

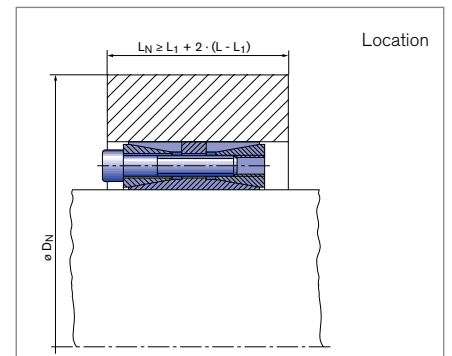
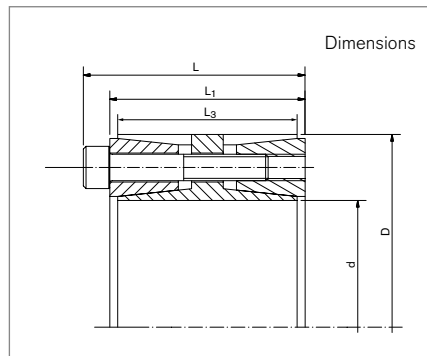
Locking Assemblies for Bending Loads

RINGFEDER® RfN 7015.1 M_b 60%

Reduced surface pressures



self-centering without axial displacement with low surface pressure



Locking Assembly dimensions		Clamping screws ISO 4762-12.9			T	PW	PN	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%	D _N min at R _{p0,2}			G _w	
		n _{Sc}	D _G	T _{Ared.}											M _b	M _b	M _b		250
d	x D	mm	mm	Nm	Nm	N/mm ²			Nm			N/mm ²			kN	mm			kg
100	x 145	9	10 x 55	83	6575	91	63	3924	5276	112	77	71	49	106	185	174	169	4,1	
110	x 155	10	10 x 55	83	8037	92	65	4740	6490	115	81	70	49	118	201	188	182	4,4	
120	x 165	12	10 x 55	83	10521	101	74	6276	8444	129	94	74	54	141	225	207	199	4,8	
130	x 180	15	10 x 60	83	14247	101	73	8502	11432	127	92	75	54	176	244	226	217	6,5	
140	x 190	15	10 x 60	83	15343	94	69	9156	12311	120	89	68	50	176	254	236	227	7	
150	x 200	16	10 x 60	83	17534	94	70	10464	14070	121	91	66	49	188	270	250	240	7,4	
160	x 210	18	10 x 60	83	21041	99	75	12558	16883	130	99	67	51	211	294	269	257	7,8	
170	x 225	15	12 x 65	145	27352	105	80	16326	21946	138	104	73	55	258	321	292	278	10	
180	x 235	16	12 x 65	145	30892	106	81	18438	24786	141	108	72	55	275	341	308	293	10,6	
190	x 250	18	12 x 75	145	36684	96	73	21900	29430	125	95	67	51	310	347	318	304	14,3	
200	x 260	20	12 x 75	145	42906	101	78	25614	34421	133	102	70	54	344	374	338	322	15	
220	x 285	21	12 x 80	145	49556	89	69	29580	39760	116	90	61	47	361	389	359	344	19,8	
240	x 305	24	12 x 80	145	61784	93	73	36882	49568	124	98	62	48	413	432	393	375	21,4	
260	x 325	27	12 x 80	145	75300	97	77	44952	60410	132	105	61	49	465	478	429	408	23	
280	x 355	28	14 x 100	230	115034	106	84	68670	92289	141	111	72	57	659	542	480	453	35,2	
300	x 375	28	14 x 100	230	123250	99	80	73578	98878	134	107	65	52	659	560	500	474	37,4	
320	x 405	28	16 x 110	355	179962	110	87	107430	144378	146	115	73	58	902	632	555	523	51,3	
340	x 425	28	16 x 110	355	191209	103	83	114150	153398	140	112	67	53	902	650	575	543	54,1	
360	x 455	24	18 x 140	485	209622	84	67	125142	168170	112	88	57	45	934	622	573	550	75,4	
380	x 475	27	18 x 140	485	248927	90	72	148602	199704	121	97	59	47	1051	675	613	585	79	
400	x 495	32	18 x 140	485	310552	101	82	185394	249141	138	111	64	52	1246	760	671	633	82,8	
420	x 515	32	18 x 140	485	326079	96	78	194664	261598	133	108	59	48	1246	778	692	654	86,5	
440	x 545	27	20 x 140	690	372775	91	74	222540	299060	125	101	57	46	1359	788	712	678	110	
460	x 565	27	20 x 140	690	389719	87	71	232656	312653	121	98	53	44	1359	808	733	698	114	
480	x 585	30	20 x 140	690	451848	93	76	269700	362531	130	107	55	45	1511	873	780	739	119	

To continue see next page

Locking Assemblies for Bending Loads RINGFEDER® RfN 7015.1 M_b 60%

Locking Assembly dimensions		Clamping screws ISO 4762-12.9			T without	P _W without	P _N without	M _b 60%	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	n _{Sc}	D _G											T _{Ared.}	M _b	M _b	
d	x D				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	Nm	Nm	N/mm ²			N/mm ²			N/mm ²			kN	mm			kg
500	x 605	30	20 x 140	690	470675	89	74	280980	377605	126	104	52	43	1510	892	800	759	123
520	x 630	32	20 x 150	690	522135	80	66	311700	418890	112	93	48	40	1611	879	804	769	148
540	x 650	32	20 x 150	690	542218	77	64	323640	435037	109	91	45	38	1611	899	824	789	154
560	x 670	36	20 x 150	690	632587	84	70	377640	507498	120	100	48	40	1812	969	875	833	160
580	x 690	36	20 x 150	690	655180	81	68	391134	525618	117	98	45	38	1812	989	896	854	165
600	x 710	36	20 x 150	690	677772	78	66	404622	543743	114	97	42	36	1812	1009	917	875	170
620	x 730	36	20 x 150	690	700364	76	64	418110	561867	112	95	40	34	1812	1029	937	895	175
640	x 750	36	20 x 150	690	722957	73	63	423022	586275	109	93	38	33	1832	1046	957	915	180
660	x 770	40	20 x 150	690	828388	79	68	469980	682162	117	100	41	35	2067	1115	1006	957	194
680	x 790	40	20 x 150	690	853491	77	66	469980	712436	114	98	40	34	2095	1129	1024	976	199
700	x 810	40	20 x 150	690	878593	75	64	469980	742324	110	95	39	34	2121	1144	1042	995	205
720	x 830	40	20 x 150	690	903696	73	63	469980	771871	107	93	38	33	2144	1159	1060	1013	210
740	x 850	42	20 x 150	690	975239	74	65	493500	841159	110	95	39	34	2273	1201	1093	1044	216
760	x 870	42	20 x 150	690	1001596	72	63	493500	871581	107	93	38	33	2294	1216	1111	1063	221
780	x 890	42	20 x 150	690	1027954	70	62	493500	901747	104	91	37	32	2312	1232	1129	1081	227
800	x 910	42	20 x 150	690	1054312	69	60	493500	931682	101	89	36	31	2329	1248	1148	1100	232

More sizes on request
To continue see next page

Locking Assemblies for Bending Loads RINGFEDER® RfN 7015.1 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_A	= Tightening torque of the clamping screws	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 7015.1	160	210

Technical Information

- Surface finishes: Shaft and hub bores Ra ≤ 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!

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

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