AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC
1000 WILSON BLVD.
ARLINGTON, VA 22209

# NATIONAL AEROSPACE STANDARD

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FED. SUPPLY CLASS
5305

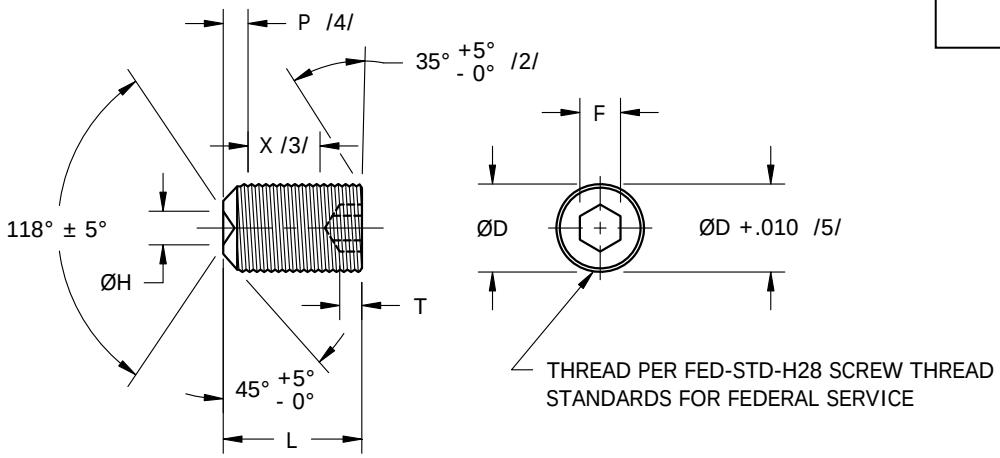


TABLE I – DIMENSIONS

| THREAD | ØD MAX | F | | ØH | | SELF-LOCKING DESIGN DATA P /4/ | T HEX DEPTH |
|---|---|---|---|---|---|---|---|
| | | MAX | MIN | MAX | MIN | 50° MAX | MIN |
| #4-40 NC-3A | .112 | .0510 | .0500 | .061 | .051 | .062 | .040 |
| #6-32 NC-3A | .138 | .0635 | .0625 | .074 | .064 | .076 | .050 |
| #8-32 NC-3A | .164 | .0791 | .0781 | .087 | .076 | .085 | .062 |
| #10-32 NF-3A | .190 | .0947 | .0937 | .102 | .088 | .093 | .075 |
| 1/4-28 UNF-3A | .250 | .1270 | .1250 | .132 | .118 | .116 | .100 |
| 5/16-24 UNF-3A | .3125 | .1582 | .1562 | .172 | .156 | .136 | .125 |
| 3/8-24 UNF-3A | .375 | .1895 | .1875 | .212 | .194 | .151 | .150 |
| 1/2-20 UNF-3A | .500 | .2520 | .2500 | .291 | .270 | .188 | .200 |

MATERIAL:

CRES – AIR 4127, NUMBERS 302, 303, 304, 316 OR EQUAL TO OR INTERCHANGEABLE WITH 16:18 CHROMIUM-NICKEL ALLOY STEEL.

FINISH:

PASSIVATED (SEE PROCUREMENT SPECIFICATION).

EXAMPLE OF PART NUMBER:

MS18064-57 = 1/4-28UNF-3A x 3/4 LONG CRES CUP POINT SELF-LOCKING SET SCREW.

(1) COMPLETELY REVISED

THE INITIAL RELEASE OF THIS DOCUMENT SUPERSEDES MS18064, REVISION A. PART NUMBERS REMAIN MS18064.

| THIRD ANGLE PROJECTION | CUSTODIAN | REVISION |
|---|---|---|
| | NATIONAL AEROSPACE STANDARDS COMMITTEE | 1 |
| PROCUREMENT SPECIFICATION | TITLE | CLASSIFICATION PART STANDARD |
| MIL-DTL-18240 | **SETSCREW, HEXAGON SOCKET, CUP POINT, 250 °F, SELF-LOCKING ELEMENT, CRES, PASSIVATED** (1) | **NASM18064** |
| | | SHEET 1 OF 3 |

REVISION DATE: AUGUST 31, 2012
ISSUE DATE: APRIL 1998

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.



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NOTES:

/1/ UNASSIGNED DASH NUMBERS SHALL NOT BE USED.

/2/ SOCKET END OF SCREW SHALL BE FLAT AND CHAMFERED. THE CHAMFER SHALL EXTEND TO THE MINOR DIAMETER OF THE THREAD AND THE EDGE BETWEEN FLAT AND CHAMFER SHALL BE SLIGHTLY ROUNDED.

/3/ LOCATION OF EFFECTIVE LOCKING AREA “X” SHALL BE IN ACCORDANCE WITH NASM15981 EXCEPT AS NOTED HEREIN.

/4/ $P_{MAX}$ = MAXIMUM POINT PLUS MINIMUM OF 1 THREAD PITCH. FOR EASE IN STARTING, LOCKING ELEMENT SHALL NOT BE EFFECTIVE WITHIN THIS AREA.

/5/ MAXIMUM MAJOR THREAD DIAMETER PLUS .010 = MAXIMUM RING GAGE DIAMETER THAT LOCKING REGION OF PART MUST PASS THROUGH FREELY OR WITH FINGER PRESSURE.

(6) SEE NASM51021 AND NASM51023 FOR SET SCREWS WITHOUT SELF-LOCKING FEATURE.

/7/ AS MIL-DTL-18240 DOESN’T ESTABLISH TORQUE REQUIREMENTS FOR ITEMS ABOVE THE HEAVY LINE, ONLY A POSITIVE INDICATION OF TORQUE IS REQUIRED.

(8) LOCKING ELEMENT IN ACCORDANCE WITH SPECIFICATION MIL-DTL-18240.

(9) DESIGN AND USAGE LIMITATIONS: SEE NASM15981.

(10) 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.

(11) DIMENSIONS IN INCHES AND APPLY AFTER FINISH UNLESS OTHERWISE SPECIFIED.

(12) THIS STANDARD TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.

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

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(15) DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1982.

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