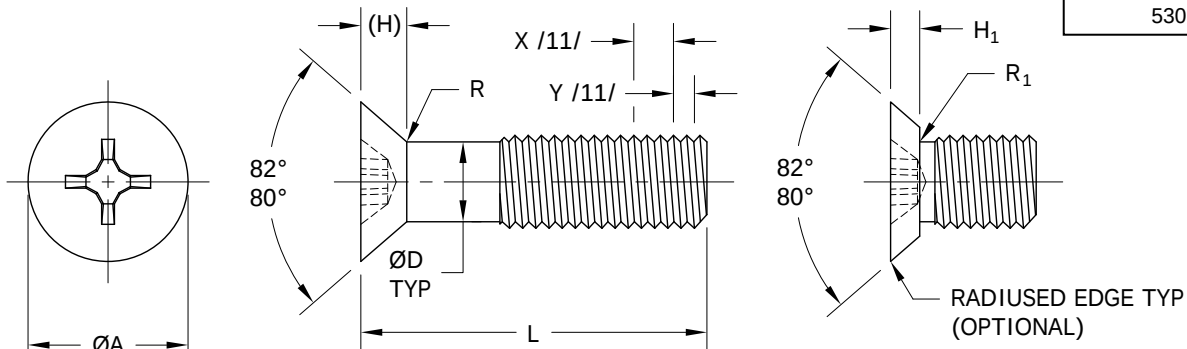


FED. SUPPLY CLASS

5305



FULL HEAD

UNDERCUT HEAD

TABLE I – DIMENSIONS AND STRENGTH VALUES

NOMINAL SIZE	(#1)	(#2)	(#4)	(#6)	(#8)	(#10)	(1/4)	(5/16)	(3/8)	(7/16)	(1/2)
THREADS PER INCH, UNC-2A /3/	64	56	40	32	32	24	20	18	16	14	13
ØD BODY	MAX .0730 MIN .0603	.0860 .0717	.1120 .0925	.1380 .1141	.1640 .1399	.1900 .1586	.2500 .2127	.3125 .2712	.3750 .3287	.4375 .3850	.5000 .4435
ØA HEAD	MAX SHARP .146 MIN SHARP .130 ABS MIN .123	.172 .156 .147	.225 .207 .195	.279 .257 .244	.332 .308 .292	.385 .359 .340	.507 .477 .452	.635 .600 .568	.762 .722 .685	.812 .767 .723	.875 .831 .775
(H) HEAD HEIGHT	.043	.051	.067	.083	.100	.116	.153	.191	.230	.223	.223
H1 HEAD HEIGHT	MAX .031 MIN .023	.036 .028	.047 .038	.059 .048	.070 .058	.081 .068	.107 .092	.134 .116	.161 .140	.156 .133	.156 .130
R RADIUS	MAX .029	.034	.045	.055	.066	.076	.100	.125	.150	.175	.200
R1 RADIUS - UNDERCUT	MAX .011	.013	.017	.021	.025	.029	.038	.047	.056	.066	.075
TENSILE STRENGTH - LBF	MIN 160	220	360	545	840	1,050	1,910	3,140	4,650	6,380	8,500
L LENGTH /5/	TOLERANCE	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.
.125	+.000 -.031	201	209	219	232	247					
.188		202	210	220	233	248	266				
.250		203	211	221	234	249	267				
.312		204	212	222	235	250	268	284			
.375		205	213	223	236	251	269	285	300		
.438	+.000 -.031	206	214	224	237	252	270	286	301		
.500		207	215	225	238	253	271	287	302	315	
.625		208	216	226	239	254	272	288	303	316	328
.750			217	227	240	255	273	289	304	317	329
.875			218	228	241	256	274	290	305	318	330
1.000				229	242	257	275	291	306	319	331
1.250	+.000 -.062			230	243	258	276	292	307	320	332
1.500				231	244	259	277	293	308	321	333
1.750					245	260	278	294	309	322	334
2.000					246	261	279	295	310	323	335
2.250	+.000 -.094					262	280	296	311	324	336
2.500						263	281	297	312	325	337
2.750						264	282	298	313	326	338
3.000						265	283	299	314	327	339

THE INITIAL RELEASE OF THIS DOCUMENT SUPERSEDES MS35190, REVISION F. PART NUMBERS REMAIN MS35190.

THIRD ANGLE PROJECTION	CUSTODIAN NATIONAL AEROSPACE STANDARDS COMMITTEE	REVISION 3
PROCUREMENT SPECIFICATION FF-S-92	TITLE SCREW, MACHINE, 82° FLAT COUNTERSUNK HEAD, CRUCIFORM RECESS, CARBON STEEL, CADMIUM PLATED, SELF-LOCKING AND NON-LOCKING, UNC-2A	CLASSIFICATION PART STANDARD NASM35190

MATERIAL:

CARBON STEEL IN ACCORDANCE WITH AIR4127 ~~FED-STD-66~~ HAVING MINIMUM ULTIMATE TENSILE STRENGTH OF 60,000 PSI.

FINISH: CADMIUM PLATED IN ACCORDANCE WITH TYPE II, CLASS 3 OF AMS-QQ-P-416 OR AMS-C-81562.

CODE: THE PART NUMBER CONSISTS OF THE MS NUMBER, PLUS THE DASH NUMBER.
ADD "L" AFTER DASH NUMBER TO DESIGNATE SELF-LOCKING THREAD.

EXAMPLE OF PART NUMBER:

MS35190-209 = SCREW, CARBON STEEL, CADMIUM PLATED, .086-56 UNC-2A THREAD, .125 LONG, NON-LOCKING
MS35190-209L = SCREW, CARBON STEEL, CADMIUM PLATED, .086-56 UNC-2A THREAD, .125 LONG, SELF-LOCKING

NOTES:

- (1) DIMENSIONS APPLY AFTER FINISH UNLESS OTHERWISE SPECIFIED.
- (2) DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1982.
- /3/ THE THREADS SHALL BE IN ACCORDANCE WITH FED-STD-H28.
- (4) SCREWS 2.00 INCHES LONG AND SHORTER SHALL HAVE COMPLETE THREADS EXTENDING TO WITHIN TWO THREADS OF THE HEAD, OR CLOSER IF PRACTICABLE. LONGER SCREWS SHALL HAVE A MINIMUM THREAD LENGTH OF 1.50 INCHES.
- /5/ SCREWS ABOVE DOTTED LINES SHALL HAVE UNDERCUT HEADS.
- (6) DIMENSIONS IN INCHES, UNLESS OTHERWISE SPECIFIED.
- (7) THE RECESS SHALL BE IN ACCORDANCE WITH NASM9006.
- (8) REMOVE ALL BURRS AND SHARP EDGES.
- (9) UNLESS OTHERWISE SPECIFIED HEREIN, REFERENCED DOCUMENTS SHALL BE THE ISSUE IN EFFECT ON DATE OF MANUFACTURE. HOWEVER, EXISTING MATERIAL INVENTORY CERTIFIED TO A PREVIOUS REVISION OF THE APPLICABLE MATERIAL SPECIFICATION(S) IS ACCEPTABLE FOR USE UNTIL DEPLETION.
- (10) THIS STANDARD TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED HEREIN.
- /11/ SELF-LOCKING ELEMENT:
 - (a) THE SELF-LOCKING ELEMENT SHALL BE A PATCH TYPE OR LONGITUDINAL STRIP IN ACCORDANCE WITH MIL-DTL-18240.
 - (b) MAXIMUM RING GAGE DIAMETER THAT LOCKING REGION OF SCREW MUST PASS THRU FREELY OR WITH FINGER PRESSURE SHALL BE THE NOMINAL SIZE PLUS .010.
 - (c) FOR "X" AND "Y" DIMENSIONS AND DESIGN AND USAGE LIMITATIONS, SEE NASM15981.
- 3 /12/ INACTIVE FOR DESIGN AFTER 2 FEBRUARY 1976.
- 3 /13/ DASH NUMBERS 150 THRU 178 CANCELLED. NO SUPERSEDING STANDARD.
- /14/ FOR TABLE IV, ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE SPECIFIED.

REVISION

3

NASM35190

SHEET 2



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