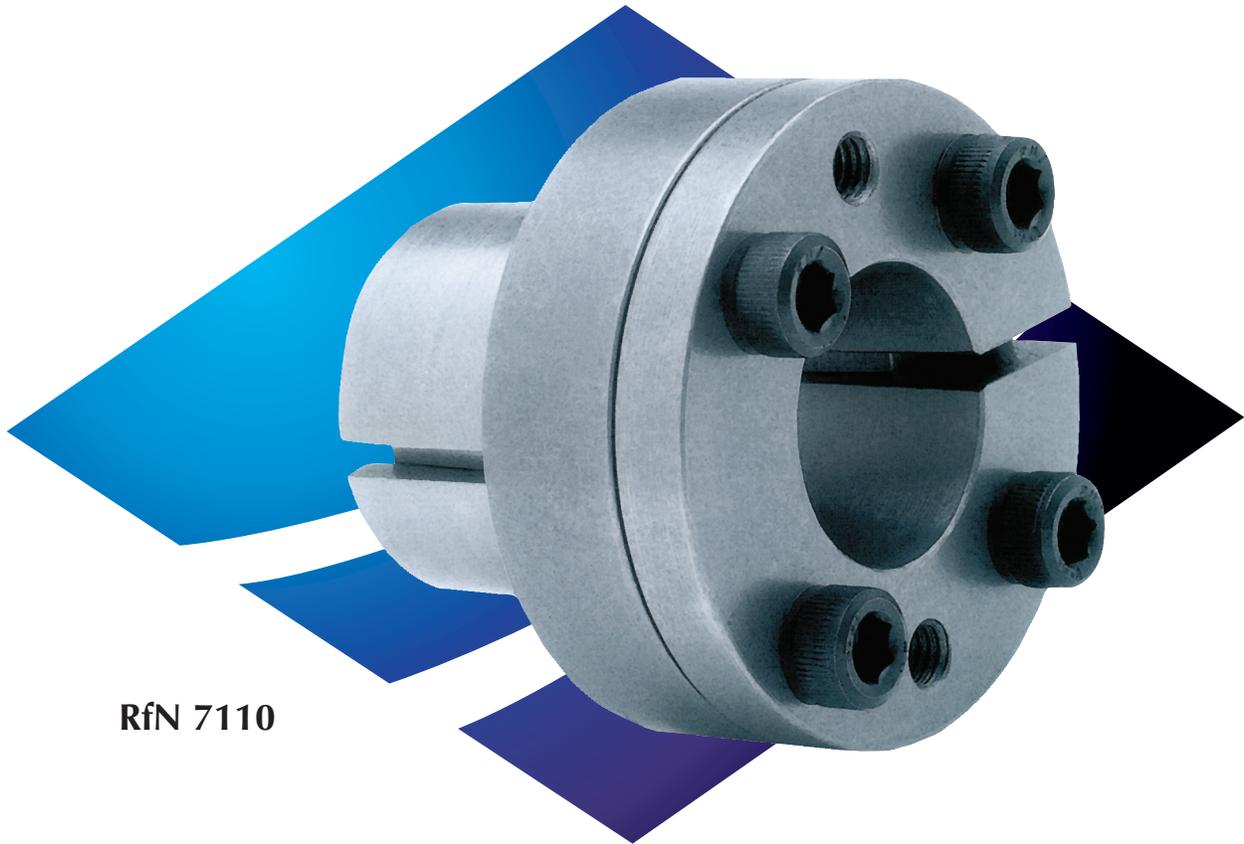


RINGFEDER®

Low Profile Locking Assembly™



RfN 7110

RfN 7110

METRIC SERIES 7110			INCH SERIES 7110			Dimensions						
SIZE	d inches	D	SIZE	d inches	D	T	d2	d1	L2	L1	L	L _{tot}
8 x 15	0.315	0.591				0.001	1.063	1.024	0.472	0.866	1.024	1.181
9 x 16	0.354	0.630	3/8	0.375	0.630	0.001	1.102	1.102	0.551	0.906	1.063	1.220
10 x 16	0.394	0.630				0.001	1.102	1.102	0.551	0.906	1.063	1.220
11 x 18	0.433	0.709	7/16	0.437	0.709	0.001	1.260	1.181	0.551	0.906	1.063	1.220
12 x 18	0.472	0.709				0.001	1.260	1.181	0.551	0.906	1.063	1.220
13 x 23	0.512	0.906				0.001	1.496	1.378	0.551	0.906	1.063	1.220
14 X 23	0.551	0.906				0.001	1.496	1.378	0.551	0.906	1.063	1.220
15 x 24	0.591	0.945				0.001	1.732	1.575	0.630	1.142	1.417	1.654
16 x 24	0.630	0.945				0.001	1.732	1.575	0.630	1.142	1.417	1.654
17 x 26	0.669	1.024				0.001	1.850	1.654	0.709	1.220	1.496	1.732
18 x 26	0.709	1.024				0.001	1.850	1.654	0.709	1.220	1.496	1.732
19 x 27	0.748	1.063	3/4	0.750	1.063	0.001	1.890	1.693	0.709	1.220	1.496	1.732
20 x 28	0.787	1.102				0.001	1.929	1.732	0.709	1.220	1.496	1.732
22 x 32	0.866	1.260	7/8	0.875	1.260	0.001	2.087	1.890	0.984	1.496	1.772	2.008
24 x 34	0.945	1.339				0.001	2.165	1.969	0.984	1.496	1.772	2.008
25 x 34	0.984	1.339	1	1.000	1.339	0.001	2.165	1.969	0.984	1.496	1.772	2.008
28 x 39	1.102	1.535				0.001	2.362	2.165	0.984	1.496	1.772	2.008
30 x 41	1.181	1.614	1-1/4	1.250	1.614	0.0015	2.441	2.244	0.984	1.496	1.772	2.008
32 x 43	1.260	1.693				0.0015	2.520	2.323	1.181	1.693	1.969	2.205
35 x 47	1.378	1.850				0.0015	2.677	2.480	1.181	1.693	1.969	2.205
38 x 50	1.496	1.969	1-1/2	1.500	1.969	0.0015	2.795	2.598	1.181	1.693	1.969	2.205
40 x 53	1.575	2.087				0.0015	2.913	2.717	1.260	1.772	2.047	2.283
42 x 55	1.654	2.165				0.0015	3.031	2.795	1.260	1.772	2.047	2.283
45 x 59	1.772	2.323				0.0015	3.346	3.110	1.575	2.205	2.520	2.835
48 x 62	1.890	2.441	1-15/16	1.937	2.441	0.0015	3.425	3.228	1.575	2.205	2.520	2.835
50 x 65	1.969	2.559	2	2.000	2.559	0.0020	3.583	3.346	1.969	2.958	2.913	3.228
55 x 71	2.165	2.795				0.0020	3.858	3.583	1.969	2.598	2.913	3.228
60 x 77	2.362	3.031	2-3/8	2.375	3.031	0.0020	4.055	3.819	1.969	2.598	2.913	3.228
65 x 84	2.559	3.307	2-5/8	2.625	3.307	0.0020	4.331	4.094	1.969	2.598	2.913	3.228
70 x 90	2.756	3.543				0.0020	4.685	4.488	2.362	3.150	3.583	3.976
75 x 95	2.953	3.740	3	3.000	3.740	0.0020	4.961	-	2.559	3.386	3.780	4.173
80 x 100	3.150	3.937				0.0020	5.157	-	2.559	3.386	3.780	4.173
85 x 106	3.346	4.173				0.0020	5.394	-	2.559	3.386	3.780	4.173
90 x 112	3.543	4.409				0.0020	5.669	-	2.559	3.386	3.780	4.173
95 x 120	3.740	4.724				0.0020	5.866	-	2.559	3.386	3.780	4.173
100 x 125	3.937	4.921	3-15/16	3.937	4.921	0.0020	6.063	-	2.559	3.386	3.780	4.173
110 x 140	4.331	5.512				0.0020	7.087	-	3.543	4.488	5.039	5.512
120 x 155	4.724	6.102				0.0020	7.795	-	3.543	4.488	5.039	5.512
130 x 165	5.118	6.496				0.0020	8.189	-	3.543	4.488	5.039	5.512

OTHER INCH SIZES AVAILABLE UPON REQUEST.

T = shaft/hub tolerances

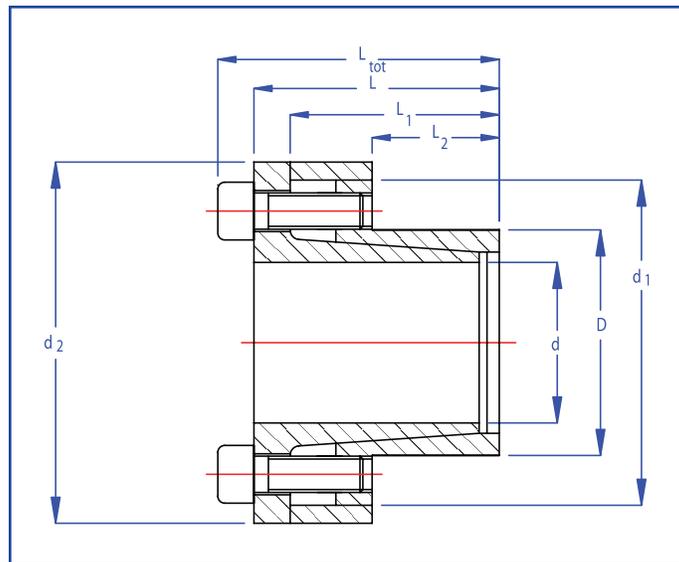
for shaft: d +0/-T
for hub: d -0/+T

Low Profile Locking Assembly™

			Locking Screws DIN			
M_T lb-ft	p psi	p' psi	Qty	Size	Length mm	M_A lb-ft
22	33205	17690	4	M4	12	3
25	25375	14210	4	M4	12	3
27	22765	14210	4	M4	12	3
38	25810	15805	4	M4	12	3.5
41	22330	15805	4	M4	12	3.5
45	21895	12325	4	M4	12	3.5
48	20300	12325	4	M4	12	3.5
82	26390	16530	3	M6	18	12
88	24795	16530	3	M6	18	12
121	27550	19575	4	M6	18	12
131	26100	19575	4	M6	18	12
138	24650	18125	4	M6	18	12
146	22040	16820	4	M6	18	12
171	16385	11310	4	M6	18	13
188	15080	10585	4	M6	18	13
188	14500	10585	4	M6	18	13
273	16095	11600	5	M6	18	13
350	18125	13195	6	M6	18	13
372	14065	10585	6	M6	18	13
545	17255	12760	8	M6	18	13
590	15805	12035	8	M6	18	13
700	15950	12035	9	M6	18	13
734	15080	11600	9	M6	18	13
1291	18560	14210	8	M8	22	30
1379	17400	13485	8	M8	22	30
1793	16675	12905	10	M8	22	30
1973	15225	11745	10	M8	22	30
2153	13920	10875	10	M8	22	30
2331	12905	10005	10	M8	22	30
3194	12615	9860	8	M10	25	61
4131	11600	9425	9	M10	25	61
5915	14500	11600	12	M10	25	61
6269	13775	10875	12	M10	25	61
6638	13050	10875	12	M10	25	61
8113	14500	11600	14	M10	25	61
11063	17400	13775	18	M10	25	61
11801	11600	9425	12	M12	30	107
12907	10150	7975	12	M12	30	107
18439	13050	10150	16	M12	30	107

p = shaft pressure
 p' = hub pressure

M_T = torque capacity
 M_A = screw tightening torque



Unlimited Range of Applications

The RfN 7110 Locking Assembly™ provides a mechanical shrink fit for low profile applications. Due to the locking device's frictional connection, there is no play or wear. The RfN 7110 Locking Assemblies are suitable for securing all types of hubs, pulleys, sprockets and gears onto shafts and axles and are ideal for thin walled hubs. They also provide accurate self-centering ability.

Simplified Manufacturing

Like all other Ringfeder® locking devices, the RfN 7110 Locking Assembly™ is a keyless locking device, so connections only require plain shaft and straight bore diameters. No additional components or machining steps, slots, threaded holes, etc. are needed. As a result of the RfN 7110's design, hubs can be manufactured with through bores without any reduction in accuracy.

Easy Mounting, Removal and Adjustment

Due to its relatively wide construction, the RfN 7110 also simplifies installation. The device uses standard capscrews that are tightened to specific torque values. The RfN 7110 is easily released using the locking screws in the threaded jacking hole positions. No additional measures or auxiliary devices are required. Adjustment is also simplified and can be done at anytime by following the removal and mounting instructions.

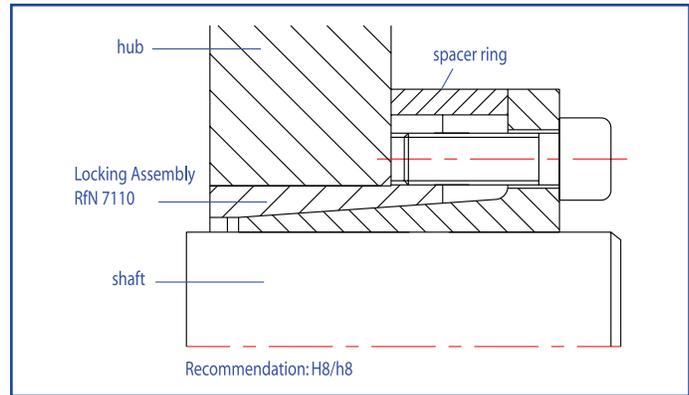
Overload Protection

In extreme cases when the maximum torque capacity is exceeded, the Locking Assembly™ will slip, thereby protecting more valuable machine components from damage. However, these devices are not suitable for use as slipping clutches as some damage to components may occur.

RfN 7110

Ringfeder Corporation

For over 30 years, Ringfeder Corporation has been the leader in keyless shaft/hub technology in North America. Our unparalleled technical expertise, wide range of power transmission components and cutting edge support provide the right solution for your PT needs. From your local inventory to 2D and 3D importable CAD files, RFC keeps you going. Visit our web site at www.ringfeder.com or call 800-245-2580 for our latest product brochures.



Installation

Mounting

Since the force is transmitted by contact pressure and friction between functional surfaces, the condition of the contact surfaces and proper tightening of the locking screws are of great importance.

1. All contact surfaces, including screw threads and screw head bearing surfaces, must be clean and slightly oiled (DO NOT USE MOLYBDENUM DISULPHIDE) prior to assembly.
2. Tighten locking screws lightly and align hub.
3. Tighten screws evenly in diametrically opposite sequence and do so in two or three stages up to the indicated tightening torque.
4. Re-check tightening torque by applying it to all screws all the way around. When no screw will turn any more, the assembly is complete.

Removal

Removing

The Locking Assemblies™ RfN 7110 are to be removed in the following sequence:

1. Loosen all screws by a few turns.
2. Remove the screws adjacent to each threaded jacking hole and screw them into these bores.
3. Tighten the jacking screws, starting with the positions furthest away from the slit first, in several stages until the connection is released.
4. The connection can then be either readjusted or disassembled. Remove the jacking screws only after the Locking Assembly™ has been removed from the hub.

Dismount and clean dirty, undamaged Locking Assemblies™ before re-use. Follow mounting instructions on this page.

In accordance with our established policy to constantly improve our products, the specifications contained herein are subject to change without notice.

Since our engineers cannot be aware of all applications and cannot control all the factors that may affect the function of our products, our warranty applies to our products only.

TECHNICAL ASSISTANCE Call Us Toll Free at 1-800-245-2580

Please let us know what your specific requirements are and we shall be very happy to work out detailed recommendations without any obligation. Just send a sketch with your requirements and specifications.

Call or write for more information
Visit our website: www.ringfeder.com

Our Representative:

RINGFEDER CORPORATION
165 Carver Ave. • PO Box 691 • Westwood, NJ 07675
TEL (201) 666-3320 • FAX (201) 664-6053
Los Angeles Office TEL (805) 382-9900 • FAX (805) 382-9980

This publication may not be reproduced, either partly or wholly, without the source being quoted.
© 2006 Ringfeder Corporation.

