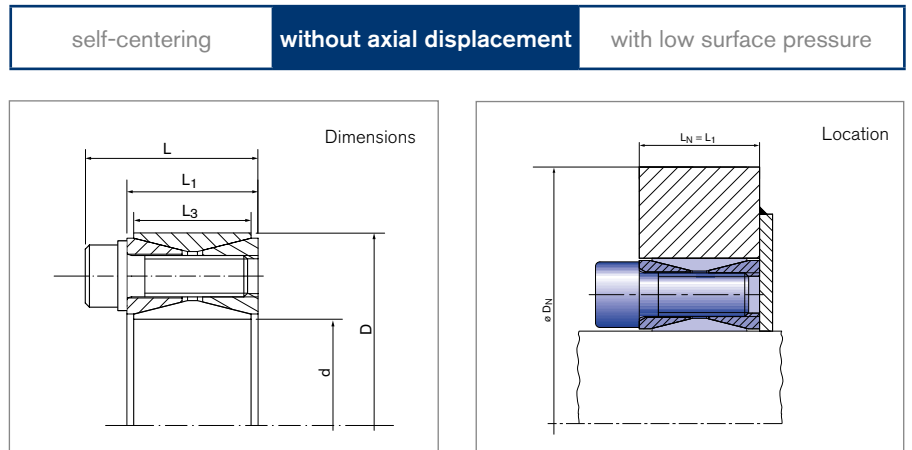


Locking Assemblies for Bending Loads

RINGFEDER® RfN 7012 M_b 80%

Extreme loads in belt drums



Locking Assembly dimensions		Clamping screws ISO 4762-12.9			T without	PW without	PN without	M _b 80%	T _{res} at M _b 80%	PW _{max} at M _b 80%	PN _{max} at M _b 80%	PW _{min} at M _b 80%	PN _{min} at M _b 80%	F _{ax} at M _b 80%	DN min at R _{p0,2}			Gw
		n _{Sc}	D _G	T _{Ared.}											M _b	M _b	M _b	
d	x D	mm	mm	Nm	Nm	N/mm ²	Nm	Nm	N/mm ²	N/mm ²	N/mm ²	N/mm ²	N/mm ²	kN	mm			kg
50	x 80	12	8 x 22	35	1777	189	118	1400	1094	289	180	89	55	44	200	142	123	0,6
55	x 85	14	8 x 22	35	2267	199	129	910	2077	258	167	140	90	76	191	144	126	0,63
60	x 90	14	8 x 22	35	2460	181	121	1520	1934	272	181	91	61	64	226	161	139	0,69
65	x 95	16	8 x 22	35	3030	190	130	1040	2846	247	169	133	91	88	218	162	142	0,73
70	x 110	14	10 x 25	70	4581	207	132	2520	3826	300	191	113	72	109	302	204	174	1,26
75	x 115	14	10 x 25	70	4887	192	125	2520	4187	280	182	105	68	112	291	205	177	1,33
80	x 120	14	10 x 25	70	5192	179	120	3380	3941	289	193	69	46	99	335	224	190	1,4
85	x 125	16	10 x 25	70	6281	192	131	2300	5845	263	179	122	83	138	308	220	191	1,49
90	x 130	16	10 x 25	70	6627	182	125	3140	5836	272	188	90	62	130	346	237	203	1,53
95	x 135	18	10 x 25	70	7843	192	135	2062	7567	249	175	136	95	159	322	234	204	1,62
100	x 145	14	12 x 30	125	9591	196	135	5768	7663	304	210	87	60	153	---	289,66	240,28	2,01
110	x 155	14	12 x 30	125	10488	177	126	6272	8405	284	202	70	49	153	---	277	239	2,15
120	x 165	16	12 x 30	125	13004	184	134	7168	10851	297	216	72	52	181	---	340	279	2,35
130	x 180	20	12 x 35	125	17522	162	117	9048	15005	261	188	63	45	231	---	329	282	3,51
140	x 190	22	12 x 35	125	20661	164	121	8128	18995	247	182	82	60	271	---	339	293	3,85
150	x 200	24	12 x 35	125	24046	167	125	7216	22937	235	176	98	74	306	482	349	304	4,07
160	x 210	26	12 x 35	125	27674	169	129	6296	26949	225	171	113	86	337	486	359	314	4,3
170	x 225	22	14 x 40	190	32486	157	119	17256	27524	265	200	49	37	324	---	432	364	5,78
180	x 235	24	14 x 40	190	37391	161	123	15168	34176	250	192	72	55	380	---	436	372	6,05
190	x 250	28	14 x 45	190	45890	147	111	19256	41655	223	169	70	53	438	571	425	372	8,25
200	x 260	30	14 x 45	190	51590	149	114	16920	48737	212	163	85	65	487	569	432	381	8,65
220	x 285	26	16 x 50	295	66374	146	112	26136	61011	223	172	68	53	555	664	489	427	11,22
240	x 305	30	16 x 50	295	83094	153	120	16264	81487	197	155	109	86	679	631	492	438	12,2
260	x 325	34	16 x 50	295	101512	159	127	13448	100618	193	154	126	101	774	669	523	466	13,2

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Locking Assemblies for Bending Loads RINGFEDER® RfN 7012 M_b 80%

Locking Assembly dimensions			Clamping screws ISO 4762-12.9			T without	P _W without	P _N without	M _b 80%	T _{res} at	P _W max at	P _N max at	P _W min at	P _N min at	F _{ax} at	D _N min at R _{P0,2}			G _w
			Thread													M _b	M _b	M _b	
d	x	D	n _{Sc}	D _G	T _{Ared.}	Nm	N/mm ²	Nm	Nm	N/mm ²	N/mm ²	N/mm ²	N/mm ²	N/mm ²	kN	mm			kg
mm		mm		mm	Nm														
280	x	355	32	18 x 60	405	124233	140	111	30752	120367	191	151	89	70	860	715	564	504	19,2
300	x	375	36	18 x 60	405	149101	146	117	19856	147773	177	142	116	93	985	715	577	521	20,5
320	x	405	36	20 x 70	580	207104	149	118	29776	204952	180	142	118	93	1281	774	624	563	29,6
340	x	425	36	20 x 70	580	219216	140	112	46336	214263	185	148	94	75	1260	841	669	599	31,1
360	x	455	36	22 x 80	780	282418	138	109	59704	276035	179	142	96	76	1534	866	700	631	42,2
380	x	475	36	22 x 80	780	297102	130	104	69600	288835	176	141	84	67	1520	898	728	657	44
400	x	495	36	22 x 80	780	311738	123	99	120368	287562	198	160	48	39	1438	1059	813	719	46
420	x	515	40	22 x 80	780	362587	130	106	74864	354774	174	142	85	70	1689	983	794	715	50
440	x	545	40	24 x 90	1000	442836	126	102	90512	433487	166	134	86	70	1970	994	818	742	64,6
460	x	565	40	24 x 90	1000	461680	121	98	141864	439344	180	147	61	49	1910	1110	885	794	67,4
480	x	585	42	24 x 90	1000	504497	121	99	134512	486234	175	144	67	55	2026	1128	907	816	71
500	x	605	44	24 x 90	1000	549139	121	100	127168	534212	171	141	72	60	2137	1148	929	838	72,6
520	x	630	45	24 x 90	1000	582655	119	98	155584	561498	177	146	61	50	2160	1232	984	884	80
540	x	650	45	24 x 90	1000	603639	114	95	206936	567060	189	157	40	33	2100	1359	1054	936	82
560	x	670	48	24 x 90	1000	666213	117	98	170240	644095	176	147	58	49	2300	1320	1051	942	85
580	x	690	50	24 x 90	1000	717182	118	99	162888	698439	172	145	63	53	2408	1338	1073	964	88
600	x	710	50	24 x 90	1000	740342	114	96	214239	708666	183	155	44	37	2362	1463	1142	1017	91
620	x	730	52	24 x 90	1000	793992	114	97	206888	766564	179	152	49	42	2473	1479	1163	1038	93
640	x	750	54	24 x 90	1000	849441	115	98	199543	825671	175	149	54	46	2580	1496	1185	1060	96
660	x	770	56	24 x 90	1000	906684	115	99	192192	886080	172	147	59	50	2685	1513	1206	1082	99
680	x	790	56	24 x 90	1000	932418	111	96	243536	900052	181	156	42	36	2647	1640	1276	1134	102
700	x	810	60	24 x 90	1000	1026541	116	100	177496	1011079	165	143	67	58	2889	1550	1249	1126	104
720	x	830	60	24 x 90	1000	1054013	112	97	228840	1028871	174	151	51	44	2858	1671	1318	1178	107
740	x	850	62	24 x 90	1000	1117486	113	98	221496	1095315	171	149	55	48	2960	1688	1339	1199	110
760	x	870	64	24 x 90	1000	1182737	113	99	214144	1163190	168	147	58	51	3061	1705	1361	1221	113
780	x	890	65	24 x 90	1000	1230829	112	98	236144	1207963	171	149	53	46	3097	1775	1406	1258	116
800	x	910	66	24 x 90	1000	1279783	111	97	258144	1253478	173	152	48	42	3134	1847	1451	1295	118
820	x	930	68	24 x 90	1000	1349444	111	98	250800	1325933	170	150	52	45	3234	1863	1472	1317	121
840	x	950	70	24 x 90	1000	1420874	111	98	243448	1399863	168	148	55	49	3333	1879	1493	1338	124
860	x	970	72	24 x 90	1000	1494068	112	99	236104	1475295	165	146	58	52	3431	1896	1515	1360	127
880	x	990	74	24 x 90	1000	1569025	112	100	228752	1552260	162	144	62	55	3528	1914	1536	1382	129
900	x	1010	75	24 x 90	1000	1624087	111	99	250752	1604612	165	147	57	51	3566	1983	1581	1418	132
920	x	1030	76	24 x 90	1000	1680004	110	98	272752	1657715	167	149	52	47	3604	2053	1626	1455	135
940	x	1050	78	24 x 90	1000	1759331	110	99	265400	1739198	165	148	55	49	3700	2070	1647	1477	138
960	x	1070	80	24 x 90	1000	1840411	110	99	258056	1822230	163	146	58	52	3796	2087	1668	1499	140
980	x	1090	81	24 x 90	1000	1899788	109	98	280056	1879032	165	148	54	48	3835	2156	1713	1535	143
1000	x	1110	82	24 x 90	1000	1960015	108	98	302056	1936601	167	150	50	45	3873	2227	1759	1572	146

More sizes on request
To continue see next page

Locking Assemblies for Bending Loads RINGFEDER® RfN 7012 M_b 80%

Explanations

Basic dimensions when screws are not tightened	
d	= Inner diameter
D	= Outer diameter
n_{Sc}	= Quantity of screws
D_G	= Thread
T_{Ared.}	= Redused tightened torque of the screws under bending load
T ohne M_b	= Transmissible torque at given T _A
p_w ohne M_b	= Surface pressure on shaft at given T _A
p_N ohne M_b	= Surface pressure on hub at given T _A
M_b80%	= 80% of max. bending moment
T_{res.} bei M_b80%	= Remaining transmissible torque at indicated Mb80% and specified torque
p_wmax. bei M_b80%	= Max. surface pressure on shaft at 80% bending moment
p_Nmax. bei M_b80%	= Max. surface pressure on hub at 80% bending moment
p_wmin. bei M_b80%	= Min. surface pressure on shaft at 80% bending moment
p_Nmin. bei M_b80%	= Min. surface pressure on hub at 80% bending moment
F_{ax} bei M_b80%	= Transmissible axial force at 80% bending moment
DN min bei Rp0,2	
250 N/mm² + M_b80%	= Min. hub outer diameter depending of the given hub yield point Rp0,2 and part of bending moment
350 N/mm² + M_b80%	= Min. hub outer diameter depending of the given hub yield point Rp0,2 and part of bending moment
450 N/mm² + M_b80%	= Min. hub outer diameter depending of the given hub yield point Rp0,2 and part of bending moment
G_w	= Weight

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