

FED.SUPPLY CLASS

5305

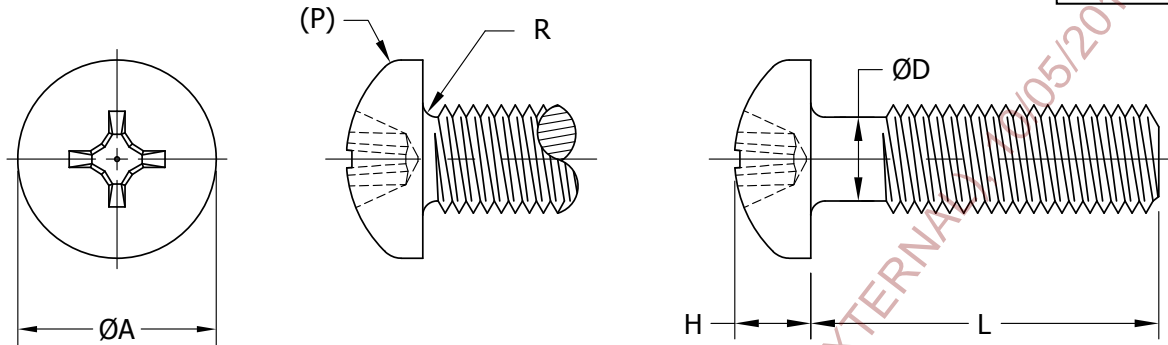


TABLE I

NOMINAL SIZE		#2	#4	#6	#8	#10	1/4	5/16	3/8
THREADS PER INCH, UNF-2A		64	48	40	36	32	28	24	24
ØD BODY	MAX	.0860	.1120	.1380	.1640	.1900	.2500	.3125	.3750
	MIN	.0717	.0925	.1141	.1399	.1586	.2127	.2712	.3287
ØA HEAD	MAX	.167	.219	.270	.322	.373	.492	.615	.740
	MIN	.155	.205	.256	.306	.357	.473	.594	.716
H HEAD HEIGHT	MAX	.062	.080	.097	.115	.133	.175	.218	.261
	MIN	.053	.070	.087	.105	.122	.162	.203	.244
(P) HEAD RADIUS		.010	.010	.015	.015	.020	.035	.040	.040
R FILLET RADIUS	MAX	.013	.017	.021	.025	.029	.038	.047	.056
TENSILE STRENGTH - LBS /8/		235	395	605	880	1,200	2,180	3,480	5,260
L LENGTH	TOLERANCE	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.
.125	+.000 -.031	201	211	224	239				
.188		202	212	225	240	258			
.250		203	213	226	241	259			
.312		204	214	227	242	260	276		
.375	+.000 -.031	205	215	228	243	261	277	292	
.438		206	216	229	244	262	278	293	
.500		207	217	230	245	263	279	294	307
.625		208	218	231	246	264	280	295	308
.750	+.000 -.062	209	219	232	247	265	281	296	309
.875		210	220	233	248	266	282	297	310
1.000			221	234	249	267	283	298	311
1.250			222	235	250	268	284	299	312
1.500	+.000 -.094		223	236	251	269	285	300	313
1.750				237	252	270	286	301	314
2.000				238	253	271	287	302	315
2.250					254	272	288	303	316
2.500	+.000 -.094				255	273	289	304	317
2.750					256	274	290	305	318
3.000					257	275	291	306	319

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THE INITIAL RELEASE OF THIS DOCUMENT SUPERSEDES MS35207, REVISION F, AMENDMENT 2. PART NUMBERS REMAIN MS35207.

THIRD ANGLE PROJECTION	CUSTODIAN NATIONAL AEROSPACE STANDARDS COMMITTEE	REVISION 2
PROCUREMENT SPECIFICATION FF-S-92	TITLE SCREW, MACHINE, PAN HEAD, CRUCIFORM RECESS, CARBON STEEL, CADMIUM PLATED, UNF-2A (IN./MM)	CLASSIFICATION PART STANDARD NASM35207 SHEET 1 OF 5

USE OF OR RELIANCE UPON THIS DOCUMENT OR ANY NATIONAL AEROSPACE STANDARD IS ENTIRELY VOLUNTARY. AIA DOES NOT QUALIFY SUPPLIERS OR CERTIFY CONFORMANCE OF ITEMS PRODUCED UNDER NATIONAL AEROSPACE STANDARDS. AIA MAKES NO REPRESENTATION OR CLAIM RESPECTING (1) THE SUITABILITY OF ITEMS FOR ANY PARTICULAR APPLICATION OR (2) THE EXISTENCE OF OR APPLICABILITY OF PATENT OR TRADEMARKS RIGHTS.

MATERIAL:

CARBON STEEL IN ACCORDANCE WITH AIR4127 ~~FED-STD-66~~.

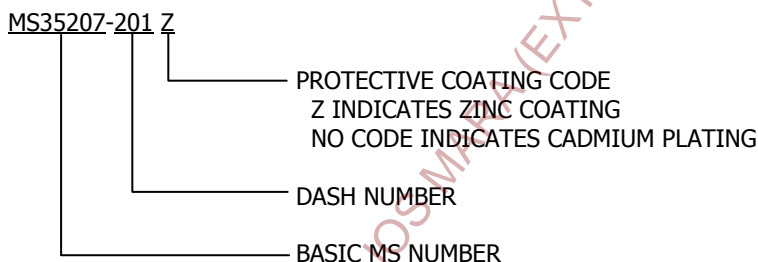
FINISH:

CADMIUM PLATED IN ACCORDANCE WITH AMS-QQ-P-416, TYPE II, CLASS 3.
ZINC COATING IN ACCORDANCE WITH ASTM B 633, Fe/Zn 5 (5µm), TYPE II.

CODE:

THE PART NUMBER SHALL CONSIST OF THE BASIC MS NUMBER, PLUS THE DASH NUMBER FROM TABLE I, FOLLOWED BY A PROTECTIVE COATING CODE.

EXAMPLE OF PART NUMBER:



MS35207-201Z = SCREW, MACHINE, PAN HEAD, CRUCIFORM RECESS, CARBON STEEL, ZINC COATED, .086-64, UNF-2A, .125 LENGTH.

NOTES:

- (1) DIMENSIONS APPLY AFTER FINISH UNLESS OTHERWISE SPECIFIED.
- (2) REMOVE ALL BURRS AND SHARP EDGES.
- (3) THE THREADS SHALL BE IN ACCORDANCE WITH FED-STD-H28/2. ACCEPTABILITY OF SCREW THREADS SHALL BE IN ACCORDANCE WITH FED-STD-H28/20, SYSTEM 21.
- (4) SCREWS 2.00 INCHES LONG AND SHORTER SHALL HAVE COMPLETE THREADS EXTENDING TO WITHIN TWO THREADS OF THE BEARING SURFACE OF THE HEAD, OR CLOSER IF PRACTICABLE. LONGER SCREWS SHALL HAVE A MINIMUM THREAD LENGTH OF 1.750 INCHES.
- (5) THE RECESS SHALL BE IN ACCORDANCE WITH NASM9006.
- (6) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED.
- (7) DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1982.
- /8/ TENSILE STRENGTH IS BASED ON 60,000 PSI MINIMUM ULTIMATE TENSILE STRENGTH. LOAD POUNDS ARE CALCULATED BY THE STRESS AREAS INDICATED IN SCREW-THREAD STANDARDS FOR FED-STD-H28.
- (9) REFERENCED DOCUMENTS SHALL BE THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID.
- (10) THIS STANDARD TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.
- (11) SUPERSEDES: MS35205, MS35209, MS35211, MS35222, MS35224, MS35226, MS35228; AND IN PART MS24584(USAF), MS35357, MS35359 THRU MS35362, MS35364 THRU MS35366, AN520 AND AN526.

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(12) UNLESS OTHERWISE SPECIFIED, PART INVENTORY MANUFACTURED TO PREVIOUS REVISIONS OF THE APPLICABLE DRAWING OR SPECIFICATION MAY BE PROCURED AND USED UNTIL STOCK IS DEPLETED.

/13/ FOR TABLE IV, ALL DIMENSIONS ARE IN MILLIMETERS (MM), UNLESS OTHERWISE SPECIFIED.

TABLE II - INTERCHANGEABILITY

SCREWS COVERED BY THE FOLLOWING CANCELED DASH NUMBERS ARE CANCELED AFTER 5 APRIL 1962. THE CANCELED SCREWS CANNOT ALWAYS REPLACE THE NEW SCREWS AND SHOULD BE USED UNTIL EXISTING STOCKS ARE DEPLETED. USE ONLY THE NEW SCREWS FOR DESIGN AND REPLACEMENT. REPLACEMENT SHALL BE IN ACCORDANCE WITH THIS TABLE.

PART NUMBERS											
CANCELED			NEW			CANCELED			NEW		
MS35205	MS35222		MS35205	MS35222		MS24584	MS35222		MS24584	MS35222	
MS35207	MS35224	MS35207	MS35207	MS35224	MS35207	MS35205	MS35224		MS35205	MS35224	MS35207
MS35209	MS35226		MS35209	MS35226		MS35207	MS35226		MS35207	MS35226	
MS35211	MS35228		MS35211	MS35228		MS35209	MS35228		MS35209	MS35228	
1	1	201	27	30	230	51	59	259	79	89	289
2	2	202	28	31	231	52	60	260	-	90	290
3	3	203	29	32	232	53	61	261	-	91	291
4	4	204	30	33	233	54	62	262	80	92	292
5	5	205	31	34	234	55	63	263	81	93	293
6	6	206	32	35	235	56	64	264	82	94	294
7	7	207	33	36	236	57	65	265	83	95	295
8	8	208	34	37	237	58	66	266	84	96	296
9	9	209	35	38	238	59	67	267	85	97	297
-	10	210	36	39	239	60	68	268	86	98	298
10	11	211	37	40	240	61	69	269	87	99	299
11	12	212	38	41	241	62	70	270	88	100	300
12	13	213	39	42	242	63	71	271	89	101	301
13	14	214	40	43	243	64	72	272	90	102	302
14	15	215	41	44	244	65	73	273	91	103	303
15	16	216	42	45	245	-	74	274	92	104	304
16	17	217	43	46	246	-	75	275	-	105	305
17	18	218	44	47	247	66	76	276	-	106	306
18	19	219	45	48	248	67	77	277	93	107	307
19	20	220	46	49	249	68	78	278	94	108	308
20	21	221	47	50	250	69	79	279	95	109	309
-	22	222	48	51	251	70	80	280	96	110	310
-	23	223	49	52	252	71	81	281	97	111	311
21	24	224	50	53	253	72	82	282	98	112	312
22	25	225	-	54	254	73	83	283	99	113	313
23	26	226	-	55	255	74	84	284	100	114	314
24	27	227	-	56	256	75	85	285	101	115	315
25	28	228	-	57	257	76	86	286	102	116	316
26	29	229	-	58	258	77	87	287	103	117	317
						78	88	288	104	118	318
									105	119	319

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TABLE III - INTERCHANGEABILITY

THE SCREWS COVERED BY DASH NUMBERS GIVEN IN AN520 IN PART AND AN526 IN PART WERE CANCELED / INACTIVATED IN REVISION C OF MS35207. USE THE DASH NUMBERS INDICATED ON THIS DOCUMENT. THE CANCELED SCREWS CANNOT ALWAYS REPLACE THE NEW SCREWS AND SHOULD BE USED UNTIL EXISTING STOCKS ARE DEPLETED. USE ONLY THE NEW SCREWS FOR DESIGN AND REPLACEMENT. REPLACEMENT SHALL BE IN ACCORDANCE WITH THIS TABLE.

PART NUMBERS		PART NUMBERS		PART NUMBERS		PART NUMBERS	
CANCELED	NEW	CANCELED	NEW	CANCELED	NEW	CANCELED	NEW
AN520-0R2	NR	AN520-5R22	NR	AN520-10R26	NR	AN526-836R12	MS35207-247
-0R3	NR	-5R24	NR	-10R28	MS35207-270	-836R14	-248
-0R4	NR	-5R26	NR	-10R30	NR	-836R16	-249
-0R5	NR	-5R28	NR	-10R32	-271	-836R18	NR
-0R6	NR	-6R4	MS35207-226	-10R36	-272	-836R20	-250
-0R7	NR	-6R5	-227	-10R40	-273	-836R22	NR
-0R8	NR	-6R6	-228	-10R44	-274	-836R24	-251
-1R2	NR	-6R7	-229	-10R48	-275	-836R26	NR
-1R3	NR	-6R8	-230	-416R6	-277	-836R28	-252
-1R4	NR	-6R10	-231	-416R7	-278	-836R30	NR
-1R5	NR	-6R12	-232	-416R8	-279	-836R32	-253
-1R6	NR	-6R14	-233	-416R10	-280	-836R36	-254
-1R7	NR	-6R16	-234	-416R12	-281	-836R40	-255
-1R8	NR	-6R18	NR	-416R14	-282	-836R44	-256
-2R3	MS35207-202	-6R20	-235	-416R16	-283	-836R48	-257
-2R4	-203	-6R22	NR	-416R18	NR	-1032R4	-259
-2R5	-204	-6R24	-236	-416R20	-284	-1032R5	-260
-2R6	-205	-6R26	NR	-416R22	NR	-1032R6	-261
-2R7	-206	-6R28	-237	-416R24	-285	-1032R7	-262
-2R8	-207	-6R30	NR	-416R26	NR	-1032R8	-263
-2R10	-208	-6R32	-238	-416R28	-286	-1032R9	NR
-2R12	-209	-6R36	NR	-416R30	NR	-1032R10	-264
-3R3	NR	-6R40	NR	-416R32	-287	-1032R12	-265
-3R4	NR	-8R4	-241	-416R36	-288	-1032R14	-266
-3R5	NR	-8R5	-242	-416R40	-289	-1032R16	-267
-3R6	NR	-8R6	-243	-416R44	-290	-1032R18	NR
-3R7	NR	-8R7	-244	-416R48	-291	-1032R20	-268
-3R8	NR	-8R8	-245			-1032R22	NR
-3R10	NR	-8R10	-246	AN526-640R4	MS35207-226	-1032R24	-269
-3R12	NR	-8R12	-247	-640R5	-227	-1032R26	NR
-4R3	-212	-8R14	-248	-640R6	-228	-1032R28	-270
-4R4	-213	-8R16	-249	-640R7	-229	-1032R30	NR
-4R5	-214	-8R18	NR	-640R8	-230	-1032R32	-271
-4R6	-215	-8R20	-250	-640R9	NR	-1032R36	-272
-4R7	-216	-8R22	NR	-640R10	-231	-1032R40	-273
-4R8	-217	-8R24	-251	-640R12	-232	-1032R44	-274
-4R10	-218	-8R26	NR	-640R14	-233	-1032R48	-275
-4R12	-219	-8R28	-252	-640R16	-234	-428R6	-277
-4R14	-220	-8R30	NR	-640R18	NR	-428R7	-278
-4R16	-221	-8R32	-253	-640R20	-235	-428R8	-279
-4R18	NR	-8R36	-254	-640R22	NR	-428R9	NR
-4R20	-222	-8R40	-255	-640R24	-236	-428R10	-280
-4R22	NR	-8R44	-256	-640R26	NR	-428R12	-281
-4R24	-223	-8R48	-257	-640R28	-237	-428R14	-282
-4R26	NR	-10R4	-259	-640R30	NR	-428R16	-283
-4R28	NR	-10R5	-260	-640R32	-238	-428R18	NR
-5R4	NR	-10R6	-261	-640R36	NR	-428R20	-284
-5R5	NR	-10R7	-262	-640R40	NR	-428R22	NR
-5R6	NR	-10R8	-263	-640R44	NR	-428R24	-285
-5R7	NR	-10R10	-264	-640R48	NR	-428R26	NR
-5R8	NR	-10R12	-265	-836R4	-241	-428R28	-286
-5R10	NR	-10R14	-266	-836R5	-242	-428R30	NR
-5R12	NR	-10R16	-267	-836R6	-243	-428R32	-287
-5R14	NR	-10R18	NR	-836R7	-244	-428R36	-288
-5R16	NR	-10R20	-268	-836R8	-245	-428R40	-289
-5R18	NR	-10R22	NR	-836R9	NR	-428R44	-290
-5R20	NR	-10R24	-269	-836R10	-246	-428R48	-291

NR = NO REPLACEMENT

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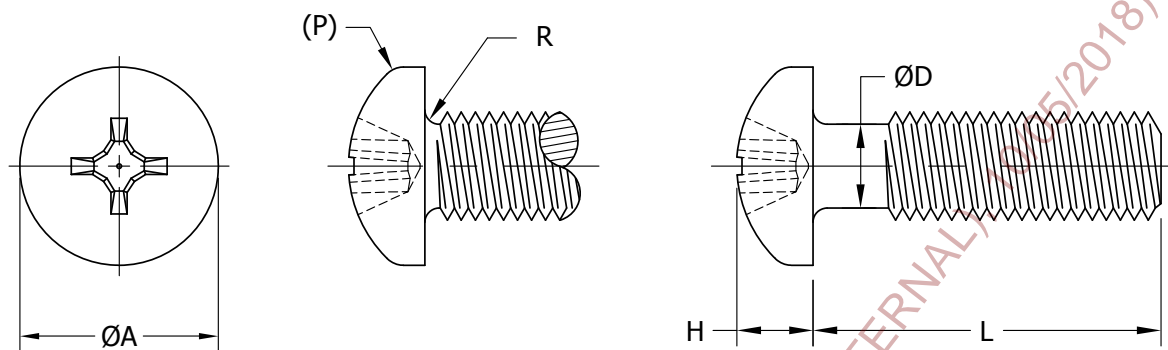


TABLE IV /13/ (METRIC CONVERSION OF TABLE I)

NOMINAL SIZE		INCH	#2	#4	#6	#8	#10	1/4	5/16	3/8
		MM	2.184	2.845	3.505	4.166	4.826	6.350	7.938	9.525
THREADS PER 25.4 MM (UNF-2A)			64	48	40	36	32	28	24	24
ØD BODY	MAX		2.184	2.845	3.505	4.166	4.826	6.350	7.938	9.525
	MIN		1.821	2.350	2.898	3.553	4.028	5.403	6.888	8.349
ØA HEAD	MAX		4.242	5.563	6.858	8.179	9.474	12.497	15.621	18.796
	MIN		3.937	5.207	6.502	7.772	9.068	12.014	15.088	18.186
H HEAD HEIGHT	MAX		1.575	2.032	2.464	2.921	3.378	4.445	5.537	6.629
	MIN		1.346	1.778	2.210	2.667	3.099	4.115	5.156	6.198
(P) HEAD RADIUS			.254	.254	.381	.381	.508	.889	1.016	1.016
R FILLET RADIUS	MAX		.330	.432	.533	.635	.737	.965	1.194	1.422
TENSILE STRENGTH - KGS /8/	MIN		107	180	275	400	545	990	1,580	2,390
L LENGTH	TOLERANCE		DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.
3.175	+0.000 -0.787		201	211	224	239				
4.775			202	212	225	240	258			
6.350			203	213	226	241	259			
7.925			204	214	227	242	260	276		
9.525	+0.000 -0.787		205	215	228	243	261	277	292	
11.125			206	216	229	244	262	278	293	
12.700			207	217	230	245	263	279	294	307
15.875			208	218	231	246	264	280	295	308
19.050	+0.000 -1.575		209	219	232	247	265	281	296	309
22.225			210	220	233	248	266	282	297	310
25.400				221	234	249	267	283	298	311
31.750				222	235	250	268	284	299	312
38.100	+0.000 -1.575			223	236	251	269	285	300	313
44.450					237	252	270	286	301	314
50.800					238	253	271	287	302	315
57.150						254	272	288	303	316
63.500	+0.000 -2.388					255	273	289	304	317
69.850						256	274	290	305	318
76.200						257	275	291	306	319

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