

FED.SUPPLY CLASS

5305

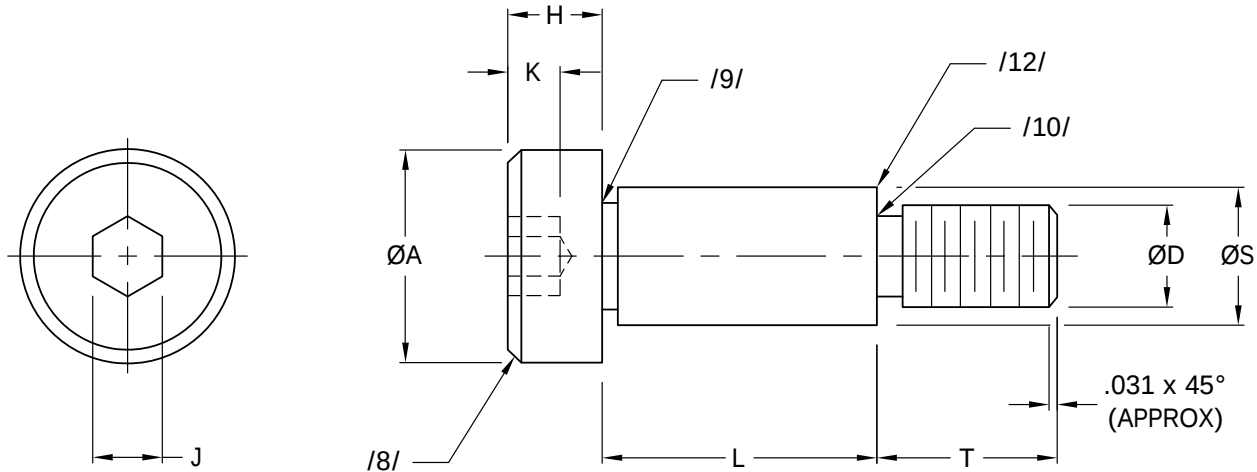


TABLE I – DASH NUMBERS AND DIMENSIONS

NOMINAL SIZE		.125	.1875	.250	.3125	.375	.500
ØS SHOULDER	MAX	.1245	.1870	.2495	.3120	.3745	.4995
	MIN	.1235	.1860	.2485	.3110	.3735	.4985
ØD NOMINAL THREAD SIZE		.1120-40 UNC-2A	.1640-32 UNC-2A	.1900-32 UNF-2A	.2500-20 UNC-2A	.3125-18 UNC-2A	.3750-16 UNC-2A
ØA HEAD	MAX	.2812	.3437	.4062	.5312	.5937	.7812
	MIN	.2188	.2813	.3438	.4688	.5313	.7188
H HEAD HEIGHT	MAX	.1562	.1874	.2187	.2499	.2812	.3437
	MIN	.0938	.1250	.1563	.1875	.2188	.2813
T THREAD LENGTH	MAX	.1874	.2187	.2812	.4687	.5312	.6562
	MIN	.1250	.1563	.2188	.4063	.4688	.5938
J SOCKET WIDTH ACROSS FLATS		.0780	.0940	.1250	.1560	.1880	.2500
K KEY ENGAGEMENT		.0630	.0780	.0940	.1170	.1410	.1880
L SHOULDER LENGTH ±.003		DASH NUMBER	DASH NUMBER	DASH NUMBER	DASH NUMBER	DASH NUMBER	DASH NUMBER
.125		1	6	–	–	–	–
.188		2	7	16	–	–	–
.250		3	8	17	–	–	–
.313		4	9	18	–	–	–
.375		5	10	19	–	–	–
.500		–	11	20	26	–	–
.625		–	12	21	27	32	37
.750		–	13	22	28	33	38
1.000		–	14	23	29	34	39
1.250		–	15	24	30	35	40
1.500		–	–	25	31	36	41

THE INITIAL RELEASE OF THIS DOCUMENT SUPERSEDES MS51576, REVISION A. PART NUMBERS REMAIN MS51576.

THIRD ANGLE PROJECTION	CUSTODIAN NATIONAL AEROSPACE STANDARDS COMMITTEE	REVISION 2
PROCUREMENT SPECIFICATION NASM21472	TITLE SCREW, SHOULDER, SOCKET-HEAD, HEXAGON, CORROSION-RESISTANT STEEL	CLASSIFICATION PART STANDARD
		NASM51576 SHEET 1 OF 2

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AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC.
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ARLINGTON, VA 22209

THIS DRAWING SUPERSEDES ALL ANTECEDENT STANDARD DRAWINGS FOR THE SAME
PRODUCT AND SHALL BECOME EFFECTIVE NO LATER THAN SIX MONTHS FROM THE LAST
REVISION DATE.

FORM 12-01

REVISION DATE: MARCH 31, 2016

ISSUE DATE: SEPTEMBER 1999

MATERIAL: 303 CRES (UNS S30300), CONDITION A IN ACCORDANCE WITH ASTM A582/A582M, OR 304 CRES (UNS S30400) OR 302HQ CRES [FORMERLY XM-7] (UNS S30430) IN ACCORDANCE WITH ASTM A493.

FINISH: CRES 303 SHALL BE PASSIVATED IN ACCORDANCE WITH AMS2700, METHOD 1, TYPE II, CLASS 4. CRES 304 AND 302HQ SHALL BE PASSIVATED IN ACCORDANCE WITH AMS2700, METHOD 1, TYPE 6 OR 7, CLASS 4.

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

② MS51576-XX

└── DASH NUMBER

└── BASIC MS NUMBER

EXAMPLE OF PART NUMBER:

② MS51576-24 = SCREW, SHOULDER, SOCKET-HEAD, CORROSION-RESISTANT STEEL, .2500 INCH NOMINAL SIZE, 1.250 NOMINAL SHOULDER LENGTH, .1900-32 UNF-2A NOMINAL THREAD SIZE.

NOTES:

- (1) DIMENSIONS ARE IN INCHES AND APPLY AFTER FINISH UNLESS OTHERWISE SPECIFIED.
- ② (2) DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1982.
- (3) THIS STANDARD TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.
- ② (4) 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.
- (5) UNLESS OTHERWISE SPECIFIED, PART INVENTORY MANUFACTURED TO PREVIOUS REVISIONS OF THE APPLICABLE DRAWING OR SPECIFICATION MAY BE PROCURED AND USED UNTIL STOCK IS DEPLETED.
- (6) MAGNETIC PERMEABILITY SHALL BE LESS THAN 2.0 (AIR = 1.0) FOR A FIELD STRENGTH H = 200 OERSTEDS USING A MAGNETIC PERMEABILITY INDICATOR PER ASTM A342/A342M, TEST METHOD 3.
- (7) 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.
- /8/ THE HEAD CHAMFER SHALL BE AT AN ANGLE OF 30° TO 45° WITH THE PLANE OF THE TOP OF THE HEAD. THE EDGE BETWEEN THE TOP OF THE HEAD AND THE CHAMFER MAY BE SLIGHTLY ROUNDED.
- /9/ SCREWS MAY BE NECKED UNDER THE HEAD AT THE OPTION OF THE MANUFACTURER.
- /10/ THE NECK UNDER THE SHOULDER SHALL ALLOW THE SHOULDER TO SEAT AGAINST THE FACE OF A STANDARD BASIC "GO" THREAD RING GAGE.
- (11) THE PLANE OF THE BEARING SURFACE OF THE HEAD SHALL BE PERPENDICULAR TO THE AXIS OF THE SHOULDER WITHIN A MAXIMUM DEVIATION OF 2°.
- /12/ THE EDGE OF THE SHOULDER MAY BE BROKEN. THE RADIUS OR CHAMFER SHALL NOT EXCEED .005 INCH FOR SHOULDERS WITH NOMINAL DIAMETERS OF .375 INCH AND UNDER. THE RADIUS OR CHAMFER SHALL NOT EXCEED .008 INCH FOR SHOULDERS WITH NOMINAL DIAMETERS OVER .375 INCH.
- ② (13) CONCENTRICITY SHALL BE IN ACCORDANCE WITH ASME B18.3.
- (14) REMOVE ALL BURRS AND SHARP EDGES.

REVISION

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NAS Documents

SHEET 2



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