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AS4863

FEDERAL SUPPLY CLASS
4730

RATIONALE

AS4863 HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

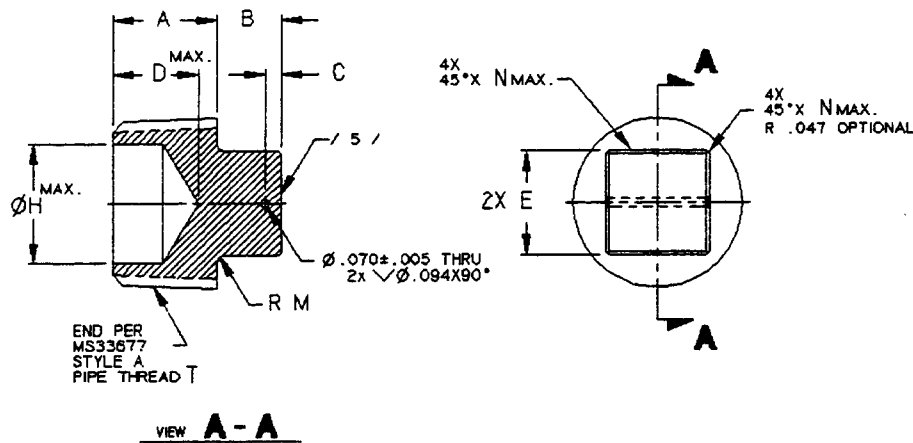


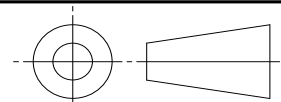
FIGURE 1 - PLUG, PIPE, EXTERNAL THREAD

TABLE 1 - DIMENSIONS

BASIC NO. AS4863 /12/ SIZE CODE	T THD. ANPT MIL-P-7105	A	B	C	D	E +.002 -.010	H	M	N
00	.063-27	.312	.188	.094	-	.188	-	.031	.010
01	.125-27	.328	.250	.125	-	.281	-	.062	.010
02	.250-18	.484	.281	.125	-	.375	-	.062	.010
03	.375-18	.484	.312	.125	.359	.438	.375	.062	.010
04	.500-14	.625	.375	.125	.500	.563	.531	.062	.010
06	.750-14	.641	.438	.125	.500	.625	.719	.062	.010
08	1.000-11.5	.797	.500	.125	.656	.813	.938	.062	.047
10	1.250-11.5	.828	.562	.125	.672	.938	1.250	.062	.047
12	1.500-11.5	.828	.625	.125	.672	1.125	1.469	.062	.047
16	2.000-11.5	.859	.688	.125	.688	1.313	1.906	.062	.047
20	2.500-8	1.297	.750	.125	1.125	1.500	2.031	.062	.047

SAE values your input. To provide feedback
on this Technical Report, please visit
<http://www.sae.org/technical/standards/AS4863>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: /4/ MIL-F-5509



AEROSPACE STANDARD

PLUG, PIPE,
EXTERNAL THREAD

AS4863
SHEET 1 OF 2

Documents

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NOTES:

- /1/ **MATERIAL CODE:**
- "J" = 377 COPPER ALLOY FORGING PER QQ-B-626 OR FORGING/BAR PER QQ-B-728 HALF HARD, OR BAR PER AMS 4614
 - "D" = 2014-T6 ALUMINUM ALLOY FORGING PER QQ-A-367 OR AMS 4133 OR 2024-T6 OR -T851 ALUMINUM ALLOY BAR PER QQ-A-225/6 OR AMS 4112
 - "J" = 304 CRES FORGING/BAR PER QQ-S-763 OR BAR PER AMS 5639
 - "K" = 316 CRES FORGING/BAR PER QQ-S-763 OR AMS 5648
 - "R" = 321 CRES FORGING/BAR PER QQ-S-763 OR AMS 5645
 - "S" = 347 CRES FORGING/BAR PER QQ-S-763 OR BAR PER AMS 5646
 - "W" = 7075-T73 ALUMINUM ALLOY FORGING PER QQ-A-367 OR AMS 4141 OR 7075-T73 OR -T7351 ALUMINUM ALLOY BAR PER QQ-A-225/9 OR AMS 4124
2. **FINISH:**
- "J" = OPTIONAL CADMIUM PLATE PER QQ-P-416, TYPE II, CLASS 3
 - "D" = ANODIZE PER MIL-A-8625, TYPE II, CLASS 2 OR AMS 2472, DYE BLUE
 - "J" = PASSIVATE PER QQ-P-35, TYPE VI OR VII
 - "K" = PASSIVATE PER QQ-P-35, TYPE VI OR VII
 - "R" = PASSIVATE PER QQ-P-35, TYPE VI OR VII
 - "S" = PASSIVATE PER QQ-P-35, TYPE VI OR VII
 - "W" = ANODIZE PER MIL-A-8625, TYPE II, CLASS 2 OR AMS 2472, DYE BROWN. SIMILAR TO COLOR 10080 OF FED-STD-595.
- /3/ **INTENDED USE:** OXYGEN SYSTEMS AND GROUND SUPPORT EQUIPMENT ONLY. PARTS FOR OXYGEN SYSTEMS SHALL BE IDENTIFIED IN THE PART NUMBER AS CODE "A" AND SHALL BE FURNISHED CLEANED, PACKAGED, AND LABELED IN ACCORDANCE WITH AIR1176 TO A PROCESS APPROVED BY THE USER.
- /4/ **PROCUREMENT SPECIFICATION:** MIL-F-5509 EXCEPT AS SPECIFIED ON THIS STANDARD. USERS OF THIS STANDARD ARE ADVISED TO CONTROL SOURCE APPROVAL(S) BY STANDARD PAGE SUPPLEMENT SHEET OR SIMILAR MEANS.
- /5/ **IDENTIFICATION:** MARK PER AS478 CLASS C OR D OR METHOD 7A3, 15A3, OR 15B.
- FOR SIZES 03 (.375 OD TUBE SIZE) AND SMALLER: MANUFACTURER'S NAME, TRADEMARK OR CAGE NO., LETTERS "AS", MATERIAL CODE LETTER, AND FORGING MANUFACTURER'S IDENTIFICATION, WHEN MADE FROM FORGING
 - FOR SIZES 04 (.500 OD TUBE SIZE) AND LARGER: MANUFACTURER'S NAME, TRADEMARK OR CAGE NO., BASIC PART NO., MATERIAL CODE LETTER, AND FORGING MANUFACTURER'S IDENTIFICATION, WHEN MADE FROM FORGING
6. THIS STANDARD IS A FUNCTIONAL EQUIVALENT OF MS20913.
7. INTERPRETATION OF DRAWING PER ARP4296.
8. SURFACE TEXTURE: SYMBOLS PER ANSI Y14.36; REQUIREMENTS PER ANSI/ASME B46.1. UNLESS OTHERWISE SPECIFIED, MACHINED SURFACES TO BE 125 μ in Ra.
9. BREAK ALL SHARP EDGES .003 TO .015 UNLESS OTHERWISE SPECIFIED.
10. DIMENSIONS AND TOLERANCING: PER ANSI Y14.5M
11. DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS $\pm$.016, ANGULAR DIMENSIONS $\pm$ 5°.
- /12/ **EXAMPLE OF PART NUMBER:** AS4863 J 04 A
- BASIC PART NUMBER _____

MATERIAL CODE /1/ _____
"J" = 304 CRES

OXYGEN SYSTEM /3/ _____

INDICATES FITTING END SIZES
IN .125 INCREMENTS
(.500 PIPE THD. ENDS)