

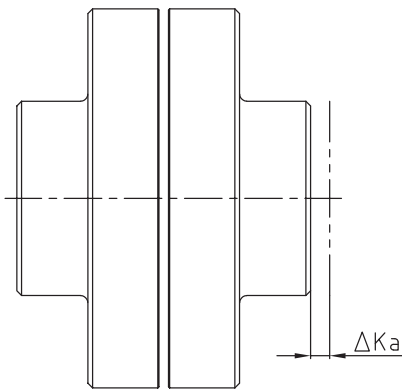
Technical data

REVOLEX® KX-D Technical data											
Size	Torque [Nm] NBR 80 Sha			Cast iron		Steel		Torsion spring stiffness C dyn. [Nm/rad]			
	Rated T _{KN}	Max. T _{K max}	Vibratory T _{KW}	Max. speed [rpm] with v = 35 m/s	Max. bore [mm]	Max. speed [rpm] with v = 60 m/s	Max. bore [mm]	0.25 T _{KN}	0.50 T _{KN}	0.75 T _{KN}	1.00 T _{KN}
KX-D 75	4300	8600	1720	-	-	4500	100	6.73x10 ⁵	1.04x10 ⁶	1.54x10 ⁶	2.17x10 ⁶
KX-D 85	5500	11000	2200	-	-	4175	110	8.66x10 ⁵	1.32x10 ⁶	1.95x10 ⁶	2.73x10 ⁶
KX-D 95	7200	14400	2880	-	-	3845	125	1.11x10 ⁶	1.70x10 ⁶	2.49x10 ⁶	3.47x10 ⁶
KX-D 105	9400	18800	3760	2000	110	3475	130	1.45x10 ⁶	2.21x10 ⁶	3.23x10 ⁶	4.51x10 ⁶
KX-D 120	15200	30400	6080	1800	125	3100	150	1.78x10 ⁶	2.48x10 ⁶	3.54x10 ⁶	4.85x10 ⁶
KX-D 135	20000	40000	8000	1600	140	2725	170	2.34x10 ⁶	3.27x10 ⁶	4.65x10 ⁶	6.36x10 ⁶
KX-D 150	25000	50000	10000	1450	160	2500	190	2.94x10 ⁶	4.12x10 ⁶	5.87x10 ⁶	8.06x10 ⁶
KX-D 170	41000	82000	16400	1250	180	2150	220	4.36x10 ⁶	7.91x10 ⁶	1.14x10 ⁷	1.50x10 ⁷
KX-D 190	54000	108000	21600	1100	205	1900	245	5.78x10 ⁶	1.05x10 ⁷	1.52x10 ⁷	1.98x10 ⁷
KX-D 215	67500	135000	27000	1000	230	1725	275	7.21x10 ⁶	1.30x10 ⁷	1.89x10 ⁷	2.47x10 ⁷
KX-D 240	98000	196000	39200	900	250	1550	310	1.19x10 ⁷	2.52x10 ⁷	3.84x10 ⁷	5.17x10 ⁷
KX-D 265	134000	268000	53600	800	285	1375	350	1.62x10 ⁷	3.44x10 ⁷	5.26x10 ⁷	7.07x10 ⁷
KX-D 280	170000	340000	68000	720	315	1225	385	2.05x10 ⁷	4.36x10 ⁷	6.66x10 ⁷	8.97x10 ⁷
KX-D 305	205000	410000	82000	675	330	1150	405	2.49x10 ⁷	5.27x10 ⁷	8.05x10 ⁷	1.08x10 ⁸
KX-D 330	265000	530000	106000	625	355	1075	435	3.20x10 ⁷	6.78x10 ⁷	1.04x10 ⁸	1.40x10 ⁸
KX-D 355	350000	700000	140000	575	380	975	450	4.26x10 ⁷	8.99x10 ⁷	1.37x10 ⁸	1.85x10 ⁸
KX-D 370	430000	860000	172000	535	450	900	530	4.92x10 ⁷	1.04x10 ⁸	1.59x10 ⁸	2.14x10 ⁸
KX-D 470	520000	1040000	208000	-	-	855	520	6.25x10 ⁷	1.33x10 ⁸	2.03x10 ⁸	2.74x10 ⁸
KX-D 520	810000	1620000	324000	-	-	740	According to customer specification	9.83x10 ⁷	2.08x10 ⁸	3.18x10 ⁸	4.28x10 ⁸
KX-D 590	1000000	2000000	400000	-	-	660	According to customer specification	1.21x10 ⁸	2.56x10 ⁸	3.91x10 ⁸	5.26x10 ⁸
KX-D 650	1350000	2700000	540000	-	-	590	According to customer specification	1.63x10 ⁸	3.47x10 ⁸	5.30x10 ⁸	7.14x10 ⁸

■ = Years of experience with applications at customer sites and additional test series in the KTR test field in Rheine enabled us to determine potentials allowing for an increase of the rated and maximum torques with some sizes of this series.

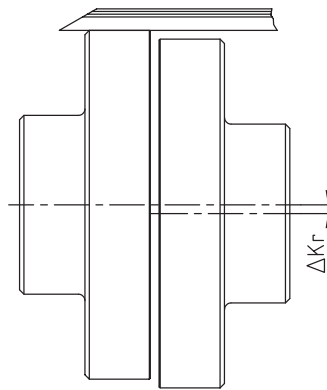
If requested, coupling is dynamically balanced (semi-key balancing G 6.3 with speed on request of customer). For circumferential speeds exceeding v = 30 m/s dyn. balancing is recommended.

Axial displacement ΔKa

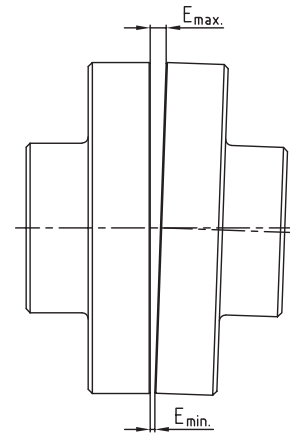


$$L_{\text{max./min.}} = L + \Delta K_a \text{ [mm]}$$

Radial displacement ΔKr



Angular displacement ΔKw



$$\Delta K_w = E_{\text{max.}} - E_{\text{min.}} \text{ [mm]}$$

		Displacements																				
Size (KX and KX-D)		75	85	95	105	120	135	150	170	190	215	240	265	280	305	330	355	370	470	520	590	650
Max. axial displacement ΔKa [mm]		±1.5	±1.5	±1.5	±2	±2	±2	±2	±2.5	±2.5	±2.5	±2.5	±2.5	±2.5	±2.5	±4	±4	±4	±4	±4	±4	±4
Max. radial displacement ΔKr [mm] or max. angular displacement ΔKw [mm] with speed n	250 rpm	0.95	1.1	1.1	1.2	1.3	1.4	1.5	1.7	1.9	2.0	2.2	2.5	2.7	2.9	3.1	3.3	3.5	3.8	4.4	4.9	5.4
	500 rpm	0.70	0.80	0.80	0.9	0.9	1.0	1.1	1.2	1.3	1.4	1.6	1.7	1.9	2.0	2.2	2.3	2.5	2.8	3.1	3.5	3.8
	750 rpm	0.60	0.65	0.65	0.7	0.8	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.6	1.7	1.8	1.9	2.0	2.2	2.4	-	-
	1000 rpm	0.50	0.55	0.55	0.6	0.7	0.7	0.8	0.9	0.9	1.0	1.1	1.2	1.4	1.4	1.5	1.7	1.8	-	-	-	-
	1500 rpm	0.40	0.45	0.45	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.9	1.0	-	-	-	-	-	-	-	-	-
	2000 rpm	0.35	0.40	0.40	0.4	0.5	0.5	0.5	0.6	0.7	-	-	-	-	-	-	-	-	-	-	-	-
3000 rpm	0.30	0.35	0.35	0.4	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Advice for assembly

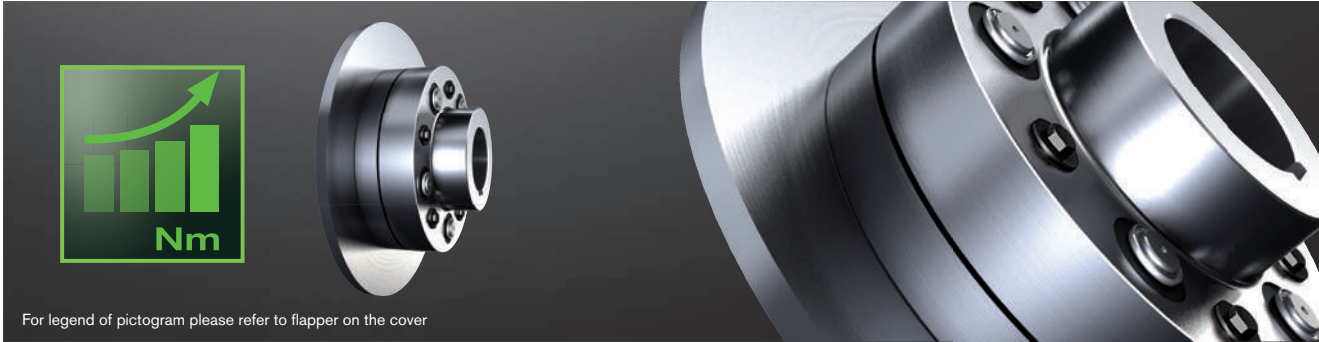
The permissible displacement figures of the flexible REVOLEX® KX couplings specified are general standard values taking into account the load of the coupling up to the rated torque T_{KN} of the coupling and an ambient temperature of +30 °C. The displacement figures may only be used one by one - if they appear simultaneously, they must be limited in proportion. Care should be taken to maintain the distance dimension E accurately in order to allow for axial clearance of the coupling while in operation. See KTR assembly instructions, KTR standard 49410 at our homepage www.ktr.com.

REVOLEX® KX-D SB

Flexible pin & bush coupling



With brake disk



For legend of pictogram please refer to flapper on the cover



REVOLEX® KX-D Type SB

Size	Torque ¹⁾ [Nm] KX-D		Finish bore KX-D (min. - max.)		Dimensions [mm]									
	T _{KN}	T _{K max}	GJL d ₁ , d ₂	Steel d ₁ , d ₂	L	l ₁ , l ₂	E	D _H	D ₁	N ₁	N ₂	N ₃	M*	
105	9400	18800	34-110	0-130	237	117	3	330	180	56	29	55	76	
120	15200	30400	50-125	0-150	270	132	6	370	206	76	45	75	100	
135	20000	40000	70-140	70-170	300	147	6	419	230	76	45	75	100	
150	25000	50000	82-160	82-190	336	165	6	457	256	76	45	75	100	
170	41000	82000	95-180	95-220	382	188	6	533	292	92	62	91	130	
190	54000	108000	110-205	110-245	428	211	6	597	330	92	62	91	130	
215	67500	135000	125-230	125-275	480	237	6	660	368	92	62	91	145	
240	98000	196000	140-250	140-310	534	264	6	737	407	122	75	121	167	

 = Years of experience with applications at customer sites and additional test series in the KTR test field in Rheine enabled us to determine potentials allowing for an increase of the rated and maximum torques with some sizes of this series.

Selection of coupling/brake disk dimension N

Size	Brake disk ØA x b ²⁾					
	Ø560x30	Ø630x30	Ø710x30	Ø800x30	Ø900x30	Ø1000x30
	KX-D	KX-D	KX-D	KX-D	KX-D	KX-D
105	47	47				
120	42	42				
135		57	57			
150			75	75		
170			82	82		
190				105	105	
215				131	131	131
240				128	128	128

* Drop-out center dimension required

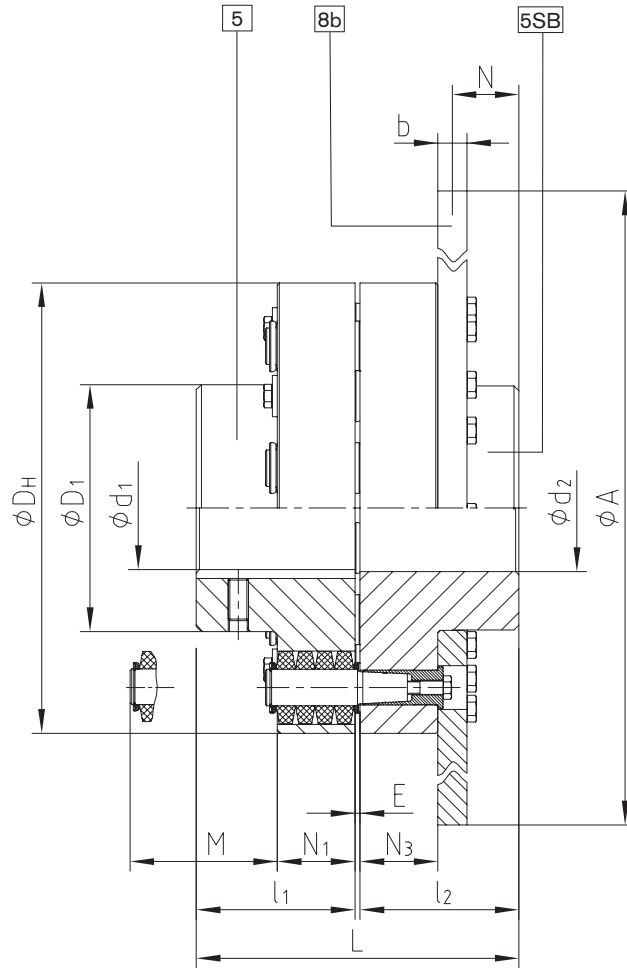
¹⁾ Standard material Perbunan [NBR] 80 Shore A, for selection see page 18 et seqq.

²⁾ Maximum circumferential speed v = 60 m/s referring to the maximum outside diameter.

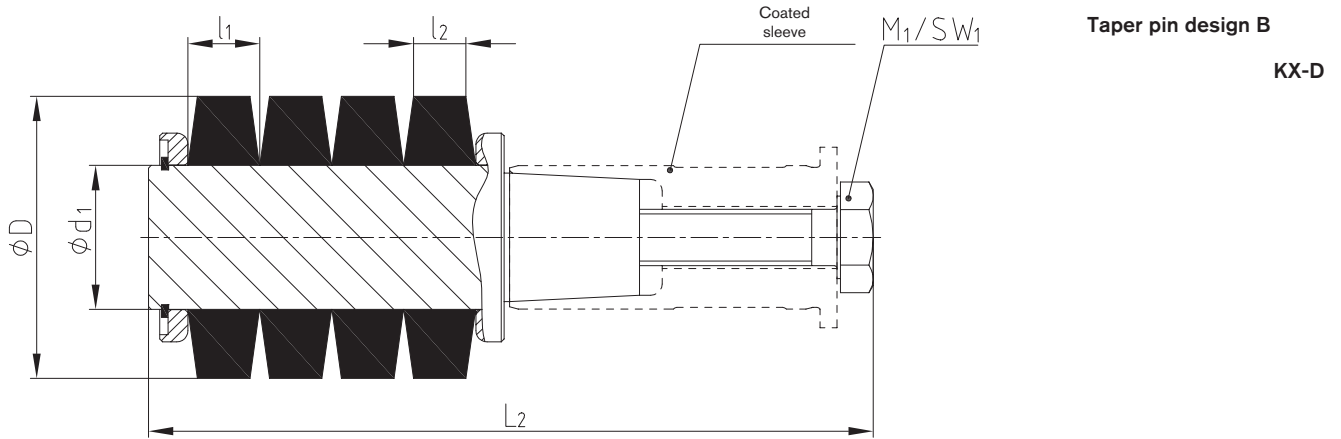
Finish bore according to ISO fit H7, feather keyway according to DIN 6885, sheet 1 [JS9].

If requested, coupling is dynamically balanced (semi-key balancing G 6.3 with speed on request of customer). For circumferential speeds exceeding v = 30 m/s dynamic balancing is necessary (referring to outside diameter ØA).



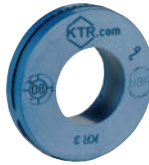
Ordering example:	REVOLEX® KX 170	SB	Ø710 x 30	1 - Ø120	2SB - Ø150
	Type and size of coupling	Type	Brake disk	Finish bore	Finish bore



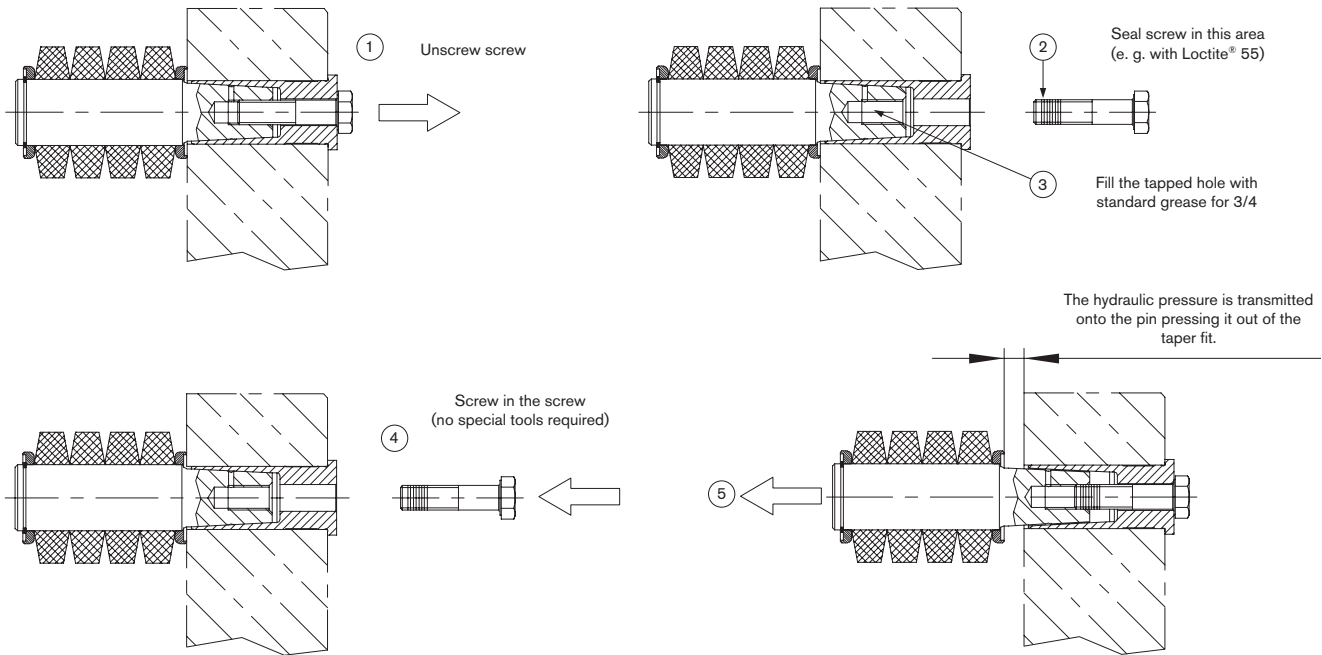
Technical data of pins



Technical data											
Size	Pin		Component 3.2			Component 3.1b			Component 3.4b		Tightening torque T_A [Nm]
	Size	Quantity	Elastomer ring NBR 80 Shore A			Pin			Screw DIN EN ISO 4014/4017		
	KX-D		D	l_1	l_2	d_1	L_1	L_2	M_1	SW_1	
75	3	10									
85	3	12									
95	3	14	50.0	12.7	9.0	25.40	103	129	M10	17	67
105	3	16									
120	4	14									
135	4	16	63.0	17.8	12.5	30.60	147.5	178	M12	19	115
150	4	18									
170	5	14									
190	5	16	85.5	22.9	15.2	43.20	191	220	M16	24	290
215	5	18									
240	6	14									
265	6	16									
280	6	18	113.7	30.5	20.3	58.40	244	290	M24	36	970
305	6	20									
330	6	24									
355	7	16									
370	7	20	150	41	28	75	-	387	M30	46	1950
470	7	22									

General information on the elastomer rings			
Material	Perbunan [NBR]	Natural rubber [NR]	Perbunan [NBR]
Hardness	80 Shore A	80 Shore A	80 Shore A
Permanent temperature range [°C]	-30 to +80	-50 to +70	-30 to +80
Max. temperature (short time) [°C]	-50 to +120	-	-
Colour	black	black	blue
Operating range	STANDARD	sub-zero temperatures	electrically insulating and backlash-free, e. g. cableway drives
			

Assembly/disassembly

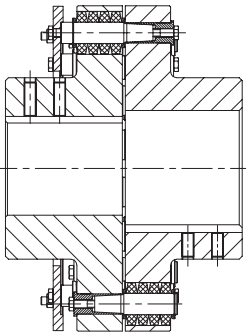


ROTEX®

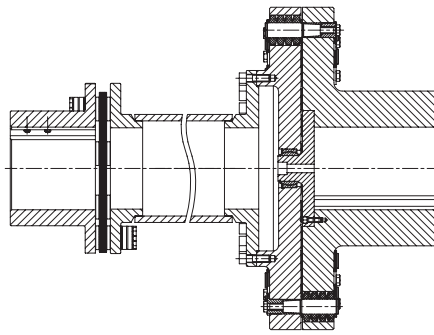
POLY-NORM®

Other types

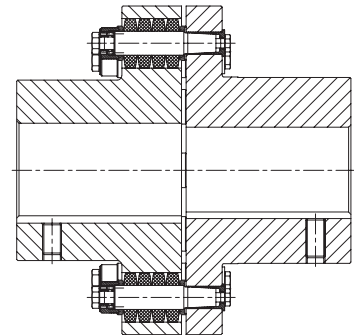
Type AB with limitation of axial backlash



Intermediate shaft type with RADEX®-N

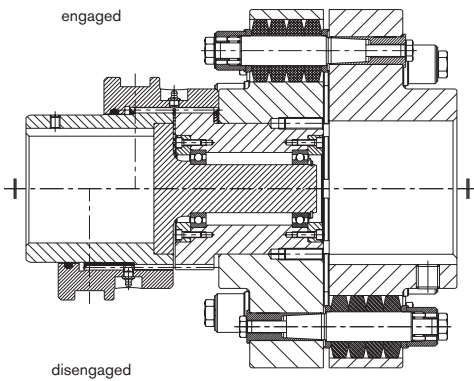


Backlash-free type

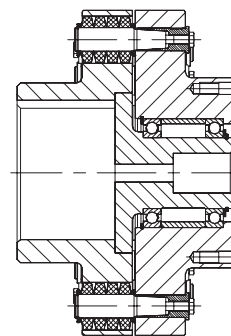


POLY

Type KX-D SD
shiftable with shiftable linkage



Type KX-D
with cardan shaft connection



REVOLUX®

Morskate®



Any questions? Please contact us.

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