

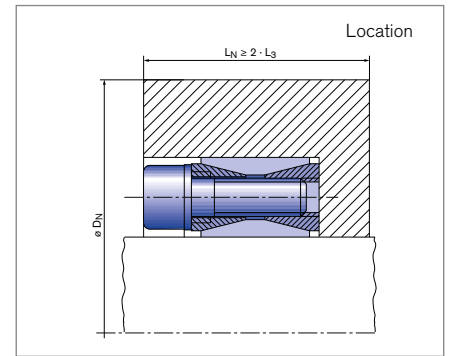
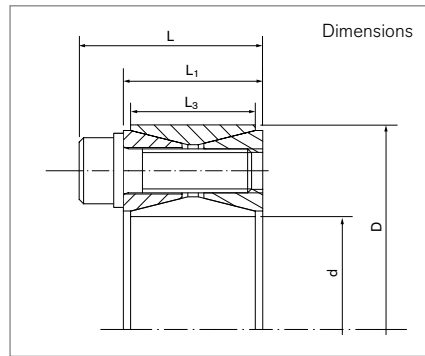
Locking Assemblies

RINGFEDER® RfN 7012

Large transmittable forces and moments



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



Locking Assembly dimensions						Transmissible torques or axial forces		Surface pressure		Locking Screws					DN min at Rp0,2			
d	d	x	D	L	L ₁	L ₃	T	F _{ax}	Shaft PW	Hub PN	n _{Sc}	D _G	SW	T _A	G _w	200	300	400
inch	inch		inch	inch	inch	inch	ft-lbs	lbs	psi			mm	ft-lbs	lbs	inch			
																[N/mm ²]		
0.750	3/4	x	1.850	1.083	0.787	0.669	225	7200	35000	14200	8	M6 x 18	5	13	0.5	2.565	2.395	2.227
1.000	1	x	1.969	1.083	0.787	0.669	337	8088	33000	16800	9	M6 x 18	5	13	0.6	2.915	2.679	2.454
1.125	1 1/8	x	2.165	1.083	0.787	0.669	424	9045	30000	15600	9	M6 x 18	5	13	0.7	3.108	2.878	2.655
1.1875	1 3/16	x	2.159	1.108	0.813	0.669	445	8994	31000	17100	9	M6 x 18	5	13	0.7	3.221	2.955	2.702
1.250	1 1/4	x	2.362	1.083	0.787	0.669	459	8813	35000	18600	12	M6 x 18	5	13	0.7	3.666	3.330	3.017
1.375	1 3/8	x	2.365	1.071	0.776	0.669	622	10857	32000	18700	12	M6 x 18	5	13	0.7	3.681	3.341	3.025
1.4375	1 7/16	x	2.559	1.083	0.787	0.669	748	12488	35000	19700	15	M6 x 18	5	13	0.8	4.092	3.689	3.318
1.500	1 1/2	x	2.559	1.083	0.787	0.669	782	12512	33500	19700	15	M6 x 18	5	13	0.8	4.092	3.689	3.318
1.625	1 5/8	x	2.953	1.319	0.945	0.787	1273	18801	39000	21500	12	M8 x 22	6	30	1.3	4.968	4.417	3.926
1.6875	1 11/16	x	2.953	1.319	0.945	0.787	1320	18773	34000	19500	12	M8 x 22	6	30	1.3	4.696	4.240	3.819
1.750	1 3/4	x	2.953	1.319	0.945	0.787	1368	18761	36000	21400	12	M8 x 22	6	30	1.3	4.953	4.408	3.921
1.875	1 7/8	x	3.150	1.319	0.945	0.787	1454	18611	34000	20300	12	M8 x 22	6	30	1.4	5.122	4.597	4.119
1.9375	1 15/16	x	3.150	1.319	0.945	0.787	1498	18556	32000	19700	12	M8 x 22	6	30	1.4	5.037	4.541	4.085
2.000	2	x	3.346	1.319	0.945	0.787	1808	21696	37000	22200	14	M8 x 22	6	30	1.4	5.744	5.079	4.493
2.125	2 1/8	x	3.346	1.319	0.945	0.787	1919	21673	35000	22300	14	M8 x 22	6	30	1.4	5.761	5.090	4.499
2.1875	2 3/16	x	3.543	1.319	0.945	0.787	1971	21625	34000	21000	14	M8 x 22	6	30	1.5	5.875	5.245	4.678
2.250	2 1/4	x	3.543	1.319	0.945	0.787	2023	21579	32000	20400	14	M8 x 22	6	30	1.5	5.777	5.181	4.639
2.375	2 3/8	x	3.531	1.370	0.996	0.787	2127	21494	30500	20600	14	M8 x 22	6	30	1.5	5.790	5.184	4.636
2.4375	2 7/16	x	3.740	1.319	0.945	0.787	2497	24586	34000	22200	16	M8 x 22	6	30	1.6	6.421	5.677	5.022
2.500	2 1/2	x	3.740	1.319	0.945	0.787	2556	24538	33000	22100	16	M8 x 22	6	30	1.6	6.402	5.665	5.015
2.5625	2 9/16	x	3.737	1.333	0.959	0.787	2617	24510	32000	22000	16	M8 x 22	6	30	1.6	6.378	5.649	5.004
2.625	2 5/8	x	4.331	1.555	1.102	0.945	3775	34514	37000	22500	14	M10 x 25	8	61	2.8	7.502	6.616	5.840
2.6875	2 11/16	x	4.331	1.555	1.102	0.945	3866	34524	36000	22400	14	M10 x 25	8	61	2.8	7.479	6.602	5.832
2.750	2 3/4	x	4.337	1.532	1.079	0.945	4017	35057	36000	22900	14	M10 x 25	8	61	2.8	7.602	6.681	5.881
2.875	2 7/8	x	4.528	1.555	1.102	0.945	4175	34852	34500	22000	14	M10 x 25	8	61	2.9	7.728	6.844	6.063
2.9375	2 15/16	x	4.528	1.555	1.102	0.945	4262	34821	34000	22100	14	M10 x 25	8	61	2.9	7.751	6.859	6.071

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Locking Assemblies RINGFEDER® RfN 7012

Locking Assembly dimensions						Transmissible torques or axial forces		Surface pressure		Locking Screws					D _{N min} at R _{p0,2}			
d	d	x	D	L	L ₁	L ₃	T	F _{ax}	Shaft	Hub	n _{Sc}	D _G	SW	T _A	G _w	200	300	400
inch	inch			inch			ft-lbs	lbs	P _W	P _N						psi		
				inch					psi				mm	ft-lbs	lbs	inch		
3.000	3	x	4.724	1.555	1.102	0.945	4332	34656	33000	21000	14	M10 x 25	8	61	3.1	7.834	6.993	6.237
3.125	3 1/8	x	4.724	1.555	1.102	0.945	4515	34675	31000	20600	14	M10 x 25	8	61	3.1	7.746	6.936	6.203
3.250	3 1/4	x	4.921	1.555	1.102	0.945	5355	39545	33000	21800	16	M10 x 25	8	61	3.3	8.350	7.407	6.571
3.375	3 3/8	x	4.921	1.555	1.102	0.945	5558	39524	34000	23400	16	M10 x 25	8	61	3.3	8.757	7.663	6.720
3.4375	3 7/16	x	5.118	1.555	1.102	0.945	5601	39105	32000	21500	16	M10 x 25	8	61	3.4	8.609	7.655	6.805
3.500	3 1/2	x	5.118	1.555	1.102	0.945	5706	39127	31000	21200	16	M10 x 25	8	61	3.4	8.536	7.608	6.776
3.750	3 3/4	x	5.305	1.594	1.142	0.945	6914	44250	34000	24100	18	M10 x 25	8	61	3.6	9.646	8.387	7.317
3.9375	3 15/16	x	5.708	1.852	1.301	1.024	8402	51212	33000	22800	14	M12 x 30	10	107	4.4	9.975	8.775	7.729
4.000	4	x	5.843	1.850	1.299	1.024	8489	50934	32000	22000	14	M12 x 30	10	107	4.4	9.973	8.832	7.823
4.4375	4 7/16	x	6.496	1.850	1.299	1.024	10498	56778	34000	23300	16	M12 x 30	10	107	5.2	11.525	10.093	8.859
4.500	4 1/2	x	6.496	1.850	1.299	1.024	10652	56811	33000	22900	16	M12 x 30	10	107	5.2	11.386	10.007	8.809
4.9375	4 15/16	x	7.087	2.047	1.496	1.339	14493	70447	29000	20300	20	M12 x 35	10	107	7.7	11.523	10.342	9.267
5.000	5	x	7.087	2.047	1.496	1.339	14672	70426	29000	20500	20	M12 x 35	10	107	7.7	11.588	10.384	9.293
5.500	5 1/2	x	7.492	2.000	1.449	1.339	17804	77690	29000	21300	22	M12 x 35	10	107	8.5	12.531	11.160	9.934
6.000	6	x	8.268	2.047	1.496	1.339	22762	91048	30500	22200	26	M12 x 35	10	107	9.5	14.194	12.550	11.102
6.500	6 1/2	x	8.858	2.362	1.732	1.496	28336	104625	29000	21300	22	M14 x 40	12	170	13	14.816	13.195	11.745
7.000	7	x	9.252	2.362	1.732	1.496	33220	113897	29000	22000	24	M14 x 40	12	170	13	15.791	13.985	12.388
7.500	7 1/2	x	9.823	2.756	2.126	1.811	41369	132381	26500	20300	28	M14 x 45	12	170	18	15.972	14.334	12.844
7.875	7 7/8	x	10.235	2.681	2.051	1.811	46707	142345	26500	20400	30	M14 x 45	12	170	19	16.688	14.966	13.402

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More sizes on request

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Explanation

d = Inner diameter (decimal notation)	F_{ax} = Transmissible axial force	T_A = Tightening torque of the clamping screws
d = Inner diameter	p_w = Surface pressure on shaft at given T _A	G_w = Weight
D = Outer diameter	p_N = Surface pressure on hub at given T _A	D_{N min} = Min. hub outer diam. depending of the given hub yield point R _{p0,2}
L = Overall length	n_{sc} = Quantity of screws	
L₁ = Overall length (without screws)	D_G = Thread	
L₃ = Width of ring	SW = Wrench size	
T = Transmissible torque at given T _A		

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 ≤ 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 equipped with 12.9 grade screws. 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
RfN 7012	4.500	6.496

Further information on
RINGFEDER® RfN 7012
 on www.ringfeder.com

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.