

RATIONALE

OPTIONAL MATERIALS ADDED TO NOTE 1. QML STATEMENT REVISED. "INTENDED USE" NOTE REVISED TO POINT THE USER TO THE PROCUREMENT SPECIFICATION FOR APPLICABLE PRESSURES. CHANGE BAR NOTE REVISED. TABLE 1 AND NOTE 11 REVISED TO REFLECT CURRENT SPECIFICATION CALLOUT. GENERAL NON-TECHNICAL UPDATES INCORPORATED. CADMIUM WARNING NOTE ADDED.

REV.
C

AS5161™

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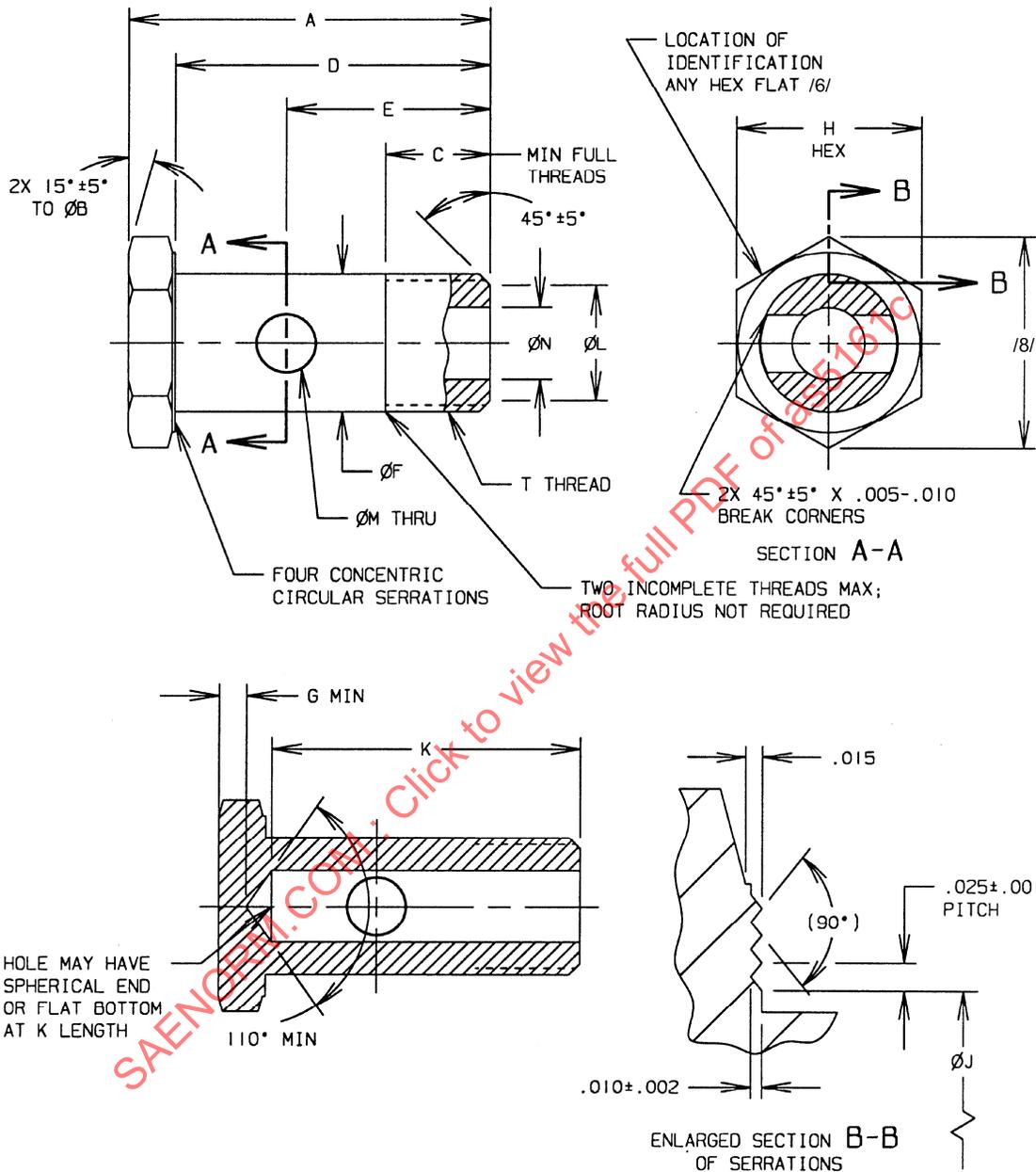
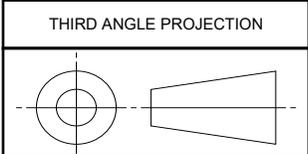


FIGURE 1 - FITTING, BOLT

For more information on this standard, visit
<https://www.sae.org/standards/content/AS5161C>



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: AS4875 /5/



AEROSPACE STANDARD

FITTING, BOLT, FLUID PASSAGE

AS5161™
SHEET 1 OF 4

REV.
C

TABLE 1A - DIMENSIONS A-G

BASIC NO. AS5161 /16/ SIZE CODE	(NOMINAL TUBE SIZE)	T THREAD PER AS8879 CLASS 3A	A	B ±.010	C	D	E ±.010	F ±.002	G
04	.250	.4375-20 UNJF	1.375	.668	.438	1.188	.781	.433	.109
05	.312	.5000-20 UNJF	1.375	.730	.438	1.188	.781	.496	.125
06	.375	.5625-18 UNJF	1.562	.792	.469	1.344	.875	.558	.125
08	.500	.7500-16 UNJF	1.938	.980	.562	1.688	1.094	.746	.156
10	.625	.8750-14 UNJF	2.250	1.103	.594	1.969	1.250	.871	.156
12	.750	1.0625-12 UNJ	2.625	1.352	.656	2.312	1.468	1.058	.188
16	1.000	1.3125-12 UNJ	3.188	1.603	.656	2.812	1.687	1.308	.188

TABLE 1B - DIMENSIONS H-N AND WEIGHTS

BASIC NO. AS5161 /16/ SIZE CODE	H	J ±.005	K	L	M	N	LB/EA MAX AL	LB/EA MAX STEEL	LB/EA MAX TI
04	.678-.691	.474	1.156	.344	.188	.168-.175	.0112	.0322	.0178
05	.740-.753	.536	1.156	.406	.219	.230-.237	.0152	.0438	.0242
06	.802-.815	.599	1.312	.469	.250	.293-.301	.0234	.0672	.0371
08	.990-1.003	.786	1.656	.625	.312	.387-.395	.0448	.128	.0709
10	1.113-1.128	.911	1.938	.750	.375	.480-.488	.0713	.205	.113
12	1.363-1.380	1.099	2.156	.938	.438	.604-.614	.135	.387	.213
16	1.613-1.630	1.349	2.578	1.188	.625	.839-.851	.276	.791	.437

NOTES:

NOTICE

THIS DOCUMENT REFERENCES A PART WHICH CONTAINS CADMIUM AS A PLATING MATERIAL. CONSULT LOCAL OFFICIALS IF YOU HAVE QUESTIONS CONCERNING CADMIUM'S USE.

/1/ MATERIAL:

- a. DASH AS CODE LETTER: TYPE 4130 CARBON STEEL BAR PER AMS-S-6758 OR AMS6370 OR TYPE 4140 PER AMS6349 OR AMS6382. /2/
- b. CODE LETTER D: TYPE 2024-T6 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/6 OR TYPE 2024-T851 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/6 OR AMS4339.
- c. CODE LETTER J: TYPE 304 CORROSION RESISTANT STEEL BAR PER QQ-S-763 OR AMS5639.
- d. CODE LETTER K: TYPE 316 CORROSION RESISTANT STEEL BAR PER QQ-S-763 OR AMS5648.
- e. CODE LETTER R: TYPE 321 CORROSION RESISTANT STEEL BAR PER QQ-S-763 OR AMS5645.
- f. CODE LETTER T: TYPE 6AL-4V TITANIUM ALLOY BAR PER AMS4928.
- g. CODE LETTER W: TYPE 7075-T73 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/9 OR TYPE 7075-T7351 ALUMINUM ALLOY BAR PER AMS4124.

	AEROSPACE STANDARD	AS5161™ SHEET 2 OF 4	REV. C
	FITTING, BOLT, FLUID PASSAGE		

/2/ HEAT TREATMENT:

- a. DASH AS MATERIAL CODE LETTER: REFER TO HARDNESS REQUIREMENT PER PROCUREMENT SPECIFICATION.
- b. MATERIAL CODE LETTERS D AND W: REFER TO ELECTRICAL CONDUCTIVITY AND HARDNESS REQUIREMENT PER PROCUREMENT SPECIFICATION.
- c. OTHER MATERIAL CODE LETTERS: NONE.

3. FINISH:

- a. DASH AS MATERIAL CODE LETTER: CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2, DYE BLACK AND COAT WITH A LIGHT FILM OF OIL PER PROCUREMENT SPECIFICATION.
- b. MATERIAL CODE LETTER D: ANODIZE PER AMS2472 OR MIL-A-8625, TYPE II, CLASS 2, DYE BLUE, DUPLEX SEAL PER PROCUREMENT SPECIFICATION.
- c. MATERIAL CODE LETTERS J, K, AND R: PASSIVATE PER AMS2700 TYPE 6 OR TYPE 7.
- d. MATERIAL CODE LETTER T: ANODIZE PER AMS2488, TYPE 2 OR FLUORIDE PHOSPHATE CONVERSION COAT PER AMS2486, TYPE 2 WITH COLOR PER PROCUREMENT SPECIFICATION.
- e. MATERIAL CODE LETTER W: ANODIZE PER AMS2472 OR MIL-A-8625, TYPE II, CLASS 2, DYE BROWN, DUPLEX SEAL PER PROCUREMENT SPECIFICATION.

4. INVENTORIED PARTS CONFORMING TO THE PREVIOUS "LETTER CHANGE" MAY BE USED TO DEPLETION.

/5/ PROCUREMENT SPECIFICATION: AS4875, EXCEPT AS SPECIFIED ON THIS STANDARD. PRODUCT MANUFACTURED TO THIS STANDARD SHALL MEET THE REQUIREMENTS SPECIFIED HEREIN AND THE PROCUREMENT SPECIFICATION. ORIGINAL COMPONENT MANUFACTURERS (OCM) AND VALUE ADDED DISTRIBUTORS (VAD) SHALL BE LISTED IN THE NADCAP QUALIFIED MANUFACTURER LIST (QML) FOR THIS PRODUCT TYPE. THE QML IS AVAILABLE AT www.eAuditNet.com.

/6/ IDENTIFICATION AT LOCATION SHOWN: MARK PER AS478 CLASS C OR D OR METHOD 7A3, 15A3, OR 15B.

- a. FOR SIZE 06 AND SMALLER: MANUFACTURER'S NAME, CAGE CODE OR TRADEMARK, LETTER "AS," AND MATERIAL CODE LETTER.
- b. FOR SIZE 08 AND LARGER: MANUFACTURER'S NAME, CAGE CODE OR TRADEMARK, BASIC PART NUMBER, AND MATERIAL CODE LETTER.

7. INTENDED USE: THIS PART IS DESIGNED FOR USE IN SYSTEMS WITH MAXIMUM OPERATING PRESSURES AS SPECIFIED IN THE PROCUREMENT SPECIFICATION.

/8/ THE HEX CORNERS MAY BE ROUNDED PER ARP1942.

9. THIS STANDARD IS THE FUNCTIONAL EQUIVALENT OF AN775 AND IS INTENDED TO BE SUITABLE AS A REPLACEMENT STANDARD.

10. REVISION INDICATOR: A CHANGE BAR (I) LOCATED IN THE LEFT MARGIN IS FOR THE CONVENIENCE OF THE USER IN LOCATING AREAS WHERE TECHNICAL REVISIONS, NOT EDITORIAL CHANGES, HAVE BEEN MADE TO THE PREVIOUS ISSUE OF THIS DOCUMENT. AN (R) SYMBOL TO THE LEFT OF THE DOCUMENT TITLE INDICATES A COMPLETE REVISION OF THE DOCUMENT, INCLUDING TECHNICAL REVISIONS. CHANGE BARS AND (R) ARE NOT USED IN ORIGINAL PUBLICATIONS, NOR IN DOCUMENTS THAT CONTAIN EDITORIAL CHANGES ONLY.

11. INTERPRETATION OF DRAWING PER AS4296

12. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M; REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, MACHINED SURFACES TO BE 125 MICROIINCHES Ra. SURFACES OF HEX FLATS MAY BE 250 MICROIINCHES Ra.

13. BREAK EDGES .003 TO .015, UNLESS OTHERWISE SPECIFIED.

	AEROSPACE STANDARD	AS5161™ SHEET 3 OF 4	REV. C
	FITTING, BOLT, FLUID PASSAGE		