

REV. C

SAE MA3331

FEDERAL SUPPLY CLASS

RATIONALE

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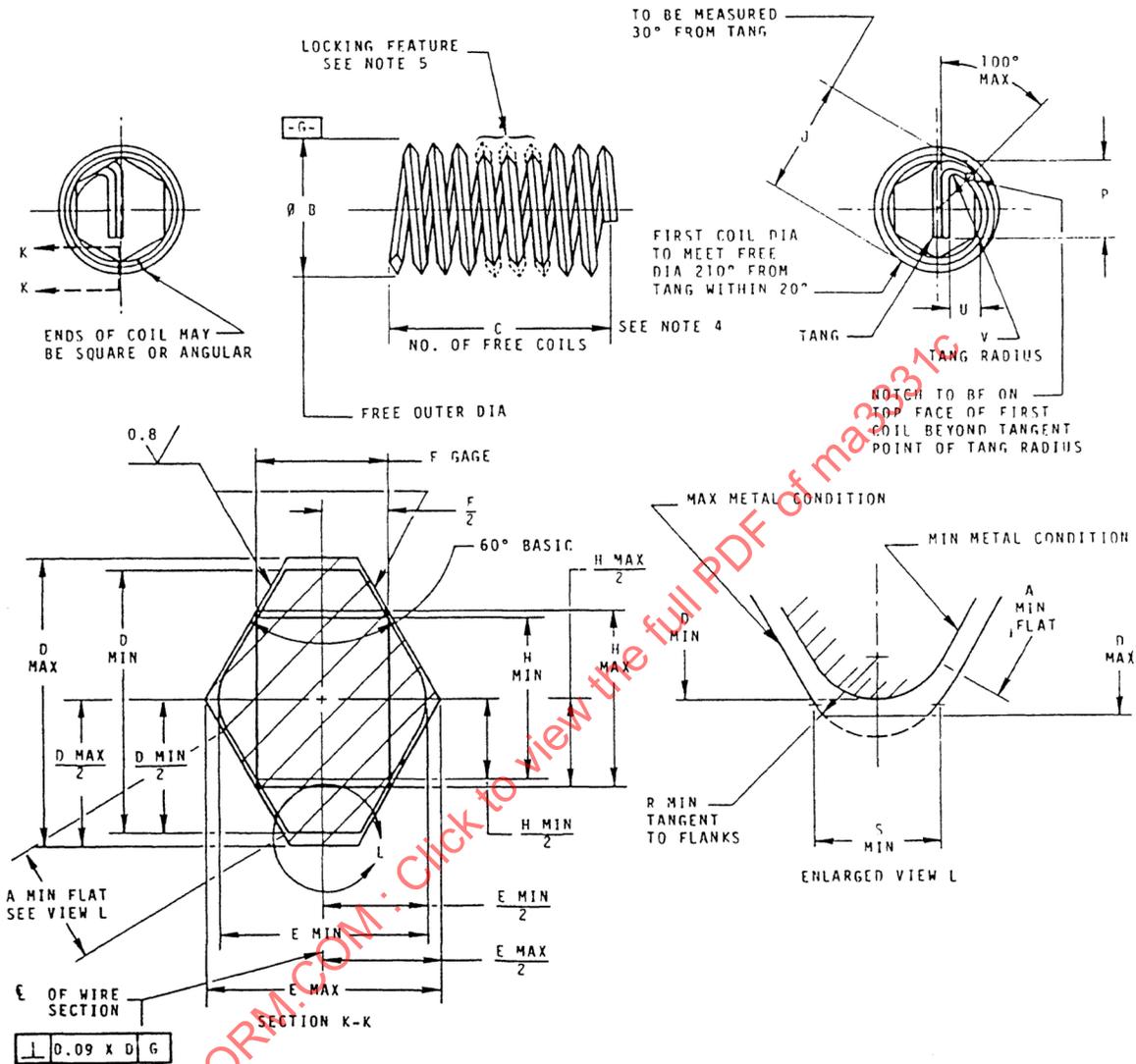
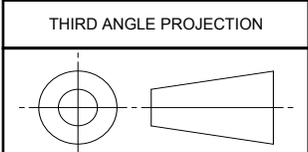


FIGURE 1

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CUSTODIAN: E-25

PROCUREMENT SPECIFICATION: NONE

SAE Aerospace
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METRIC AEROSPACE STANDARD

INSERT, SCREW THREAD, HELICAL COIL, METRIC SERIES, SCREW LOCKING, CRES, CADMIUM PLATED

SAE MA3331
SHEET 1 OF 5

REV. C

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ISSUED 1981-09 REVISED 1995-12 REAFFIRMED 2012-12

TABLE 1

THREAD SIZE DIA	THREAD PITCH	AEROSPACE STANDARD		AEROSPACE STANDARD		AEROSPACE STANDARD		AEROSPACE STANDARD		NOMINAL LENGTH		NOMINAL LENGTH		NOMINAL LENGTH		NOMINAL LENGTH		
		1 DIA	1.5 DIA	2 DIA	2.5 DIA	3 DIA	3 DIA	3 DIA	3 DIA	NOTE 1	NOTE 1	NOTE 1						
2	0.4	MA3331-100	MA3331-190	MA3331-240	MA3331-290	MA3331-340	MA3331-390	MA3331-440	MA3331-490	MA3331-540	MA3331-590	MA3331-640	MA3331-690	MA3331-740	MA3331-790	MA3331-840	MA3331-890	MA3331-940
2	0.45	MA3331-101	MA3331-151	MA3331-201	MA3331-251	MA3331-301	MA3331-351	MA3331-401	MA3331-451	MA3331-501	MA3331-551	MA3331-601	MA3331-651	MA3331-701	MA3331-751	MA3331-801	MA3331-851	MA3331-901
3	0.5	MA3331-102	MA3331-152	MA3331-202	MA3331-252	MA3331-302	MA3331-352	MA3331-402	MA3331-452	MA3331-502	MA3331-552	MA3331-602	MA3331-652	MA3331-702	MA3331-752	MA3331-802	MA3331-852	MA3331-902
3	0.6	MA3331-103	MA3331-153	MA3331-203	MA3331-253	MA3331-303	MA3331-353	MA3331-403	MA3331-453	MA3331-503	MA3331-553	MA3331-603	MA3331-653	MA3331-703	MA3331-753	MA3331-803	MA3331-853	MA3331-903
4	0.7	MA3331-104	MA3331-154	MA3331-204	MA3331-254	MA3331-304	MA3331-354	MA3331-404	MA3331-454	MA3331-504	MA3331-554	MA3331-604	MA3331-654	MA3331-704	MA3331-754	MA3331-804	MA3331-854	MA3331-904
5	0.8	MA3331-105	MA3331-155	MA3331-205	MA3331-255	MA3331-305	MA3331-355	MA3331-405	MA3331-455	MA3331-505	MA3331-555	MA3331-605	MA3331-655	MA3331-705	MA3331-755	MA3331-805	MA3331-855	MA3331-905
6	1	MA3331-106	MA3331-156	MA3331-206	MA3331-256	MA3331-306	MA3331-356	MA3331-406	MA3331-456	MA3331-506	MA3331-556	MA3331-606	MA3331-656	MA3331-706	MA3331-756	MA3331-806	MA3331-856	MA3331-906
7	1	MA3331-107	MA3331-157	MA3331-207	MA3331-257	MA3331-307	MA3331-357	MA3331-407	MA3331-457	MA3331-507	MA3331-557	MA3331-607	MA3331-657	MA3331-707	MA3331-757	MA3331-807	MA3331-857	MA3331-907
8	1	MA3331-108	MA3331-158	MA3331-208	MA3331-258	MA3331-308	MA3331-358	MA3331-408	MA3331-458	MA3331-508	MA3331-558	MA3331-608	MA3331-658	MA3331-708	MA3331-758	MA3331-808	MA3331-858	MA3331-908
8	1.25	MA3331-109	MA3331-159	MA3331-209	MA3331-259	MA3331-309	MA3331-359	MA3331-409	MA3331-459	MA3331-509	MA3331-559	MA3331-609	MA3331-659	MA3331-709	MA3331-759	MA3331-809	MA3331-859	MA3331-909
10	1	MA3331-141	MA3331-191	MA3331-241	MA3331-291	MA3331-341	MA3331-391	MA3331-441	MA3331-491	MA3331-541	MA3331-591	MA3331-641	MA3331-691	MA3331-741	MA3331-791	MA3331-841	MA3331-891	MA3331-941
10	1.25	MA3331-110	MA3331-160	MA3331-210	MA3331-260	MA3331-310	MA3331-360	MA3331-410	MA3331-460	MA3331-510	MA3331-560	MA3331-610	MA3331-660	MA3331-710	MA3331-760	MA3331-810	MA3331-860	MA3331-910
10	1.5	MA3331-111	MA3331-161	MA3331-211	MA3331-261	MA3331-311	MA3331-361	MA3331-411	MA3331-461	MA3331-511	MA3331-561	MA3331-611	MA3331-661	MA3331-711	MA3331-761	MA3331-811	MA3331-861	MA3331-911
12	1.25	MA3331-112	MA3331-162	MA3331-212	MA3331-262	MA3331-312	MA3331-362	MA3331-412	MA3331-462	MA3331-512	MA3331-562	MA3331-612	MA3331-662	MA3331-712	MA3331-762	MA3331-812	MA3331-862	MA3331-912
12	1.5	MA3331-113	MA3331-163	MA3331-213	MA3331-263	MA3331-313	MA3331-363	MA3331-413	MA3331-463	MA3331-513	MA3331-563	MA3331-613	MA3331-663	MA3331-713	MA3331-763	MA3331-813	MA3331-863	MA3331-913
12	1.75	MA3331-114	MA3331-164	MA3331-214	MA3331-264	MA3331-314	MA3331-364	MA3331-414	MA3331-464	MA3331-514	MA3331-564	MA3331-614	MA3331-664	MA3331-714	MA3331-764	MA3331-814	MA3331-864	MA3331-914
14	1.5	MA3331-115	MA3331-165	MA3331-215	MA3331-265	MA3331-315	MA3331-365	MA3331-415	MA3331-465	MA3331-515	MA3331-565	MA3331-615	MA3331-665	MA3331-715	MA3331-765	MA3331-815	MA3331-865	MA3331-915
14	2	MA3331-116	MA3331-166	MA3331-216	MA3331-266	MA3331-316	MA3331-366	MA3331-416	MA3331-466	MA3331-516	MA3331-566	MA3331-616	MA3331-666	MA3331-716	MA3331-766	MA3331-816	MA3331-866	MA3331-916
16	1.5	MA3331-117	MA3331-167	MA3331-217	MA3331-267	MA3331-317	MA3331-367	MA3331-417	MA3331-467	MA3331-517	MA3331-567	MA3331-617	MA3331-667	MA3331-717	MA3331-767	MA3331-817	MA3331-867	MA3331-917
16	2	MA3331-118	MA3331-168	MA3331-218	MA3331-268	MA3331-318	MA3331-368	MA3331-418	MA3331-468	MA3331-518	MA3331-568	MA3331-618	MA3331-668	MA3331-718	MA3331-768	MA3331-818	MA3331-868	MA3331-918
18	1.5	MA3331-119	MA3331-169	MA3331-219	MA3331-269	MA3331-319	MA3331-369	MA3331-419	MA3331-469	MA3331-519	MA3331-569	MA3331-619	MA3331-669	MA3331-719	MA3331-769	MA3331-819	MA3331-869	MA3331-919
18	2	MA3331-120	MA3331-170	MA3331-220	MA3331-270	MA3331-320	MA3331-370	MA3331-420	MA3331-470	MA3331-520	MA3331-570	MA3331-620	MA3331-670	MA3331-720	MA3331-770	MA3331-820	MA3331-870	MA3331-920
18	2.5	MA3331-121	MA3331-171	MA3331-221	MA3331-271	MA3331-321	MA3331-371	MA3331-421	MA3331-471	MA3331-521	MA3331-571	MA3331-621	MA3331-671	MA3331-721	MA3331-771	MA3331-821	MA3331-871	MA3331-921
20	1.5	MA3331-122	MA3331-172	MA3331-222	MA3331-272	MA3331-322	MA3331-372	MA3331-422	MA3331-472	MA3331-522	MA3331-572	MA3331-622	MA3331-672	MA3331-722	MA3331-772	MA3331-822	MA3331-872	MA3331-922
20	2	MA3331-123	MA3331-173	MA3331-223	MA3331-273	MA3331-323	MA3331-373	MA3331-423	MA3331-473	MA3331-523	MA3331-573	MA3331-623	MA3331-673	MA3331-723	MA3331-773	MA3331-823	MA3331-873	MA3331-923
20	2.5	MA3331-124	MA3331-174	MA3331-224	MA3331-274	MA3331-324	MA3331-374	MA3331-424	MA3331-474	MA3331-524	MA3331-574	MA3331-624	MA3331-674	MA3331-724	MA3331-774	MA3331-824	MA3331-874	MA3331-924
22	1.5	MA3331-125	MA3331-175	MA3331-225	MA3331-275	MA3331-325	MA3331-375	MA3331-425	MA3331-475	MA3331-525	MA3331-575	MA3331-625	MA3331-675	MA3331-725	MA3331-775	MA3331-825	MA3331-875	MA3331-925
22	2	MA3331-126	MA3331-176	MA3331-226	MA3331-276	MA3331-326	MA3331-376	MA3331-426	MA3331-476	MA3331-526	MA3331-576	MA3331-626	MA3331-676	MA3331-726	MA3331-776	MA3331-826	MA3331-876	MA3331-926
22	2.5	MA3331-127	MA3331-177	MA3331-227	MA3331-277	MA3331-327	MA3331-377	MA3331-427	MA3331-477	MA3331-527	MA3331-577	MA3331-627	MA3331-677	MA3331-727	MA3331-777	MA3331-827	MA3331-877	MA3331-927
24	2	MA3331-128	MA3331-178	MA3331-228	MA3331-278	MA3331-328	MA3331-378	MA3331-428	MA3331-478	MA3331-528	MA3331-578	MA3331-628	MA3331-678	MA3331-728	MA3331-778	MA3331-828	MA3331-878	MA3331-928
24	3	MA3331-129	MA3331-179	MA3331-229	MA3331-279	MA3331-329	MA3331-379	MA3331-429	MA3331-479	MA3331-529	MA3331-579	MA3331-629	MA3331-679	MA3331-729	MA3331-779	MA3331-829	MA3331-879	MA3331-929
27	2	MA3331-130	MA3331-180	MA3331-230	MA3331-280	MA3331-330	MA3331-380	MA3331-430	MA3331-480	MA3331-530	MA3331-580	MA3331-630	MA3331-680	MA3331-730	MA3331-780	MA3331-830	MA3331-880	MA3331-930
27	3	MA3331-131	MA3331-181	MA3331-231	MA3331-281	MA3331-331	MA3331-381	MA3331-431	MA3331-481	MA3331-531	MA3331-581	MA3331-631	MA3331-681	MA3331-731	MA3331-781	MA3331-831	MA3331-881	MA3331-931
30	2	MA3331-132	MA3331-182	MA3331-232	MA3331-282	MA3331-332	MA3331-382	MA3331-432	MA3331-482	MA3331-532	MA3331-582	MA3331-632	MA3331-682	MA3331-732	MA3331-782	MA3331-832	MA3331-882	MA3331-932
30	3	MA3331-133	MA3331-183	MA3331-233	MA3331-283	MA3331-333	MA3331-383	MA3331-433	MA3331-483	MA3331-533	MA3331-583	MA3331-633	MA3331-683	MA3331-733	MA3331-783	MA3331-833	MA3331-883	MA3331-933
33	2	MA3331-134	MA3331-184	MA3331-234	MA3331-284	MA3331-334	MA3331-384	MA3331-434	MA3331-484	MA3331-534	MA3331-584	MA3331-634	MA3331-684	MA3331-734	MA3331-784	MA3331-834	MA3331-884	MA3331-934
33	3	MA3331-135	MA3331-185	MA3331-235	MA3331-285	MA3331-335	MA3331-385	MA3331-435	MA3331-485	MA3331-535	MA3331-585	MA3331-635	MA3331-685	MA3331-735	MA3331-785	MA3331-835	MA3331-885	MA3331-935
36	2	MA3331-136	MA3331-186	MA3331-236	MA3331-286	MA3331-336	MA3331-386	MA3331-436	MA3331-486	MA3331-536	MA3331-586	MA3331-636	MA3331-686	MA3331-736	MA3331-786	MA3331-836	MA3331-886	MA3331-936
36	3	MA3331-137	MA3331-187	MA3331-237	MA3331-287	MA3331-337	MA3331-387	MA3331-437	MA3331-487	MA3331-537	MA3331-587	MA3331-637	MA3331-687	MA3331-737	MA3331-787	MA3331-837	MA3331-887	MA3331-937
39	2	MA3331-138	MA3331-188	MA3331-238	MA3331-288	MA3331-338	MA3331-388	MA3331-438	MA3331-488	MA3331-538	MA3331-588	MA3331-638	MA3331-688	MA3331-738	MA3331-788	MA3331-838	MA3331-888	MA3331-938
39	3	MA3331-139	MA3331-189	MA3331-239	MA3331-289	MA3331-339	MA3331-389	MA3331-439	MA3331-489	MA3331-539	MA3331-589	MA3331-639	MA3331-689	MA3331-739	MA3331-789	MA3331-839	MA3331-889	MA3331-939

TABLE 1 (CONTINUED)

THREAD SIZE	THREAD SIZE PITCH	C ± .25		C ± .25		C ± .25		C ± .25		D MIN	D MAX	E MIN	E MAX	F GAGE	H MIN	H MAX	J MIN	J MAX
		COIL 1 DIA	COIL 1.5 DIA	COIL 2 DIA	COIL 2.5 DIA	COIL 3 DIA	COIL 3 DIA	MIN	MAX									
2	0.4	—	5.500	7.750	10.125	12.375	12.375	0.389	0.433	0.274	0.350	0.200	0.2495	0.2600	2.50	2.70		
2.2	0.45	3.125	5.375	7.625	9.875	12.125	12.125	0.437	0.487	0.318	0.394	0.225	0.2820	0.2920	2.60	2.80		
2.5	0.45	3.375	5.750	8.125	10.500	12.750	12.750	0.437	0.487	0.318	0.394	0.225	0.2820	0.2920	3.05	3.65		
3	0.5	3.750	6.375	8.875	11.375	13.875	13.875	0.482	0.541	0.362	0.438	0.250	0.3145	0.3250	3.60	4.30		
3.5	0.6	3.750	6.375	8.750	11.375	13.750	13.750	0.586	0.650	0.449	0.525	0.300	0.3795	0.3900	4.25	4.90		
4	0.7	3.625	6.125	8.625	11.125	13.625	13.625	0.683	0.758	0.510	0.612	0.350	0.4445	0.4550	4.90	5.55		
5	0.8	4.125	6.875	9.625	12.375	15.125	15.125	0.775	0.866	0.598	0.700	0.400	0.5085	0.5200	6.10	6.75		
6	1	4.000	6.750	9.500	12.125	14.875	14.875	0.975	1.083	0.748	0.875	0.500	0.6370	0.6500	7.25	7.90		
7	1	4.875	8.000	11.125	14.125	17.250	17.250	0.975	1.083	0.748	0.875	0.500	0.6370	0.6500	8.40	9.15		
8	1	5.875	9.375	13.000	16.500	20.125	20.125	0.975	1.083	0.748	0.875	0.500	0.6370	0.6500	9.20	9.65		
8	1.25	4.500	7.375	10.250	13.250	16.125	16.125	1.251	1.353	0.967	1.094	0.625	0.7990	0.8120	9.50	9.90		
10	1	7.625	12.000	16.500	21.000	25.500	25.500	0.975	1.083	0.748	0.875	0.500	0.6370	0.6500	11.10	11.55		
10	1.25	5.875	9.500	13.125	16.750	20.375	20.375	1.251	1.353	0.967	1.094	0.625	0.7990	0.8120	11.50	11.95		
10	1.5	4.875	8.000	11.125	14.625	17.375	17.375	1.522	1.624	1.160	1.312	0.750	0.9615	0.9740	11.80	12.25		
12	1.25	7.250	11.625	15.875	20.250	24.500	24.500	1.251	1.353	0.967	1.094	0.625	0.7990	0.8120	13.50	14.00		
12	1.5	6.000	9.625	13.375	17.000	20.750	20.750	1.522	1.624	1.160	1.312	0.750	0.9615	0.9740	13.80	14.30		
12	1.75	5.000	8.250	11.500	14.625	17.875	17.875	1.792	1.894	1.379	1.531	0.875	1.1240	1.1370	14.10	14.60		
14	1.5	7.125	11.375	15.625	20.000	24.250	24.250	1.522	1.624	1.160	1.312	0.750	0.9615	0.9740	15.80	16.30		
14	2	5.125	8.500	11.750	15.000	18.375	18.375	2.063	2.165	1.598	1.750	1.000	1.2865	1.2990	16.40	16.90		
16	1.5	8.250	13.125	18.000	22.750	27.625	27.625	1.522	1.624	1.160	1.312	0.750	0.9615	0.9740	17.80	18.30		
16	2	6.125	9.750	13.500	17.250	21.000	21.000	2.063	2.165	1.598	1.750	1.000	1.2865	1.2990	18.40	18.90		
18	1.5	9.500	15.000	20.375	25.875	31.375	31.375	1.522	1.624	1.160	1.312	0.750	0.9615	0.9740	19.80	20.35		
18	2	7.000	11.125	15.375	19.500	23.625	23.625	2.063	2.165	1.598	1.750	1.000	1.2865	1.2990	20.40	20.95		
18	2.5	5.375	8.875	12.250	15.625	19.000	19.000	2.604	2.706	1.998	2.188	1.250	1.6110	1.6240	20.90	21.45		
20	1.5	10.750	16.875	22.875	28.875	35.000	35.000	1.522	1.624	1.160	1.312	0.750	0.9615	0.9740	21.80	22.50		
20	2	7.875	12.500	17.250	21.875	26.500	26.500	2.063	2.165	1.598	1.750	1.000	1.2865	1.2990	22.40	23.10		
20	2.5	6.125	9.875	13.625	17.375	21.125	21.125	2.604	2.706	1.998	2.188	1.250	1.6110	1.6240	22.90	23.60		
22	1.5	11.875	18.500	25.125	31.625	38.250	38.250	1.522	1.624	1.160	1.312	0.750	0.9615	0.9740	24.10	24.80		
22	2	8.750	13.750	18.875	23.875	29.000	29.000	2.063	2.165	1.598	1.750	1.000	1.2865	1.2990	24.40	25.10		
22	2.5	6.750	10.875	14.875	19.000	23.125	23.125	2.604	2.706	1.998	2.188	1.250	1.6110	1.6240	24.90	25.60		
24	2	9.500	15.000	20.375	25.875	31.250	31.250	2.063	2.165	1.598	1.750	1.000	1.2865	1.2990	26.40	27.10		
24	3	6.125	10.000	13.750	17.500	21.375	21.375	3.146	3.248	2.396	2.625	1.500	1.9360	1.9485	27.50	28.20		
27	2	10.875	17.000	23.250	29.375	35.500	35.500	2.063	2.165	1.598	1.750	1.000	1.2865	1.2990	29.40	30.10		
27	3	7.000	11.250	15.500	19.750	24.000	24.000	3.146	3.248	2.396	2.625	1.500	1.9360	1.9485	30.50	31.20		
30	2	12.250	19.125	25.875	32.750	39.500	39.500	2.063	2.165	1.598	1.750	1.000	1.2865	1.2990	32.50	33.20		
30	3	7.875	12.500	17.125	21.875	26.500	26.500	3.146	3.248	2.396	2.625	1.500	1.9360	1.9485	33.50	34.20		
33	2	13.625	21.125	28.625	36.000	43.500	43.500	2.063	2.165	1.598	1.750	1.000	1.2865	1.2990	35.80	36.50		
33	3	8.750	13.875	19.000	24.125	29.250	29.250	3.146	3.248	2.396	2.625	1.500	1.9360	1.9485	36.50	37.20		
36	2	15.000	23.250	31.375	39.500	47.750	47.750	2.063	2.165	1.598	1.750	1.000	1.2865	1.2990	39.00	39.70		
36	3	9.750	15.250	20.875	26.500	32.000	32.000	3.146	3.248	2.396	2.625	1.500	1.9360	1.9485	39.50	40.20		
39	2	16.375	25.250	34.125	43.000	51.875	51.875	2.063	2.165	1.598	1.750	1.000	1.2865	1.2990	42.30	43.00		
39	3	10.750	16.750	22.750	28.875	34.875	34.875	3.146	3.248	2.396	2.625	1.500	1.9360	1.9485	42.30	43.20		

TABLE 1 (CONTINUED)

THREAD SIZE DIA	THREAD SIZE PITCH	P		R		S		U		V		APPROXIMATE MASS, KILOGRAMS/100		APPROXIMATE MASS, KILOGRAMS/100		APPROXIMATE MASS, KILOGRAMS/100	
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	1 DIA	1.5 DIA	2 DIA	2.5 DIA	3 DIA	3 DIA
2	0.4	1.30	1.90	0.072	0.125	0.125	0.66	0.37	0.22	0.003	0.005	0.007	0.008				
2.2	0.45	1.40	2.00	0.081	0.141	0.141	0.91	0.62	0.25	0.004	0.006	0.008	0.009				
2.5	0.45	1.60	2.25	0.081	0.141	0.141	1.22	0.81	0.30	0.003	0.006	0.010	0.012				
3	0.5	1.95	2.80	0.090	0.156	0.156	1.33	0.86	0.30	0.006	0.012	0.016	0.019				
3.5	0.6	2.20	3.00	0.108	0.188	0.188	1.47	0.92	0.30	0.009	0.020	0.026	0.031				
4	0.7	2.50	3.55	0.126	0.219	0.219	1.67	1.02	0.45	0.014	0.031	0.039	0.048				
5	0.8	3.15	4.55	0.144	0.250	0.250	2.09	1.41	0.60	0.025	0.055	0.070	0.085				
6	1	3.70	4.85	0.180	0.312	0.312	2.55	1.65	0.60	0.044	0.099	0.126	0.153				
7	1	4.30	5.50	0.180	0.312	0.312	3.10	2.09	0.75	0.062	0.136	0.173	0.210				
8	1	4.75	6.50	0.180	0.312	0.312	3.88	2.27	0.75	0.083	0.180	0.228	0.277				
8	1.25	4.75	6.50	0.226	0.391	0.391	3.60	2.02	0.75	0.100	0.221	0.281	0.342				
10	1	5.50	8.00	0.180	0.312	0.312	4.90	2.95	0.75	0.136	0.288	0.362	0.439				
10	1.25	5.50	8.00	0.226	0.391	0.391	4.77	2.86	0.75	0.162	0.352	0.446	0.541				
10	1.5	5.50	8.00	0.271	0.469	0.469	4.54	2.56	0.75	0.188	0.416	0.530	0.643				
12	1.25	6.70	9.75	0.226	0.391	0.391	5.84	3.77	1.00	0.240	0.512	0.649	0.785				
12	1.5	6.70	9.75	0.271	0.469	0.469	5.58	3.50	1.20	0.281	0.608	0.772	0.935				
12	1.75	6.70	9.75	0.316	0.547	0.547	5.36	3.23	1.40	0.318	0.700	0.890	1.081				
14	1.5	7.20	11.25	0.271	0.469	0.469	6.76	4.34	1.15	0.391	0.836	1.059	1.282				
14	2	7.20	11.25	0.361	0.625	0.625	6.26	3.79	1.40	0.497	1.091	1.368	1.685				
16	1.5	8.30	12.75	0.271	0.469	0.469	7.79	5.32	1.45	0.519	1.101	1.392	1.682				
16	2	8.30	12.75	0.361	0.625	0.625	7.00	4.76	2.70	0.665	1.441	1.828	2.216				
18	1.5	9.30	14.00	0.271	0.469	0.469	8.83	6.26	1.75	0.665	1.401	1.769	2.137				
18	2	9.30	14.00	0.361	0.625	0.625	8.30	5.74	2.70	0.856	1.838	2.328	2.819				
18	2.5	9.30	14.00	0.451	0.781	0.781	7.79	5.20	2.85	1.031	2.258	2.872	3.486				
20	1.5	10.40	14.50	0.271	0.469	0.469	9.77	7.19	2.85	0.830	1.284	1.739	2.247				
20	2	10.40	14.50	0.361	0.625	0.625	9.40	6.65	2.85	1.072	2.284	2.890	3.495				
20	2.5	10.40	14.50	0.451	0.781	0.781	8.89	6.11	2.85	1.297	2.812	3.569	4.326				
22	1.5	11.40	16.00	0.271	0.469	0.469	11.10	8.01	2.85	1.013	1.563	2.113	2.662				
22	2	11.40	16.00	0.361	0.625	0.625	10.45	7.61	2.85	1.313	2.046	2.779	3.512				
22	2.5	11.40	16.00	0.451	0.781	0.781	9.94	7.07	2.85	1.593	2.510	3.426	4.245				
24	2	12.50	16.50	0.361	0.625	0.625	11.46	8.60	2.85	1.576	2.448	3.321	4.193				
24	3	12.50	16.50	0.541	0.938	0.938	10.45	7.51	2.85	2.239	3.548	4.857	6.166				
27	2	14.00	17.50	0.361	0.625	0.625	13.14	9.93	2.85	2.017	3.121	4.225	5.329				
27	3	14.00	17.50	0.541	0.938	0.938	12.13	8.85	2.85	2.864	4.540	6.196	7.853				
30	2	15.00	19.00	0.361	0.625	0.625	14.81	11.26	2.85	2.513	3.876	5.238	6.601				
30	3	15.00	19.00	0.541	0.938	0.938	13.65	10.32	2.85	3.611	5.656	7.700	9.745				
33	2	17.00	21.00	0.361	0.625	0.625	16.35	12.74	2.85	3.063	4.712	6.361	8.010				
33	3	17.00	21.00	0.541	0.938	0.938	15.19	11.78	2.85	4.420	6.894	9.367	11.841				
36	2	18.50	22.50	0.361	0.625	0.625	17.77	14.29	2.85	3.671	5.633	7.595	9.557				
36	3	18.50	22.50	0.541	0.938	0.938	16.73	13.23	2.85	5.316	8.260	11.204	14.147				
39	2	20.00	24.00	0.361	0.625	0.625	19.28	15.77	2.85	4.331	6.634	8.936	11.239				
39	3	20.00	24.00	0.541	0.938	0.938	18.28	14.68	2.85	6.290	9.745	13.200	16.654				