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REV.  
E

AS5173™

## RATIONALE

FEDERAL SUPPLY CLASS  
4730

REVISED FINISH CODE LETTER NOTE IN NOTE 15 ALLOWING FINISH CODE "V" TO BE APPLICABLE FOR MATERIAL CODE "D."

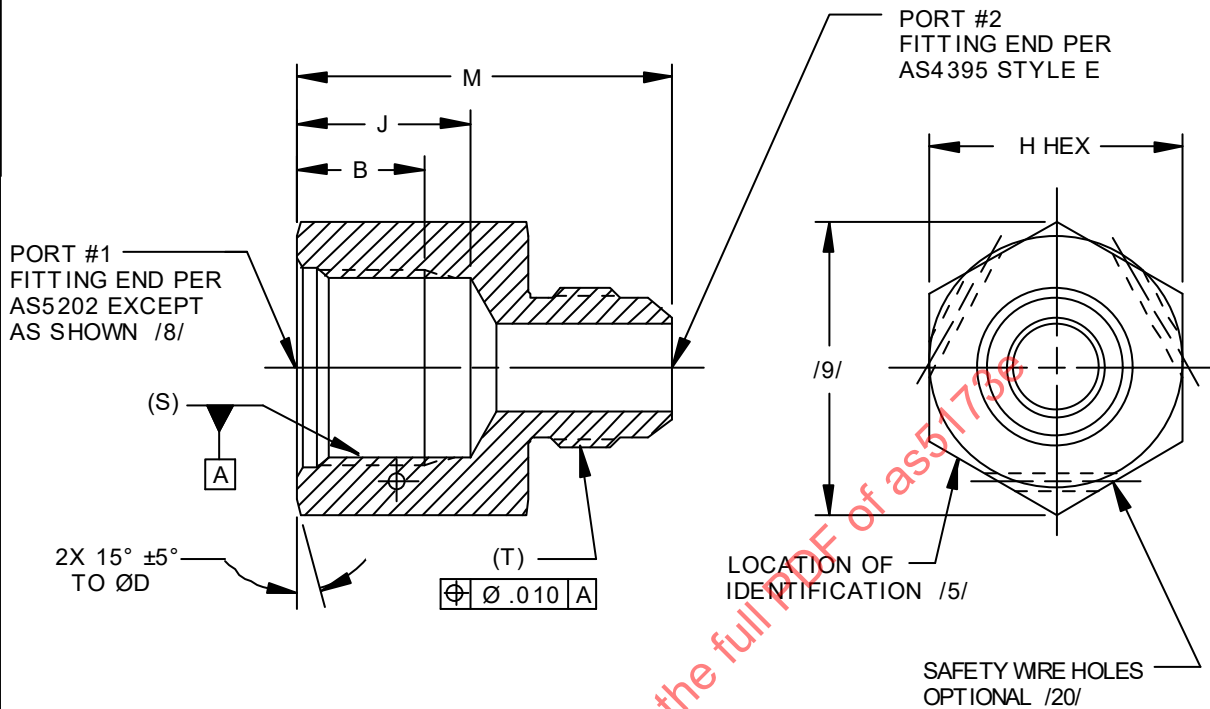
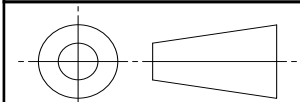


FIGURE 1 - FITTING

NOT RECOMMENDED IN PART /17/

For more information on this standard, visit  
<https://www.sae.org/standards/content/AS5173E/>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: AS4875/1 /4/



## AEROSPACE STANDARD

FITTING, BUSHING, PORT, REDUCER

AS5173™  
SHEET 1 OF 5

REV.  
E

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ISSUED 2000-01 REAFFIRMED 2015-04 REVISED 2022-02

**TABLE 1A - DIMENSIONS B-D**

| BASIC NO.<br>AS5173<br>/15/<br>SIZE CODE | NOMINAL<br>TUBE<br>SIZE<br>PORT #1 | NOMINAL<br>TUBE<br>SIZE<br>PORT #2 | S THREAD<br>PER<br>AS8879<br>CLASS 3B | T THREAD<br>PER<br>AS8879<br>CLASS 3A | B<br>MIN | D<br>±.010 |
|------------------------------------------|------------------------------------|------------------------------------|---------------------------------------|---------------------------------------|----------|------------|
| 0302                                     | .188                               | .125                               | .3750-24 UNJF                         | .3125-24 UNJF                         | .538     | .605       |
| 0402                                     | .250                               | .125                               | .4375-20 UNJF                         | .3125-24 UNJF                         | .568     | .668       |
| 0403                                     | .250                               | .188                               | .4375-20 UNJF                         | .3750-24 UNJF                         | .568     | .668       |
| 0504                                     | .312                               | .250                               | .5000-20 UNJF                         | .4375-20 UNJF                         | .568     | .730       |
| 0604                                     | .375                               | .250                               | .5625-18 UNJF                         | .4375-20 UNJF                         | .470     | .793       |
| 0605                                     | .375                               | .313                               | .5625-18 UNJF                         | .5000-20 UNJF                         | .470     | .793       |
| 0804                                     | .500                               | .250                               | .7500-16 UNJF                         | .4375-20 UNJF                         | .562     | .980       |
| 0805                                     | .500                               | .313                               | .7500-16 UNJF                         | .5000-20 UNJF                         | .562     | .980       |
| 0806                                     | .500                               | .375                               | .7500-16 UNJF                         | .5625-18 UNJF                         | .562     | .980       |
| 1004                                     | .625                               | .250                               | .8750-14 UNJF                         | .4375-20 UNJF                         | .625     | 1.103      |
| 1005                                     | .625                               | .313                               | .8750-14 UNJF                         | .5000-20 UNJF                         | .625     | 1.103      |
| 1006                                     | .625                               | .375                               | .8750-14 UNJF                         | .5625-18 UNJF                         | .625     | 1.103      |
| 1008                                     | .625                               | .500                               | .8750-14 UNJF                         | .7500-16 UNJF                         | .625     | 1.103      |
| 1206                                     | .750                               | .375                               | 1.0625-12 UNJ                         | .5625-18 UNJF                         | .688     | 1.353      |
| 1208                                     | .750                               | .500                               | 1.0625-12 UNJ                         | .7500-16 UNJF                         | .688     | 1.353      |
| 1210                                     | .750                               | .625                               | 1.0625-12 UNJ                         | .8750-14 UNJF                         | .688     | 1.353      |
| 1606                                     | 1.000                              | .375                               | 1.3125-12 UNJ                         | .5625-18 UNJF                         | .688     | 1.603      |
| 1608                                     | 1.000                              | .500                               | 1.3125-12 UNJ                         | .7500-16 UNJF                         | .688     | 1.603      |
| 1610                                     | 1.000                              | .625                               | 1.3125-12 UNJ                         | .8750-14 UNJF                         | .688     | 1.603      |
| 1612                                     | 1.000                              | .750                               | 1.3125-12 UNJ                         | 1.0625-12 UNJ                         | .688     | 1.603      |
| 2008                                     | 1.250                              | .500                               | 1.0625-12 UNJ                         | .7500-16 UNJF                         | .688     | 1.863      |
| 2010                                     | 1.250                              | .625                               | 1.0625-12 UNJ                         | .8750-14 UNJF                         | .688     | 1.863      |
| 2012                                     | 1.250                              | .750                               | 1.0625-12 UNJ                         | 1.0625-16 UNJ                         | .688     | 1.863      |
| 2016                                     | 1.250                              | 1.000                              | 1.0625-12 UNJ                         | 1.3125-12 UNJ                         | .688     | 1.863      |



**AEROSPACE STANDARD**

FITTING, BUSHING, PORT, REDUCER

**AS5173™**  
SHEET 2 OF 5

**REV.**  
**E**

**TABLE 1B - DIMENSIONS H-M AND WEIGHTS**

| BASIC NO.<br>AS5173<br>/15/<br>SIZE CODE | H           | J     | M     | LB/EA<br>APPROX<br>REF<br>AL<br>/18/ | LB/EA<br>APPROX<br>REF<br>STEEL<br>/18/ | LB/EA<br>APPROX<br>REF<br>TI<br>/18/ |
|------------------------------------------|-------------|-------|-------|--------------------------------------|-----------------------------------------|--------------------------------------|
| 0302                                     | .615- .628  | .598  | 1.188 | .0319                                | .0917                                   | .0506                                |
| 0402                                     | .678- .691  | .672  | 1.297 | .0362                                | .104                                    | .0573                                |
| 0403                                     | .678- .691  | .672  | 1.297 | .0378                                | .109                                    | .0599                                |
| 0504                                     | .740- .753  | .672  | 1.500 | .0433                                | .124                                    | .0685                                |
| 0604                                     | .806- .816  | .630  | 1.391 | .0511                                | .147                                    | .0809                                |
| 0605                                     | .806- .816  | .630  | 1.375 | .0534                                | .153                                    | .0846                                |
| 0804                                     | .990-1.003  | .750  | 1.609 | .0649                                | .186                                    | .103                                 |
| 0805                                     | .990-1.003  | .750  | 1.547 | .0672                                | .193                                    | .107                                 |
| 0806                                     | .990-1.003  | .750  | 1.547 | .0698                                | .200                                    | .111                                 |
| 1004                                     | 1.113-1.128 | .810  | 1.672 | .0713                                | .205                                    | .113                                 |
| 1005                                     | 1.113-1.128 | .810  | 1.656 | .0737                                | .212                                    | .117                                 |
| 1006                                     | 1.113-1.128 | .810  | 1.641 | .0763                                | .219                                    | .121                                 |
| 1008                                     | 1.113-1.128 | .810  | 1.750 | .090                                 | .258                                    | .143                                 |
| 1206                                     | 1.363-1.380 | .940  | 1.813 | .102                                 | .294                                    | .162                                 |
| 1208                                     | 1.363-1.380 | .940  | 1.922 | .116                                 | .334                                    | .184                                 |
| 1210                                     | 1.363-1.380 | .940  | 2.016 | .131                                 | .376                                    | .207                                 |
| 1606                                     | 1.613-1.630 | .970  | 1.922 | .123                                 | .352                                    | .194                                 |
| 1608                                     | 1.613-1.630 | .970  | 2.032 | .136                                 | .391                                    | .216                                 |
| 1610                                     | 1.613-1.630 | .970  | 2.109 | .151                                 | .434                                    | .293                                 |
| 1612                                     | 1.613-1.630 | .970  | 2.203 | .179                                 | .514                                    | .283                                 |
| 2008                                     | 1.863-1.880 | 1.010 | 2.172 | .137                                 | .392                                    | .216                                 |
| 2010                                     | 1.863-1.880 | 1.010 | 2.250 | .151                                 | .435                                    | .240                                 |
| 2012                                     | 1.863-1.880 | 1.010 | 2.238 | .179                                 | .515                                    | .284                                 |
| 2016                                     | 1.863-1.880 | 1.010 | 2.297 | .224                                 | .642                                    | .354                                 |

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:

- DASH AS CODE LETTER - TYPE 4130 STEEL BAR PER AMS-S-6758 OR AMS6370 OR TYPE 4140 PER AMS6349 OR AMS6382.
- CODE LETTER D - TYPE 2024-T6 ALUMINUM ALLOY BAR PER AMS-QQ-225/6, OR TYPE 2024-T851 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/6 OR AMS4339. /17/
- CODE LETTER J - TYPE 304 CORROSION RESISTANT STEEL BAR PER AMS-QQ-S-763 OR AMS5639.
- CODE LETTER K - TYPE 316 COND A CORROSION RESISTANT STEEL BAR PER AMS-QQ-S-763 OR AMS5648.
- CODE LETTER R - TYPE 321 COND A CORROSION RESISTANT STEEL BAR PER AMS-QQ-S-763 OR AMS5645.
- CODE LETTER S - TYPE 347 CORROSION RESISTANT STEEL BAR PER AMS-QQ-S-763 OR AMS5646. /17/
- CODE LETTER T - TYPE 6AL-4V TITANIUM ALLOY BAR PER AMS4928.
- CODE LETTER W - TYPE 7075-T73 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/9 OR TYPE 7075-T7351 ALUMINUM ALLOY BAR PER AMS4124.

|                                                                                     |                                 |                                |                         |
|-------------------------------------------------------------------------------------|---------------------------------|--------------------------------|-------------------------|
|  | <b>AEROSPACE STANDARD</b>       | <b>AS5173™</b><br>SHEET 3 OF 5 | <b>REV.</b><br><b>E</b> |
|                                                                                     | FITTING, BUSHING, PORT, REDUCER |                                |                         |

/2/ HEAT TREATMENT:

- a. DASH AS MATERIAL CODE LETTER - SEE 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:
    - 1. ANODIZE PER AMS2472 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. HIGH PURITY ALUMINUM COAT PER PROCUREMENT SPECIFICATION. /15/
  - c. MATERIAL CODE LETTER J: PASSIVATE PER AMS2700 TYPE 6 OR TYPE 7 OR METHOD 2.
  - d. MATERIAL CODE LETTER K: PASSIVATE PER AMS2700 TYPE 6 OR TYPE 7 OR METHOD 2.
  - e. MATERIAL CODE LETTER R: PASSIVATE PER AMS2700 TYPE 6 OR TYPE 7 OR METHOD 2.
  - f. MATERIAL CODE LETTER S: PASSIVATE PER AMS2700 TYPE 6 OR TYPE 7 OR METHOD 2.
  - g. MATERIAL CODE LETTER T: ANODIZE PER AMS2488 TYPE 2 OR FLUORIDE PHOSPHATE COAT PER AMS2486, COLOR PER PROCUREMENT SPECIFICATION.
  - h. MATERIAL CODE LETTER W:
    - 1. ANODIZE PER AMS2472 OR MIL-A-8625, TYPE II, CLASS 2, DYE BROWN, 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. HIGH PURITY ALUMINUM COAT PER PROCUREMENT SPECIFICATION. /15/
- /4/ PROCUREMENT SPECIFICATION: AS4875/1 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](http://www.eAuditNet.com).
- /5/ IDENTIFICATION AT LOCATION SHOWN: MARK PER AS478 CLASS C OR D OR METHOD 7A3, 15A3, OR 15B MANUFACTURER'S NAME, TRADEMARK OR CAGE CODE, BASIC PART NUMBER, AND MATERIAL CODE LETTER.
6. INTENDED USE: THIS PART IS DESIGNED FOR USE IN SYSTEMS WITH MAXIMUM OPERATING PRESSURES AS SPECIFIED IN THE PROCUREMENT SPECIFICATION.
7. THIS STANDARD IS THE FUNCTIONAL EQUIVALENT OF AN894 AND MS24398, EXCEPT WITH LONGER "M" LENGTHS IN SOME SIZES, AND IS INTENDED TO BE SUITABLE AS A REPLACEMENT STANDARD.
- /8/ THE INTERNAL DIAMETERS SHALL END IN A CONICAL END OF 115° MINIMUM INCLUDED ANGLE.
- /9/ THE HEX CORNERS MAY BE ROUNDED PER ARP1942.
10. INTERPRETATION OF DRAWING PER AS4296.

|                                                                                     |                                 |                                |                         |
|-------------------------------------------------------------------------------------|---------------------------------|--------------------------------|-------------------------|
|  | <b>AEROSPACE STANDARD</b>       | <b>AS5173™</b><br>SHEET 4 OF 5 | <b>REV.</b><br><b>E</b> |
|                                                                                     | FITTING, BUSHING, PORT, REDUCER |                                |                         |