

Loking Rings SRI 7012



Locking Rings designation for shaft diameter = 70 mm : Locking Rings 70 X 110 SRI 7012

Locking Rings dimensions				Transmissible torques		Surface Pressures between Locking Rings			Locking Rings Screws			Weight
dxD mm	L	l mm	L ₁	T or Nm	F _{ax} Nm	Shaft P N/mm ²	hub P	Qty.	Thread d _e	T _A Nm	d _b	~ kg
19 x 47	20	17	27.5	255	27	220	90	8	M 6 x 18	14	M 8	0.24
20 x 47	20	17	27.5	270	27	210	90	8	M 6 x 18	14	M 8	0.24
22 x 47	20	17	27.5	300	27	195	90	8	M 6 x 18	14	M 8	0.23
24 x 50	20	17	27.5	360	30	195	95	9	M 6 x 18	14	M 8	0.26
25 x 50	20	17	27.5	380	30	190	95	9	M 6 x 18	14	M 8	0.25
28 x 55	20	17	27.5	470	33	185	95	9	M 6 x 18	14	M 8	0.3
30 x 55	20	17	27.5	500	33	175	95	9	M 6 x 18	14	M 8	0.29
32 x 60	20	17	27.5	630	40	192	105	12	M 6 x 18	14	M 8	0.34
35 x 60	20	17	27.5	700	40	180	105	12	M 6 x 18	14	M 8	0.32
38 x 65	20	17	27.5	870	46	188	110	15	M 6 x 18	14	M 8	0.36
40 x 65	20	17	27.5	920	46	180	110	15	M 6 x 18	14	M 8	0.34
42 x 75	24	20	33.5	1500	72	226	125	12	M 8 x 22	35	M 10	0.6
45 x 75	24	20	33.5	1610	72	210	125	12	M 8 x 22	35	M 10	0.57
48 x 80	24	20	33.5	1700	71	196	115	12	M 8 x 22	35	M 10	0.62
50 x 80	24	20	33.5	1770	71	190	115	12	M 8 x 22	35	M 10	0.6
55 x 85	24	20	33.5	2270	83	200	130	14	M 8 x 22	35	M 10	0.63
60 x 90	24	20	33.5	2470	83	180	120	14	M 8 x 22	35	M 10	0.69
65 x 95	24	20	33.5	3040	93	190	130	16	M 8 x 22	35	M 10	0.73
70 x 110	28	24	39.5	4600	132	210	130	14	M 10 x 25	70	M 12	1.26
75 x 115	28	24	39.5	4900	131	195	125	14	M 10 x 25	70	M 12	1.33
80 x 120	28	24	39.5	5200	131	180	120	14	M 10 x 25	70	M 12	1.4
85 x 125	28	24	39.5	6300	148	195	130	16	M 10 x 25	70	M 12	1.49
90 x 130	28	24	39.5	6600	147	180	125	16	M 10 x 25	70	M 12	1.53
95 x 135	28	24	39.5	7900	167	195	135	18	M 10 x 25	70	M 12	1.62
100 x 145	33	26	47	9600	192	195	135	14	M 12 x 30	125	M 14	2.01
110 x 155	33	26	47	10500	191	180	125	14	M 12 x 30	125	M 14	2.15
120 x 165	33	26	47	13100	218	185	135	16	M 12 x 30	125	M 14	2.35
130 x 180	38	34	52	17600	272	165	115	20	M 12 x 35	125	M 14	3.51
140 x 190	38	34	52	20900	298	165	125	22	M 12 x 35	125	M 14	3.85
150 x 200	38	34	52	24200	324	170	125	24	M 12 x 35	125	M 14	4.07
160 x 210	38	34	52	28000	350	170	130	26	M 12 x 35	125	M 14	4.3
170 x 225	44	38	60	32800	386	160	120	22	M 14 x 40	190	M 16	5.78
180 x 235	44	38	60	37800	420	165	125	24	M 14 x 40	190	M 16	6.05
190 x 250	52	46	68	46500	490	150	115	28	M 14 x 45	190	M 16	8.25
200 x 260	52	46	68	52500	525	150	115	30	M 14 x 45	190	M 16	8.65
220 x 285	56	50	74	68000	620	150	115	26	M 16 x 50	295	M 20	11.22
240 x 305	56	50	74	85500	715	160	125	30	M 16 x 50	295	M 20	12.2
260 x 325	56	50	74	104000	800	165	130	34	M 16 x 50	295	M 20	13.2
280 x 355	66	60	86.5	128000	915	145	115	32	M 18 x 60	405	M 22	19.2
300 x 375	66	60	86.5	153000	1020	150	120	36	M 18 x 60	405	M 22	20.5
320 x 405	78	72	100.5	210000	1310	150	120	36	M 20 x 70	580	M 24	29.6
340 x 425	78	72	100.5	224000	1310	145	115	36	M 20 x 70	580	M 24	31.1
360 x 455	90	84	116	294000	1630	145	115	36	M 22x80	780	M 27	42.2
380 x 475	90	84	116	308000	1620	135	110	36	M 22 x 80	780	M 27	44
400 x 495	90	84	116	322000	1610	130	105	36	M 22 x 80	780	M 27	46

Details to the opposite table



SHRIRAAM (SRI) manufacturing Locking Rings for highly stressed Shaft - hub connections in which Locking rings replace shrink fits, key, polygon connections and splined shafts etc.

Locking Rings are used for the connection of gear wheels, Chain Sprockets, Coupling and Clutches, Rope Sheaves, Track Wheels, Shaft mounted gearing, Impellerflanges, Ship & Air - craft propellers, Crushers etc. The manufacturing-range is from 20 mm to 600 mm.

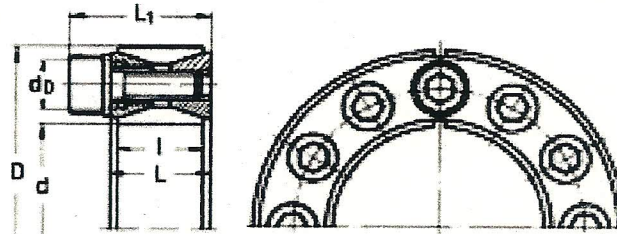


Fig. Locking Rings SRI 7012

The values for T, Fax, P and p apply to Locking Rings that are lightly oiled prior to being fitted ($iJ = 0,12$).

D X 0, L, I, LI = Basic dimensions, Locking Rings not tightened

T = Transmissible torque

Fax = Transmissible axial force

p = Approx. Surface pressure between Locking Rings & shaft

p = Approx. Surface pressure between Locking Rings and hub

TA = Required tightening torque per locking screw (tighten with torque wrench)

do = Auxiliary thread in the front thrust ring. The screws at these points are paint marked for easy identification.

For shafts and hub bores: Ra ~ 3,2 μ m Corresponds to RMS < 125 micro-inches. Locking Rings SRI 7012 can bridge large deviations from nominal sizes without any torque losses. We do not stipulate any particular clearances. The following may be taken as guide values:

Shaft: all fits between k11 and h 11. Hub: all fits between N 11 and H 11.

The Locking Rings should be located as symmetrically as possible between shaft and hub bore in order to avoid excessive deformations of the relatively thickwalled thrust rings. If the shaft is smaller than nominal d, the bore should exceed nominal D to the same extent and vice versa. The difference between both deviations of the nominal dimensions should not exceed IT9 (with regard to d). The Locking Rings are generally equipped with screws of the quality 12.9

Locking Rings SRI 7012 are not selfcentering. Consequently, the true running of hubs mounted with these L Rings is governed by the efficiency of the shaft centering action is governed by the play between the remaining boss or hub bore and the shaft, as well as by the mating length between hub and shaft

We also supply shaft-hub connections

- Locking Rings SRI 7012 - for highly stressed shaft-hub connections and big matching tolerances
- Locking Rings SRI 7013 - for higher demands to concentricity
- Locking Rings SRI 7013in- for shafts with inch dimensions
- Locking Rings SRI 7014 - for extremely stressed shaft-hub connections
- Locking Rings SRI 7015 - self-centering, for highest transmission values as well as for the use in belt drums locking
- Locking Rings SRI 8006 - Adaptable design for special requirements.