

M_t = Max. transmissible torque per locking assembly

M_A = Tightening torque per screw

P_{ax} = Transmissible axial force

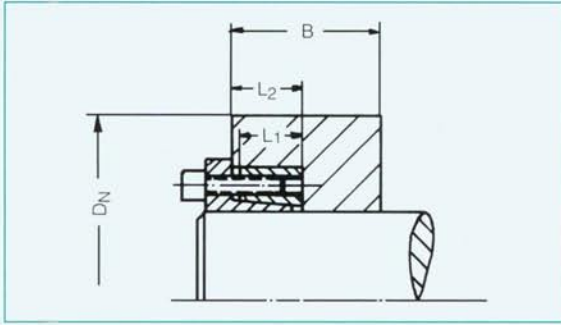
p_w p_N = Contact pressure between locking assembly and shaft
(p_w) resp. hub (p_n)

$L_2 - L_4$ are for unlocked assemblies

mm d x D	Nm M_t	kN P_{ax}	mm				Pieces	S	Nm M_A	N/mm ²		Weight kg
			L_1	L_2	L_3	L_4			p_w	p_N		
20 x 47	280	28	17	22	30	36	5	M 6 x 20	17	219	93	0.28
22 x 47	310	28	17	22	30	36	5	M 6 x 20	17	200	94	0.28
24 x 50	340	28	17	22	30	36	5	M 6 x 20	17	185	89	0.3
25 x 50	420	34	17	22	30	36	6	M 6 x 20	17	210	105	0.3
28 x 55	470	33	17	22	30	36	6	M 6 x 20	17	187	96	0.35
30 x 55	500	33	17	22	30	36	6	M 6 x 20	17	174	95	0.35
32 x 60	720	45	17	22	30	36	8	M 6 x 20	17	220	118	0.4
35 x 60	780	45	17	22	30	36	8	M 6 x 20	17	199	116	0.39
38 x 65	850	45	17	22	30	36	8	M 6 x 20	17	184	108	0.49
40 x 65	900	45	17	22	30	36	8	M 6 x 20	17	176	108	0.45
45 x 75	1750	77	20	25	34	42	8	M 8 x 25	41	214	128	0.72
50 x 80	1950	78	20	25	34	42	8	M 8 x 25	41	213	120	0.8
55 x 85	2250	100	20	25	34	42	8	M 8 x 25	41	222	130	0.85
60 x 90	2475	83	20	25	34	42	8	M 8 x 25	41	203	122	0.92
65 x 95	3025	93	20	25	34	42	9	M 8 x 25	41	205	131	0.99
70 x 110	4600	131	24	30	42	52	8	M 10 x 30	83	227	132	1.75
75 x 115	4925	131	24	30	42	52	8	M 10 x 30	83	212	126	1.85
80 x 120	5250	131	24	30	42	52	8	M 10 x 30	83	198	121	1.95
85 x 125	6300	148	24	30	42	52	9	M 10 x 30	83	210	131	2.05
90 x 130	6650	148	24	30	42	52	9	M 10 x 30	83	198	126	2.15
95 x 135	7800	164	24	30	42	52	10	M 10 x 30	83	209	135	2.25
100 x 145	10750	215	26	32	46	58	9	M 12 x 35	145	229	152	3
110 x 155	11850	215	26	32	46	58	9	M 12 x 35	145	208	142	3.2
120 x 165	12900	215	26	32	46	58	9	M 12 x 35	145	191	133	3.5
130 x 180	19200	295	34	40	57	71	9	M 14 x 40	230	195	128	5.1
140 x 190	20700	296	34	40	57	71	9	M 14 x 40	230	181	121	5.4
150 x 200	24600	328	34	40	57	71	10	M 14 x 40	230	187	128	5.8
160 x 210	28900	361	34	40	57	71	12	M 14 x 40	230	193	134	6
170 x 225	33500	394	44	50	67	81	12	M 14 x 40	230	150	106	8.3
180 x 235	35500	394	44	50	67	81	12	M 14 x 40	230	142	101	8.8
190 x 250	52000	597	44	50	67	83	12	M 16 x 50	355	187	132	10.4
200 x 260	54800	548	44	50	67	83	12	M 16 x 50	355	177	127	10.9
220 x 285	60200	548	50	56	75	91	12	M 16 x 50	355	141	102	14.7
240 x 305	82200	685	50	56	75	91	15	M 16 x 50	355	161	119	15.9
260 x 325	114000	877	50	56	75	91	18	M 16 x 50	355	180	145	17
280 x 355	123050	879	60	66	87	105	16	M 18 x 60	485	139	110	24.7
300 x 375	148300	989	60	66	87	105	18	M 18 x 60	485	146	117	26.4
320 x 405	182500	1141	74	81	104	124	18	M 20 x 60	690	128	101	38
340 x 425	218000	1282	74	81	104	124	21	M 20 x 60	690	136	109	40
360 x 455	290000	1611	86	94	120	142	18	M 22 x 60	930	138	109	48
380 x 475	305000	1605	86	94	120	142	21	M 22 x 60	930	131	105	57
400 x 495	355000	1775	86	94	120	142	21	M 22 x 60	930	137	111	63

HUB OUTSIDE DIAMETER D_N AS A FACTOR OF THE YIELD POINT

(minimum theoretical values)



The values in the table for D_N apply to the use of the Locking Assembly TAS 3006

Width of the hub $B \geq 2 L_1$

Depth of the bore $b \geq L_4$

Hub section unweakened

d x D mm	PN N/mm ²	σ 0.2 N/mm ²								
		150	180	200	220	250	270	300	350	400
		GG-22	GG-26 GS-38 V2A-S V2A-E	GG-30 V4A-S GTS-35	GS-45 St 35 St 37-3 V4A-E	GS-52 GS-C 25 GGG-40 St 45	C 35 St 50-2 X8CrTi 17 AlCuNiC	GS-60 St 60-2 C 10 GTS-45	GS-62 St 70-2 St 52	GS-70 C 60 25CrMo4
20 x 47	93	70	65	63	61	59	58	57	55	54
25 x 50	105	78	72	70	67	65	64	62	60	59
30 x 55	95	82	77	74	72	70	69	67	65	64
35 x 60	116	100	91	87	84	81	79	77	74	72
40 x 65	108	104	95	91	88	85	83	82	79	77
45 x 75	128	132	119	113	108	103	101	98	95	92
50 x 80	120	136	123	117	113	108	106	103	100	96
55 x 85	130	152	136	129	124	118	115	111	108	104
60 x 90	122	154	140	133	128	123	120	117	113	109
65 x 95	131	170	152	145	139	132	129	125	121	117
70 x 110	132	197	176	168	161	153	149	145	140	136
75 x 115	126	201	179	172	165	157	154	150	144	140
80 x 120	121	204	185	176	170	162	159	154	149	145
85 x 125	131	224	200	191	183	174	170	165	160	154
90 x 130	126	228	203	195	187	178	175	170	163	159
95 x 135	136	250	221	208	199	189	184	179	172	167
100 x 145	152	295	254	238	225	214	206	199	190	183
110 x 155	142	298	259	244	234	222	216	208	200	192
120 x 165	133	299	271	253	242	231	224	218	210	203
130 x 180	128	317	286	272	260	248	243	236	228	221
140 x 190	121	323	293	279	269	257	252	244	236	230
150 x 200	128	352	318	302	288	275	270	262	254	246
160 x 210	134	384	342	323	518	294	286	277	267	258
170 x 225	106	352	325	313	302	290	286	279	270	264
180 x 235	101	360	332	320	311	301	294	287	280	273
190 x 250	132	448	400	382	366	348	339	330	318	309
200 x 260	127	456	412	392	374	357	350	340	328	318
220 x 285	102	439	405	391	379	367	359	351	340	331
240 x 305	119	515	467	445	430	412	403	390	378	366
260 x 325	145	630	549	517	494	468	455	439	419	403
280 x 355	110	568	522	501	483	465	454	444	430	419
300 x 375	117	626	570	544	525	502	491	461	450	443
320 x 405	101	620	571	551	535	518	506	494	482	470
340 x 425	109	680	625	599	578	557	544	531	514	501
360 x 455	109	728	669	641	618	596	582	568	550	536
380 x 475	105	741	684	660	637	613	603	589	570	556
400 x 495	111	792	728	698	673	649	634	619	599	585

FITTING AND REMOVAL OF TAS 3003/3006 LOCKING ASSEMBLIES

N. B. Do not use any molybdenum disulphide.

The locking assemblies are delivered by the manufacturers oiled and are ready to be fitted. Additional hub centring arrangements are not absolutely necessary as the concentricity is 0.02 to 0.04 mm.

Fitting:

1. At least 3 screws, evenly spaced around the circumference, must be screwed into the flanges' lifting screw holes which are protected by plastic plugs. As a result, the bushes and rings are held apart due to the stopping effect of the taper and cannot tilt during fitting.
2. Tighten locking screws delicately and carefully until the locking assembly is located in place without any play. Remove lifting screws and tighten with remaining screws.
3. Tighten all screws evenly by tightening them crosswise covering the whole circumference several times, until the given torque has been reached for each screw. Make sure that the screws to the left and right of the slot are tightened one after the other.

Removal:

Loosen all locking screws several turns and insert one screw into each of the bush's lifting screw holes after removing the plastic plugs. Tighten these screws crosswise to loosen the connection. Tighten the screws to the left and right of the slot one after the other.

Tightening torques in Nm for DIN 912 screws

DIN 912		M 6	M 8	M 10	M 12	M 14	M 16	M 18	M 20	M 22
10.9	$\mu = 0.14$	14	35	69	120	190	295	405	580	780
	$\mu = 0.125$	13	32	64	110	180	275	390	540	720
12.9	$\mu = 0.14$	17	41	83	145	230	355	485	690	930
	$\mu = 0.125$	16	39	77	135	215	330	455	650	870

N. B.

Screws which are re-oiled on fitting should be tightened to a reduced torque.

($\mu_{Schr} = 0.125$) to avoid possible overloading, especially in the case of screws of 12.9 quality.

TAS 3003



TAS 3006

