

REV. B

MA3281

FEDERAL SUPPLY CLASS

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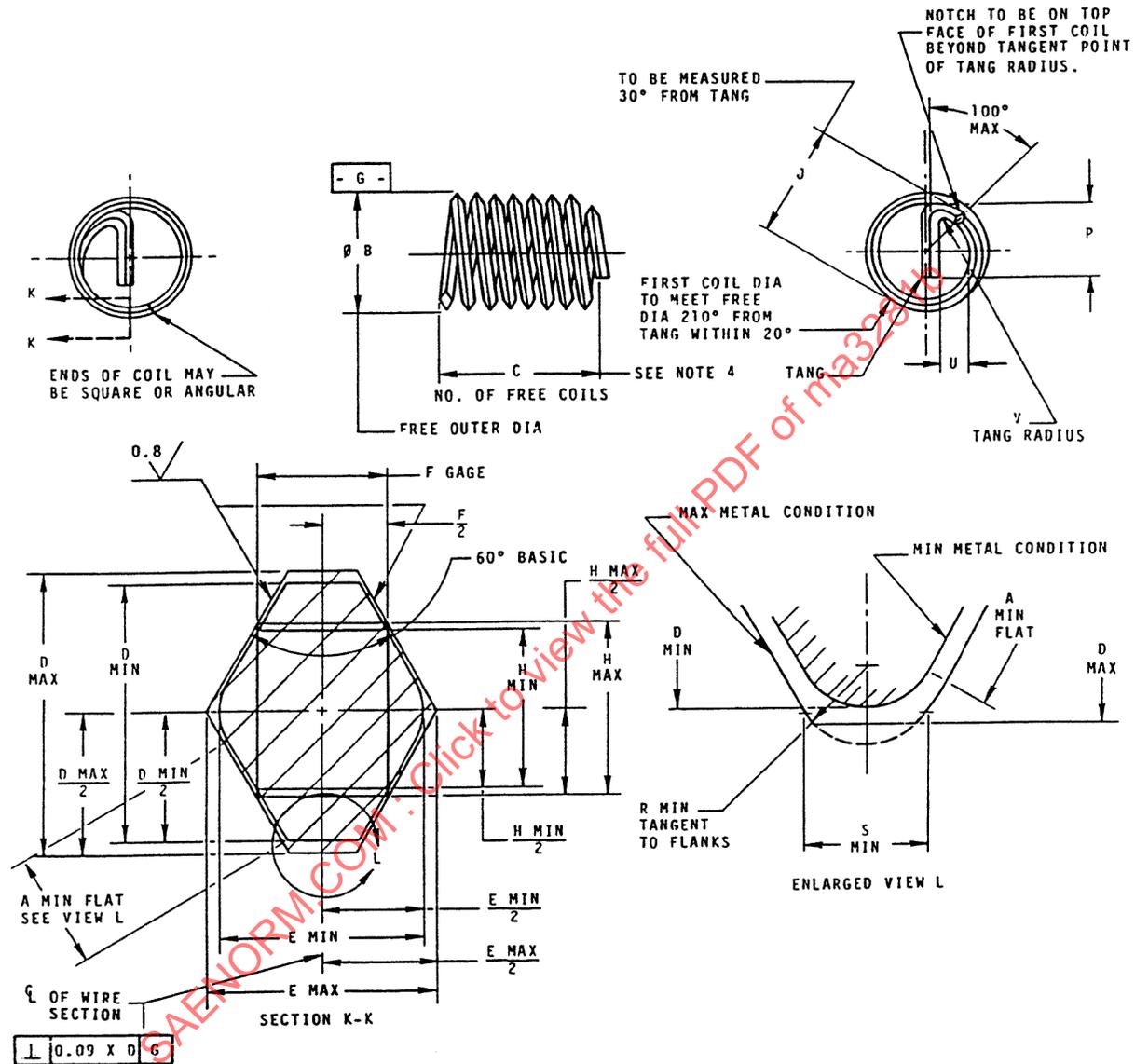
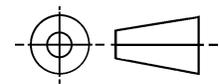


FIGURE 1

THIRD ANGLE PROJECTION



PREPARED BY SAE COMMITTEE E-25, GENERAL STANDARDS FOR AEROSPACE PROPULSION SYSTEMS

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**METRIC AEROSPACE STANDARD**

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**MA3281**  
SHEET 1 OF 5

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ISSUED 1981-09 REVISED 1995-12 REAFFIRMED 2006-05



TABLE 1 (CONTINUED)

THREAD SIZE D/A	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	3.250	5.500	7.750	10.125	12.375	12.375	0.389	0.433	0.274	0.350	0.2495	0.2600	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	0.2820	0.2920	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	0.2820	0.2920	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	0.3145	0.3250	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	0.3795	0.3900	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	0.4445	0.4550	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	0.5085	0.5200	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	0.6370	0.6500	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	0.6370	0.6500	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	0.6370	0.6500	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	0.7990	0.8120	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	0.6370	0.6500	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	0.7990	0.8120	0.625	0.7990	0.8120	11.50	11.95
10	1.5	4.875	8.000	11.125	14.250	17.375	17.375	1.522	1.624	1.160	1.312	0.9615	0.9740	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	0.7990	0.8120	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	0.9615	0.9740	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	1.1240	1.1370	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	0.9615	0.9740	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	1.2865	1.2990	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	0.9615	0.9740	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	1.2865	1.2990	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	0.9615	0.9740	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	1.2865	1.2990	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	1.6110	1.6240	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	0.9615	0.9740	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	1.2865	1.2990	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	1.6110	1.6240	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	0.9615	0.9740	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	1.2865	1.2990	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	1.6110	1.6240	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	1.2865	1.2990	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	1.9360	1.9485	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	1.2865	1.2990	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	1.9360	1.9485	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	1.2865	1.2990	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	1.9360	1.9485	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	1.2865	1.2990	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	1.9360	1.9485	1.500	1.9360	1.9485	37.20	37.90
36	2	15.000	23.250	31.375	39.500	47.750	47.750	2.063	2.165	1.598	1.750	1.2865	1.2990	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	1.9360	1.9485	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	1.2865	1.2990	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	1.9360	1.9485	1.500	1.9360	1.9485	42.50	43.20

TABLE 1 (CONTINUED)

THREAD SIZE DIA	THREAD SIZE PITCH	P		R		S		U		V MAX	APPROX- MATE MASS, KILO- GRAMS/100		APPROX- MATE MASS, KILO- GRAMS/100		APPROX- MATE MASS, KILO- GRAMS/100	
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX		1.5 DIA	2.5 DIA	1.5 DIA	2.5 DIA	1.5 DIA	2.5 DIA
2	0.4	1.30	1.90	0.072	0.125	0.37	0.66	0.002	0.003	0.005	0.007	0.008	0.008	0.009	0.012	0.012
2.2	0.45	1.40	2.00	0.081	0.141	0.62	0.91	0.002	0.004	0.006	0.008	0.008	0.008	0.010	0.012	0.012
2.5	0.45	1.60	2.25	0.081	0.141	0.81	1.22	0.003	0.006	0.008	0.010	0.010	0.010	0.012	0.012	0.012
3	0.5	1.95	2.80	0.090	0.156	0.86	1.33	0.006	0.009	0.012	0.016	0.016	0.016	0.019	0.019	0.019
3.5	0.6	2.20	3.00	0.108	0.188	0.92	1.47	0.009	0.014	0.020	0.026	0.026	0.026	0.031	0.031	0.031
4	0.7	2.50	3.55	0.126	0.219	1.02	1.67	0.014	0.022	0.031	0.039	0.039	0.039	0.048	0.048	0.048
5	0.8	3.15	4.55	0.144	0.250	1.41	2.09	0.025	0.040	0.055	0.070	0.070	0.070	0.085	0.085	0.085
6	1	3.70	4.85	0.160	0.312	1.65	2.55	0.044	0.072	0.099	0.126	0.126	0.126	0.153	0.153	0.153
7	1	4.30	5.50	0.160	0.312	2.09	3.10	0.062	0.099	0.136	0.173	0.173	0.173	0.210	0.210	0.210
8	1	4.75	6.50	0.160	0.312	2.27	3.88	0.083	0.132	0.180	0.228	0.228	0.228	0.277	0.277	0.277
8	1.25	4.75	6.50	0.226	0.391	2.02	3.60	0.100	0.160	0.221	0.281	0.281	0.281	0.342	0.342	0.342
10	1	5.50	8.00	0.180	0.312	2.95	4.90	0.136	0.212	0.288	0.362	0.362	0.362	0.439	0.439	0.439
10	1.25	5.50	8.00	0.226	0.391	2.86	4.77	0.162	0.257	0.352	0.446	0.446	0.446	0.541	0.541	0.541
10	1.5	5.50	8.00	0.271	0.469	2.56	4.54	0.188	0.302	0.416	0.530	0.530	0.530	0.643	0.643	0.643
12	1.25	6.70	9.75	0.226	0.391	3.77	5.84	0.240	0.376	0.512	0.649	0.649	0.649	0.785	0.785	0.785
12	1.5	6.70	9.75	0.271	0.469	3.50	5.58	0.281	0.444	0.608	0.772	0.772	0.772	0.935	0.935	0.935
12	1.75	6.70	9.75	0.316	0.547	3.23	5.36	0.318	0.509	0.700	0.890	0.890	0.890	1.081	1.081	1.081
14	1.5	7.20	11.25	0.271	0.469	4.34	6.76	0.391	0.614	0.836	1.059	1.059	1.059	1.282	1.282	1.282
14	2	7.20	11.25	0.361	0.625	3.79	6.26	0.497	0.784	1.091	1.388	1.388	1.388	1.685	1.685	1.685
16	1.5	8.30	12.75	0.271	0.469	5.32	7.76	0.519	0.810	1.101	1.392	1.392	1.392	1.682	1.682	1.682
16	2	8.30	12.75	0.361	0.625	4.76	7.30	0.665	1.053	1.441	1.828	1.828	1.828	2.216	2.216	2.216
18	1.5	9.30	14.00	0.271	0.469	6.26	8.83	0.665	1.033	1.401	1.769	1.769	1.769	2.137	2.137	2.137
18	2	9.30	14.00	0.361	0.625	5.74	8.30	0.856	1.347	1.838	2.328	2.328	2.328	2.819	2.819	2.819
18	2.5	9.30	14.00	0.451	0.781	5.20	7.79	1.031	1.645	2.258	2.872	2.872	2.872	3.486	3.486	3.486
20	1.5	10.40	14.50	0.271	0.469	7.19	9.77	0.890	1.284	1.739	2.193	2.193	2.193	2.647	2.647	2.647
20	2	10.40	14.50	0.361	0.625	6.65	9.40	1.072	1.678	2.284	2.890	2.890	2.890	3.495	3.495	3.495
20	2.5	10.40	14.50	0.451	0.781	6.11	8.89	1.297	2.054	2.812	3.569	3.569	3.569	4.326	4.326	4.326
22	1.5	11.40	16.00	0.271	0.469	8.01	11.10	1.013	1.563	2.113	2.662	2.662	2.662	3.212	3.212	3.212
22	2	11.40	16.00	0.361	0.625	7.61	10.45	1.313	2.046	2.779	3.512	3.512	3.512	4.245	4.245	4.245
22	2.5	11.40	16.00	0.451	0.781	7.07	9.94	1.593	2.510	3.426	4.342	4.342	4.342	5.259	5.259	5.259
24	2	12.50	16.50	0.361	0.625	8.60	11.46	1.576	2.448	3.321	4.193	4.193	4.193	5.065	5.065	5.065
24	3	12.50	16.50	0.541	0.938	7.51	10.45	2.239	3.548	4.857	6.166	6.166	6.166	7.474	7.474	7.474
27	2	14.00	17.50	0.361	0.625	9.93	13.14	2.884	4.540	6.196	7.853	7.853	7.853	9.509	9.509	9.509
27	3	14.00	17.50	0.541	0.938	8.85	12.13	3.611	5.656	7.700	9.745	9.745	9.745	11.782	11.782	11.782
30	2	15.00	19.00	0.361	0.625	11.26	14.81	3.611	5.656	7.700	9.745	9.745	9.745	11.782	11.782	11.782
30	3	15.00	19.00	0.541	0.938	10.32	13.65	4.420	6.894	9.367	11.841	11.841	11.841	14.315	14.315	14.315
33	2	17.00	21.00	0.361	0.625	12.74	16.35	4.420	6.894	9.367	11.841	11.841	11.841	14.315	14.315	14.315
33	3	17.00	21.00	0.541	0.938	11.78	15.19	5.316	8.260	11.204	14.147	14.147	14.147	17.091	17.091	17.091
36	2	18.50	22.50	0.361	0.625	14.29	17.77	5.316	8.260	11.204	14.147	14.147	14.147	17.091	17.091	17.091
36	3	18.50	22.50	0.541	0.938	13.23	16.73	6.280	9.745	13.200	16.654	16.654	16.654	20.109	20.109	20.109
39	2	20.00	24.00	0.361	0.625	15.77	19.28	6.280	9.745	13.200	16.654	16.654	16.654	20.109	20.109	20.109
39	3	20.00	24.00	0.541	0.938	14.68	18.28	7.280	10.745	14.680	18.654	18.654	18.654	22.609	22.609	22.609