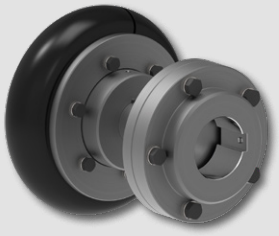
Tyre Couplings

RINGFEDER® RLT

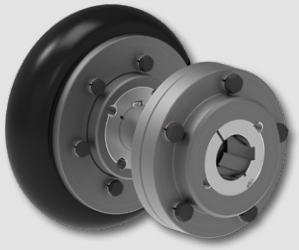
Standard Series with Straight Bores and Keyways (B) or Taper Bushes (F/H), with or without Spacer

RLT with Straight Bores (B)

RLT with Taper Bushes (F/H)



RLT with Straight Bores, with Spacer (SB)



RLT with Taper Bushes, with Spacer (SF/SH)

Power Rating (kW)															
Speed 1/min	RLT Size														
	40	50	60	70	80	90	100	110	120	140	160	180	200	220	250
100	0.25	0.69	1.33	2.62	3.93	5.24	7.07	9.16	13.9	24.3	39.5	65.7	97.6	121	154
750	1.87	5.17	9.97	19.65	29.47	39.30	53.02	68.70	104.25	182.25	296.25	492.75	732	907.5	1155
1000	2.50	6.90	13.30	26.20	39.30	52.40	70.70	91.60	139.0	243.0	395.0	657.0	976	1215	1537
1500	3.75	10.35	19.95	39.30	58.95	78.60	106.05	137.40	208.50	364.50	592.50 *	986.5 *	-	-	-
1800	4.50	12.42	23.94	47.16	70.74	94.32	127.26	164.88	250.20	437.40 *	-	-	-	-	-
3000	7.50	20.70	39.90	78.60	117.90 *	157.20 *	-	-	-	-	-	-	-	-	-
3600	9.00	24.84	47.98	94.32	-	-	-	-	-	-	-	-	-	-	-

- All these power ratings are calculated at constant torque.
- For speeds below 100 1/min and intermediate speeds use normal torque ratings.

* Dynamic balancing preferred at these speeds.

Poles	2	4	6	8
1/min	3000	1500	1000	750

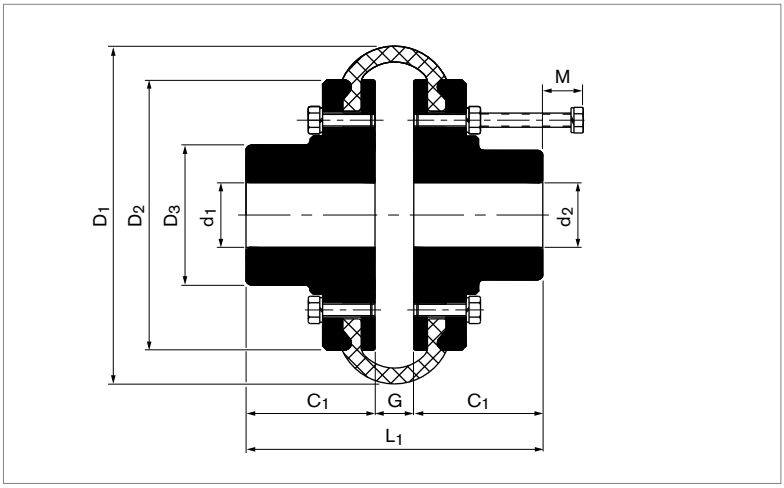
Technical Data – Flexible Tyres															
Size		40	50	60	70	80	90	100	110	120	140	160	180	200	220	250
Max. Speed	1/min	4500	4500	4000	3600	3100	3000	2600	2300	2050	1800	1600	1500	1300	1100	1000
Torsional Stiffness	Nm/Deg.	5	13	26	41	63	91	126	178	296	470	778	1371	1959	2760	3562
Parallel Misalignment	mm	1.1	1.3	1.6	1.9	2.1	2.4	2.6	2.9	3.2	3.7	4.2	4.8	5.3	5.8	6.6
End Float	mm	1.3	1.7	2.0	2.3	2.6	3.0	3.3	3.7	4.0	4.6	5.3	6.0	6.6	7.3	8.2
Normal Torque	Nm	24	66	127	250	375	500	675	875	1330	2325	3730	6270	9325	11600	14675
Max. Torque	Nm	64	160	318	487	759	1096	1517	2137	3547	5642	9339	16455	23508	33125	42740

- The flexible capabilities of the Tyreflex Coupling help to accommodate angular, parallel and axial misalignments.
- Parallel Misalignment upto 6 mm. Angular Misalignment up to 4°. End Float up to 8 mm. Suitable in ambient temp. up to 70 °C.

To continue see next page

Tyre Couplings RINGFEDER® RLT

RLT B: Type with Straight Bores

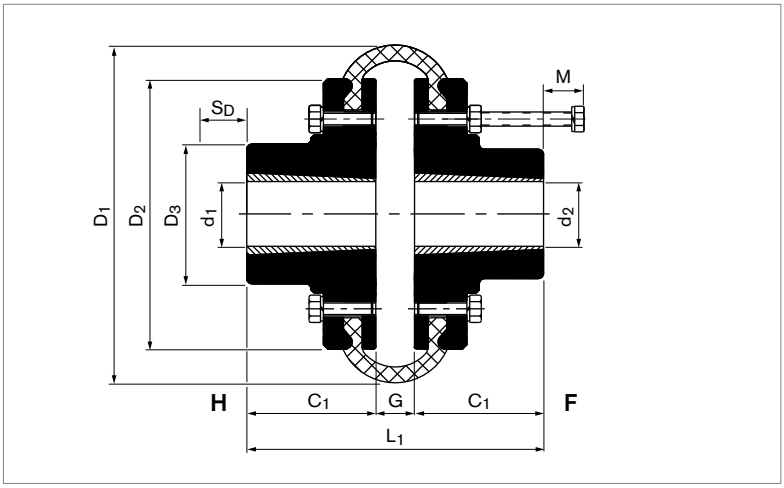


Dimensions of RLT Bore B											
RLT Size	n_{max}	d_1/d_2		L_1	C_1	D_1	D_2	D_3	G	M	Gw
		Min.	Max.								
	1/min	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg
40	4500	10	32	68	22	104	82	-	24	40	1.9
50	4500	10	38	93	32	133	100	79	29	50	3.5
60	4000	15	45	111	38	165	125	73	35	31	5
70	3600	19	50	106	45	197	144	82	16	21	8.4
80	3100	25	63	124	51	210	167	96	22	26	11.5
90	3000	30	75	138	57	235	188	110	24	22	16
100	2600	32	80	144	60	254	216	125	24	26	22.7
110	2300	32	90	152	65	279	233	140	22	22	28.3
120	2050	38	100	177	76	314	264	152	25	21	40.1
140	1800	58	125	201	89	359	311	195	23	31	60.6
160	1600	65	140	212	102	395	345	216	8	40	86.4
180	1500	70	150	254	116	470	398	220	22	41	133.3
200	1300	70	150	258	114	508	429	220	30	52	144.6
220	1100	75	160	281	127	562	470	240	27	44	181.63
250	1000	85	190	294	132	628	532	275	30	80	281.1

To continue see next page

Tyre Couplings RINGFEDER® RLT

RLT F/H: Type with Taper Bushes



Dimensions of RLT Bore F/H																			
RLT Size	n_{max}	Bush Size		Max. Bore Diameter d_1/d_2		L_1		C_1		S_D		D_1	D_2	D_3	G	M		Gw	
		F	H	F	H	F	H	F	H	F	H	F/H	F/H	F/H	F/H	F	H	F	H
	1/min	mm		mm		mm		mm		mm		mm	mm	mm	mm	mm		kg	
40	4500	1008		22		68		22		37		104	82	-	24	40		1.7	
50	4500	1210		32		79		25		46		133	100	79	29	50		2.7	
60	4000	1610		35		85		25		46			125	103	35	45		3.6	
70	3600	2012	1610	45	35	80	66	32	25	38	46	197	144	82	16	41	34	6.35	6.2
80	3100	2517	2012	60	45	112	86	45	32	42	56	210	167	98	22	45	32	8.53	8.5
90	3000	2517		60		114		45		62		235	188	110	24	34		12	
100	2600	3020	2517	75	60	126	114	51	45	48	62	254	216	125	24	41	35	18.2	18.1
110	2300	3020		75		124		51		73		279	233	140	22	36		21.1	
120	2050	3525	3020	90	75	155	127	65	51	55	73	314	264	152	25	46	32	30.33	30.3
140	1800	3525		90		153		65		75		359	311	195	23	55		42.6	
160	1600	4030		100		162		77		86		395	345	216	8	65		72.6	
180	1500	4535		110		200		89		97		470	398	220	22	68		123	
200	1300	4535		110		208		89		97		508	429	220	30	77		158.3	
220	1100	5040		125		231		102		113			470	240	27	69		195.1	

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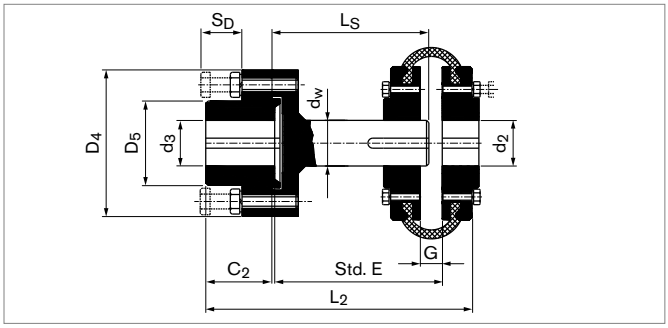
Tyre Couplings RINGFEDER® RLT

RLT SB: Type with Straight Bores, with Spacer

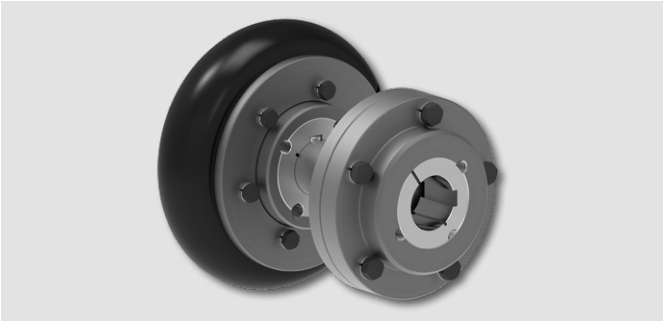


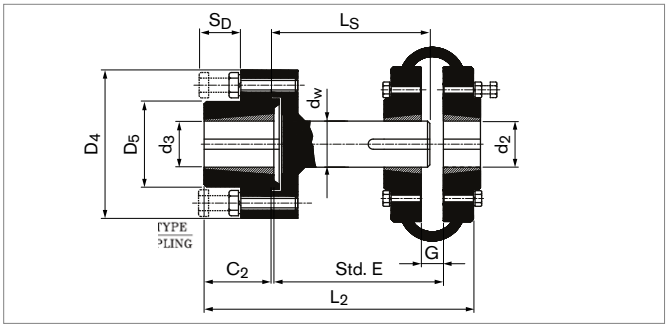
Dimensions of RLT SB														
Spacer Size	Std. E	d_3		D_4	D_5	L_2	C_2	S_D	L_S	d_w	RLT Size	d_2		G
		Min.	Max.									Min.	Max.	
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm		mm	mm	mm
12	80 100	10	42	118	83	127 147	25	22	57 77	25	40	10	32	24
16	100 140 100 140 100 140	18	48	127	80	160 200 170 210 176 216	38	24	94 134 94 134 94 134	32	40 40 50 50 60 60	10 10 10 10 15 15	32 32 38 38 45 45	24 24 29 29 35 35
25	100 140 180 100 140 180 140 180	38	80	178	127	190 230 270 196 236 276 242 282	45	27	94 134 174 94 134 174 134 174	48	70 70 70 80 80 80 90 90	19 19 19 25 25 25 30 30	50 50 50 63 63 63 75 75	16 16 16 22 22 22 24 24
30	140 180 140 180	40	90	216	146	276 316 281 321	76	33	134 174 134 174	60	100 100 110 110	32 32 32 32	80 80 90 90	24 24 22 22
35	140 180 180	66	110	248	178	305 345 358	89	33	134 174 174	80	120 120 140	38 38 58	100 100 125	25 25 23

To continue see next page

Tyre Couplings RINGFEDER® RLT

RLT SF/SH: Type with Taper Bushes, with Spacer





Dimensions of RLT SF/SH														
Spacer Size	Std. E	Taper Bush		D_4	D_5	L_2	C_2	S_D	L_S	d_w	RLT Size	Taper Bush		G
		Size	Max. Bore Diameter d_3									Size	Max. Bore Diameter d_2	
		mm	mm	mm	mm	mm	mm	mm	mm	mm		mm	mm	mm
12	80 100	1210	32	118	83	127 147	25	22	57	25	40	1008	22	24
16	100 140 100 140 100 140	1615	42	127	80	160 200 170 210 176 216	38	24	94 134 94 134 94 134	32	40 40 50 50 60 60	1008 1008 1210 1210 1610 1610	22 22 32 32 35 35	24 24 29 29 35 35
25	100 140 180 100 140 180 140 180	2517	60	178	127	180 220 260 193 233 273 233 273	45	27	94 134 174 94 134 174 134 174	48	70F 70F 70F 80F 80F 80F 90 90	2012 2012 2012 2517 2517 2517 2517 2517	45 45 45 60 60 60 60 60	16 16 16 22 22 22 24 24
30	140 180 140 180	3030	75	216	146	270 310 270 310	76	33	134 174 134 174	60	100F 100F 110 110	3020 3020 3020 3020	75 75 75 75	24 24 22 22
35	140 180 140 180	3535	90	248	178	297 337 297 337	89	33	134 174 134 174	80	120F 120F 140 140	3525 3525 3525 3525	90 90 90 90	25 25 23 23

Std. Distance Between Shaft Ends (Std. E)																				
	Spacer 12		Spacer 16				Spacer 25						Spacer 30				Spacer 35			
	80		100		140		100		140		180		140		180		140		180	
RLT Size	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
40	80	100	100	113	140	153	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50	-	-	100	116	140	153	-	-	-	-	-	-	-	-	-	-	-	-	-	-
60	-	-	100	124	140	164	-	-	-	-	-	-	-	-	-	-	-	-	-	-
70F	-	-	-	-	-	-	100	107	140	147	180	187	-	-	-	-	-	-	-	-
80F	-	-	-	-	-	-	100	112	140	152	180	192	-	-	-	-	-	-	-	-
90	-	-	-	-	-	-	-	-	140	155	180	195	-	-	-	-	-	-	-	-
100F	-	-	-	-	-	-	-	-	-	-	-	-	140	151	180	191	-	-	-	-
110	-	-	-	-	-	-	-	-	-	-	-	-	140	151	180	192	-	-	-	-
120F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	140	156	180	196
140	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	140	153	180	193

To continue see next page

Tyre Couplings RINGFEDER® RLT

Explanations

n_{max}	= Max. Rotational Speed	**Std. E**	= Std. Distance Between Shaft Ends	**M**	= Amount by wich the Clamping Screw must be pulled out to loosen Tyres
$d_1/d_2/d_3$	= Bore Diameter Hubs & Bushes	L_1/L_2	= Total Length	S_D	= Disassembly Space
D_1	= Max. Outer Diameter	L_S	= Intermediate Part Length	**Gw**	= Approx. Weight
D_2/D_4	= Max. Outer Diameter Hubs	d_w	= Intermediate Shaft Diameter		
D_3/D_5	= Outer Diameter Hubs	**G**	= Width of Gap Between Left and Rigth Component		
C_1/C_2	= Guided Length in Bore				

Technical Information

- All dimensions are in millimeters, unless otherwise specified. Decimal points are used as decimal separators.
- For size 40 of RLT Bore B, a flange must be used for mounting the spacer shaft.
- With RLT Bore B, up to size 60 the Tyre is clamped from the inside. From size 70 and above, it is clamped from the outside.
- With RLT Bore F/H, up to size 60 the Tyre is clamped from the inside. From size 70 and above, it is clamped from the outside.
- Shaft ends, although normally located G apart can project beyond flanges.
- Weight & Moment of inertia specified for solid bores.
- For detailed information about taper bush bore, please contact RINGFEDER POWER TRANSMISSION.
- Non-Std. spacers are available on request.
- Taper Lock Bushes can be mounted from the inside "F" or from the outside "H". Selection is made in the order.
- RLT Tyre Couplings are also available with mixed hub variations. Selection is made via the type in the order.
- For other types of shaft-hub-connections, please contact RINGFEDER POWER TRANSMISSION.

Ordering example RLT

Series	Type	Size	Tyre-Material	Bore Diameter d_1	Bore Diameter d_2
RLT	FIF	100	FRAS	60	70

Additional Ordering Example in case of RLT with Spacer

Series	Type	Spacer Size	Distance between Shaft Ends 'E'	Bore Diameter d_3
RLT	SF	30	140	70

Ordering Information

- Type Definition: Left Hub - Clamping - Right Hub
- Hub Definition: B = Straight Bore and Keyway, F = Taper Bush mounted from the inside, H = Taper Bush mounted from the outside
- Clamping Definition: I = Tyre clamped from the inside, O = Tyre clamped from the outside
- Tyre Materials: STDR = Natural Rubber (standard), NEUR = Natural Rubber (without labeling), FRAS = Fire Resistant Anti Static
- Without further specifications, we deliver hubs of type B as standard: Bore tolerance H7; Keyway acc. to DIN 6885-1; Keyway width tolerance JS9; Set screw per hub. For bores complying with AGMA or other specifications, please contact RINGFEDER POWER TRANSMISSION.

Further information on
RINGFEDER® RLT on
www.ringfeder.com

Disclaimer of liability
All technical details and notes are non-binding and cannot be used as a basis for legal claims. The user is obligated to determine whether the represented products meet his requirements. We reserve the right to carry out modifications at any time in the interests of technical progress.

RINGFEDER POWER TRANSMISSION