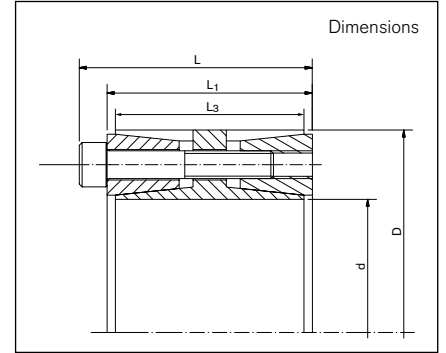
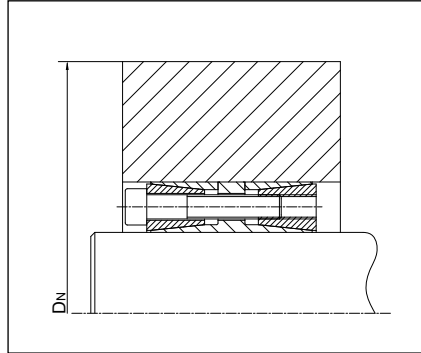


RINGFEDER® Locking Assemblies for Bending Moments

RfN 7015.1 M_b 20%



Basic dimensions when screws are not tightened		
d	= Inner diameter	p_Wmin. at M_b20% = Min. surface pressure on shaft
D	= Outer diameter	p_Nmin. at M_b20% = Min. surface pressure on hub
n_{Sc}	= Quantity of clamping screws	F_{ax} at M_b20% = Transmissible axial force
D_G	= Thread	DN min at Rp0,2
T_A	= Max tightened torque of the clamping screws	250 N/mm² +M_b20% = Min. hub outer diameter depending of the given hub yield point Rp0,2 and part of bending moment
T without M_b	= Transmissible torque at given T _A	DN min bei Rp0,2
p_W without M_b	= Surface pressure on shaft at given T _A	350 N/mm² +M_b20% = Min. hub outer diameter depending of the given hub yield point Rp0,2 and part of bending moment
p_N without M_b	= Surface pressure on hub at given T _A	DN min at Rp0,2
M_b20%	= 20% of max. bending moment	450 N/mm² +M_b20% = Min. hub outer diameter depending of the given hub yield point Rp0,2 and part of bending moment
T_{res.} at M_b20%	= Remaining transmissible torque at indicated M _b 20% and specified torque	Gw = Weight
p_Wmax. at M_b20%	= Max. surface pressure on shaft	
p_Nmax. at M_b20%	= Max. surface pressure on hub	

Locking Assembly dimensions ¹⁾	Clamping screws ISO 4762-12.9			T	p _W	p _N	M _b 20%	T _{res.}	p _W max	p _N max	p _W min	p _N min	F _{ax}	DN min at Rp0,2			Gw						
	Thread													without				at	at	at	250	350	450
	d	x	D											n _{Sc}	D _G	T _A		M _b	M _b	M _b	M _b 20%	M _b 20%	M _b 20%
100	x	145	9	10 x 55	83	6575	91	63	1308	6444	98	68	84	58	129	179	170	166	4,1				
110	x	155	10	10 x 55	83	8037	92	65	1580	7880	100	71	85	60	143	193	183	178	4,4				
120	x	165	12	10 x 55	83	10521	101	74	2092	10311	110	80	92	67	172	213	200	194	4,8				
130	x	180	15	10 x 60	83	14247	101	73	2834	13962	110	79	92	67	215	232	218	211	6,5				
140	x	190	15	10 x 60	83	15343	94	69	3052	15036	103	76	85	63	215	242	228	221	7				
150	x	200	16	10 x 60	83	17534	94	70	3488	17184	103	77	84	63	229	256	241	233	7,4				
160	x	210	18	10 x 60	83	21041	99	75	4186	20621	109	83	88	67	258	275	257	248	7,8				
170	x	225	15	12 x 65	145	27352	105	80	5442	26806	116	88	95	72	315	300	278	268	10				
180	x	235	16	12 x 65	145	30892	106	81	6146	30275	118	90	95	73	336	316	293	282	10,6				
190	x	250	18	12 x 75	145	36684	96	73	7300	35951	106	80	87	66	378	326	305	295	14,3				
200	x	260	20	12 x 75	145	42906	101	78	8538	42048	112	86	91	70	420	347	322	310	15				
220	x	285	21	12 x 80	145	49556	89	69	9860	48565	98	76	80	61	442	367	344	333	19,8				

¹⁾ More Locking Assemblies dimensions (L, L₁, L₂) you will find in our actual catalogue.

To continue see next page

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!

RINGFEDER® Locking Assemblies for Bending Moments

RfN 7015.1 M_b 20%

Locking Assembly dimensions ¹⁾			Clamping screws ISO 4762-12.9			T	P _W	P _N	M _b 20%	T _{res}	P _W max	P _N max	P _W min	P _N min	F _{ax}	D _N min at R _{p0,2}			G _w
			Thread													without			
d	x	D	n _{Sc}	D _G	T _A	M _b	M _b	M _b	M _b 20%	M _b 20%	M _b 20%	M _b 20%	M _b 20%	M _b 20%	M _b 20%	[N/mm ²]			kg
mm		mm	Nm	Nm	N/mm ²			Nm			N/mm ²			kN	mm			kg	
240	x	305	24	12 x 80	145	61784	93	73	12294	60549	103	81	83	65	505	402	374	361	21,4
260	x	325	27	12 x 80	145	75300	97	77	14984	73794	108	87	85	68	568	438	405	389	23
280	x	355	28	14 x 100	230	115034	106	84	22890	112733	118	93	95	75	805	495	453	433	35,2
300	x	375	28	14 x 100	230	123250	99	80	24526	120786	111	89	88	70	805	512	472	453	37,4
320	x	405	28	16 x 110	355	179962	110	87	35810	176363	122	96	98	77	1102	572	521	498	51,3
340	x	425	28	16 x 110	355	191209	103	83	38050	187385	115	92	91	73	1102	589	540	517	54,1
360	x	455	24	18 x 140	485	209622	84	67	41714	205430	93	74	75	59	1141	585	549	531	75,4
380	x	475	27	18 x 140	485	248927	90	72	49534	243948	100	80	79	63	1284	626	583	562	79
400	x	495	32	18 x 140	485	310552	101	82	61798	304341	113	91	89	72	1522	687	629	602	82,8
420	x	515	32	18 x 140	485	326079	96	78	64888	319558	108	88	84	68	1522	704	648	622	86,5
440	x	545	27	20 x 140	690	372775	91	74	74180	365319	102	83	80	64	1661	725	673	648	110
460	x	565	27	20 x 140	690	389719	87	71	77552	381925	98	80	76	62	1661	744	693	668	114
480	x	585	30	20 x 140	690	451848	93	76	89900	442814	105	86	80	66	1845	791	731	702	119
500	x	605	30	20 x 140	690	470675	89	74	93660	461262	101	84	77	63	1845	809	750	722	123
520	x	630	32	20 x 150	690	522135	80	66	103900	511694	91	75	70	58	1968	813	762	737	148
540	x	650	32	20 x 150	690	542218	77	64	107880	531377	88	73	67	55	1968	832	782	757	154
560	x	670	36	20 x 150	690	632587	84	70	125880	619936	96	80	72	60	2214	883	823	793	160
580	x	690	36	20 x 150	690	655180	81	68	130378	642076	93	78	69	58	2214	902	842	813	165
600	x	710	36	20 x 150	690	677772	78	66	134874	664217	90	76	66	56	2214	921	862	833	170
620	x	730	36	20 x 150	690	700364	76	64	139370	686357	88	75	64	54	2214	940	882	853	175
640	x	750	36	20 x 150	690	722957	73	63	141007	709072	85	73	62	53	2216	959	901	873	180
660	x	770	40	20 x 150	690	828388	79	68	156660	813440	92	79	66	57	2465	1009	941	908	194
680	x	790	40	20 x 150	690	853491	77	66	156660	838990	89	77	65	56	2468	1026	960	928	199
700	x	810	40	20 x 150	690	878593	75	64	156660	864514	87	75	63	54	2470	1044	979	947	205
720	x	830	40	20 x 150	690	903696	73	63	156660	890014	84	73	61	53	2472	1062	998	966	210
740	x	850	42	20 x 150	690	975239	74	65	164500	961265	86	75	62	54	2598	1096	1027	994	216
760	x	870	42	20 x 150	690	1001596	72	63	164500	987996	84	73	61	53	2600	1114	1046	1013	221
780	x	890	42	20 x 150	690	1027954	70	62	164500	1014707	82	71	59	52	2602	1132	1065	1032	227
800	x	910	42	20 x 150	690	1054312	69	60	164500	1041400	80	70	58	51	2603	1150	1084	1052	232

¹⁾ More Locking Assemblies dimensions (L, L₁, L₂) you will find in our actual catalogue.

[More sizes on request](#)

Ordering example: RfN 7015.1

Type	d	D
RfN 7015.1	160	210

Technical Information

■ Surface finishes: Shaft and hub bores R_a = 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. Increase resp. reduction of the screw tightening torque results in different calculation values!

Subject to technical change.