

REV.
A

SAE AS4859

FEDERAL SUPPLY CLASS
4730

RATIONALE

AS4859A HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

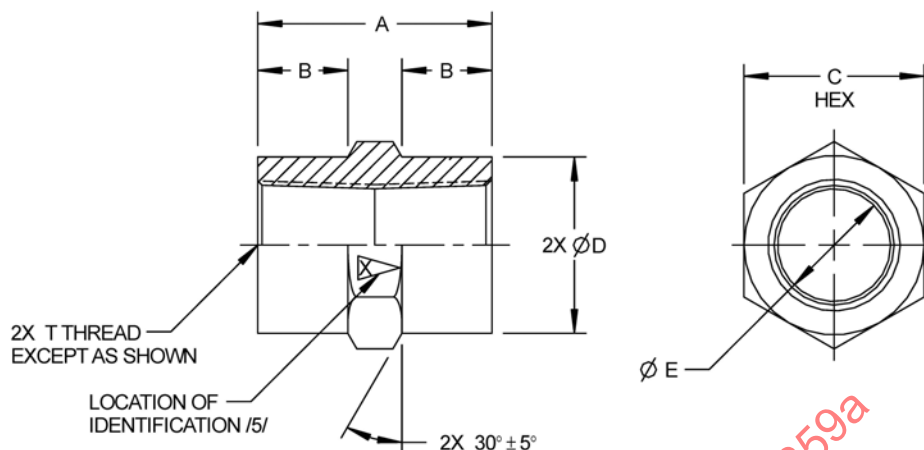


FIGURE 1 – FITTING, COUPLING, PIPE, INTERNAL THREAD

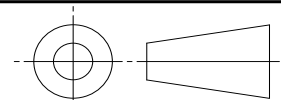
TABLE 1 – DIMENSIONS

BASIC NO. AS4859 /14/ SIZE CODE	T THREAD PER AS71051 ANPT	A ±.031	B	C	D	E
01	.125-.27	.844	.313	.610-.628	.578	.311-.327
02	.250-.18	1.125	.438	.797-.815	.781	.404-.423
03	.375-.18	1.219	.469	.923-.941	.922	.529-.557
04	.500-.14	1.594	.641	1.173-1.191	1.156	.654-.688
06	.750-.14	1.625	.641	1.355-1.380	1.359	.857-.897
08	1.000-11.5	1.938	.781	1.730-1.755	1.688	1.091-1.128
10	1.250-11.5	1.938	.781	2.105-2.135	2.094	1.435-1.471

INACTIVE IN PART - SEE NOTE /15/

SAE values your input. To provide feedback
on this Technical Report, please visit
<http://www.sae.org/technical/standards/AS4859A>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: /5/ AS4842

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

FITTING, COUPLING, PIPE,
INTERNAL THREAD

SAE AS4859
SHEET 1 OF 3

REV.
A

NOTES:

/1/ MATERIAL:

- a. DASH AS CODE LETTER - TYPE 377 COPPER ALLOY FORGING PER ASTM B 124 OR HALF HARD FORGING OR BAR PER ASTM B 138, OR BAR PER AMS 4614.
- b. CODE LETTER D – TYPE 2014-T6 ALUMINUM ALLOY FORGING PER AMS-QQ-A-367 OR AMS 4133, OR 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 AMS 4339.
- c. CODE LETTER J – TYPE 304 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS-QQ-S-763 OR AMS 5639.
- d. CODE LETTER K – TYPE 316 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS-QQ-S-763 OR AMS 5648
- e. CODE LETTER R – TYPE 321 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS-QQ-S-763 OR AMS 5645.
- f. CODE LETTER S - TYPE 347 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS-QQ-S-763 OR AMS 5646. /15/
- g. CODE LETTER W - TYPE 7075-T73 ALUMINUM ALLOY FORGING PER AMS-QQ-A-367 OR AMS 4141, OR TYPE 7075-T73 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/9, OR TYPE 7075-T7351 ALUMINUM ALLOY BAR PER AMS 4124.

2. FINISH:

- a. DASH AS CODE LETTER - CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 3 OR NONE. /13/
- b. MATERIAL CODE LETTER D:
 1. ANODIZE PER AMS 2472 OR MIL-A-8625, TYPE II, CLASS 2, DYE BLUE, DUPLEX SEAL PER PROCUREMENT SPECIFICATION.
 2. D CODE PARTS TO BE COATED WITH HIGH PURITY ALUMINUM ONLY WILL HAVE THE FINISH CODE LETTER "V" AFTER THE SIZE CODE IN THE PART NUMBER. THE FINISH WILL BE: COAT WITH HIGH PURITY ALUMINUM PER MIL-DTL-83488, CLASS 3, TYPE II WITH MAXIMUM COATING THICKNESS OF .0005. GLASS BEAD PEEN PRESSURE SHALL BE 25 psi MAXIMUM.
- c. MATERIAL CODE LETTER J – PASSIVATE PER AMS-QQ-P-35, TYPE VI OR VII
- d. MATERIAL CODE LETTER K – PASSIVATE PER AMS-QQ-P-35, TYPE VI OR VII
- e. MATERIAL CODE LETTER R – PASSIVATE PER AMS-QQ-P-35, TYPE VI OR VII
- f. MATERIAL CODE LETTER S - PASSIVATE PER AMS-QQ-P-35, TYPE VI OR VII
- g. MATERIAL CODE LETTER W:
 1. ANODIZE PER AMS 2472 OR MIL-A-8625, TYPE II, CLASS 2, DYE BROWN SIMILAR TO COLOR 10080 OF FED-STD-595, DUPLEX SEAL PER PROCUREMENT SPECIFICATION.
 2. W CODE PARTS TO BE COATED WITH HIGH PURITY ALUMINUM ONLY WILL HAVE THE FINISH CODE LETTER "V" AFTER THE SIZE CODE IN THE PART NUMBER. THE FINISH WILL BE: COAT WITH HIGH PURITY ALUMINUM PER MIL-DTL-83488, CLASS 3, TYPE II WITH MAXIMUM COATING THICKNESS OF .0005. GLASS BEAD PEEN PRESSURE SHALL BE 25 psi MAXIMUM.

/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: AS4842 EXCEPT AS SPECIFIED ON THIS STANDARD. USERS OF THIS STANDARD SHALL PROCURE THIS PRODUCT FROM ACCREDITED MANUFACTURER(S), OR ACCREDITED DISTRIBUTOR(S), AS LISTED IN THE PERFORMANCE REVIEW INSTITUTE (PRI) QUALIFIED MANUFACTURERS LIST (QML) FOR THIS TYPE OF PRODUCT.

/5/ IDENTIFICATION AT LOCATION SHOWN: MARK PER AS478 CLASS C OR D OR METHOD 7A3, 15A3, OR 15B.

- a. FOR SIZES 03 AND SMALLER: MANUFACTURER'S NAME, CAGE CODE OR TRADEMARK, LETTERS "AS", MATERIAL CODE LETTER, AND FORGING MANUFACTURER'S IDENTIFICATION, WHEN MADE FROM FORGING.
- b. FOR SIZES 04 AND LARGER: MANUFACTURER'S NAME, CAGE CODE OR TRADEMARK, BASIC PART NUMBER, MATERIAL CODE LETTER, AND FORGING MANUFACTURER'S IDENTIFICATION, WHEN MADE FROM FORGING.

 An SAE International Group	AEROSPACE STANDARD	 AS4859 SHEET 2 OF 3	REV. A
	FITTING, COUPLING, PIPE, INTERNAL THREAD		