

FED. SUPPLY CLASS

5305

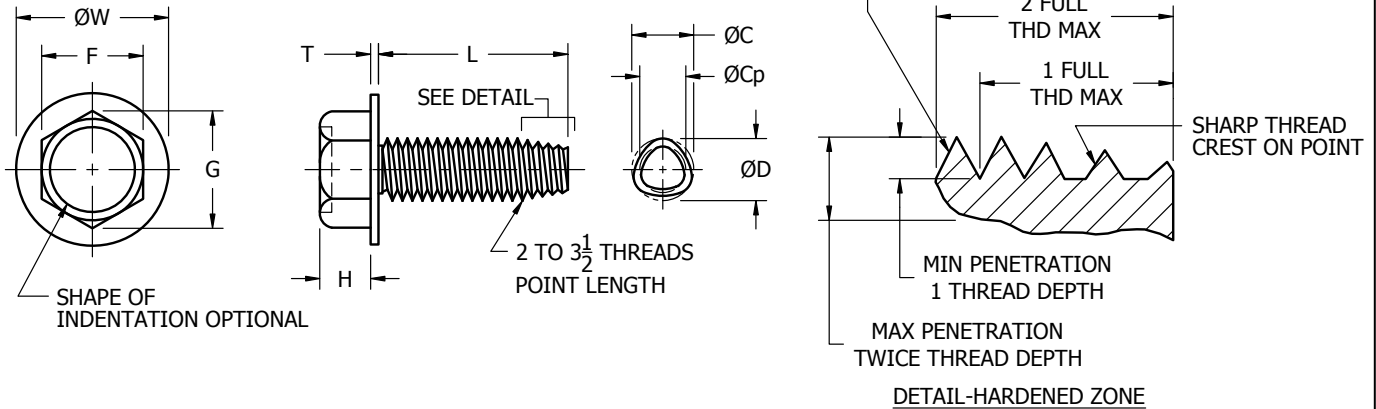


TABLE I – DIMENSIONS

NOM SIZE	THREADS PER INCH	F ACROSS FLATS		G ACROSS CORNERS MIN	H HEAD HEIGHT		T WASHER THICKNESS		$\varnothing W$ WASHER		$\varnothing C$		$\varnothing C_p$ POINT MAX	$\varnothing D$ ACROSS CENTER		TENSILE STRENGTH LBF MIN	THREADED LENGTH MAX
		MAX	MIN		MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN		MAX	MIN		
.2500	20	.375	.367	.409	.190	.172	.050	.030	.520	.480	.2550	.2490	.206	.2460	.2400	4,750	1,500
.3750	16	.562	.551	.614	.295	.270	.063	.037	.780	.720	.3810	.3750	.320	.3710	.3650	11,600	1,500
.5000	13	.750	.735	.820	.400	.367	.085	.050	1.040	.960	.5075	.5015	.433	.4935	.4875	21,300	1,500

- ② MATERIAL: LOW ALLOY STEEL, 4037 (UNS G40370) IN ACCORDANCE WITH FED-STD-66 AIR4127.
- HEAT TREATMENT:
- DEVELOP BASIC MATERIAL PROPERTIES AS FOLLOWS, WITH CONTROL PER AMS2759: 150 KSI ULTIMATE TENSILE STRENGTH MINIMUM.
- ② HARDNESS: 32-38 HRC.
- FINISH: CADMIUM PLATED IN ACCORDANCE WITH AMS-QQ-P-416, TYPE II, CLASS 2 OR AMS-C-81562, TYPE II, CLASS 2.
- CODE: THE PART NUMBER CONSISTS OF THE BASIC PART NUMBER, PLUS THE DASH NUMBER FROM TABLE II.
- EXAMPLE OF PART NUMBER:
- ② MS51871-1 = SCREW, ALLOY STEEL, TAPPING, HIGH PERFORMANCE, ZONE HARDENED STRUCTURAL THREAD ROLLING, HEXAGON WASHER HEAD, .2500-20 THREAD, .500 LONG.

THE INITIAL RELEASE OF THIS DOCUMENT SUPERSEDES MS51871. PART NUMBERS REMAIN MS51871.

THIRD ANGLE PROJECTION	CUSTODIAN NATIONAL AEROSPACE STANDARDS COMMITTEE	REVISION 2
PROCUREMENT SPECIFICATION FF-S-107	TITLE SCREW, TAPPING, HIGH PERFORMANCE, ZONE HARDENED STRUCTURAL THREAD ROLLING, HEXAGON WASHER HEAD	CLASSIFICATION PART STANDARD MS51871

NOTES:

- (1) UNLESS OTHERWISE SPECIFIED, PART INVENTORY MANUFACTURED TO PREVIOUS REVISIONS OF THE APPLICABLE DRAWING OR SPECIFICATION MAY BE PROCURED AND USED UNTIL STOCK IS DEPLETED.
- (2) DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1982.
- (3) THE THREADS SHALL BE IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF THE PROCUREMENT SPECIFICATION.
- (4) DIMENSIONS IN INCHES AND APPLY AFTER FINISH UNLESS OTHERWISE SPECIFIED.
- (5) THE TRI-LOBULAR SECTION IS MAINTAINED THROUGHOUT THE FULL LENGTH OF THE SCREW.
- (6) 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.
- (7) THIS STANDARD TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.

TABLE II – LENGTH DASH NUMBERS

L LENGTH	TOLERANCE	.2500	.3750	.5000
		DASH NUMBER		
.500	+.000 –.030	1	–	–
.625		2	12	–
.750		3	13	23
.875	+.000 –.050	4	14	24
1.000		5	15	25
1.250		6	16	26
1.500		7	17	27
1.750	+.000 –.060	–	–	28
2.000		–	–	29
2.250		–	–	30

REVISION

2

NASM51871

SHEET 2



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