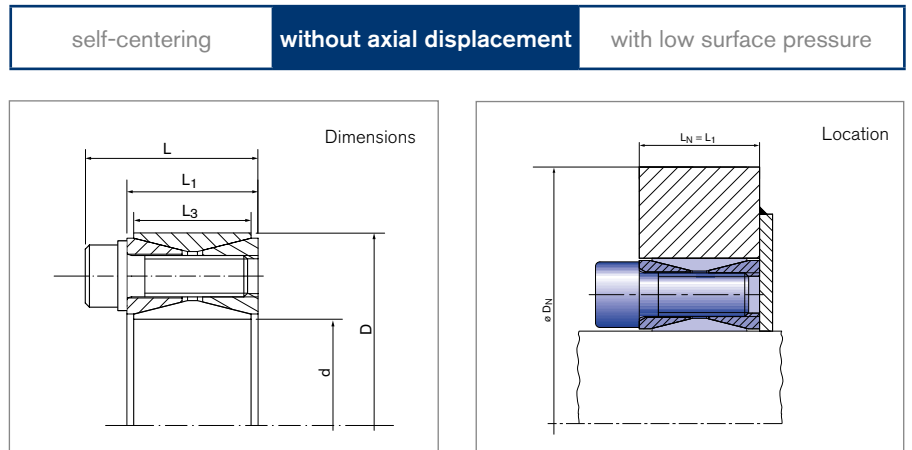


Locking Assemblies for Bending Loads

RINGFEDER® RfN 7012 M_b 60%

Extreme loads in belt drums



Locking Assembly dimensions		Clamping screws ISO 4762-12.9			T			M _b 60%	T _{res} at M _b 60%	PW _{max} at M _b 60%	PN _{max} at M _b 60%	PW _{min} at M _b 60%	PN _{min} at M _b 60%	F _{ax} at M _b 60%	DN _{min} at R _{P0,2}			Gw
		n _{Sc}	D _G	T _{Ared.}	M _b	PW	PN								250	350	450	
d	x D	mm	mm	Nm	Nm	N/mm ²	Nm								mm			kg
50	x 80	12	8 x 22	35	1777	189	118	1050	1434	264	165	114	71	57	177	134	118	0,6
55	x 85	14	8 x 22	35	2267	199	129	682	2162	243	157	155	100	79	178	138	123	0,63
60	x 90	14	8 x 22	35	2460	181	121	1140	2180	249	166	113	76	73	201	151	133	0,69
65	x 95	16	8 x 22	35	3030	190	130	780	2928	233	159	147	101	90	202	156	138	0,73
70	x 110	14	10 x 25	70	4581	207	132	1890	4173	277	176	136	87	119	265	192	167	1,26
75	x 115	14	10 x 25	70	4887	192	125	1890	4507	258	168	126	82	120	260	195	171	1,33
80	x 120	14	10 x 25	70	5192	179	120	2535	4531	262	175	97	65	113	286	208	181	1,4
85	x 125	16	10 x 25	70	6281	192	131	1725	6039	245	167	139	95	142	281	211	185	1,49
90	x 130	16	10 x 25	70	6627	182	125	2355	6194	249	172	113	78	138	303	223	195	1,53
95	x 135	18	10 x 25	70	7843	192	135	1546	7889	234	165	150	105	162	299	226	199	1,62
100	x 145	14	12 x 30	125	9591	196	135	4326	8560	277	191	114	79	171	---	269	229	2,01
110	x 155	14	12 x 30	125	10488	177	126	4704	9373	257	183	96	68	170	---	277	239	2,15
120	x 165	16	12 x 30	125	13004	184	134	5376	11841	268	195	100	73	197	---	309	262	2,35
130	x 180	20	12 x 35	125	17522	162	117	6786	16155	236	170	88	63	249	415	307	269	3,51
140	x 190	22	12 x 35	125	20661	164	121	6096	19741	226	167	103	76	282	426	320	281	3,85
150	x 200	24	12 x 35	125	24046	167	125	5412	23429	218	164	116	87	312	438	333	294	4,07
160	x 210	26	12 x 35	125	27674	169	129	4722	27268	211	160	127	97	341	451	346	306	4,3
170	x 225	22	14 x 40	190	32486	157	119	12942	29797	238	180	76	58	351	557	398	344	5,78
180	x 235	24	14 x 40	190	37391	161	123	11376	35618	228	175	94	72	396	559	408	355	6,05
190	x 250	28	14 x 45	190	45890	147	111	14442	43559	204	155	89	68	459	517	403	359	8,25
200	x 260	30	14 x 45	190	51590	149	114	12690	50005	197	151	101	78	500	525	414	370	8,65
220	x 285	26	16 x 50	295	66374	146	112	19602	63413	204	157	87	68	576	598	463	411	11,22
240	x 305	30	16 x 50	295	83094	153	120	12198	82194	186	146	120	94	685	598	477	429	12,2
260	x 325	34	16 x 50	295	101512	159	127	10086	101010	185	148	134	107	777	642	511	458	13,2
280	x 355	32	18 x 60	405	124233	140	111	23064	122073	178	141	102	80	872	673	545	492	19,2

To continue see next page

Locking Assemblies for Bending Loads RINGFEDER® RfN 7012 M_b 60%

Locking Assembly dimensions			Clamping screws ISO 4762-12.9			T without M _b	P _w without M _b	P _N without M _b	M _b 60%	T _{res} at M _b 60%	P _w max at M _b 60%	P _N max at M _b 60%	P _w min at M _b 60%	P _N min at M _b 60%	F _{ax} at M _b 60%	D _N min at R _{p0,2}			G _w
			Thread	T _{Ared.}	M _b											M _b	M _b	250	
d	x	D	n _{Sc}	D _G	Nm	Nm	N/mm ²	Nm	N/mm ²	N/mm ²	N/mm ²	N/mm ²	N/mm ²	kN	mm			kg	
mm		mm		mm															
300	x	375	36	18 x 60	405	149101	146	117	14892	148355	170	136	123	99	989	690	566	513	20,5
320	x	405	36	20 x 70	580	207104	149	118	22332	205896	172	136	126	99	1287	747	612	554	29,6
340	x	425	36	20 x 70	580	219216	140	112	34752	216444	174	139	106	85	1273	797	648	586	31,1
360	x	455	36	22 x 80	780	282418	138	109	44778	278845	169	133	107	84	1549	827	681	619	42,2
380	x	475	36	22 x 80	780	297102	130	104	52200	292480	164	131	96	76	1539	853	706	643	44
400	x	495	36	22 x 80	780	311738	123	99	90276	298380	179	145	67	54	1492	961	770	692	46
420	x	515	40	22 x 80	780	362587	130	106	56148	358213	163	133	96	79	1706	933	770	700	50
440	x	545	40	24 x 90	1000	442836	126	102	67884	437602	156	126	96	78	1989	951	796	728	64,6
460	x	565	40	24 x 90	1000	461680	121	98	106398	449253	165	135	76	62	1953	1033	849	770	67,4
480	x	585	42	24 x 90	1000	504497	121	99	100884	494307	162	133	80	66	2060	1058	873	794	71
500	x	605	44	24 x 90	1000	549139	121	100	95376	540793	158	131	84	70	2163	1083	897	817	72,6
520	x	630	45	24 x 90	1000	582655	119	98	116688	570851	163	134	76	62	2196	1149	945	858	80
540	x	650	45	24 x 90	1000	603639	114	95	155202	583346	170	141	59	49	2161	1235	999	901	82
560	x	670	48	24 x 90	1000	666213	117	98	127680	653864	162	135	73	61	2335	1228	1008	914	85
580	x	690	50	24 x 90	1000	717182	118	99	122166	706700	159	133	77	65	2437	1252	1032	938	88
600	x	710	50	24 x 90	1000	740342	114	96	160679	722695	166	140	62	52	2409	1338	1085	980	91
620	x	730	52	24 x 90	1000	793992	114	97	155166	778683	163	138	66	56	2512	1361	1109	1004	93
640	x	750	54	24 x 90	1000	849441	115	98	149657	836153	160	137	69	59	2613	1385	1133	1027	96
660	x	770	56	24 x 90	1000	906684	115	99	144144	895153	157	135	73	62	2713	1409	1157	1050	99
680	x	790	56	24 x 90	1000	932418	111	96	182652	914353	164	141	59	51	2689	1495	1211	1093	102
700	x	810	60	24 x 90	1000	1026541	116	100	133122	1017873	153	132	79	68	2908	1458	1205	1097	104
720	x	830	60	24 x 90	1000	1054013	112	97	171630	1039946	159	138	66	57	2889	1542	1259	1139	107
740	x	850	62	24 x 90	1000	1117486	113	98	166122	1105069	156	136	69	60	2987	1566	1282	1163	110
760	x	870	64	24 x 90	1000	1182737	113	99	160608	1171782	154	135	72	63	3084	1590	1306	1186	113
780	x	890	65	24 x 90	1000	1230829	112	98	177108	1218020	156	137	68	59	3123	1644	1345	1219	116
800	x	910	66	24 x 90	1000	1279783	111	97	193608	1265054	157	138	64	56	3163	1699	1384	1252	118
820	x	930	68	24 x 90	1000	1349444	111	98	188100	1336270	155	137	66	59	3259	1723	1407	1275	121
840	x	950	70	24 x 90	1000	1420874	111	98	182586	1409093	153	136	69	61	3355	1746	1431	1298	124
860	x	970	72	24 x 90	1000	1494068	112	99	177078	1483537	152	134	72	64	3450	1770	1455	1321	127
880	x	990	74	24 x 90	1000	1569025	112	100	171564	1559617	150	133	74	66	3545	1794	1479	1344	129
900	x	1010	75	24 x 90	1000	1624087	111	99	188064	1613161	151	135	70	63	3585	1848	1517	1377	132
920	x	1030	76	24 x 90	1000	1680004	110	98	204564	1667503	153	137	67	59	3625	1902	1556	1410	135
940	x	1050	78	24 x 90	1000	1759331	110	99	199050	1748035	151	135	69	62	3719	1925	1580	1433	138
960	x	1070	80	24 x 90	1000	1840411	110	99	193542	1830206	149	134	71	64	3813	1949	1603	1456	140
980	x	1090	81	24 x 90	1000	1899788	109	98	210042	1888141	151	136	68	61	3853	2003	1642	1489	143
1000	x	1110	82	24 x 90	1000	1960015	108	98	226542	1946879	152	137	64	58	3894	2057	1681	1522	146

More sizes on request
To continue see next page

Locking Assemblies for Bending Loads RINGFEDER® RfN 7012 M_b 60%

Explanations

Basic dimensions when screws are not tightened			
d	= Inner diameter	p_{Wmin} bei M_b60%	= Min. surface pressure on shaft at 60% bending moment
D	= Outer diameter	p_{Nmin} bei M_b60%	= Min. surface pressure on hub at 60% bending moment
n_{Sc}	= Quantity of screws	F_{ax} bei M_b60%	= Transmissible axial force at 60% bending moment
D_G	= Thread	DN min bei Rp0,2	
T_{Ared.}	= Redused tightened torque of the screws under bending load	250 N/mm² + M_b60%	= Min. hub outer diameter depending of the given hub yield point Rp0,2 and part of bending moment
T ohne M_b	= Transmissible torque at given T _A	350 N/mm² + M_b60%	= Min. hub outer diameter depending of the given hub yield point Rp0,2 and part of bending moment
p_W ohne M_b	= Surface pressure on shaft at given T _A	450 N/mm² + M_b60%	= Min. hub outer diameter depending of the given hub yield point Rp0,2 and part of bending moment
p_N ohne M_b	= Surface pressure on hub at given T _A	G_w	= Weight
M_b60%	= 60% of max. bending moment		
T_{res.} bei M_b60%	= Remaining transmissible torque at indicated Mb60% and specified torque		
p_{Wmax.} bei M_b60%	= Max. surface pressure on shaft at 60% bending moment		
p_{Nmax.} bei M_b60%	= Max. surface pressure on hub at 60% bending moment		

Ordering example

Type	d	D
RfN 7012	160	210

Technical Information

- Surface finishes: Shaft and hub bores Ra ≤ 3,2 μm
- Tolerances: Shaft: h9 · Hub: H9

Remark: The Values of the shaft- and hub pressures have been calculated with the screw tightening shown in the tables. Increase resp. reduction of the screw tightening torque results in different calculation values!

Further information on
RINGFEDER® RfN 7012
 for Bending Loads
 on www.ringfeder.com