



Size	Locking Assembly dimensions							Transmissible torques or axial forces		Surface Pressure		Locking screws DIN EN ISO 4762-12.9				Weight	min. D <sub>N</sub> *			
	d	C <sub>1</sub>	D	C <sub>2</sub>	L	I	L <sub>1</sub>			P <sub>W</sub>	H <sub>ub</sub>	n	d <sub>G</sub>	s	T <sub>A</sub>		WT	Rp0,2[psi]		
	Inch	Inch						lb-ft	lbs	psi		mm			lb-ft	lbs	Inch			
1	1.000	+0	1.969	-0	+0.0018	1.220	0.854	1.457	323	7752	40170	15070	5	M6x20	5	13	0.7	2.875	2.591	2.398
1 3/16	1.1875	-0.0013	2.165			1.220	0.854	1.457	385	7781	33800	13650	5	M6x20	5	13	0.8	3.000	2.773	2.587
1 1/4	1.250	+0	2.362			1.220	0.854	1.457	531	10195	38560	15070	6	M6x20	5	13	0.9	3.375	3.108	2.876
1 3/8	1.375		2.362			1.220	0.854	1.457	585	10211	35055	15070	6	M6x20	5	13	0.9	3.375	3.108	2.876
1 7/16	1.4375		2.559			1.220	0.854	1.457	620	10351	33495	13935	6	M6x20	5	13	1.0	3.625	3.296	3.069
1 1/2	1.500		2.559			1.220	0.854	1.457	647	10352	32100	13935	6	M6x20	5	13	1.0	3.625	3.296	3.069
1 5/8	1.625		2.953			1.496	0.996	1.811	1234	18225	43870	19055	6	M8x25	6	30	1.7	4.750	4.202	3.796
1 3/4	1.750		2.953			1.496	0.996	1.811	1329	18226	40740	19055	6	M8x25	6	30	1.7	4.750	4.202	3.796
1 7/8	1.875		3.150			1.496	0.996	1.811	1426	18253	38070	17915	6	M8x25	6	30	1.8	4.875	4.381	3.986
1 15/16	1.9375		3.150			1.496	0.996	1.811	1473	18246	36840	17915	6	M8x25	6	30	1.8	4.875	4.381	3.986
2	2.000		3.150	1.496	0.996	1.811	1521	18252	35690	17915	6	M8x25	6	30	1.8	4.875	4.381	3.986		
2 1/8	2.125		3.346	1.496	0.996	1.811	1803	20363	39125	19625	7	M8x25	6	30	1.8	5.500	4.816	4.335		
2 3/16	2.1875	3.346	1.496	0.996	1.811	1856	20363	38005	19625	7	M8x25	6	30	1.8	5.500	4.816	4.335			
2 1/4	2.250	3.543	1.496	0.996	1.811	1908	20352	36875	18485	7	M8x25	6	30	1.9	5.500	4.984	4.518			
2 3/8	2.375	3.543	1.496	0.996	1.811	2014	20352	34935	18485	7	M8x25	6	30	1.9	5.500	4.984	4.518			
2 7/16	2.4375	3.740	1.496	0.996	1.811	2466	24281	38965	20050	8	M8x25	6	30	2.1	6.125	5.430	4.873			
2 1/2	2.500	3.740	1.496	0.996	1.811	2530	24288	37990	20050	8	M8x25	6	30	2.1	6.125	5.430	4.873			
2 9/16	2.5625	3.740	1.496	0.996	1.811	2593	24286	37065	20050	8	M8x25	6	30	2.1	6.125	5.430	4.873			
2 3/4	2.750	4.331	1.969	1.315	2.362	3680	32116	34770	18200	7	M10x35	8	61	4.6	6.750	6.058	5.502			
2 7/8	2.875	4.528	1.969	1.315	2.362	3845	32097	33300	16920	7	M10x35	8	61	4.9	6.875	6.176	5.653			
2 15/16	2.9375	4.528	1.969	1.315	2.362	3929	32101	32590	16920	7	M10x35	8	61	4.9	6.875	6.176	5.653			
3	3.000	4.528	1.969	1.315	2.362	4012	32096	31910	16920	7	M10x35	8	61	4.9	6.875	6.176	5.653			
3 3/8	3.375	4.921	1.969	1.315	2.362	5434	38642	32430	18345	8	M10x35	8	61	5.3	7.625	6.903	6.264			
3 7/16	3.4375	5.118	1.969	1.315	2.362	5543	38700	31810	17630	8	M10x35	8	61	5.7	7.875	7.079	6.451			
3 1/2	3.500	5.118	1.969	1.315	2.362	5644	38702	31240	17630	8	M10x35	8	61	5.7	7.875	7.079	6.451			
3 3/4	3.750	5.315	1.969	1.315	2.362	7180	45952	36450	21190	10	M10x35	8	61	6.0	9.000	7.899	7.036			
3 15/16	3.9375	5.709	2.283	1.606	2.677	7957	48500	27300	16210	10	M10x35	8	61	8.2	8.500	7.680	7.059			
4	4.000	5.709	2.283	1.606	2.677	8083	48498	26870	16210	10	M10x35	8	61	8.2	8.500	7.680	7.059			

\* B ≥ 2 l necessary

More sizes on request

### ■ Mounting of Locking Assembly

The Locking Assemblies are supplied slightly oiled and ready-to-use. The values for T, F<sub>ax</sub>, P<sub>W</sub> and P<sub>N</sub> apply to installed in oiled condition.

### ■ Surface finishes

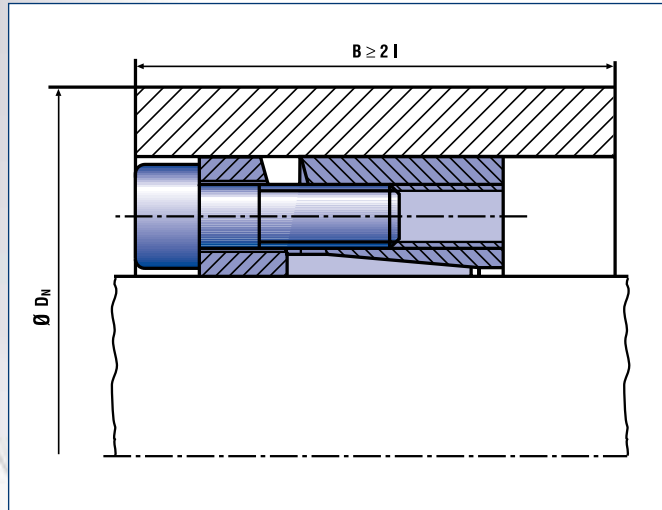
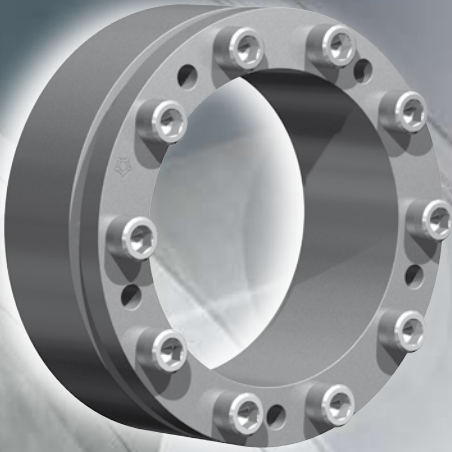
For shafts and hub bores  
**R<sub>a</sub> = 63 RMS**

### ■ Tolerances

We recommend the following mounting tolerances  
**shaft: h8 · hub: H8 - see table above**

### ■ Change of screw tightening torques

A change of the T<sub>A</sub> values given in the above table is inadmissible.



Locking Assembly RfN 7013.0 · Typical installation

## Characteristics

**Excellent centering ability** – Due to the shallow tapered design the RfN 7013 Locking Assemblies are self-centering.

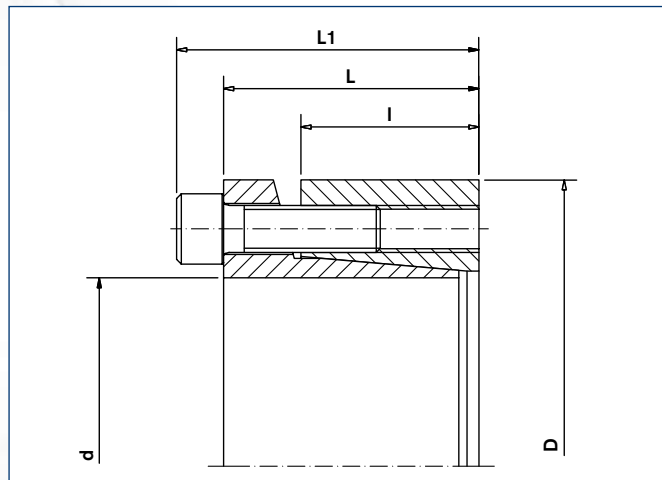
**Easy trouble free assembly/removal** – The reinforced flange prevents the Locking Assembly from distorting when the jacking screws are used during assembly and removal.

**High rotation speed** – The dimensional accuracy of the RfN 7013 Locking Assemblies allows their use in applications with higher rotational speeds.

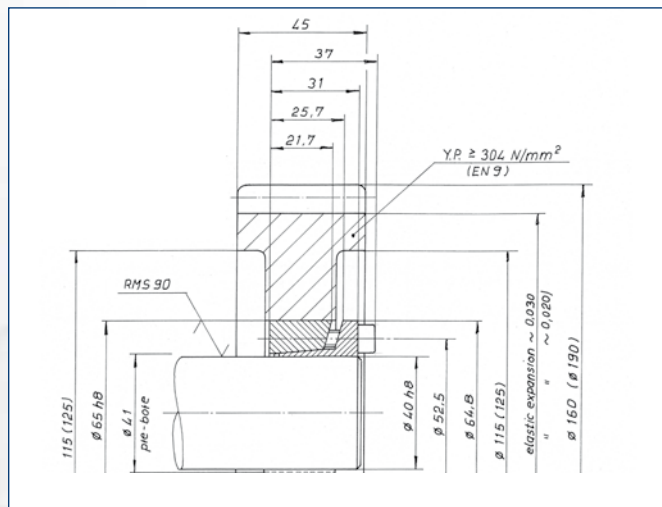
**High radial loads** – The material strength of the RfN 7013 Locking Assemblies makes them especially suitable for applications with high radial loads.

## Example applications:

Crane running wheels, couplings, gears, flywheels, fan blades



Locking Assembly RfN 7013.0 · Dimensions



Locking Assembly RfN 7013.0 · Gear (metric example)

Size	Locking Assembly dimensions							Transmissible torques or axial forces		Surface Pressure		Locking screws DIN EN ISO 4762-12.9			Weight	min. D <sub>N</sub> *					
	d	C <sub>1</sub>	D	C <sub>2</sub>	L	I	L <sub>1</sub>	T	F <sub>ax</sub>	Shaft P <sub>W</sub>	Hub P <sub>N</sub>	n	d <sub>G</sub>	T <sub>A</sub>		WT	R <sub>p0,2</sub> [psi]				
	Inch	Inch						lb-ft	lbs	psi			mm	lb-ft	lbs	Inch			T <sub>max</sub>		
19 x 47	0.748	+0 -0.0013	1.850	-0 +0.0016	1.220	0.854	1.457	210	22129	43513	13054	4	M6 x 20	13	0.6	2.494	2.343	2.193	236		
20 x 47	0.787		1.850		1.220	0.854	1.457	221	22129	42063	13054	4	M6 x 20	13	0.6	2.494	2.343	2.193	251		
22 x 47	0.866		1.850		1.220	0.854	1.457	243	22129	37712	13054	4	M6 x 20	13	0.6	2.494	2.343	2.193	273		
24 x 50	0.945		1.969		1.220	0.854	1.457	310	29505	43513	15955	5	M6 x 20	13	0.7	2.852	2.636	2.426	354		
25 x 50	0.984		1.969		1.220	0.854	1.457	325	29505	42063	15955	5	M6 x 20	13	0.7	2.852	2.636	2.426	369		
28 x 55	1.102		2.165		1.220	0.854	1.457	361	29505	37712	14504	5	M6 x 20	13	0.8	3.024	2.819	2.616	413		
30 x 55	1.181		2.165		1.220	0.854	1.457	391	29505	34811	14504	5	M6 x 20	13	0.7	3.024	2.819	2.616	443		
32 x 60	1.260		2.362		1.220	0.854	1.457	546	36882	39162	15955	6	M6 x 20	13	0.9	3.422	3.162	2.911	627		
35 x 60	1.378	2.362	1.220	0.854	1.457	597	36882	36261	15955	6	M6 x 20	13	0.8	3.422	3.162	2.911	686				
38 x 65	1.496	2.559	1.220	0.854	1.457	656	36882	33360	14504	6	M6 x 20	13	1.0	3.575	3.331	3.093	752				
40 x 65	1.575	2.559	1.220	0.854	1.457	693	36882	31910	14504	6	M6 x 20	13	0.9	3.575	3.331	3.093	797				
42 x 75	1.654	+0 -0.0016	2.953	-0 +0.0018	1.496	0.996	1.811	1276	59011	43513	18856	6	M8 x 25	30	1.7	4.615	4.185	3.785	1461		
45 x 75	1.772		2.953		1.496	0.996	1.811	1372	59011	42063	18856	6	M8 x 25	30	1.5	4.615	4.185	3.785	1571		
48 x 80	1.890		3.150		1.496	0.996	1.811	1461	59011	39162	18856	6	M8 x 25	30	1.8	4.923	4.464	4.038	1674		
50 x 80	1.969		3.150		1.496	0.996	1.811	1527	59011	37712	18856	6	M8 x 25	30	1.7	4.923	4.464	4.038	1756		
55 x 85	2.165		3.346		1.496	0.996	1.811	1874	66387	39162	20306	7	M8 x 25	30	1.8	5.441	4.883	4.376	2154		
60 x 90	2.362		3.543		1.496	0.996	1.811	2043	66387	36261	18856	7	M8 x 25	30	1.9	5.537	5.021	4.541	2346		
65 x 95	2.559		3.740		1.496	0.996	1.811	2641	81140	37712	20306	8	M8 x 25	30	2.1	6.082	5.458	4.891	3032		
70 x 110	2.756		4.331		1.969	1.315	2.362	3762	103269	34811	18856	7	M10 x 35	61	4.6	6.769	6.138	5.552	4323		
75 x 115	2.953	4.528	1.969	1.315	2.362	4027	103269	33360	17405	7	M10 x 35	61	4.9	6.809	6.235	5.690	4625				
80 x 120	3.150	4.724	1.969	1.315	2.362	4315	103269	30459	15955	7	M10 x 35	61	5.1	6.844	6.324	5.821	4957				
85 x 125	3.346	4.921	1.969	1.315	2.362	5495	132774	33360	18856	8	M10 x 35	61	5.3	7.691	6.974	6.308	6314				
90 x 130	3.543	5.118	1.969	1.315	2.362	5827	132774	31910	17405	8	M10 x 35	61	5.7	7.697	7.047	6.432	6698				
95 x 135	3.740	+0 -0.0022	5.315	-0 +0.0025	1.969	1.315	2.362	7303	154903	37712	21757	10	M10 x 35	61	6.0	9.008	7.993	7.092	8394		
100 x 145	3.937		5.709		2.283	1.606	2.677	8114	162280	27559	15955	10	M10 x 35	61	8.2	8.270	7.642	7.035	9331		
110 x 155	4.331		6.102		2.283	1.606	2.677	8925	162280	26108	15955	10	M10 x 35	61	8.8	8.840	8.168	7.519	10261		
120 x 165	4.724		6.496		2.283	1.606	2.677	11581	191785	27559	17405	12	M10 x 35	61	9.5	9.769	8.945	8.163	13314		
130 x 180	5.118		7.087		2.559	1.787	3.031	15269	236043	27559	17405	10	M12 x 40	107	13	10.658	9.759	8.906	17556		
140 x 190	5.512		+0 -0.0025		7.480	-0 +0.0028	2.559	1.787	3.031	16597	236043	26108	15955	10	M12 x 40	107	14	10.836	10.013	9.217	19083
150 x 200	5.906				7.874		2.559	1.787	3.031	21023	280301	29009	18856	12	M12 x 40	107	15	12.306	11.159	10.093	24172

\* B ≥ 2 l necessary

More sizes on request

### ■ Mounting of Locking Assembly

The Locking Assemblies are supplied slightly oiled and ready-to-use. The values for T, F<sub>ax</sub>, P<sub>W</sub> and P<sub>N</sub> apply to installed in oiled condition.

### ■ Surface finishes

For shafts and hub bores

**R<sub>a</sub> = 63 RMS**

### ■ Tolerances

We recommend the following mounting tolerances  
**shaft: h8 · hub: H8 - see table above**

### ■ Change of screw tightening torques

A change of the T<sub>A</sub> values given in the above table is inadmissible.

## Explanations to tables

$d, D, L, l, L_1$  = Basic dimensions, Locking Assemblies not tightened

$T$  = transmissible torque

$F_{ax}$  = transmissible axial force

$p_W$  = surface pressure between Locking Assembly and shaft

$p_N$  = surface pressure between Locking Assembly and hub

$n$  = fastener quantity

$d_G$  = clamping thread

$d_D$  = metric pullout thread dia.

$T_A$  = maximum tightening torque for the screws considered in order to determine the values  $T, F_{ax}, p_W$  and  $p_N$

$D_N$  = minimum required outside hub diameter

$R_{p0,2}$  = minimum required yield point of hub material

$T_{max}$  = maximum theoretical transmissible torque

$B$  = minimum hub width (calculation formula at [www.ringfeder.com](http://www.ringfeder.com))

$C_1$  = Shaft Tolerances

$C_2$  = Bore Tolerances

$s$  = metric hex key size (across flats)



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