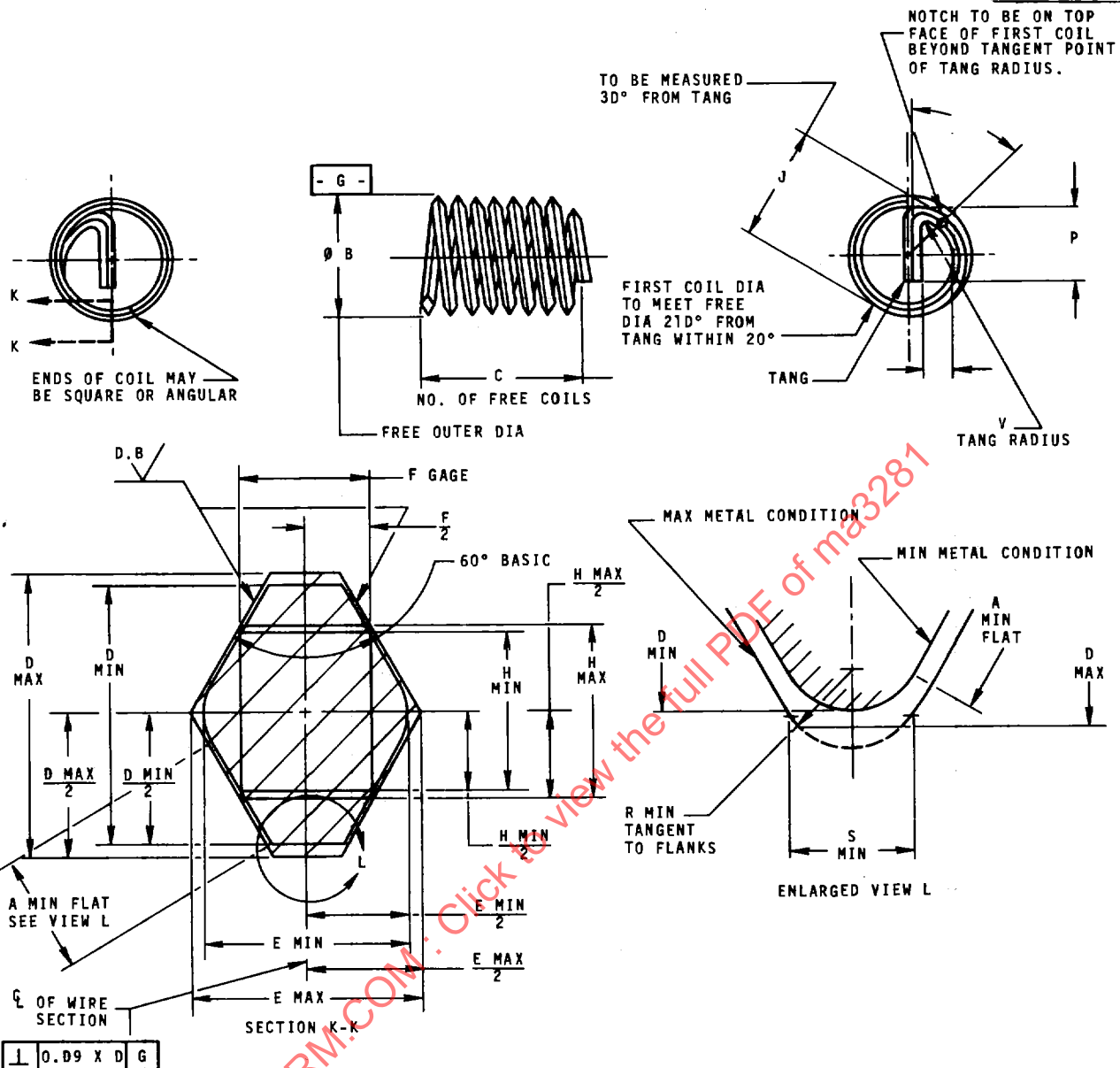


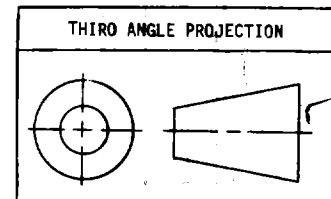
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FED SUP CLASS
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1. NOMINAL LENGTH H IS REFERENCE AND EQUALS MINIMUM LENGTH OF FULL THREAD INTO WHICH MAXIMUM INSERT CAN BE ASSEMBLED. SEE TABLE.
2. ASSEMBLED LENGTH OF INSERT TO BE AS SPECIFIED ON AEROSPACE STANDARD MA 1567.
3. ASSEMBLED LENGTH OF INSERT TO BE MEASURED FROM NOTCH.
4. NUMBER OF FREE COILS TO BE COUNTED FROM NOTCH.
5. MATERIAL CRES, SEE PROCUREMENT SPECIFICATION.
6. SURFACE TEXTURE: SYMBOLS PER ANSI Y14.36-1978; REQUIREMENTS PER ANSI B46.1-1978.
7. WHEN DRY FILM LUBRICANT IS SPECIFIED IT SHALL BE IN ACCORDANCE WITH MIL-L-8937.
8. WHEN CADMIUM PLATING IS SPECIFIED IT SHALL BE IN ACCORDANCE WITH QQ-P-416, TYPE II, EXCEPT THICKNESS SHALL BE A MAXIMUM OF 0.003 mm.
9. DIMENSIONING AND TOLERANCING: ANSI Y14.5-1973. DIMENSIONS APPLY BEFORE COATING.
10. LINEAR DIMENSIONS IN MILLIMETRES (mm).
11. INSERT CAN BE USED WITH M OR MJ EXTERNAL THREADS.
12. PROCUREMENT SPECIFICATION: MA1565.
13. DO NOT USE UNASSIGNED AEROSPACE STANDARD PART NUMBERS.



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

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AEROSPACE STANDARD

INSERT, SCREW THREAD, HELICAL COIL, METRIC SERIES
FREE RUNNING, CRES

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Revised 3-1-85
Issued 9-1-81

Issued 9-1-81 Revised (A) 3-1-85

AEROSPACE STANDARD PART NUMBER FOR CADMIUM PLATED INSERT												NOMINAL LENGTH See Note 1				A		B	
THREAD SIZE		1 DIA	1.5 DIA	2.0 DIA	2.5 DIA	3 DIA	1 DIA	1.5 DIA	2 DIA	2.5 DIA	3 DIA	MIN	MAX	MIN	MAX				
2.2	0.45	MA3281-100	MA3281-150	MA3281-200	MA3281-250	MA3281-300	2.2	3.3	4.4	5.5	6.6	0.082	2.80	0.082	3.00				
2.5	0.45	MA3281-101	MA3281-151	MA3281-201	MA3281-251	MA3281-301	2.5	3.8	5.0	6.3	7.5	0.082	3.20	0.082	3.70				
3	0.5	MA3281-102	MA3281-152	MA3281-202	MA3281-252	MA3281-302	3.0	4.5	6.0	7.5	9.0	0.105	3.80	0.105	4.35				
3.5	0.6	MA3281-103	MA3281-153	MA3281-203	MA3281-253	MA3281-303	3.5	5.3	7.0	8.8	10.5	0.160	4.40	0.160	4.95				
4	0.7	MA3281-104	MA3281-154	MA3281-204	MA3281-254	MA3281-304	4.0	6.0	8.0	10.0	12.0	0.163	5.05	0.163	5.60				
5	0.8	MA3281-105	MA3281-155	MA3281-205	MA3281-255	MA3281-305	5.0	7.5	10.0	12.5	15.0	0.209	6.25	0.209	6.80				
6	1	MA3281-106	MA3281-156	MA3281-206	MA3281-256	MA3281-306	6.0	9.0	12.0	15.0	18.0	0.267	7.40	0.267	7.95				
7	1	MA3281-107	MA3281-157	MA3281-207	MA3281-257	MA3281-307	7.0	10.5	14.0	17.5	21.0	0.267	8.65	0.267	9.20				
8	1	MA3281-108	MA3281-158	MA3281-208	MA3281-258	MA3281-308	8.0	12.0	16.0	20.0	24.0	0.267	9.70	0.267	10.25				
8	1.25	MA3281-109	MA3281-159	MA3281-209	MA3281-259	MA3281-309	8.0	12.0	16.0	20.0	24.0	0.415	9.80	0.415	10.35				
10	1.25	MA3281-110	MA3281-160	MA3281-210	MA3281-260	MA3281-310	10.0	15.0	20.0	25.0	30.0	0.415	12.10	0.415	12.65				
10	1.5	MA3281-111	MA3281-161	MA3281-211	MA3281-261	MA3281-311	10.0	15.0	20.0	25.0	30.0	0.511	11.95	0.511	12.50				
12	1.25	MA3281-112	MA3281-162	MA3281-212	MA3281-262	MA3281-312	12.0	18.0	24.0	30.0	36.0	0.415	14.30	0.415	15.00				
12	1.5	MA3281-113	MA3281-163	MA3281-213	MA3281-263	MA3281-313	12.0	18.0	24.0	30.0	36.0	0.511	14.25	0.511	14.95				
12	1.75	MA3281-114	MA3281-164	MA3281-214	MA3281-264	MA3281-314	12.0	18.0	24.0	30.0	36.0	0.654	14.30	0.654	15.00				
14	1.5	MA3281-115	MA3281-165	MA3281-215	MA3281-265	MA3281-315	14.0	21.0	28.0	35.0	42.0	0.511	16.55	0.511	17.25				
14	2	MA3281-116	MA3281-166	MA3281-216	MA3281-266	MA3281-316	14.0	21.0	28.0	35.0	42.0	0.799	16.65	0.799	17.35				
16	1.5	MA3281-117	MA3281-167	MA3281-217	MA3281-267	MA3281-317	16.0	24.0	32.0	40.0	48.0	0.511	18.90	0.511	19.60				
16	2	MA3281-118	MA3281-168	MA3281-218	MA3281-268	MA3281-318	16.0	24.0	32.0	40.0	48.0	0.799	18.90	0.799	19.60				
18	1.5	MA3281-119	MA3281-169	MA3281-219	MA3281-269	MA3281-319	18.0	27.0	36.0	45.0	54.0	0.511	21.05	0.511	21.75				
18	2	MA3281-120	MA3281-170	MA3281-220	MA3281-270	MA3281-320	18.0	27.0	36.0	45.0	54.0	0.799	21.15	0.799	21.85				
18	2.5	MA3281-121	MA3281-171	MA3281-221	MA3281-271	MA3281-321	18.0	27.0	36.0	45.0	54.0	1.017	21.30	1.017	22.00				
20	1.5	MA3281-122	MA3281-172	MA3281-222	MA3281-272	MA3281-322	20.0	30.0	40.0	50.0	60.0	0.511	23.15	0.511	24.00				
20	2	MA3281-123	MA3281-173	MA3281-223	MA3281-273	MA3281-323	20.0	30.0	40.0	50.0	60.0	0.799	23.20	0.799	24.05				
20	2.5	MA3281-124	MA3281-174	MA3281-224	MA3281-274	MA3281-324	20.0	30.0	40.0	50.0	60.0	1.017	23.55	1.017	24.40				
22	1.5	MA3281-125	MA3281-175	MA3281-225	MA3281-275	MA3281-325	22.0	33.0	44.0	55.0	66.0	0.511	25.55	0.511	26.45				
22	2	MA3281-126	MA3281-176	MA3281-226	MA3281-276	MA3281-326	22.0	33.0	44.0	55.0	66.0	0.799	25.60	0.799	26.50				
22	2.5	MA3281-127	MA3281-177	MA3281-227	MA3281-277	MA3281-327	22.0	33.0	44.0	55.0	66.0	1.017	25.90	1.017	26.90				
24	2	MA3281-128	MA3281-178	MA3281-228	MA3281-278	MA3281-328	24.0	36.0	48.0	60.0	72.0	0.799	28.10	0.799	29.10				
24	3	MA3281-129	MA3281-179	MA3281-229	MA3281-279	MA3281-329	24.0	36.0	48.0	60.0	72.0	1.234	28.00	1.234	29.00				
27	2	MA3281-130	MA3281-180	MA3281-230	MA3281-280	MA3281-330	27.0	40.5	54.0	67.5	81.0	0.799	31.30	0.799	32.30				
27	3	MA3281-131	MA3281-181	MA3281-231	MA3281-281	MA3281-331	27.0	40.5	54.0	67.5	81.0	1.234	31.40	1.234	32.40				
30	2	MA3281-132	MA3281-182	MA3281-232	MA3281-282	MA3281-332	30.0	45.0	60.0	75.0	90.0	0.799	34.50	0.799	35.70				
30	3	MA3281-133	MA3281-183	MA3281-233	MA3281-283	MA3281-333	30.0	45.0	60.0	75.0	90.0	1.234	34.90	1.234	36.10				
33	2	MA3281-134	MA3281-184	MA3281-234	MA3281-284	MA3281-334	33.0	49.5	66.0	82.5	99.0	0.799	37.80	0.799	39.20				
33	3	MA3281-135	MA3281-185	MA3281-235	MA3281-285	MA3281-335	33.0	49.5	66.0	82.5	99.0	1.234	38.10	1.234	39.50				
36	2	MA3281-136	MA3281-186	MA3281-236	MA3281-286	MA3281-336	36.0	54.0	72.0	90.0	108.0	0.799	41.00	0.799	42.40				
36	3	MA3281-137	MA3281-187	MA3281-237	MA3281-287	MA3281-337	36.0	54.0	72.0	90.0	108.0	1.234	41.30	1.234	42.70				
39	2	MA3281-138	MA3281-188	MA3281-238	MA3281-288	MA3281-338	39.0	58.5	78.0	97.5	117.0	0.799	44.30	0.799	45.70				
39	3	MA3281-139	MA3281-189	MA3281-239	MA3281-289	MA3281-339	39.0	58.5	78.0	97.5	117.0	1.234	44.40	1.234	45.80				

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C ± .25 COIL													FED SUP. CLASS 534D			
THREAD SIZE		D					E		F		H		J		P	
DIA	PITCH	1 DIA	1.5 DIA	2 DIA	2.5 DIA	3 DIA	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
2-2	0.45	3.125	5.375	7.625	9.875	12.125	0.437	0.487	0.318	0.394	0.225	0.2920	2.60	2.80	1.40	2.00
2-5	0.45	3.375	5.750	8.125	10.500	12.750	0.437	0.487	0.318	0.394	0.225	0.2920	3.05	3.65	1.60	2.25
3	0.5	3.750	6.375	8.875	11.375	13.875	0.482	0.541	0.362	0.438	0.250	0.3250	3.60	4.30	1.95	2.80
3-5	0.6	3.750	6.375	8.750	11.375	13.750	0.586	0.650	0.449	0.525	0.300	0.3900	4.25	4.90	2.20	3.00
4	0.7	3.625	6.125	8.625	11.125	13.625	0.583	0.758	0.510	0.612	0.350	0.4550	4.90	5.55	2.50	3.55
5	0.8	4.125	6.875	9.625	12.375	15.125	0.775	0.866	0.598	0.700	0.400	0.5200	6.10	6.75	3.15	4.55
6	1	4.000	6.750	9.500	12.250	14.875	0.975	1.083	0.748	0.875	0.500	0.6500	7.25	7.90	3.70	4.85
7	1	4.875	8.000	11.125	14.125	17.250	0.975	1.083	0.748	0.875	0.500	0.6500	8.40	9.15	4.30	5.50
8	1	5.875	9.375	13.000	16.500	20.125	0.975	1.083	0.748	0.875	0.500	0.6500	9.20	9.90	4.75	6.50
8	1.25	4.500	7.375	10.250	13.250	16.125	1.251	1.353	0.967	1.094	0.625	0.8120	11.50	11.95	5.50	8.00
10	1.25	5.875	9.500	13.125	16.750	20.375	1.251	1.353	0.967	1.094	0.625	0.8120	11.80	12.25	5.50	8.00
10	1.5	4.875	8.000	11.125	14.250	17.375	1.522	1.624	1.160	1.312	0.750	0.9740	13.50	14.00	6.70	9.75
12	1.25	7.250	11.625	15.875	20.250	24.500	1.251	1.353	0.967	1.094	0.625	0.7990	13.80	14.30	6.70	9.75
12	1.5	6.000	9.625	13.375	17.000	20.750	1.522	1.624	1.160	1.312	0.750	0.9740	14.10	14.60	6.70	9.75
12	1.75	5.000	8.250	11.500	14.625	17.875	1.792	1.894	1.379	1.531	0.875	1.1370	15.80	16.30	7.20	11.25
14	1.5	7.125	11.375	15.625	20.000	24.250	1.522	1.624	1.160	1.312	0.750	0.9740	16.40	16.90	7.20	11.25
14	2	5.125	8.500	11.750	15.000	18.375	2.063	2.165	1.598	1.750	1.000	1.2865	17.80	18.30	8.30	12.75
16	1.5	8.250	13.125	18.000	22.750	27.625	1.522	1.624	1.160	1.312	0.750	0.9740	18.40	18.90	8.30	12.75
16	2	6.125	9.750	13.500	17.250	21.000	2.063	2.165	1.598	1.750	1.000	1.2865	19.80	20.35	9.30	14.00
18	1.5	9.500	15.000	20.375	25.875	31.375	1.522	1.624	1.160	1.312	0.750	0.9740	20.40	20.95	9.30	14.00
18	2	7.000	11.125	15.375	19.500	23.625	2.063	2.165	1.598	1.750	1.000	1.2865	21.80	22.40	10.40	14.50
18	2.5	5.375	8.875	12.250	15.625	19.000	2.604	2.706	1.998	2.188	1.250	1.6240	22.90	23.50	10.40	14.50
20	1.5	10.750	16.875	22.875	28.875	35.000	1.522	1.624	1.160	1.312	0.750	0.9740	24.10	24.80	11.40	16.00
20	2	7.875	12.500	17.250	21.875	26.500	2.063	2.165	1.598	1.750	1.000	1.2865	24.40	25.10	11.40	16.00
20	2.5	6.125	9.875	13.625	17.375	21.125	2.604	2.706	1.998	2.188	1.250	1.6240	25.80	26.50	11.40	16.00
22	1.5	11.875	18.500	25.125	31.625	38.250	1.522	1.624	1.160	1.312	0.750	0.9740	26.40	27.10	12.50	16.50
22	2	8.750	13.750	18.875	23.875	29.000	2.063	2.165	1.598	1.750	1.000	1.2865	27.50	28.20	12.50	16.50
22	2.5	6.750	10.875	14.875	19.000	23.125	2.604	2.706	1.998	2.188	1.250	1.6240	29.40	30.10	14.00	17.50
24	3	9.500	15.000	20.375	25.875	31.250	2.063	2.165	1.598	1.750	1.000	1.2865	30.50	31.20	15.00	19.00
24	3	6.125	10.000	13.750	17.500	21.375	3.146	3.248	2.396	2.625	1.500	1.9360	32.50	33.20	15.00	19.00
27	2	10.875	17.000	23.250	29.375	35.500	2.063	2.165	1.598	1.750	1.000	1.2865	35.80	36.50	17.00	21.00
27	3	7.000	11.250	15.500	19.750	24.000	3.146	3.248	2.396	2.625	1.500	1.9360	37.20	37.90	17.00	21.00
30	2	12.250	19.125	25.875	32.750	39.500	2.063	2.165	1.598	1.750	1.000	1.2865	39.00	39.70	18.50	22.50
30	3	7.875	12.500	17.125	21.875	26.500	3.146	3.248	2.396	2.625	1.500	1.9360	40.20	40.90	18.50	22.50
33	2	13.625	21.125	28.625	36.000	43.500	2.063	2.165	1.598	1.750	1.000	1.2865	42.30	43.00	20.00	24.00
33	3	8.750	13.875	19.000	24.125	29.250	3.146	3.248	2.396	2.625	1.500	1.9360	43.20	43.90	20.00	24.00
36	2	15.000	23.250	31.375	39.500	47.750	2.063	2.165	1.598	1.750	1.000	1.2865	44.50	45.20	21.00	25.00
36	3	9.750	15.250	20.875	26.500	32.000	3.146	3.248	2.396	2.625	1.500	1.9360	45.50	46.20	21.00	25.00
39	2	16.375	25.250	34.125	43.000	51.875	2.063	2.165	1.598	1.750	1.000	1.2865	46.50	47.20	22.00	26.00
39	3	10.750	16.750	22.750	28.875	34.875	3.146	3.248	2.396	2.625	1.500	1.9360	47.50	48.20	22.00	26.00

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AEROSPACE STANDARD

INSERT, SCREW THREAD, HELICAL COIL, METRIC SERIES
FREE RUNNING, CRES

SHEET 4 OF 5 METRIC

MA3279

MA3280

MA3281

Issued 9-1-81 Revised 6-3-1-85