Locking Assemblies

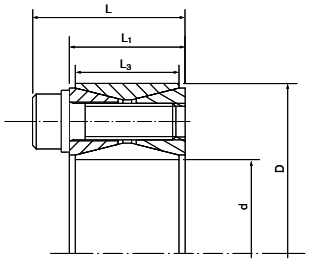
RINGFEDER® RfN 7012 stainless steel

Large transmittable forces and moments

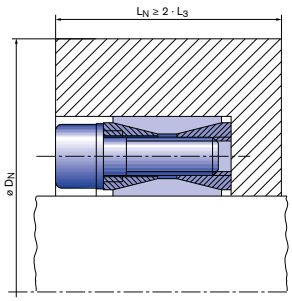


self-centering | **without axial displacement** | with low surface pressure

Dimensions



Location



Locking Assembly dimensions						Transmissible torques or axial forces		Surface pressure		Locking screws				$D_{N\,min}$ at $R_{p0,2}$			
								Shaft	Hub					200	300	400	
d	x	D	L	L_1	L_3	T	F_{ax}	p_W	p_N	n_{Sc}	D_G	T_A	Gw	[N/mm²]			T_{max}
mm			mm			Nm	kN	N/mm²				Nm	kg	mm			Nm
19	x	47	27,5	20	17	252	27	218	88	8	M6 x 18	14	0,24	63	57	55	269
20	x	47	27,5	20	17	265	26	206	88	8	M6 x 18	14	0,24	63	57	55	320
22	x	47	27,5	20	17	289	26	187	88	8	M6 x 18	14	0,23	63	57	55	350
24	x	50	27,5	20	17	353	29	191	92	9	M6 x 18	14	0,26	67	61	58	428
25	x	50	27,5	20	17	367	29	183	92	9	M6 x 18	14	0,25	67	58	61	445
28	x	55	27,5	20	17	408	29	162	83	9	M6 x 18	14	0,3	72	66	63	495
30	x	55	27,5	20	17	435	29	151	83	9	M6 x 18	14	0,29	72	66	63	528
32	x	60	27,5	20	17	617	39	188	100	12	M6 x 18	14	0,34	83	75	71	748
35	x	60	27,5	20	17	671	38	171	100	12	M6 x 18	14	0,32	83	75	71	815
38	x	65	27,5	20	17	906	48	196	114	15	M6 x 18	14	0,36	94	83	78	1100
40	x	65	27,5	20	17	950	48	185	114	15	M6 x 18	14	0,34	94	83	78	1153
42	x	75	33,5	24	20	1509	72	227	127	12	M8 x 22	35	0,6	113	98	92	1767
45	x	75	33,5	24	20	1610	72	211	127	12	M8 x 22	35	0,57	113	98	92	1885
48	x	80	33,5	24	20	1710	71	197	118	12	M8 x 22	35	0,62	117	103	97	2003
50	x	80	33,5	24	20	1777	71	189	118	12	M8 x 22	35	0,6	117	103	97	2081
55	x	85	33,5	24	20	2267	82	199	129	14	M8 x 22	35	0,63	129	112	104	2655
60	x	90	33,5	24	20	2460	82	181	121	14	M8 x 22	35	0,69	133	116	109	2880
65	x	95	33,5	24	20	3030	93	190	130	16	M8 x 22	35	0,73	144	125	117	3550
70	x	110	39,5	28	24	4581	131	207	132	14	M10 x 25	70	1,26	168	145	135	5431
75	x	115	39,5	28	24	4887	130	192	125	14	M10 x 25	70	1,33	172	150	140	5795
80	x	120	39,5	28	24	5192	130	179	120	14	M10 x 25	70	1,4	176	154	145	6155
85	x	125	39,5	28	24	6281	148	192	131	16	M10 x 25	70	1,49	190	164	153	7446
90	x	130	39,5	28	24	6627	147	181	125	16	M10 x 25	70	1,53	194	169	158	7856
95	x	135	39,5	28	24	7843	165	192	135	18	M10 x 25	70	1,62	209	179	167	7856
100	x	145	47	33	26	9591	192	196	135	14	M12 x 30	125	2,01	224	192	179	11125
110	x	155	47	33	26	10488	191	177	126	14	M12 x 30	125	2,15	231	201	189	12165

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Locking Assemblies RINGFEDER® RfN 7012 stainless steel

Locking Assembly dimensions						Transmissible torques or axial forces		Surface pressure		Locking screws				$D_{N\,min}$ at $Rp_{0,2}$			
								Shaft	Hub					200	300	400	
d	x	D	L	L_1	L_3	T	F_{ax}	p_W	p_N	n_{Sc}	D_G	T_A	Gw	[N/mm²]			T_{max}
mm			mm			Nm	kN	N/mm²				Nm	kg	mm			Nm
120	x	165	47	33	26	13004	217	184	134	16	M12 x 30	125	2,35	254	218	203	20325
130	x	180	52	38	34	17522	270	162	117	20	M12 x 35	125	3,51	261	229	216	20325
140	x	190	52	38	34	20661	295	164	121	22	M12 x 35	125	3,85	279	244	229	23966
150	x	200	52	38	34	24046	321	167	125	24	M12 x 35	125	4,07	298	259	243	27892

More sizes on request

Explanation

d = Inner diameter
D = Outer diameter
L = Overall length
L_1 = Overall length (without screws)
L_3 = Width of ring
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
n_{Sc} = Quantity of screws
D_G = Thread
T_A = Tightening torque of the clamping screws
Gw = Weight
D_N min = Min. hub outer diameter depending of the given hub yield point Rp0,2
T_{max} = Max. transmissible torque

Technical Information

- The Locking Assemblies are supplied slightly oiled and ready-to-use. The values for T, F_{ax}, p_W and p_N apply to Locking Assemblies in delivery condition.
- Surface finishes: For shaft and hub bore $R_a \leq 3{,}2$ µm
- Tolerances: Shaft: k9-h9 · Hub: N9-H9
  Max. permissible: Shaft: k11-h11; Hub: N11-H11
- To avoid excessive deformations of the relatively thickwalled thrust rings, the Locking Assembly should be located as symmetrically as possible between shaft and hub bore. If the shaft is smaller than nominal d, the bore should exceed nominal D to the same extent and vice versa. The concentricity quality is determined by the direct centering between shaft and hub.
- If several Locking Assemblies are to be installed the transmission values of the table can be added when the Locking Assemblies are located within a distance of 4 · L .
- The Locking Assemblies are generally equipped with screws of quality A4 BUMAX 109. A reduction of the screw tightening torque is possible. Please contact our specialists for assistance.
- To facilitate removal, the front thrust rings have auxiliary threads.
- The outside diameter of the hub is calculated with factor C3 = 0.6. (see chapter „Calculation“ in Product Paper & Tech Paper „RINGFEDER® Locking Assemblies“).

Ordering example

Locking Assembly	d	D	Further details
RfN 7012 stainless steel	**200**	**260**	**SST (=stainless steel)**

Further information on
RINGFEDER® RfN 7012 stainless steel
on **www.ringfeder.com**

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RINGFEDER POWER TRANSMISSION