



Fig. 8 SERIES TAS 3012

- d = nominal locking assembly I.D.
= shaft O.D.
- D = nominal locking assembly O.D.
= hub counterbore I.D.
- L₁, L₂ = width dimensions, relaxed condition
- L₃
- M_t = maximum transmissible torque
- p = contact pressure between locking assembly and shaft
- p' = contact pressure between locking assembly and hub bore
- M_A = required tightening torque per locking screw (tighten with torque wrench)

D_N = min. hub O.D. for single unit installation based on hub material Y.P. as shown in table and hub width B=1.5 L₁ (c=0.8); for other hub materials calculate hub O.D. per step 3 of Selection Guide.

T = Allowable machining tolerance
for shaft: use d + 0/-T
for hub bore: use D - 0/+T

Example: for 80 TAS 3012
required shaft size: 3.150" + .000/- .002"
required hub bore size: 4.724" - .000/+ .002"

NOTES:
P_{ax} = axial load (thrust capacity) = $\frac{M_t \times 24 \text{ (lbs)}}{d}$

The values of M_t, P_{ax}, p' are based on lightly oiled installation (coefficient of friction μ = 0.12)

Surface Finish

Required surface finish for shaft O.D. and hub bore:
RMS 125 micro inches or better

HOW TO ORDER:

Specify SIZE and SERIES
e.g. 100 X 145 TAS 3012

TAS 3012 Size mm	Locking Assembly Dimensions						max. M _t lb-ft	Contact pressure			Locking screws DIN 912-12.9			Wt. lbs	Hub O.D. (D _N) based on Yield Points shown		
	d	D	T	L ₁ inches	L ₂	L ₃		p psi	p' psi	Qty.	Size	M _A lb-ft	Hub O.D. (D _N) based on Yield Points shown				
													36 KSI		45 KSI	62KSI	
25x50	0.984	1.969	0.0015	1.772	2.165	2.402	479	22 620	11 310	5	M6X45	12.5	1.1	2.545	2.414	2.280	
30x55	1.181	2.165	0.0015	1.772	2.165	2.402	701	22 910	12 470	6	M6X45	12.5	1.3	2.878	2.713	2.547	
35x60	1.378	2.362	0.0015	1.772	2.165	2.402	944	22 620	13 195	7	M6X45	12.5	1.5	3.195	3.000	2.805	
38x65	1.496	2.559	0.0015	1.772	2.165	2.402	1 180	23 780	13 920	8	M6X45	12.5	1.8	3.523	3.295	3.069	
40x65	1.575	2.559	0.0015	1.772	2.165	2.402	1 239	22 620	13 920	8	M6x45	12.5	1.8	3.523	3.295	3.069	
45x75	1.772	2.953	0.0015	1.732	2.126	2.441	2 360	35 235	21 170	7	M8X50	30.2	2.2	4.920	4.387	3.908	
50x80	1.969	3.150	0.002	2.205	2.520	2.835	3 061	29 008	14 214	8	M8X50	30.2	3.1	4.368	4.078	3.792	
55x85	2.165	3.346	0.002	2.205	2.520	2.835	3 799	29 733	15 084	9	M8X50	30.2	3.5	4.743	4.405	4.076	
60x90	2.362	3.543	0.002	2.205	2.520	2.835	4 573	29 298	15 374	10	M8X50	30.2	3.7	5.058	4.690	4.332	
65x95	2.559	3.740	0.002	2.205	2.520	2.835	4 979	27 122	14 504	10	M8X50	30.2	4.2	5.224	4.869	4.520	
70x110	2.756	4.331	0.002	2.756	3.071	3.465	8 482	32 344	16 530	10	M10X60	61.2	6.8	6.367	5.862	5.378	
80x120	3.150	4.724	0.002	2.756	3.071	3.465	10 695	31 184	16 675	11	M10X60	61.2	8.4	6.971	6.413	5.879	
85x125	3.346	4.921	0.002	2.756	3.071	3.465	11 363	29 350	16 008	11	M10X60	61.2	8.4	7.139	6.594	6.068	
90x130	3.543	5.118	0.0025	2.756	3.071	3.465	13 129	30 168	16 675	12	M10X60	61.2	8.4	7.552	6.948	6.368	
95x135	3.740	5.315	0.0025	2.756	3.071	3.465	13 830	28 560	16 095	12	M10X60	61.2	8.4	7.727	7.134	6.562	
100x145	3.937	5.709	0.0025	3.543	3.937	4.409	19 399	29 008	15 519	11	M12X80	107.0	13.5	8.179	7.578	6.993	
110x155	4.331	6.102	0.0025	3.543	3.937	4.409	23 456	28 718	15 954	12	M12X80	107.0	14.6	8.840	8.169	7.520	
120x165	4.724	6.496	0.0025	3.543	3.937	4.409	29 799	30 748	17 405	14	M12X80	107.0	15.9	9.769	8.945	8.163	
130x180	5.118	7.087	0.0025	4.094	4.567	5.118	37 986	27 848	16 244	12	M14X90	169.6	22.1	10.342	9.540	8.767	
140x190	5.512	7.480	0.0025	4.094	4.567	5.118	47 723	30 188	17 985	14	M14X90	169.6	23.4	11.422	10.419	9.475	
150x200	5.906	7.874	0.0025	4.094	4.567	5.118	54 730	30 168	18 420	15	M14X90	169.6	24.9	12.163	11.062	10.033	
160x210	6.299	8.268	0.0025	4.094	4.567	5.118	62 327	30 168	18 565	16	M14X90	169.6	26.2	12.821	11.649	10.556	
170x225	6.693	8.858	0.0025	5.276	5.748	6.378	79 808	26 397	16 390	14	M16X110	261.8	39.7	12.976	11.958	10.980	
180x235	7.087	9.252	0.0025	5.276	5.748	6.378	90 909	26 687	16 880	15	M16X110	261.8	41.5	13.654	12.560	11.513	
190x250	7.480	9.843	0.003	5.276	5.748	6.378	98 691	26 977	16 825	16	M16X110	261.8	48.3	14.580	13.400	12.272	
200x260	7.874	10.236	0.003	5.276	5.748	6.378	107 690	25 672	16 244	16	M16X110	261.8	50.7	14.939	13.779	12.663	
220x285	8.661	11.220	0.003	5.276	5.748	6.378	133 506	27 268	16 680	18	M16X110	261.8	59.5	16.559	15.233	13.963	
240x305	9.449	12.008	0.003	5.276	5.748	6.378	160 797	26 687	17 260	20	M16X110	261.8	64.4	17.989	16.488	15.060	
260x325	10.236	12.795	0.0035	5.276	5.748	6.378	184 400	25 817	16 970	20	M16X110	261.8	69.5	19.025	17.469	15.985	
280x355	11.024	13.976	0.0035	6.496	6.969	7.756	265 536	26 832	16 970	18	M20X130	508.9	105.8	20.781	19.082	17.460	
300x375	11.811	14.764	0.0035	6.496	6.969	7.756	315 693	27 848	17 840	20	M20X130	508.9	112.5	22.457	20.505	18.663	
320x405	12.598	15.945	0.0035	6.496	6.969	7.756	354 048	27 268	17 260	21	M20X130	508.9	136.7	23.887	21.894	19.998	
340x425	13.386	16.732	0.0035	6.496	6.969	7.756	393 878	26 977	17 260	22	M20X130	508.9	145.5	25.067	22.975	20.986	
360x455	14.173	17.913	0.0035	7.480	7.953	8.819	494 192	25 527	16 680	21	M22X150	686.0	200.7	26.436	24.319	22.291	
380x475	14.961	18.701	0.0035	7.480	7.953	8.819	547 299	25 382	16 680	22	M22X150	686.0	209.5	27.598	25.388	23.271	
400x495	15.748	19.488	0.0035	7.480	7.953	8.819	628 435	26 252	17 405	24	M22X150	686.0	220.5	29.306	26.835	24.490	
420x515	16.535	20.276	0.0035	7.480	7.953	8.819	659 414	25 092	16 825	24	M22X150	686.0	229.3	30.034	27.604	25.280	
440x535	17.323	21.063	0.0035	7.480	7.953	8.819	691 131	23 932	16 244	24	M22X150	686.0	240.3	30.739	28.354	26.057	
460x555	18.110	21.850	0.0035	7.480	7.953	8.819	722 848	22 916	15 519	24	M22X150	686.0	249.2	31.307	29.005	26.768	
480x575	18.898	22.638	0.0035	7.480	7.953	8.819	885 120	25 527	17 550	28	M22X150	686.0	260.2	34.172	31.261	28.505	
500x595	19.685	23.425	0.004	7.480	7.953	8.819	914 624	24 512	16 970	28	M22X150	686.0	269.0	34.830	31.982	29.265	
520x615	20.472	24.213	0.004	7.480	7.953	8.819	1025 264	25 237	17 550	30	M22X150	686.0	277.8	36.550	33.436	30.488	
540x635	21.260	25.000	0.004	7.480	7.953	8.819	1062 144	24 367	16 970	30	M22X150	686.0	288.9	37.172	34.132	31.232	
560x655	22.047	25.787	0.005	7.480	7.953	8.819	1172 784	24 947	17 550	32	M22X150	686.0	297.7	38.927	35.611	32.470	
580x675	22.835	26.575	0.005	7.480	7.953	8.819	1257 608	24 947	17 550	33	M22X150	686.0	308.7	40.115	36.698	33.462	
600x695	23.622	27.362	0.005	7.480	7.953	8.819	1298 176	24 077	17 115	33	M22X150	686.0	317.5	40.838	37.464	34.250	

Other sizes available upon request.