
IKUSE LAK Saddle-block flexible coupling

Overview

Coupling halves and elastic blocks transmit torque through deformation of the blocks and cushion shock loads.

Construction and maintenance

Check the elastic blocks, connecting parts, shaft-end separation and maintenance space for the specific configuration.

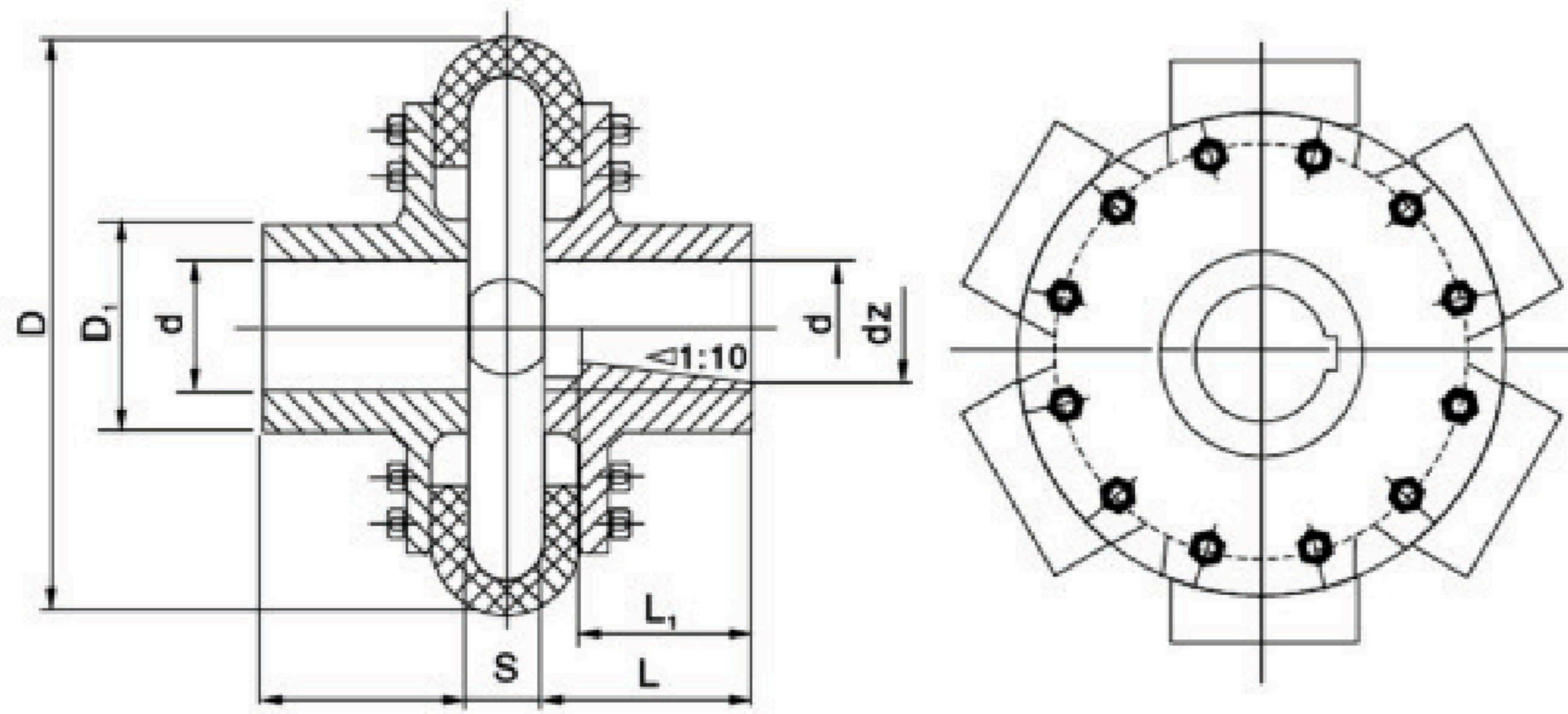
Technical specifications

Torque, speed, bores and installation dimensions must all correspond to the same size.

Ordering information

Specify power, operating speed, load characteristics, both shaft diameters and extension lengths, shaft-end separation and installation conditions. Include brake, dynamic-balancing and elastic-element requirements where applicable.

Structural diagram



Bores, shaft extensions, connection dimensions and installation spacing must correspond to the selected size.

Model	Nominal torque	Allowable speed	Bore diameter	Bore length	D	D ₁	S	Mass	Mass moment of inertia
	[T] N·m	[n] r/min	d,dz	Y,J ₁ ,Z				kg	kg·m ²
LAK1	63	5000	20-32	38-82	155	50	10	3.4	0.005
LAK2	100	5000	25-38	44-82	165	60	10	4.8	0.007
LAK3	160	4500	28-45	44-112	185	75	10	8.73	0.018
LAK4	250	4500	30-48	60-112	185	75	10	7.86	0.018
LAK5	500	3800	40-65	84-142	235	95	15	14.4	0.039
LAK6	630	3700	40-71	84-142	240	100	15	16.1	0.043
LAK7	1000	3000	45-75	84-142	295	120	15	29	0.147
LAK8	1600	2800	50-80	84-172	340	130	15	38.5	0.28
LAK9	2500	2300	50-90	84-172	385	145	25	53	0.42
LAK10	4000	1900	55-100	84-212	460	160	25	76.6	1.03
LAK11	6300	1700	60-110	107-212	530	180	25	128	2.38
LAK12	7100	1600	65-120	107-212	575	190	25	144	3.32
LAK13	10000	1500	75-140	107-252	630	225	25	198	5.45
LAK14	14000	1350	85-150	132-252	665	250	30	242	5.66
LAK15	20000	1200	100-180	167-302	740	280	30	330	10.3
LAK16	31500	1000	110-190	167-352	880	305	30	475	23.5
LAK17	50000	900	120-220	167-352	1040	345	30	701	50.2

Notes

Linear dimensions are in mm; other units are given in the corresponding column headings. Check bores, shaft extensions and installation dimensions for the same size.

IKUSE HTLB H-block flexible coupling

Overview

Coupling halves and elastic blocks transmit torque through deformation of the blocks and cushion shock loads.

Construction and maintenance

Check the elastic blocks, connecting parts, shaft-end separation and maintenance space for the specific configuration.

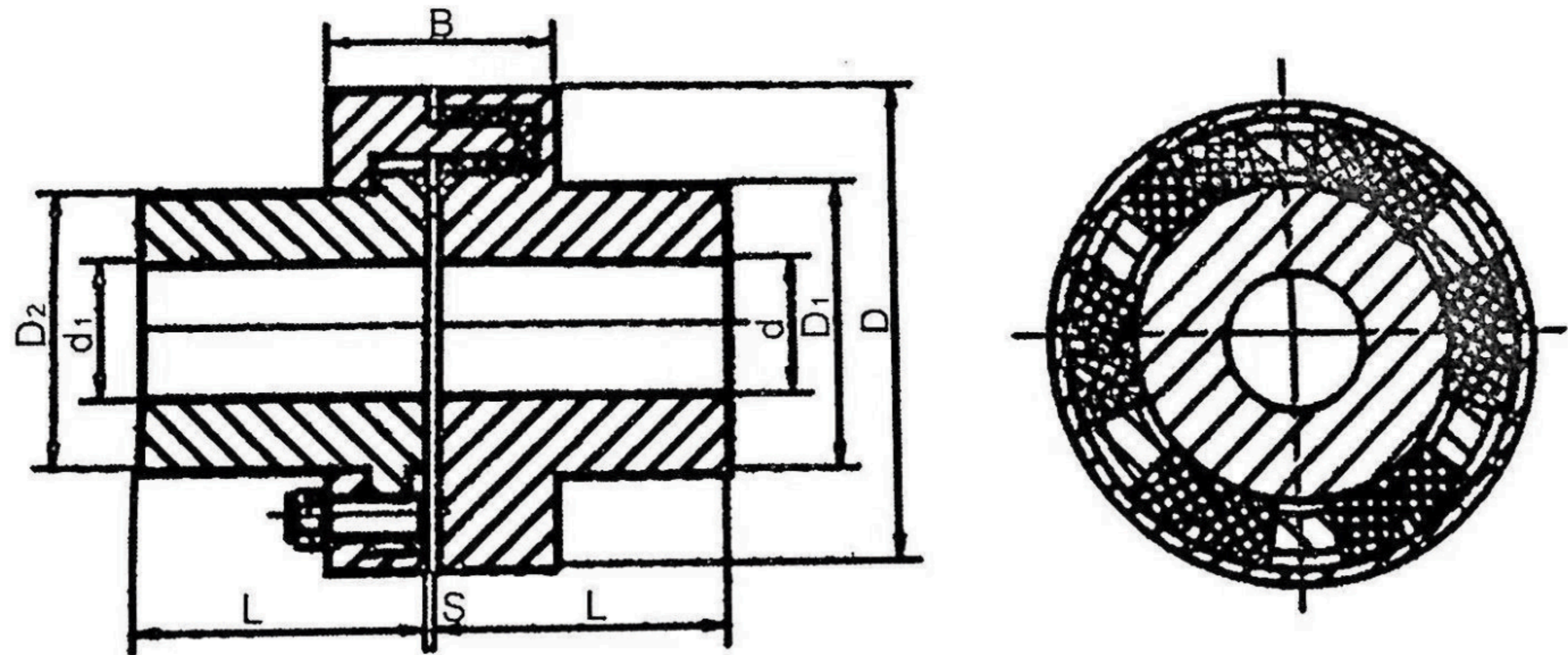
Technical specifications

Torque, speed, bores and installation dimensions must all correspond to the same size.

Ordering information

Specify power, operating speed, load characteristics, both shaft diameters and extension lengths, shaft-end separation and installation conditions. Include brake, dynamic-balancing and elastic-element requirements where applicable.

Structural diagram



Bores, shaft extensions, connection dimensions and installation spacing must correspond to the selected size.

Model	Nominal torque	Allowable speed	Bore diameter	Bore length	B	D	D ₁	D ₂	S	Mass	Mass moment of inertia
	[T] N·m	[n] r/min	d,d ₁	Types Y, J ₁						kg	kg·m ²
HTLB1	160	5000	28-38-45	44-112	49	110	80	62	2	6	0.007
HTLB2	250	4500	32-45-50	60-112	56	125	92	75	2	9.2	0.012
HTLB3	355	4000	38-50-56	60-112	62	140	100	80	2	11.2	0.02
HTLB4	560	3500	42-56-65	84-142	69	160	110	95	2	17.8	0.039
HTLB5	900	3100	50-65-75	84-142	74	180	125	108	2	25.4	0.072
HTLB6	1400	2800	60-75-85	107-172	81	200	140	122	2	31.3	0.117
HTLB7	2000	2500	65-85-90	107-172	92	235	150	138	2	43.4	0.183
HTLB8	2800	2200	71-95-100	107-212	105	250	165	155	3	58.5	0.35
HTLB9	4000	2000	80-100-110	132-212	110	280	180	172	3	81	0.55
HTLB10	5600	1800	90-125	132-212	120	315	200	200	3	98.9	0.9
HTLB11	7100	1600	100-140	167-252	128	350	230	230	3	152	1.6
HTLB12	10000	1400	110-150	167-252	138	400	250	250	3	182.8	2.7
HTLB13	12500	1300	120-160	167-302	155	440	265	265	5	204	3.9
HTLB14	16000	1200	130-170	202-302	160	480	300	300	5	277.6	5.9
HTLB15	20000	1100	140-180	202-302	175	520	315	315	5	348.3	8.6
HTLB16	28000	1000	160-200	242-352	201	560	320	320	6	496.9	13.9
HTLB17	35500	900	170-220	242-352	215	610	352	352	6	582	20.2
HTLB18	45000	860	180-240	242-410	234	660	384	384	6	706.2	29.7
HTLB19	63000	800	200-250	280-410	246	710	416	416	6	917.2	43.2

Notes

Linear dimensions are in mm; other units are given in the corresponding column headings. Check bores, shaft extensions and installation dimensions for the same size.

IKUSE HTLA H-block flexible coupling

Overview

Coupling halves and elastic blocks transmit torque through deformation of the blocks and cushion shock loads.

Construction and maintenance

Check the elastic blocks, connecting parts, shaft-end separation and maintenance space for the specific configuration.

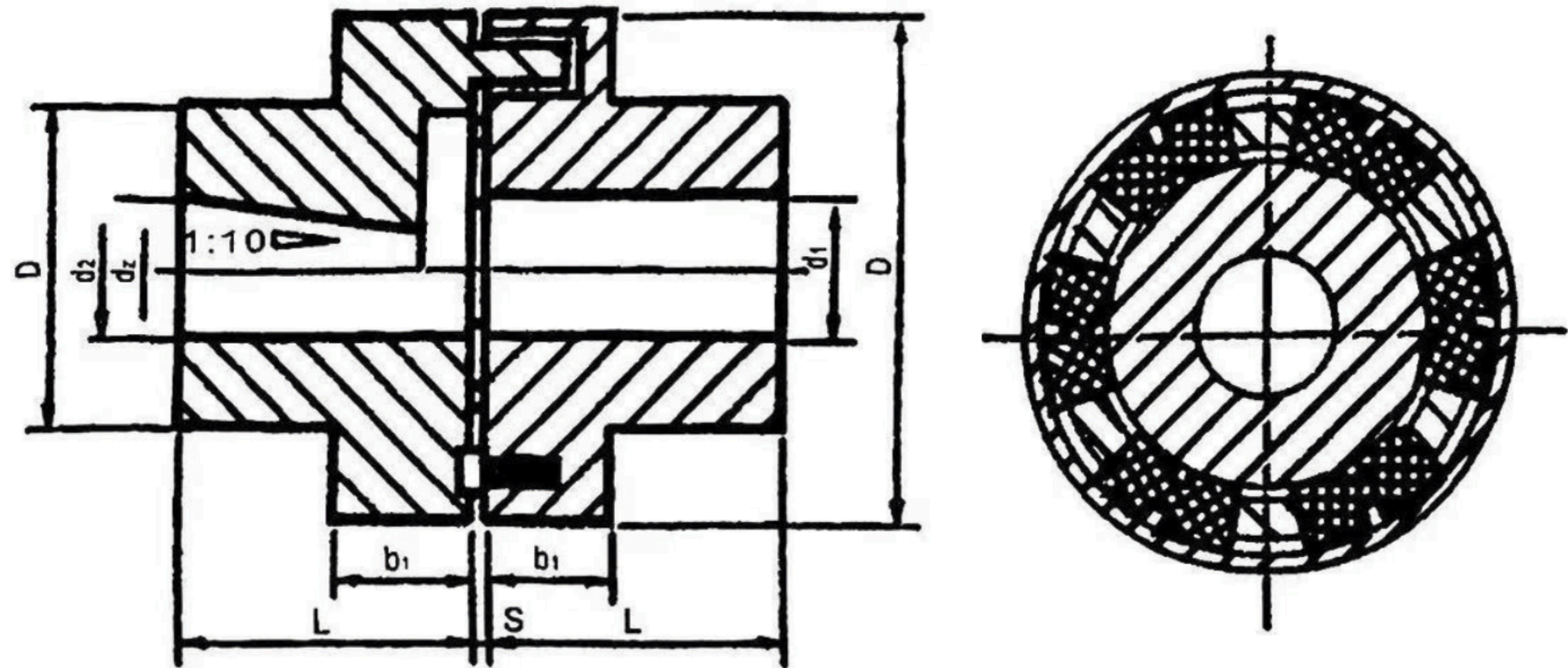
Technical specifications

Torque, speed, bores and installation dimensions must all correspond to the same size.

Ordering information

Specify power, operating speed, load characteristics, both shaft diameters and extension lengths, shaft-end separation and installation conditions. Include brake, dynamic-balancing and elastic-element requirements where applicable.

Structural diagram



Bores, shaft extensions, connection dimensions and installation spacing must correspond to the selected size.

Model	Nominal torque	Allowable speed	Bore diameter	Bore length			b		b ₁	D	D ₁	S	Mass	Mass moment of inertia
				Type Y	Types J ₁ , Z		Types Y, J ₁	Type Z						
	[T] N·m	[n] r/min	d ₁ ,d ₂ ,dz	L	L	L ₁			kg	kg·m²				
HTLA1	20	5000	12-24	32-52	27-38	44-52	8	22	20	58	40	2	1.00	0.0003
HTLA2	35.5	5000	16-28	42-62	30-44	48-62	8	26	20	70	48	2	1.65	0.0006
HTLA3	71	5000	20-32	52-82	38-60	60-82	10	32	21	82	60	2	3.22	0.0017
HTLA4	112	5000	24-40	52-112	38-84	66-112	12	40	24	95	70	2	5.15	0.0041
HTLA5	180	5000	28-45	62-112	44-84	72-112	14	42	27	110	80	2	7.39	0.008
HTLA6	280	4500	32-50	82-112	60-84	88-112	17	45	31	125	92	2	10.85	0.014
HTLA7	400	4000	38-56	82-112	60-84	88-112	20	48	34	140	100	2	12.97	0.02
HTLA8	630	3500	42-65	112-142	84-107	119-142	20	55	39	160	110	2	20.15	0.033
HTLA9	1000	3100	50-75	112-142	84-107	119-142	20	55	42	180	125	2	26.12	0.061
HTLA10	1600	2800	60-85	112-142	107-132	147-172	22	62	47	200	140	2	38.90	0.13
HTLA11	2240	2500	65-90	142-172	107-132	147-172	22	62	52	225	150	2	43.13	0.19
HTLA12	3150	2200	71-100	142-212	107-167	152-212	22	67	60	250	165	3	57.55	0.33
HTLA13	4500	2000	80-110	172-212	132-167	177-212	24	69	65	280	180	3	80.33	0.52

Notes

Linear dimensions are in mm; other units are given in the corresponding column headings. Check bores, shaft extensions and installation dimensions for the same size.

IKUSE LK Elastic-block coupling

Overview

Coupling halves and elastic blocks transmit torque through deformation of the blocks and cushion shock loads.

Construction and maintenance

Check the elastic blocks, connecting parts, shaft-end separation and maintenance space for the specific configuration.

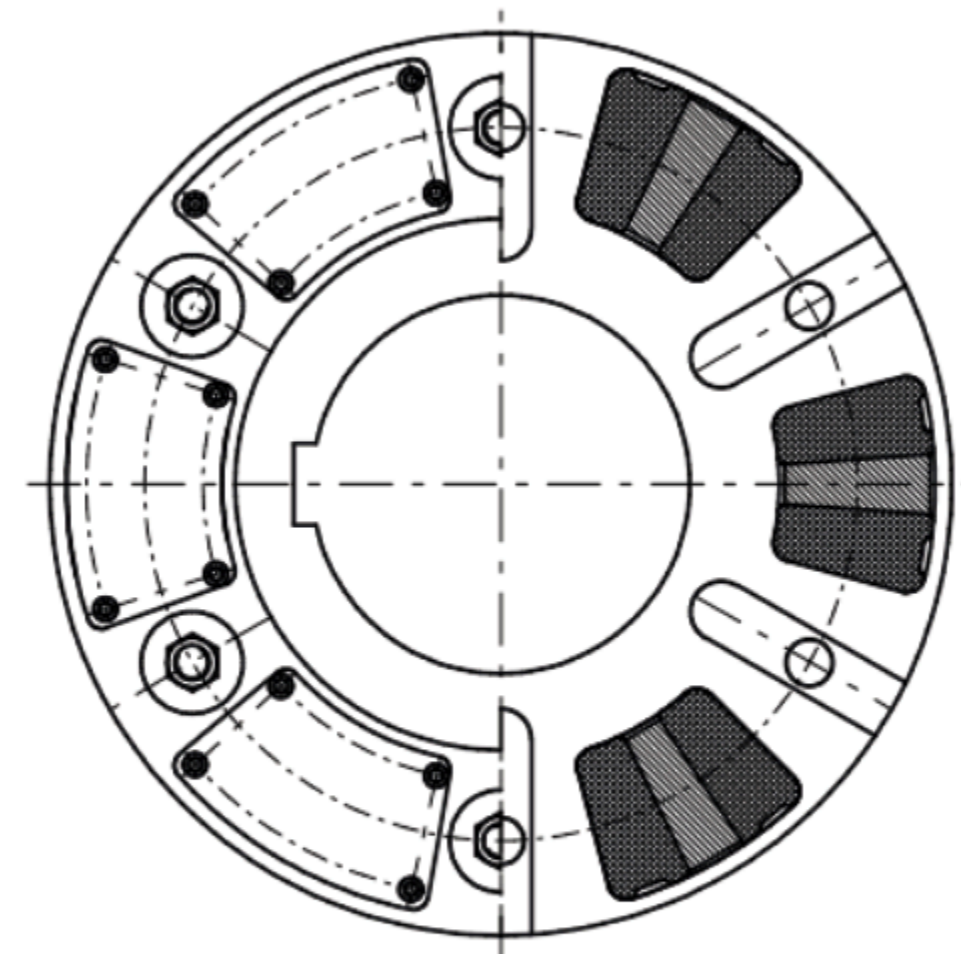
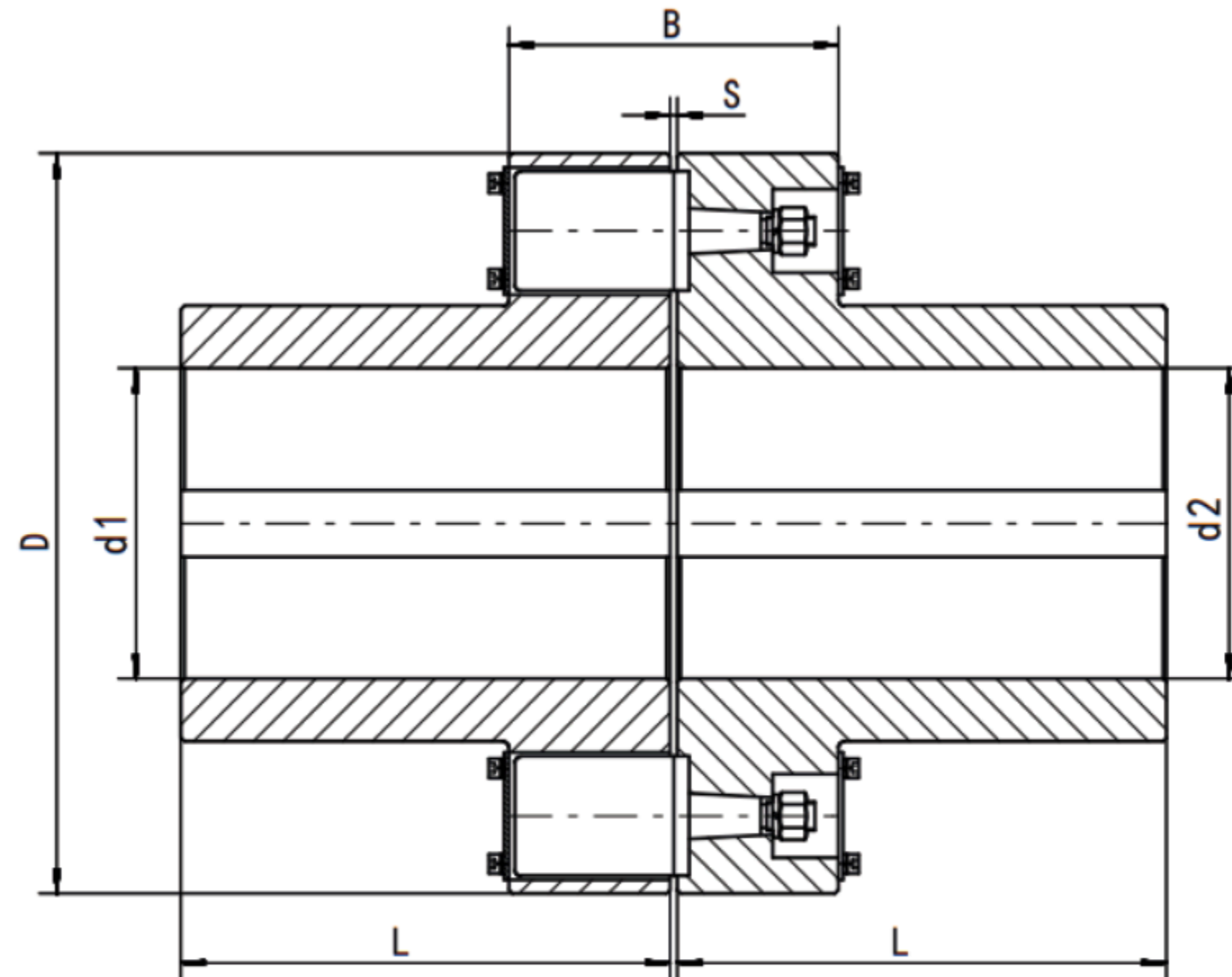
Technical specifications

Torque, speed, bores and installation dimensions must all correspond to the same size.

Ordering information

Specify power, operating speed, load characteristics, both shaft diameters and extension lengths, shaft-end separation and installation conditions. Include brake, dynamic-balancing and elastic-element requirements where applicable.

Structural diagram



Bores, shaft extensions, connection dimensions and installation spacing must correspond to the selected size.

Model	Nominal torque	Allowable speed	Bore diameter	Bore length			D	B	S	Mass	Mass moment of inertia
				Type Y	Type J ₁	Recommen ded L					
	[T] N·m	[n] r/min	d ₁ ,d ₂	L	L ₁					kg	kg·m²
LK1	10000	1950	85-120	172-212	132-167	150	370	190	5	125	4
LK2	16000	1750	95-130	172-252	132-202	170	415	208	5	200	5.2
LK3	25000	1600	110-150	212-252	167-202	185	450	225	5	265	6.3
LK4	40000	1400	130-180	252-302	202-242	210	520	260	5	338	21.5
LK5	63000	1200	160-220	302-352	242-282	230	600	275	6	580	26.6
LK6	100000	1170	190-260	352-410	282-330	260	620	285	6	625	29.3
LK7	125000	1080	220-280	352-470	282-380	280	670	295	6	780	55
LK8	160000	990	240-320	410-470	330-380	300	730	305	6	880	80
LK9	200000	950	260-340	410-550	330-450	320	760	315	6	1075	100
LK10	250000	920	280-360	470-550	380-450	345	790	345	7	1270	120
LK11	315000	820	300-380	470-550	380-450	360	850	380	7	1545	192
LK12	400000	790	320-400	470-650	380-540	380	910	420	7	1820	255
LK13	500000	750	360-440	550-650	450-540	400	960	460	8	2245	332
LK14	630000	690	400-480	650	540	450	1050	505	8	2670	520
LK15	900000	600	440-530	650-800	540-680	500	1200	550	10	4401	708
LK16	1250000	535	460-560	650-800	540-680	520	1350	570	10	4870	1248
LK17	1600000	480	530-630	800	680	600	1500	650	12	5900	1930
LK18	2000000	450	560-670	800-900	680-780	650	1600	730	12	7000	2650
LK19	2500000	420	630-750	800-900	680-780	680	1700	780	12	8850	4080
LK20	3150000	380	710-850	900-1000	780-880	750	1900	820	12	12060	5500

Notes

Linear dimensions are in mm; other units are given in the corresponding column headings. Check bores, shaft extensions and installation dimensions for the same size.

IKUSE WB Elastic-Block Coupling

Overview

Elastic rubber blocks absorb torque fluctuations. The coupling is used with substantial shocks and reversing operation.

Construction

Rubber blocks transmit torque with a small elastic twist angle. The elastic section requires no lubrication.

Applications

High-torque equipment with shock loads, reversing or reciprocating motion.

Selection

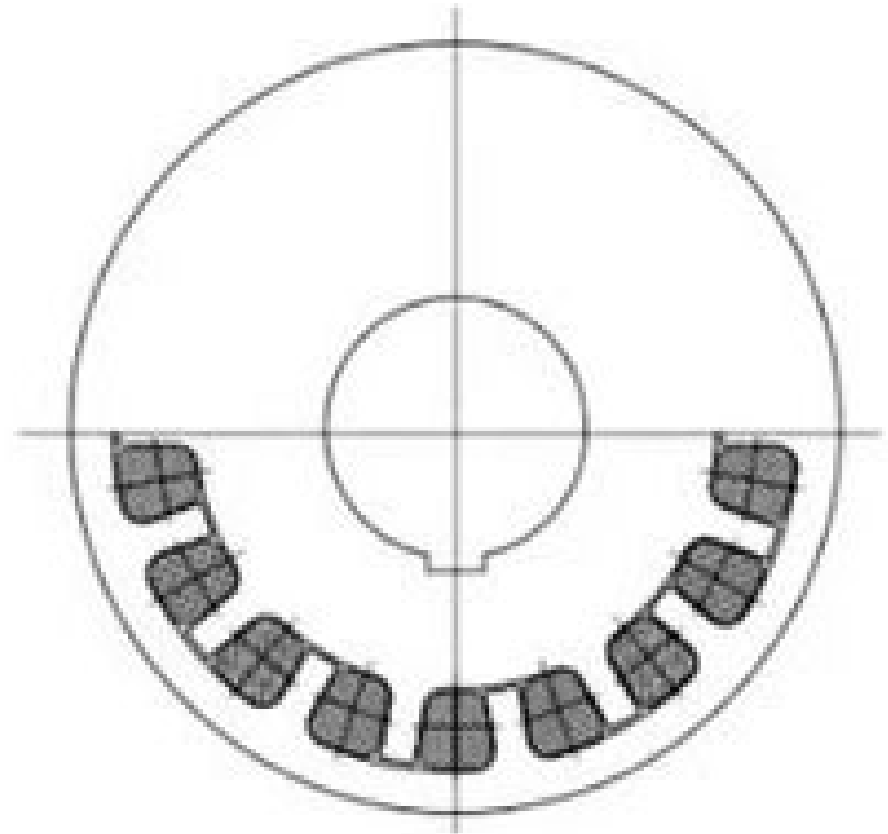
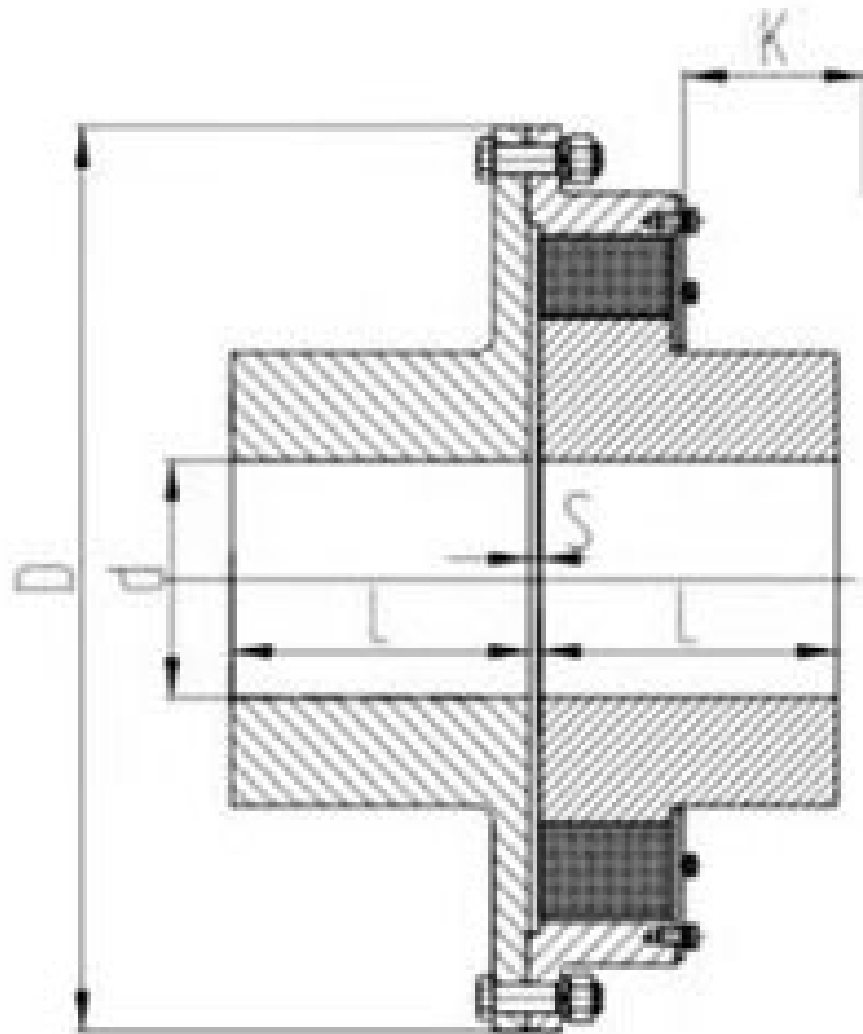
The catalogue gives a typical elastic twist angle of 1°–2°. Torsional-vibration selection must consider shock sources on both driving and driven sides.

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.

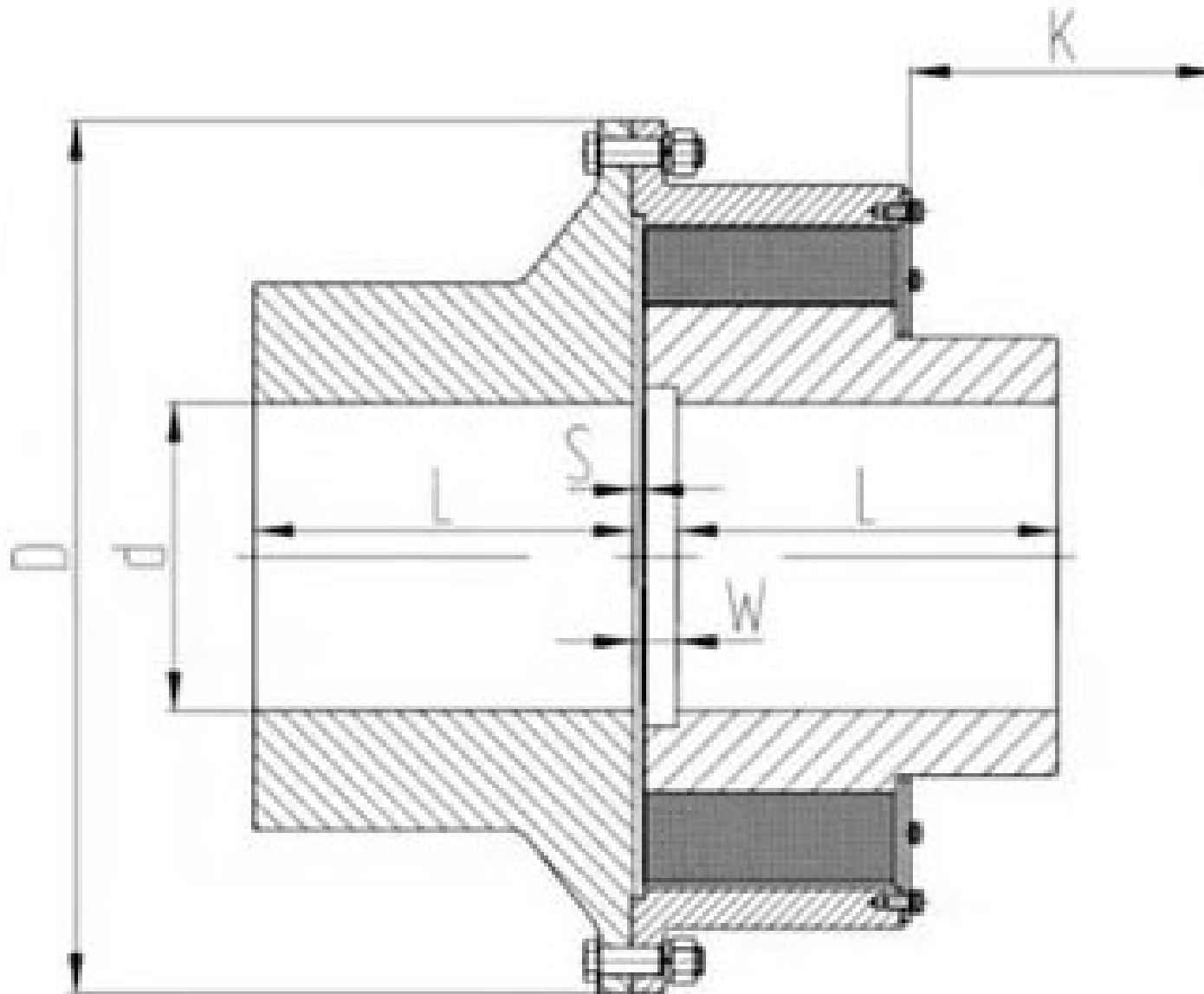
IKUSE WB Elastic-Block Coupling

Construction and installation dimensions



IKUSE WB Elastic-Block Coupling

Construction and installation dimensions



Model	Peak torque KN · m	Maximum speed r/min	Number of holes Z	Number of elastic blocks Z	Maximum bore d	D	L	S	K	W	Mass moment of inertia Kg · m ²	Mass Kg	Misalignment capacity		
					mm								Axial mm	Radial mm	Angular。
2.5	2.88	4470	12	12	76	260	70	3.2	73		0.16878	26	0.762	0.508	0.5
3	5.29	3700	12	12	89	300	89	3.2	92		0.3451	45	0.762	0.508	0.5
3.5	10.12	3250	12	12	108	360	108	4	130		0.8439	76	0.889	0.635	0.5
4	14.61	2700	12	12	127	425	121	4	130		1.6791	117	0.889	0.635	0.5
4.5	24.15	2660	12	12	133	450	125	4.8	178		2.2388	135	1.143	0.635	0.5
5.5	37.95	2210	14	14	175	530	141	6.4	178		5.4897	227	1.270	0.889	0.5
6	57.5	2030	16	32	200	575	156	6.4	203		8.5521	303	1.270	0.889	0.5
6.5	86.25	1840	16	32	216	635	194	6.4	254		15.5382	450	1.270	0.889	0.5
7	116.15	1710	16	32	232	685	213	12.7	159		22.1125	565	1.524	1.016	0.5
8	155.25	1560	18	36	273	750	222	12.7	165		32.714	715	1.524	1.016	0.5
9	190.9	1470	18	36	286	800	248	127	184		45.559	892	1.524	1.016	0.5
10	278.3	1320	20	40	333	890	267	12.7	197		79.112	1230	1.524	1.016	0.5
11	385.25	1200	20	40	381	980	318	12.7	232		138.214	1782	1.524	1.016	0.5
12	593.4	1100	22	44	406	1060	375	12.7	273		223.88	2480	1.524	1.016	0.5
14	828	1020	24	48	448	1142	406	19	302	20	330.6	3185	1.524	1.016	0.5
16	1092.5	880	24	72	540	1350	425	19	314	20	741.82	4830	1.524	1.016	0.5
19	1966.5	750	28	84	635	1568	508	19	362	20	1713.9	8073	2.286	1.524	0.5
22	3254.5	580	32	96	864	2020	610	25	362	25	5255.8	14562	3.175	2.032	0.5
25	4864.5	580	32	160	864	2020	724	27	540	52	6696.1	19113	3.175	2.032	0.5
28	6497.5	580	32	192	864	2020	889	30	714	132	8776.8	25182	3.175	2.032	0.5

Selection of CB or WB

- If a shaft torsional analysis has been completed, select CB or WB according to its results. Otherwise, use the following guidelines:
- a) For diesel drives, consult IKUSE technical staff;
 - b) Electric drives: for direct drives without gears, with vibration or shocks originating on the motor side, use WB; CB may be used where more appropriate;
 - c) Gear reducers: normally use WB when vibration or shocks originate on the driven side; otherwise use CB;
 - d) Speed increasers: use WB if shocks and vibration originate on the high-speed side; otherwise use CB.

IKUSE CB Elastic-Block Coupling

Overview

Rubber blocks with low torsional stiffness cushion torsional vibration in reciprocating machinery.

Construction

Large elastic angular deformation; rubber blocks cushion fluctuating torque. Install and maintain according to the construction.

Applications

Reciprocating machinery and drives requiring resonance analysis.

Selection

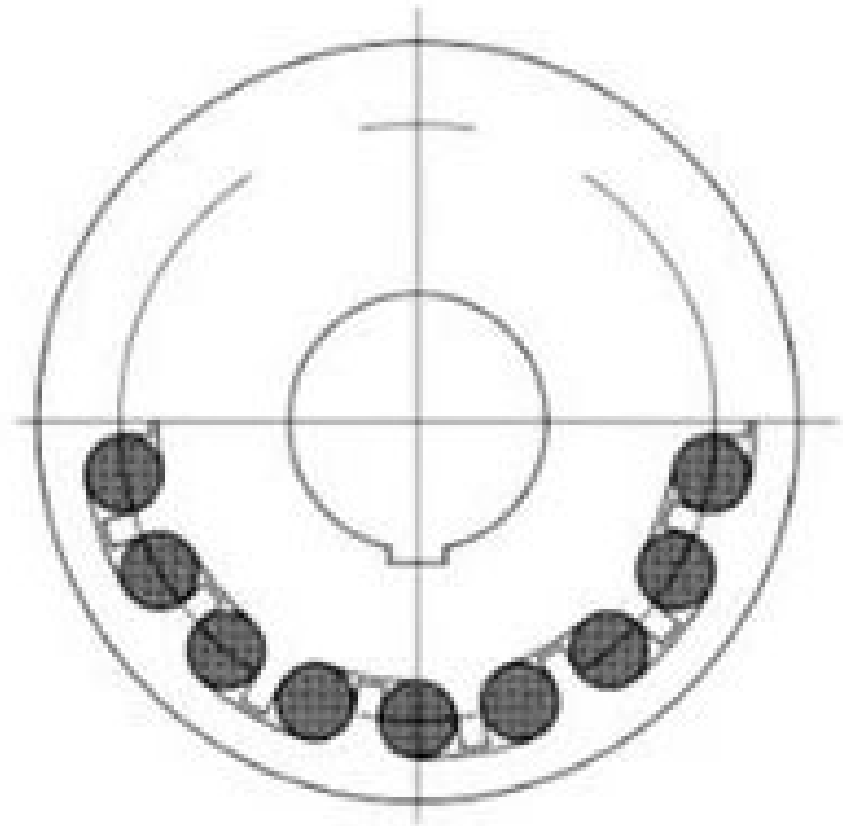
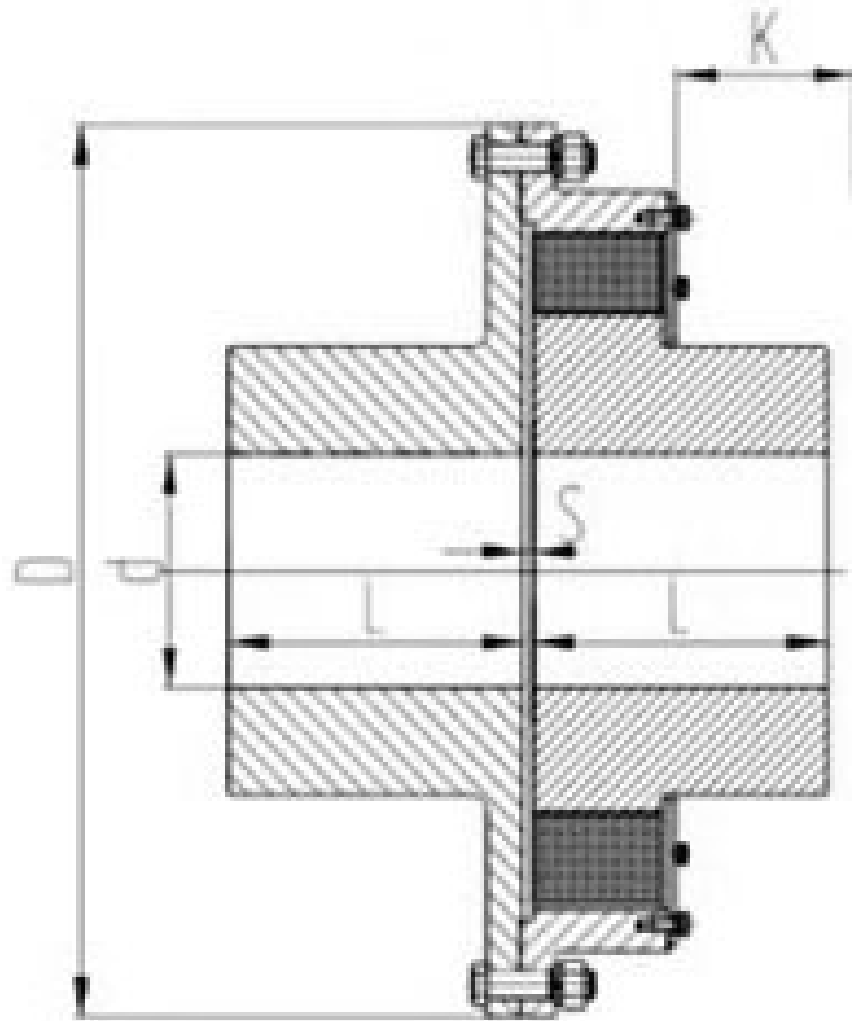
The catalogue elastic twist angle can reach 7°. Check suitability by size, frequency and torsional-vibration calculation.

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 CB Elastic-Block Coupling

Construction and installation dimensions



CB Technical specifications and main dimensions

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

Model	Peak torque KN · m	Maximum speed r/min	Number of holes Z	Number of elastic blocks Z	Maximum bore d	D	L	S	K	Mass moment of inertia Kg · m ²	Mass Kg	Misalignment capacity		
					mm							Axial mm	Radial mm	Angular。
1.5	0.5	6900	10	10	45	168	55	2.5	70	0.03248	11.475	0.635	0.381	0.5
2	0.87	5900	10	10	54	197	61	2.5	76	0.06641	18	0.635	0.381	0.5
2.5	1.59	4800	10	10	67	240	67	3	83	0.15196	27.765	0.762	0.508	0.5
3	2.9	4100	10	10	81	285	83	3	108	0.34249	46.8	0.762	0.508	0.5
3.5	5.07	3600	10	10	97	340	98	3	121	0.8439	81.4	0.762	0.508	0.5
4	8.69	3000	10	10	118	400	116	3	146	1.7383	124.65	0.762	0.508	0.5
5	15.94	2400	10	10	143	485	143	3	181	3.9776	189.9	0.762	0.508	0.5
6	28.98	1950	10	10	175	595	173	5	222	10.5096	322.55	1.143	0.762	0.5
7	43.47	1760	10	10	199	665	200	5	260	17.6146	467.1	1.143	0.762	0.5
8	57.96	1600	10	10	220	735	213	5	279	30.189	645.3	1.143	0.762	0.5
9	86.94	1400	10	10	251	840	243	5	324	59.044	964.35	1.143	0.762	0.5
10	115.92	1265	10	10	277	920	273	7	356	93.911	1287.9	1.524	1.016	0.5
12	159.39	1150	10	10	308	1015	302	7	400	155.324	1766.7	1.524	1.016	0.5
13	217.35	1110	12	24	343	1055	354	8	248	209.003	2289.6	2.032	1.27	0.5
14	289.8	1030	12	24	375	1130	398	10	279	316.68	2957. 85	2.286	1.524	0.5
16	437.7	960	16	32	429	1220	457	10	300	465.48	3962.25	2.286	1.524	0.5

Selection of CB or WB

If a shaft torsional analysis has been completed, select CB or WB according to its results. Otherwise, use the following guidelines:

- a) For diesel drives, consult IKUSE technical staff;
- b) Electric drives: for direct drives without gears, with vibration or shocks originating on the motor side, use WB; CB may be used where more appropriate;
- c) Gear reducers: normally use WB when vibration or shocks originate on the driven side; otherwise use CB;
- d) Speed increasers: use WB if shocks and vibration originate on the high-speed side; otherwise use CB.