



| THREAD T UNC-2 | A MAX DIA | B DIA | | C | | D | | (1) REF | H | | J | | K DRILL + .004 - .001 |
|-------------------|-----------------|----------|------|------|------|------|------|------------|------|------|------|------|--------------------------------|
| | | MAX | MIN | MAX | MIN | MAX | MIN | | MAX | MIN | MAX | MIN | |
| NO. 2-56 | .0860 | .140 | .124 | .083 | .070 | .062 | .055 | .026 | .030 | .022 | .031 | .023 | .031 |
| NO. 3-48 | .0990 | .161 | .145 | .095 | .082 | .070 | .064 | .030 | .034 | .026 | .035 | .027 | .037 |
| NO. 4-40 | .1120 | .183 | .166 | .107 | .094 | .079 | .072 | .035 | .038 | .030 | .039 | .031 | .037 |
| NO. 5-40 | .1250 | .205 | .187 | .120 | .106 | .098 | .081 | .038 | .042 | .033 | .043 | .035 | .046 |
| NO. 6-32 | .1380 | .226 | .208 | .132 | .118 | .096 | .089 | .043 | .045 | .035 | .048 | .039 | .046 |
| NO. 8-32 | .1640 | .270 | .250 | .154 | .141 | .113 | .104 | .043 | .045 | .035 | .054 | .045 | .045 |
| NO. 10-24 | .1900 | .313 | .292 | .186 | .165 | .130 | .123 | .043 | .045 | .035 | .064 | .050 | .046 |
| 1/4-20 | .2500 | .414 | .389 | .237 | .219 | .170 | .162 | .067 | .102 | .087 | .095 | .084 | .062 |
| 5/16-18 | .3125 | .518 | .490 | .295 | .276 | .211 | .201 | .078 | .130 | .110 | .084 | .072 | .070 |
| 3/8-16 | .3750 | .622 | .590 | .355 | .333 | .253 | .242 | .094 | .154 | .134 | .094 | .081 | .070 |

DASH NUMBERS FOR UNDRILLED CARBON STEEL SCREWS

| LENGTH | NO. 2-56 | NO. 3-48 | NO. 4-40 | NO. 5-40 | NO. 6-32 | NO. 8-32 | NO. 10-24 | 1/4-20 | 5/16-18 | 3/8-16 |
|--------|----------|----------|----------|----------|----------|----------|-----------|--------|---------|--------|
| 1/16 | 2-3 | 3-3 | 4-3 | 5-3 | 6-3 | | | | | |
| 1/8 | 2-4 | 3-4 | 4-4 | 5-4 | 6-4 | | | | | |
| 5/16 | 2-5 | 3-5 | 4-5 | 5-5 | 6-5 | 8-5 | 10-5 | | | |
| 3/8 | 2-6 | 3-6 | 4-6 | 5-6 | 6-6 | 8-6 | 10-6 | 16-6 | 18-6 | 24-6 |
| 7/16 | 2-7 | 3-7 | 4-7 | 5-7 | 6-7 | 8-7 | 10-7 | 16-7 | 18-7 | 24-7 |
| 1/2 | 2-8 | 3-8 | 4-8 | 5-8 | 6-8 | 8-8 | 10-8 | 16-8 | 18-8 | 24-8 |
| 5/8 | 2-10 | 3-10 | 4-10 | 5-10 | 6-10 | 8-10 | 10-10 | 16-10 | 18-10 | 24-10 |
| 3/4 | 2-12 | 3-12 | 4-12 | 5-12 | 6-12 | 8-12 | 10-12 | 16-12 | 18-12 | 24-12 |
| 7/8 | | | | | 6-14 | 8-14 | 10-14 | 16-14 | 18-14 | 24-14 |
| 1 | | | | | 6-16 | 8-16 | 10-16 | 16-16 | 18-16 | 24-16 |
| 1-1/8 | | | | | 6-18 | 8-18 | 10-18 | 16-18 | 18-18 | 24-18 |
| 1-1/4 | | | | | 6-20 | 8-20 | 10-20 | 16-20 | 18-20 | 24-20 |
| 1-3/8 | | | | | 6-22 | 8-22 | 10-22 | 16-22 | 18-22 | 24-22 |
| 1-1/2 | | | | | 6-24 | 8-24 | 10-24 | 16-24 | 18-24 | 24-24 |
| 1-5/8 | | | | | 6-28 | 8-28 | 10-28 | 16-28 | 18-28 | 24-28 |
| 1-3/4 | | | | | 6-32 | 8-32 | 10-32 | 16-32 | 18-32 | 24-32 |
| 2-1/2 | | | | | | | 10-40 | 16-40 | 18-40 | 24-40 |
| 1 | | | | | | | 11-48 | 16-48 | 18-48 | 24-48 |

- (a) THE DIAMETER OF THE UNTHREADED PORTION SHALL NOT BE LESS THAN THE MINIMUM PITCH DIAMETER NOR MORE THAN THE MAXIMUM MAJOR DIAMETER OF THE THREAD.
- (b) THE RADIUS OF THE FILLET AT THE BASE OF THE HEAD SHALL NOT EXCEED ONE-HALF THE PITCH OF THE SCREW THREAD.
- (c) DRILLED HOLE TO BE ON CENTER APPROXIMATELY AT RIGHT ANGLES TO THE SLOT BUT MUST NOT BREAK THROUGH THE BASE OR TOP (SPHERICAL PORTION) OF THE HEAD.
- (d) FOR MACHINE SCREWS 2 INCHES LONG AND SHORTER, COMPLETE THREADS SHALL EXTEND TO WITHIN 2 THREADS OF THE BEARING SURFACE OF THE HEAD OR CLOSER IF PRACTICABLE. SCREWS OF LONGER LENGTH SHALL HAVE A MINIMUM COMPLETE THREAD LENGTH OF 1-3/4 INCHES.
- (e) ALL FILLISTER HEAD SCREWS WITH UNDRILLED HEADS INACTIVE FOR DESIGN AFTER 12 MAY 1967.
- (f) REFERENCE DIMENSIONS ARE FOR DESIGN PURPOSES ONLY AND ARE NOT AN INSPECTION REQUIREMENT.
- (g) NOT PREFERRED FOR AIRFRAME USE.

(h) MATERIAL: (1) CARBON STEEL, QQ-S-637 TYPE F51010, 60,000 PSI MINIMUM TENSILE STRENGTH OR OTHER STEEL MEETING THE SAME PHYSICAL REQUIREMENTS. (2) CORROSION RESISTANT STEEL, QQ-S-763, CLASS IV, MIL-C-2770, COMPOSITION PM OR C FOR COLD CHIPPING PROCESS, OR NON-MAGNETIC EQUIVALENT. (3) CORROSION RESISTANT STEEL, FEDERAL STANDARD NO. 56, TYPE 302, 304, 316, AND 303 SE (1) BRASS, COMMERCIAL, 55,000 PSI MINIMUM ULTIMATE TENSILE STRENGTH

FINISH: CARBON STEEL, CADMIUM PLATE, QQ-P-416, TYPE I, CLASS I. CORROSION RESISTANT STEEL, PASSIVATE. BRASS, NONE.

PLAIN DASH NUMBER INDICATES CARBON STEEL. ADD A BEFORE FIRST DASH NUMBER FOR DRILLED HEAD. ADD B BEFORE FIRST DASH NUMBER FOR BRASS. ADD C BEFORE FIRST DASH NUMBER FOR CORROSION RESISTANT STEEL. NOT TO BE USED FOR NEW DESIGN. ADD D BEFORE FIRST DASH NUMBER FOR CORROSION RESISTANT STEEL.

EXAMPLES OF PART NUMBERS: (e) AN509-6-8 - NO. 6-32 UNDRILLED CARBON STEEL SCREW, 1/2 INCH LONG. AN500A6-8 - NO. 6-32 DRILLED CARBON STEEL SCREW, 1/2 INCH LONG. AN500AB6-8 - NO. 6-32 DRILLED BRASS SCREW, 1/2 INCH LONG. (e) AN500P6-8 - NO. 6-32 UNDRILLED BRASS SCREW, 1/2 INCH LONG. AN500AC-8 - NO. 6-32 DRILLED CORROSION RESISTANT STEEL SCREW, 1/2 INCH LONG. AN500AD6-8 - NO. 6-32 DRILLED CORROSION RESISTANT STEEL SCREW, 1/2 INCH LONG.

SCREWS SHALL BE FREE OF ALL LOOSE OR HANGING BURRS OR SLIVERS WHICH MIGHT BECOME DISLODGED UNDER USAGE.

(6) ~~ENTIRE STANDARD INACTIVE FOR NEW DESIGN AFTER 24 MAY 1967. USE M335273 OR M335275.~~

(6) ENTIRE STANDARD INACTIVE FOR NEW DESIGN AFTER 24 MAY 1967. USE M335265, M335273, OR M335276.

(1) (2) INTERCHANGEABILITY RELATIONSHIP: AN5000 SCREWS CAN UNIVERSALLY REPLACE AN500C SCREWS OF LIKE THREAD SIZE AND LENGTH, BUT THE AN500C SCREWS CANNOT UNIVERSALLY REPLACE THE AN5000 SCREWS. FOR M335273 OR M335275 PARTS THAT CAN BE SUBSTITUTED FOR AN500 PARTS, SEE INTERCHANGEABILITY TABLE OF M335273 OR M335275. PARTS MARKED WITH (2) HAVE NO SUBSTITUTE PART.

(7) REINSTATED AS OF 12 NOVEMBER 1980.

NOTICE: When Government drawings, specifications or other data are used for any purpose other than in connection with a definitely related Government procurement operation, the United States Government thereby incurs no responsibility, nor any obligation whatsoever; and the fact that the Government may have furnished, furnished, or in any way supplied the said drawings, specifications, or other data in this connection shall not be construed as an acknowledgment of any right in the manufacture, use, or sale of any patented invention that may in any way be related thereto.

NOTE: This drawing was approved by joint action of the Air Force and Navy Departments as the Air Force-Navy standard for this product. This drawing supersedes all antecedent standard drawings for the same product and will become effective for the procurement of aeronautical supplies, or for use in new design not later than 6 months after the latest date of approval above.

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| PROCUREMENT SPECIFICATION FF-C 92 | AIR FORCE-NAVY AERONAUTICAL STANDARD | |
| | SCREW, MACHINE, FILLISTER HEAD, COARSE THREAD | |
| | | AN500 |
| | | SHEET 1 OF 1 |

APPROVED 12 APR 64 REVISED 12 NOV 80