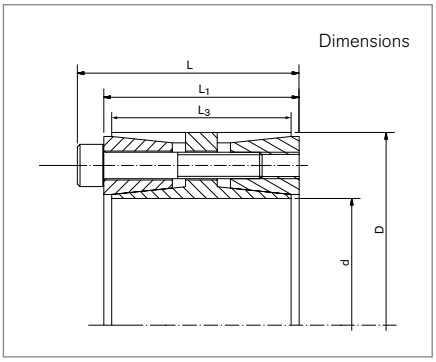
Locking Assemblies for Bending Loads

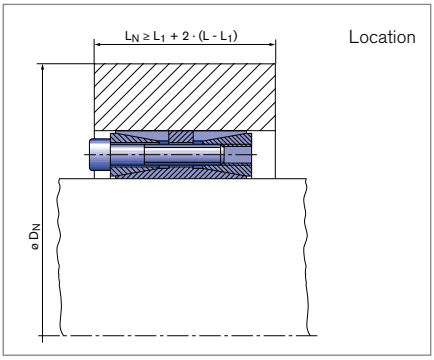
RINGFEDER® RfN 7015.1

Reduced surface pressures



self-centering | **without axial displacement** | **with low surface pressure**





Locking Assembly dimensions				Locking screws														$D_{N\,min}$ at $R_{p0,2}$			
d x D	L	L_1	L_3	n_{Sc}	D_G	T_A	T	F_{ax}	p_W	p_N	$M_b$max	p_{Wmax} at $M_b$max	p_{Nmax} at $M_b$max	p_{Wmin} at $M_b$max	p_{Nmin} at $M_b$max	T_{res} at $M_b$max	F_{ax} at $M_b$max	250	350	450	Gw
mm	mm					Nm	Nm	kN	N/mm²		Nm	N/mm²				Nm	kN	[N/mm²]			kg
100 x 145	75	65	60	9	M10 x 55	83	6575	132	91	63	6540	125	86	57	39	681	14	192	179	172	4,1
110 x 155	75	65	60	10	M10 x 55	83	8037	146	92	65	7900	130	92	55	39	1475	27	210	194	186	4,4
120 x 165	75	65	60	12	M10 x 55	83	10521	175	101	74	10460	147	107	56	41	1128	19	238	215	205	4,8
130 x 180	84	74	68	15	M10 x 60	83	14247	219	101	73	14170	145	105	58	42	1476	23	258	234	223	6,5
140 x 190	84	74	68	15	M10 x 60	83	15343	219	94	69	15260	138	101	50	37	1589	23	269	245	234	7
150 x 200	84	74	68	16	M10 x 60	83	17534	234	94	70	17440	140	105	47	35	1816	24	288	261	248	7,4
160 x 210	84	74	68	18	M10 x 60	83	21041	263	99	75	20930	151	115	46	35	2160	27	317	282	267	7,8
170 x 225	93	81	75	15	M12 x 65	145	27352	322	105	80	27210	159	120	52	39	2788	33	348	307	289	10
180 x 235	93	81	75	16	M12 x 65	145	30892	343	106	81	30730	164	125	49	37	3161	35	374	326	306	10,6
190 x 250	106	94	88	18	M12 x 75	145	36684	386	96	73	36500	144	109	48	37	3674	39	371	333	315	14,3
200 x 260	106	94	88	20	M12 x 75	145	42906	429	101	78	42690	154	119	48	37	4298	43	406	357	336	15
220 x 285	116	104	98	21	M12 x 80	145	49556	451	89	69	49300	135	104	43	33	5033	46	416	375	356	19,8
240 x 305	116	104	98	24	M12 x 80	145	61784	515	93	73	61470	145	114	41	32	6225	52	470	415	391	21,4
260 x 325	116	104	98	27	M12 x 80	145	75300	579	97	77	74920	155	124	38	30	7552	58	531	458	428	23
280 x 355	140	126	120	28	M14 x 100	230	115034	822	106	84	114450	164	129	49	39	11574	83	605	513	476	35,2
300 x 375	140	126	120	28	M14 x 100	230	123250	822	99	80	122630	157	125	42	34	12351	82	623	534	498	37,4
320 x 405	158	142	135	28	M16 x 110	355	179962	1125	110	87	179050	171	135	49	39	18093	113	716	597	551	51,3
340 x 425	158	142	135	28	M16 x 110	355	191209	1125	103	83	190250	164	131	42	34	19131	113	733	618	573	54,1
360 x 455	183	165	158	24	M18 x 140	485	209622	1165	84	67	208570	130	103	38	30	20978	117	668	600	570	75,4
380 x 475	183	165	158	27	M18 x 140	485	248927	1310	90	72	247670	141	113	38	30	24980	131	736	648	611	79
400 x 495	183	165	158	32	M18 x 140	485	310552	1553	101	82	308990	162	131	40	32	31104	156	861	723	669	82,8
420 x 515	183	165	158	32	M18 x 140	485	326079	1553	96	78	324440	157	128	35	28	32655	155	879	744	691	86,5
440 x 545	200	180	172	27	M20 x 140	690	372775	1694	91	74	370900	147	119	35	28	37338	170	871	758	711	110
460 x 565	200	180	172	27	M20 x 140	690	389719	1694	87	71	387760	143	117	31	25	39026	170	891	779	732	114
480 x 585	200	180	172	30	M20 x 140	690	451848	1883	93	76	449500	155	127	30	25	46004	192	986	839	781	119
500 x 605	200	180	172	30	M20 x 140	690	470675	1883	89	74	468300	151	125	27	22	47224	189	1006	861	802	123

To continue see next page

Locking Assemblies for Bending Loads RINGFEDER® RfN 7015.1

Locking Assembly dimensions				Locking screws														$D_{N\,min}$ at $Rp_{0,2}$			
d x D	L	L_1	L_3	n_{Sc}	D_G	T_A	T	F_{ax}	p_W	p_N	$M_b$max	p_{Wmax} at $M_b$max	p_{Nmax} at $M_b$max	p_{Wmin} at $M_b$max	p_{Nmin} at $M_b$max	T_{res} at $M_b$max	F_{ax} at $M_b$max	250	350	450	Gw
mm	mm					Nm	Nm	kN	N/mm²		Nm	N/mm²				Nm	kN	[N/mm²]			kg
520 x 630	220	200	190	32	M20 x 150	690	522135	2008	80	66	519500	134	110	27	22	52395	202	961	851	804	148
540 x 650	220	200	190	32	M20 x 150	690	542218	2008	77	64	539400	131	109	24	20	55205	204	982	873	826	154
560 x 670	220	200	190	36	M20 x 150	690	632587	2259	84	70	629400	144	120	24	20	63421	227	1084	938	878	160
580 x 690	220	200	190	36	M20 x 150	690	655180	2259	81	68	651890	141	119	21	18	65573	226	1104	960	900	165
600 x 710	220	200	190	36	M20 x 150	690	677772	2259	78	66	674370	138	117	18	16	67823	226	1125	982	922	170
620 x 730	220	200	190	36	M20 x 150	690	700364	2259	76	64	696850	136	115	16	13	70074	226	1146	1004	944	175
640 x 750	220	200	190	36	M20 x 150	690	722957	2259	73	63	705037	132	113	15	13	159967	500	1160	1022	963	180
660 x 770	220	200	190	40	M20 x 150	690	828388	2510	79	68	783300	142	122	16	14	269570	817	1260	1085	1014	194
680 x 790	220	200	190	40	M20 x 150	690	853491	2510	77	66	783300	138	119	15	13	338951	997	1268	1101	1032	199
700 x 810	220	200	190	40	M20 x 150	690	878593	2510	75	64	783300	134	116	15	13	397954	1137	1277	1117	1049	205
720 x 830	220	200	190	40	M20 x 150	690	903696	2510	73	63	783300	131	113	15	13	450675	1252	1287	1133	1067	210
740 x 850	220	200	190	42	M20 x 150	690	975239	2636	74	65	822500	133	116	15	13	524008	1416	1341	1172	1101	216
760 x 870	220	200	190	42	M20 x 150	690	1001596	2636	72	63	822500	130	113	14	13	571567	1504	1351	1188	1119	221
780 x 890	220	200	190	42	M20 x 150	690	1027954	2636	70	62	822500	127	111	14	12	616590	1581	1362	1205	1137	227
800 x 910	220	200	190	42	M20 x 150	690	1054312	2636	69	60	822500	123	108	14	12	659597	1649	1374	1222	1155	232

More sizes on request

Explanations

d = Inner diameter
D = Outer diameter
L = Overall length
L_1 = Overall length (without screws)
L_3 = Width of ring
n_{Sc} = Quantity of screws
D_G = Thread
T_A = Tightening torque of the clamping screws
T = Transmissible torque at given T_A
F_{ax} = Transmissible axial force

p_W = Surface pressure on shaft at given T_A
p_N = Surface pressure on hub at given T_A
$M_b$max = Max. bending moment under the specified T_A
p_{Wmax} at $M_b$max = Max. surface pressure on shaft at max. bending moment
p_{Nmax} at $M_b$max = Max. surface pressure on hub at max. bending moment
p_{Wmin} at $M_b$max = Min. surface pressure on shaft at max. bending moment
p_{Nmin} at $M_b$max = Min. surface pressure on hub at max. bending moment

T_{res} at $M_b$max = Remaining transmissible torque at indicated Mbmax and specified torque
F_{ax} at $M_b$max = Transmissible axial force at max. bending moment
$D_{N\,min}$ at $Rp_{0,2}$ = Min. hub outer diameter depending of the given hub yield point $Rp_{0,2}$ and part of bending moment
Gw = Weight

Ordering example

Locking Assembly	d	D
RfN 7015.1	620	730

Further information on
RINGFEDER® RfN 7015.1
for Bending Loads
on **www.ringfeder.com**

Technical Information

- Surface finishes: Shaft and hub bores $R_a \leq 3{,}2$ µm
- Tolerances: Shaft: h8 · Hub: H8

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

The specified pressures at $M_b$max. are sometimes very low. An operation near these limit values may therefore lead to increased fretting corrosion! More options with reduced bending moments (M_b 20% - M_b 80%) are also available.

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 carry out modifications at any time in the interests of technical progress.

RINGFEDER POWER TRANSMISSION