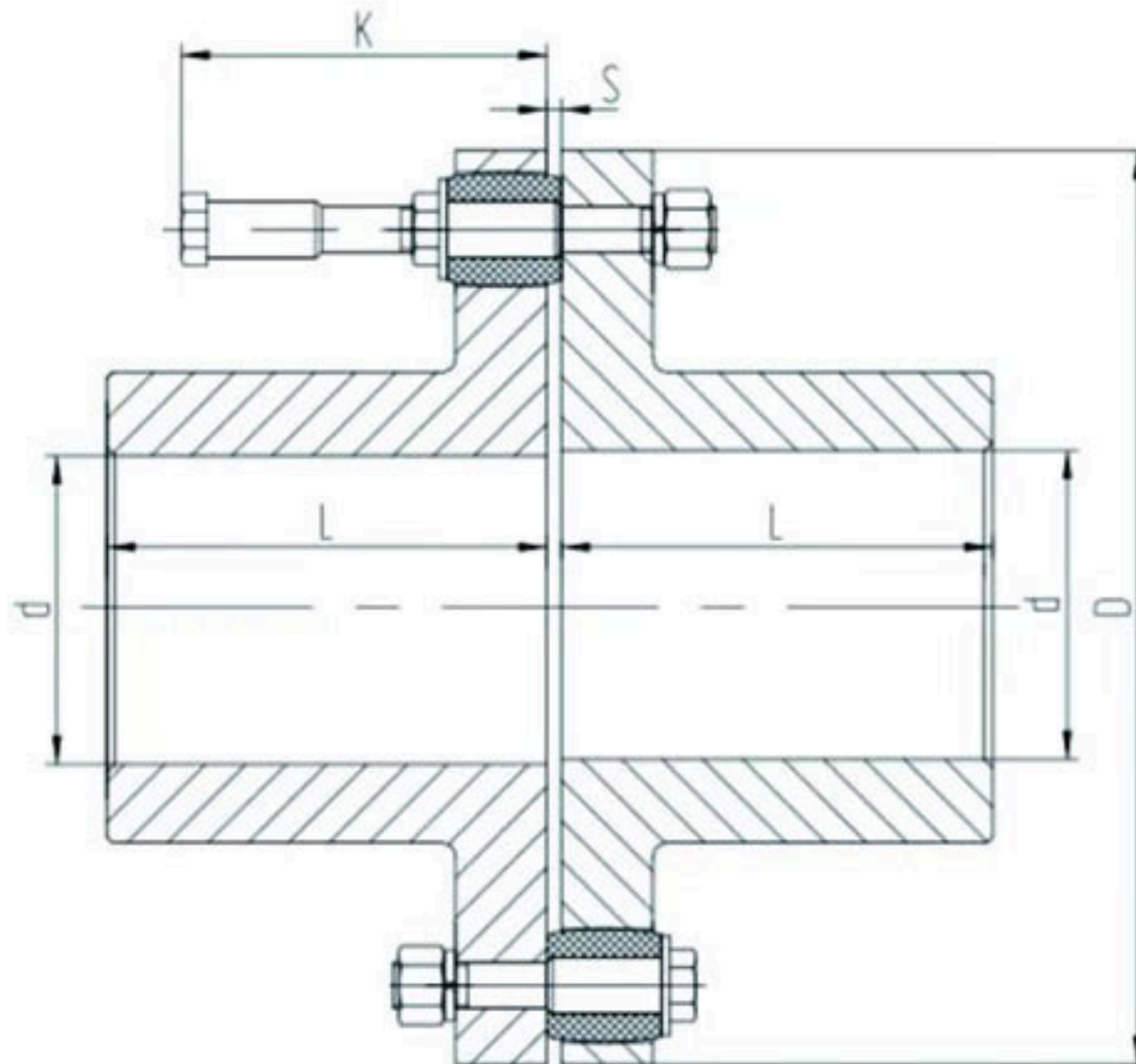
Confirm bush material and stiffness grade using the torsional-vibration calculation and operating conditions.

Ordering information

Specify equipment type, transmitted power, operating speed, load characteristics, both shaft diameters and extension lengths, shaft-end separation and installation space. Include any brake, dynamic-balancing or elastic-element requirements.

IKUSE NUP Flexible Pin-and-Bush Coupling

Construction and installation dimensions



NUP Technical specifications and main dimensions

Table 1 / 1 · Units and model designations in the headers

IKUSE

Model	Rated torque Tn N.m	Peak torque Tp N.m	Allowable speed r/min	D mm	d Max mm	S mm	K mm	Mass Kg	Mass moment of inertia Kgm ²	Torsional stiffness MNm/rad	Misalignment capacity		
											Axial mm	Angular °	Radial mm
NUP105	530	1060	5000	105	40	4	66	2.2	0.11	0.002	3	2	1
NUP125	700	1400	5000	125	55	4	72	3.6	0.118	0.006	3	2	1
NUP144	1100	2200	4900	144	60	4	99	5.5	0.126	0.01	3	2	1
NUP162	1800	3600	4300	162	75	4	99	9.6	0.132	0.02	3	2	1
NUP178	2100	4200	3800	178	80	4	99	12	0.14	0.036	3	2	1
NUP198	2300	4600	3400	198	90	4	99	16.9	0.148	0.054	3	2	1
NUP228	3600	7200	3000	228	100	5	106	24	0.159	0.114	3	2	1
NUP252	5200	10400	2700	252	120	5	106	33	0.17	0.19	3	1.5	1
NUP285	9000	18000	2400	285	130	5	133	47	0.179	0.35	4	1.5	1.2
NUP320	11000	22000	2100	320	140	5	133	65	0.19	0.46	4	1.5	1.2
NUP360	22000	44000	1900	360	160	5	138	92	0.2	0.13	4	1.5	1.2
NUP400	27000	54000	1700	400	170	6	168	130	0.212	1.9	4	1.2	1.5
NUP450	44000	88000	1500	450	195	6	196	200	0.22	3.6	4	1.2	1.5
NUP500	54000	108000	1350	500	220	6	196	250	0.23	5.8	4	1.2	1.5
NUP560	84000	168000	1200	560	235	6	241	320	0.24	10.4	4	1	1.5
NUP630	95000	190000	1050	630	250	6	241	340	0.25	16	5	1	1.5
NUP710	142000	284000	950	710	270	6	279	360	0.26	30	5	1	1.5
NUP800	162000	324000	850	800	295	6	279	400	0.27	47	5	1	1.5
NUP900	245000	490000	750	900	320	8	313	420	0.28	85	6	0.75	1.8
NUP1000	280000	560000	680	1000	350	8	313	450	0.29	125	6	0.75	1.8

IKUSE NUPEX Combined Flexible Coupling

Overview

Combines elastic bushes with a disc connection for drives requiring widely separated shafts and cushioning of torsional shocks.

Construction

Elastic elements and metal discs; spacer-tube length follows the shaft separation. Calculate stiffness and critical speed for the machine.

Applications

Variable-frequency drives and industrial systems with large shaft separations.

Selection

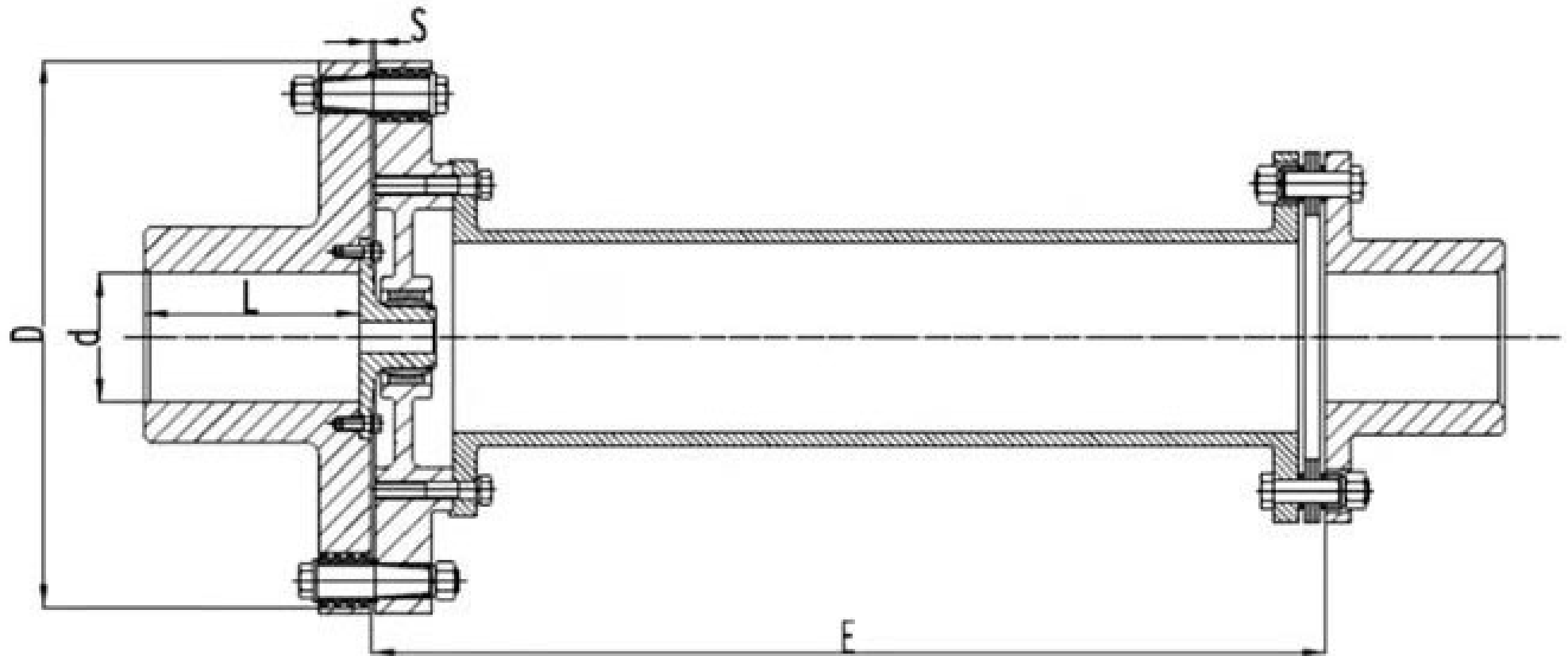
Table inertia and torsional stiffness refer to $E=1$ m. Determine actual values from the final shaft separation and drawings.

Ordering information

Specify equipment type, transmitted power, operating speed, load characteristics, both shaft diameters and extension lengths, shaft-end separation and installation space. Include any brake, dynamic-balancing or elastic-element requirements.

IKUSE NUPEX Combined Flexible Coupling

Construction and installation dimensions



NUPEX Technical specifications and main dimensions

Table 1 / 1 · Units and model designations in the headers

IKUSE

Model	Rated torque Tn N.m	Peak torque Tp N.m	Allowable speed r/min	D mm	d Max mm	S mm	L mm	Mass moment of inertia Kgm ²	Torsional stiffness MNm/rad	Misalignment capacity	
										Axial mm	Angular °
NUPEX162	920	1800	4300	162	75	4	60	0.132	0.02	4	1.5
NUPEX178	1000	2100	3800	178	80	4	70	0.14	0.036	4	1.5
NUPEX198	1200	2300	3400	198	90	4	80	0.148	0.054	5	1.5
NUPEX228	1800	3600	3000	228	100	5	90	0.159	0.114	5	1.5
NUPEX252	2600	5200	2700	252	120	5	100	0.17	0.19	6	1.8
NUPEX285	4500	9000	2400	285	130	5	110	0.179	0.35	6	1.8
NUPEX320	5500	11000	2100	320	140	5	125	0.19	0.46	6	1.8
NUPEX360	9000	18000	1900	360	160	5	140	0.2	0.13	7	1.8
NUPEX400	13000	27000	1700	400	170	6	160	0.212	1.9	7	2.5
NUPEX450	22000	44000	1500	450	195	6	180	0.22	3.6	7	2.5
NUPEX500	27000	54000	1350	500	220	6	200	0.23	5.8	8	2.5
NUPEX560	42000	84000	1200	560	235	6	220	0.24	10.4	8	2.5
NUPEX630	48000	95000	1050	630	250	6	240	0.25	16	8	2.5
NUPEX710	70000	142000	950	710	270	6	260	0.26	30	8	3.0
NUPEX800	81000	162000	850	800	295	6	290	0.27	47	10	3.0
NUPEX900	123000	245000	750	900	320	8	320	0.28	85	10	3.0
NUPEX1000	140000	280000	680	1000	350	8	350	0.29	125	10	3.0

Note: Bore length L is recommended and may be specified by the customer.

 Inertia and torsional stiffness are given for E=1 m; final values are shown on the drawing.

 Shaft separation E as required by the customer, ≤10 m

IKUSE LX Flexible Pin Coupling

Overview

Non-metallic elastic pins connect the flanges, transmit torque and accommodate specified shaft displacements.

Construction

Replaceable pins and simple construction cushion normal shocks and vibration.

Applications

General industrial drives between two nominally coaxial shafts.

Selection

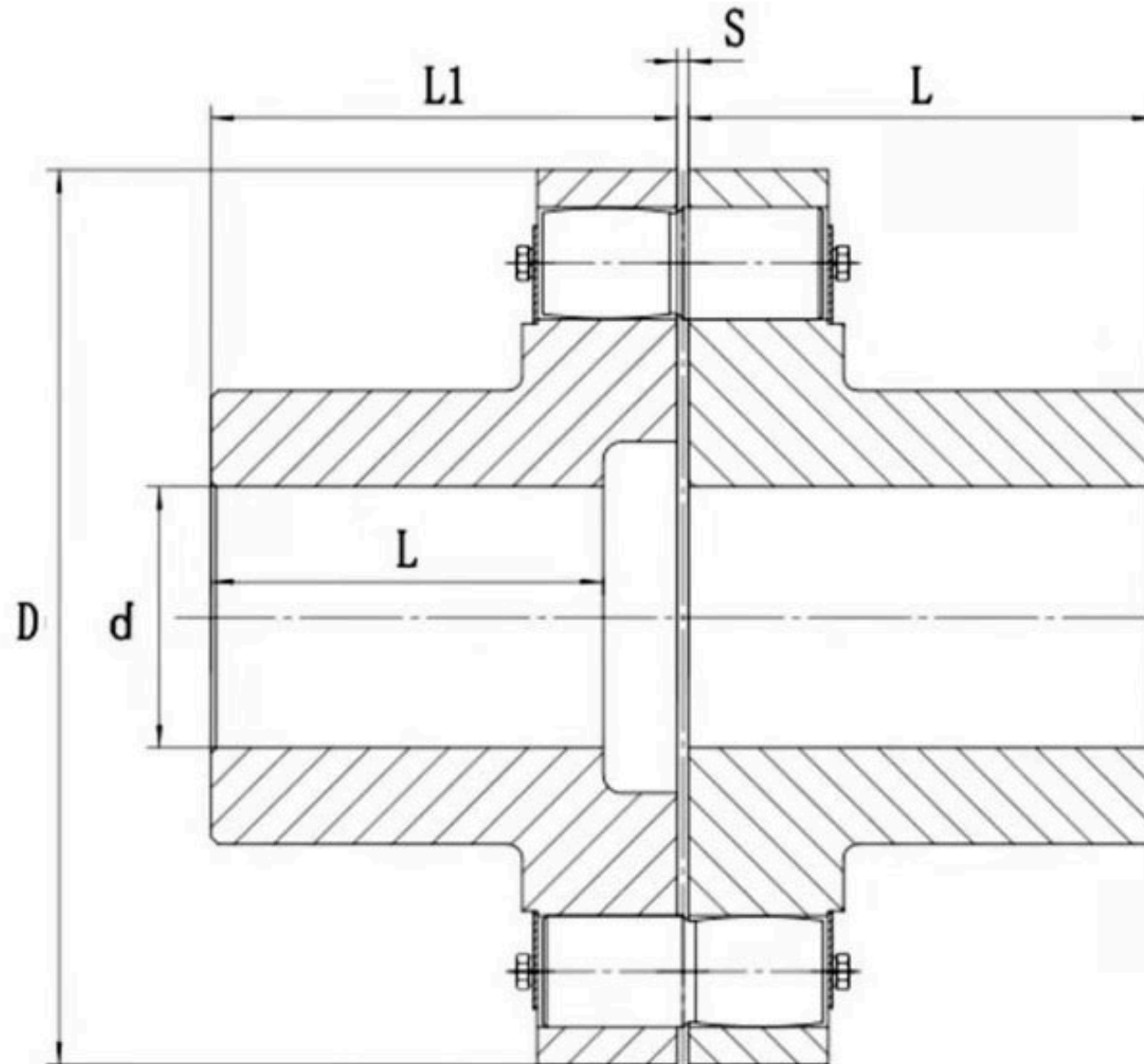
Operating temperature $-20...+70$ °C. Confirm bores, shaft ends and pin material for the operating conditions.

Ordering information

Specify equipment type, transmitted power, operating speed, load characteristics, both shaft diameters and extension lengths, shaft-end separation and installation space. Include any brake, dynamic-balancing or elastic-element requirements.

IKUSE LX Flexible Pin Coupling

Construction and installation dimensions



Model	Nominal torque /Nn	Allowable speed /rmin	Bore diameterd /mm	Bore length /mm			D/mm	S/m	Mass moment of inertia /kg·m²	Mass /kg	Allowable displacement			
				Y	J、J1、Z						Axial △x/m	Radial △y/mm	Angular △a/°	
				L	L	L1								
LX1	250	8500	12、 14	32	27		90	2.5	0.002	2	±0.5	0.15	≤0.5	
			15、 18、 19	42	30	42								
			20、 22、 24	52	38	52								
LX2	560	6300	20、 22、 24				120		0.009	5	±1			
			25、 28	62	44	62								
			30、 32、 35	82	60	82								
LX3	1250	4700	30、 32、 35、 38				160		0.026	8				
			40、 42、 45、 48	112	84	112								
LX4	2500	3800	40、 42、 45、 48、 50、 55、 56				195	3	0.109	22	±1.5			
			60、 63											142
LX5	3150	3450	50、 55、 56、 60、 63、 65、 70、 71、 75	220	0.191	30								
			60、 63、 65、 70、 71、 75、 80				280	4	0.543	53				
LX6	6300	2720	85	172	107	172								
			70、 71、 75	142	107	142	320		1.314	98				
LX7	11200	2360	80、 85、 90、 95	172	132	172								
			100.110	212	167	212								
LX8	16000	2120	80、 85、 90、 95、 100、 110、 120、 125				360	2.023	119					
			100、 110、 120、 125							410	4.386	197		
LX9	22400	1850	130、 140	252	202	252								
			110、 120、 125	212	167	212	480	6	9.760	322				
LX10	35500	1600	130、 140、 150	252	202	252								
			160、 170、 180	302	242	302								
			LX11	50000	1400	130、 140、 150	252	202	252	540	6	20.05		520
160、 170、 180	302	242				302								
190、 200、 220	352	282				352								
LX12	80000	1220	160、 170、 180	302	242	302	630	7	37.71	714	±2.5			
			190、 200、 220	352	282	352								
			240、 250、 260	410	330	-								
LX13	125000	1080	190、 200、 220	352	282	352	710	8	71.37	1057	±3	0.25		
			240、 250、 260	410	330	-								
			230、 300	470	380	-								
LX14	180000	950	240、 250、 260	410	330	-	800	8	170.6	1956	±3	0.25		
			230、 300、 320	470	380	-								
			340	550	450	-								

IKUSE LZ Flexible Pin Coupling with Outer Ring

Overview

Pins fitted into corresponding holes in the coupling halves and outer ring transmit torque.

Construction

Compact, lubrication-free construction with replaceable elastic pins. Assess vibration damping for the operating conditions.

Applications

Coaxial drives and general machinery requiring a compact arrangement.

Selection

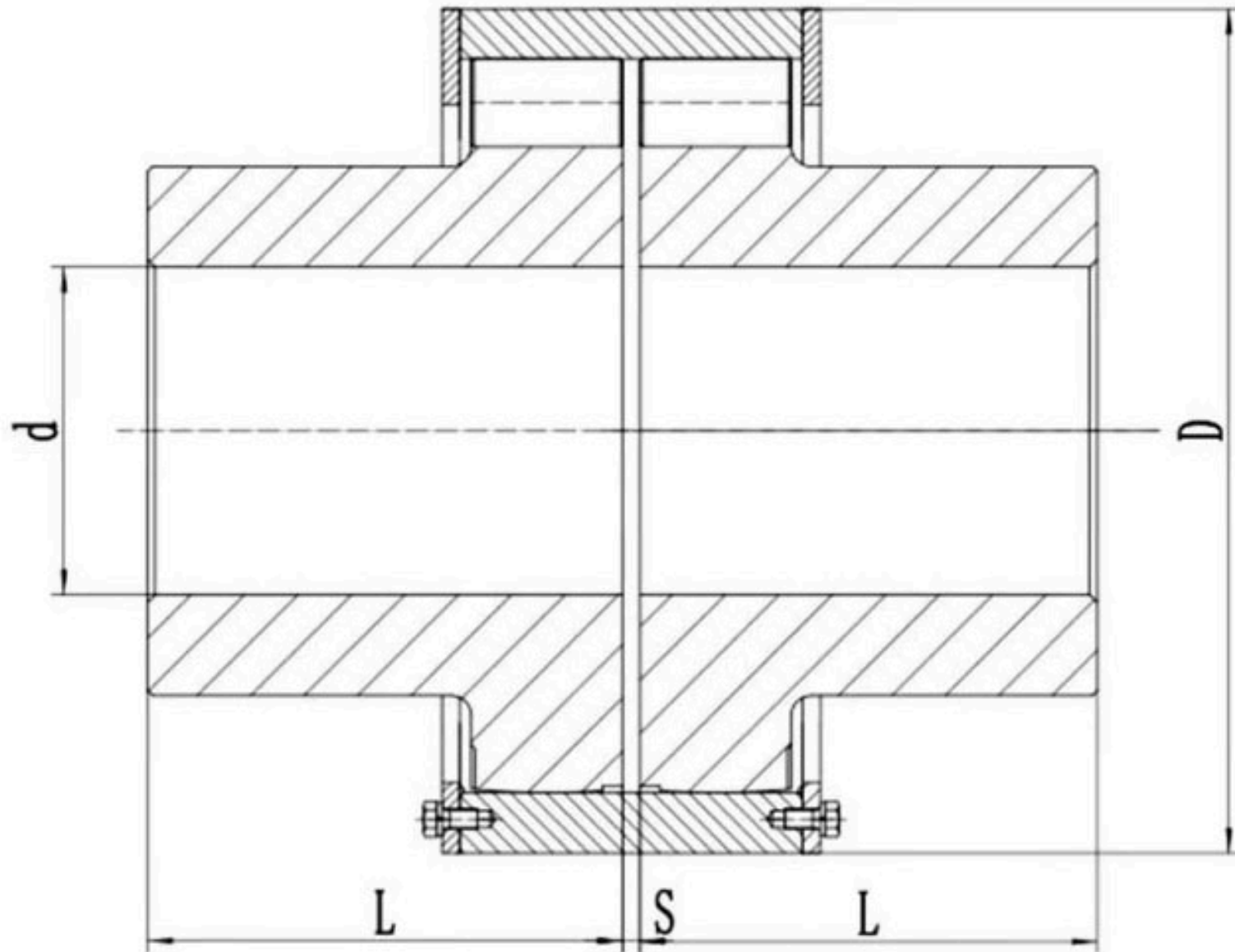
Operating temperature $-20...+70$ °C. Check transient overload and permissible pin loading for the selected size.

Ordering information

Specify equipment type, transmitted power, operating speed, load characteristics, both shaft diameters and extension lengths, shaft-end separation and installation space. Include any brake, dynamic-balancing or elastic-element requirements.

IKUSE LZ Flexible Pin Coupling with Outer Ring

Construction and installation dimensions



LZ Technical specifications and main dimensions

Table 1 / 1 · Units and model designations in the headers

Model	Nominal torque Tn KN · m	Allowable speed [n] r/min	Bore diameter d	Bore length		D	S	Mass moment of inertia kg · m ²	Mass kg	Allowable displacement				
				Type Y	J ₁ type					Radial mm	Axial mm	Angular °		
													L	
			mm											
LZ1	0.112	5000	12~24	27~52		76	2.5	0.001	1.67	0.3	±1.5	0.5		
LZ2	0.25	5000	16~32	44~82		90	2.5	0.003	3.00					
LZ3	0.63	4500	25~42	44~112		118	3.0	0.012	7.31					
LZ4	1.8	4200	40~60	84~142		158	4	0.045	16.20	0.4			±1.5	
LZ5	4.5	4000	50~80	84~172		192	4	0.108	27.02					
LZ6	8	3300	60~95	107~172		230	5	0.242	40.89					
LZ7	11.2	2900	70~110	107~212		260	5	0.443	59.60					
LZ8	18	2500	80~130	132~252		300	6	0.908	94.67	0.6	±2.5			
LZ9	25	2300	90~150	132~252		335	7	1.733	138.1					
LZ10	31.5	2100	100~170	167~302		355	8	2.422	169.3					
LZ11	40	2000	110~180	167~302		380	8	3.369	203.1					
LZ12	63	1700	130~200	202~352		445	8	6.524	296.6					
LZ13	100	1500	150~240	202~410		515	8	14.19	469.2					
LZ14	125	1400	170~260	242~410		560	8	21.67	621.7	1			±2.5	
LZ15	160	1300	190~300	282~470		590	10	29.52	730.5					
LZ16	250	1000	220~340	282~550		695	10	62.47	1144					
LZ17	355	950	240~380	330~550		770	10	106.0	1557					
LZ18	450	850	250~420	330~650		860	13	175.4	2062					±5
LZ19	630	750	280~450	380~650		970	14	323.2	3068					
LZ20	1120	650	320~500	380~650		1160	15	669.4	4715					
LZ21	1800	530	380~630	450~800		1440	18	1880	8599					
LZ22	2240	500	420~750	540~800		1520	19	2596	9473	1.5				
LZ23	2800	460	480~850	540~880		1640	20	3982	12095					

Notes: 1. Mass and inertia are calculated for the Y/J1 bore combination and minimum bore diameter.
2. Short-term overload must not exceed 2 times nominal torque Tn.

IKUSE LZZ Flexible Pin Coupling with Brake Wheel

Overview

Combines an outer-ring flexible pin connection with a brake wheel for torque transmission and braking.

Construction

Pin-type torque transmission, brake wheel and replaceable elastic elements.

Applications

Industrial drives and general machinery equipped with a brake.

Selection

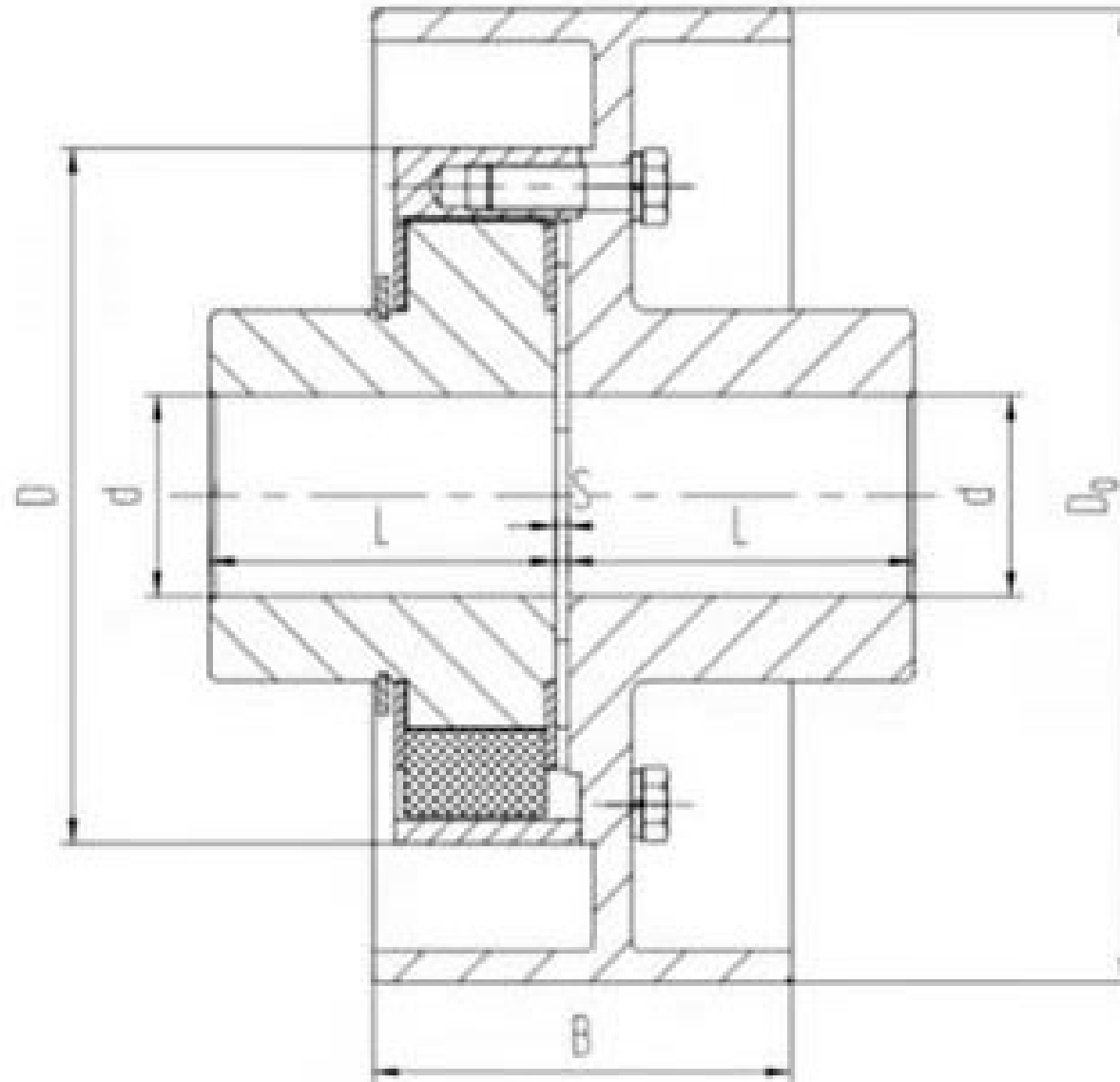
Check wheel dimensions, brake interface and speed together. Do not directly apply the dimensions of the basic LZ coupling.

Ordering information

Specify equipment type, transmitted power, operating speed, load characteristics, both shaft diameters and extension lengths, shaft-end separation and installation space. Include any brake, dynamic-balancing or elastic-element requirements.

IKUSE LZZ Flexible Pin Coupling with Brake Wheel

Construction and installation dimensions



Model	Nominal torque Tn KN · m	Allowable speed [n] r/min	Bore diameter d	Bore length		D ₀	D	B	S	Mass moment of inertia kg · m ²	Mass kg	Allowable displacement		
				Type Y	J ₁ type							Radial mm	Axial mm	Angular °
				L										
			mm											
LZZ1	0.25	4500	16~38	38~60		160	98	70	2.5	0.018	5.82	0.15	1	0.5
LZZ2	0.63	3800	25~48	60~112		200	124	85	2.5	0.053	11.15			
LZZ3	1.8	3000	40~70	84~142		250	166	105	3.0	0.181	28.09	0.2	3	
LZZ4	4.5	2400	50~90	84~172		315	214	132	4	0.534	48.75			
LZZ5	8	1900	60~95	107~172		400	240	170	4	1.404	76.51			
LZZ6	11.2	1500	70~120	107~212		500	280	210	5	3.812	124.65		5	
LZZ7	18	1200	80~130	132~252		630	330	265	5	10.674	216.43			
LZZ8	25	1050	90~150	132~252		710	380	300	6	18.96	299.01	0.3	10	
LZZ9	31.5	950	100~180	167~302		800	400	340	7	33.258	403.84			

Notes: 1. Mass and inertia are calculated for the Y/J1 bore combination and minimum bore diameter.

2. Short-term overload must not exceed 2 times nominal torque Tn.