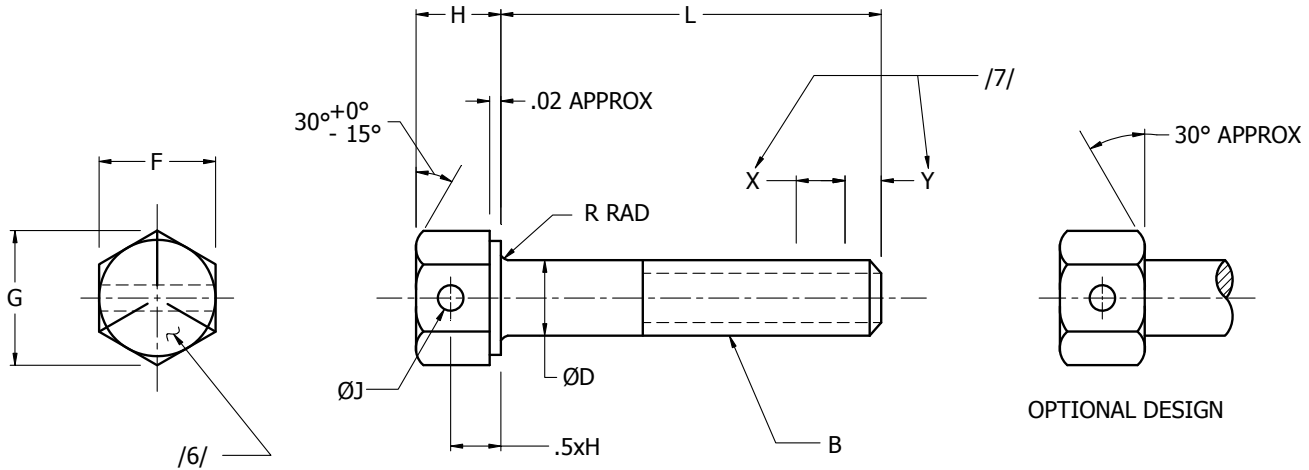


FED. SUPPLY CLASS

5305



2

TABLE I – DIMENSIONS

NOMINAL SIZE	B THREAD	ØD BODY		F WIDTH ACROSS FLATS		G WIDTH ACROSS CORNERS		H HEAD HEIGHT		.5xH		ØJ HOLE +.006 -.002	R RADIUS		MIN TENSILE STRENGTH LBF
		MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN		MAX	MIN	
.250	28 UNF-2A	.2500	.2450	.4375	.4280	.505	.488	.163	.150	.088	.075	.0625	.025	.015	4,350
.313	24 UNF-2A	.3125	.3065	.5000	.4890	.577	.557	.211	.195	.114	.098	.0625	.025	.015	6,950
.375	24 UNF-2A	.3750	.3690	.5625	.5510	.650	.628	.243	.226	.130	.113	.0625	.025	.015	10,500
.438	20 UNF-2A	.4375	.4305	.6250	.6120	.722	.698	.291	.272	.155	.136	.0625	.025	.015	14,200
.500	20 UNF-2A	.5000	.4930	.7500	.7360	.866	.840	.323	.302	.172	.151	.094	.025	.015	19,200
.625	18 UNF-2A	.6250	.6170	.9375	.9220	1.083	1.051	.403	.378	.214	.189	.094	.045	.020	30,700
.750	16 UNF-2A	.7500	.7410	1.1250	1.1000	1.299	1.254	.483	.455	.256	.228	.094	.045	.020	44,800
.875	14 UNF-2A	.8750	.8660	1.3125	1.2850	1.516	1.465	.563	.531	.298	.266	.125	.065	.040	61,100
1.000	12 UNF-2A	1.0000	.9900	1.5000	1.4690	1.732	1.675	.627	.591	.332	.296	.125	.095	.060	79,600

THE INITIAL RELEASE OF THIS DOCUMENT SUPERSEDES MS51096, REVISION E. PART NUMBERS REMAIN MS51096.

THIRD ANGLE PROJECTION		CUSTODIAN		REVISION	
		NATIONAL AEROSPACE STANDARDS COMMITTEE		2	
PROCUREMENT SPECIFICATION	FF-S-85	TITLE		CLASSIFICATION	
		SCREW, CAP, HEXAGON HEAD (FINISHED HEXAGON BOLT), HEAD DRILLED FOR LOCKING WIRE, STEEL, GRADE 5, CADMIUM PLATED, UNF-2A, PLAIN AND SELF-LOCKING		PART STANDARD	

NAS
SHEET 1 OF 3

MATERIAL:

MEDIUM CARBON STEEL, GRADE 5, IN ACCORDANCE WITH PROCUREMENT SPECIFICATION.
MINIMUM ULTIMATE TENSILE STRENGTH: 120 KSI.

FINISH:

CADMIUM PLATED IN ACCORDANCE WITH PROCUREMENT SPECIFICATION.

CODE:

THE MS PART NUMBER CONSISTS OF THE MS NUMBER, PLUS THE DASH NUMBER.
FOR SCREWS WITH SELF-LOCKING ELEMENT ADD THE LETTER "L" AFTER THE DASH NUMBER.

EXAMPLES OF PART NUMBER:

MS51096-301 = PLAIN SCREW
MS51096-301L = SELF-LOCKING SCREW

NOTES:

- (1) THIS STANDARD TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.
- (2) 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.
- (3) THE THREADS SHALL BE IN ACCORDANCE WITH FED-STD-H28.
- (2) (4) MINIMUM THREAD LENGTH SHALL BE TWICE THE DIAMETER PLUS .250 INCH. THE TOLERANCE SHALL BE PLUS .188 INCH OR 2.500 THREADS, WHICHEVER IS GREATER. ON SCREWS THAT ARE TOO SHORT FOR MINIMUM THREAD LENGTH, THE DISTANCE FROM THE BEARING SURFACE OF THE HEAD TO THE FIRST COMPLETE THREAD SHALL NOT EXCEED THE LENGTH OF 2.500 THREADS.
- (5) DIMENSIONS IN INCHES AND APPLY AFTER FINISH UNLESS OTHERWISE SPECIFIED.
- /6/ HEADS SHALL BE MARKED IN ACCORDANCE WITH MIL-HDBK-131. SCREWS WITH SELF-LOCKING ELEMENTS SHALL ALSO HAVE SIX DOTS IN A CIRCULAR PATTERN ON THE HEAD. RAISED MARKINGS ARE PREFERRED, RECESSED MARKINGS ARE ACCEPTABLE.
- /7/ SELF-LOCKING ELEMENT:
 - (a) THE SELF-LOCKING ELEMENT SHALL BE A PATCH TYPE OR LONGITUDINAL STRIP IN ACCORDANCE WITH MIL-DTL-18240.
 - (b) FOR "X" AND "Y" DIMENSIONS AND DESIGN AND USAGE LIMITATIONS, SEE NASM15981.
 - (c) MAXIMUM RING GAGE DIAMETER THAT LOCKING REGION OF SCREW MUST PASS THRU FREELY OR WITH FINGER PRESSURE SHALL BE THE NOMINAL SIZE PLUS .010.
 - (2) (d) SIZES .313, .438 AND .875 SHALL NOT BE AVAILABLE WITH SELF-LOCKING ELEMENT.
- (8) UNLESS OTHERWISE SPECIFIED, PART INVENTORY MANUFACTURED TO PREVIOUS REVISIONS OF THE APPLICABLE DRAWING OR SPECIFICATION MAY BE PROCURED AND USED UNTIL STOCK IS DEPLETED.
- (9) DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1982.

REVISION

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NASM51096

SHEET 2



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