

REV.  
B

AS5238

RATIONALE

MATERIAL OPTION FOR 15-5PH CORROSION RESISTANT STEEL HAS BEEN ADDED. UPDATES.

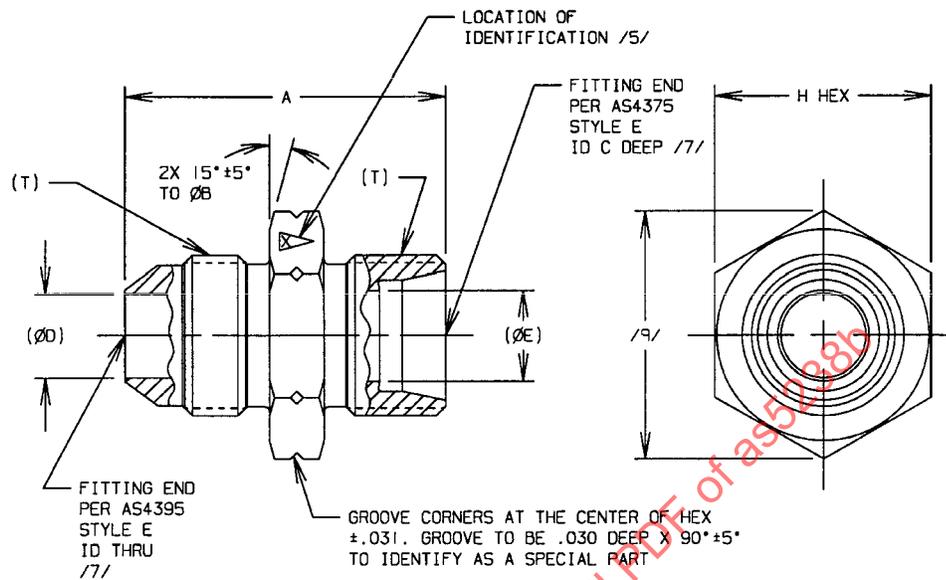


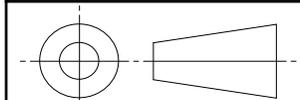
FIGURE 1 - FITTING, ADAPTER

TABLE 1 - DIMENSIONS

| BASIC NO.<br>AS5238<br>/15/<br>SIZE CODE | (NOMINAL<br>TUBE<br>SIZE) | T THREAD<br>PER AS8879<br>CLASS 3A | A     | B<br>$\pm .010$ | C<br>$\pm .031$ | D     | E     |
|--|---------------------------|------------------------------------|-------|-----------------|-----------------|-------|-------|
| 03                                       | .188                      | .3750-24 UNJF                      | 1.156 | .605            | THRU            | .124  | .125  |
| 04                                       | .250                      | .4375-20 UNJF                      | 1.188 | .668            | .563            | .172  | .187  |
| 05                                       | .312                      | .5000-20 UNJF                      | 1.156 | .730            | THRU            | .234  | .234  |
| 06                                       | .375                      | .5625-18 UNJF                      | 1.281 | .792            | THRU            | .297  | .297  |
| 08                                       | .500                      | .7500-16 UNJF                      | 1.469 | .980            | .688            | .391  | .422  |
| 10                                       | .625                      | .8750-14 UNJF                      | 1.688 | 1.103           | .781            | .484  | .500  |
| 12                                       | .750                      | 1.0625-12 UNJ                      | 1.938 | 1.353           | .875            | .609  | .656  |
| 16                                       | 1.000                     | 1.3125-12 UNJ                      | 1.969 | 1.603           | .844            | .845  | .875  |
| 20                                       | 1.250                     | 1.6250-12 UNJ                      | 2.000 | 1.853           | .875            | 1.080 | 1.093 |
| 24                                       | 1.500                     | 1.8750-12 UNJ                      | 2.156 | 2.099           | .875            | 1.314 | 1.344 |
| 32                                       | 2.000                     | 2.5000-12 UNJ                      | 2.469 | 2.724           | .906            | 1.784 | 1.813 |

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/AS5238B>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: /4/ AS18280



AEROSPACE STANDARD

FITTING, ADAPTER, FLARELESS TO FLARED

AS5238  
SHEET 1 OF 4

REV.  
B

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TABLE 1A - DIMENSIONS AND WEIGHTS

| BASIC NO.<br>AS5238<br>/15/<br>SIZE CODE | H      |       | LB/EA<br>APPROX<br>REF<br>AL | LB/EA<br>APPROX<br>REF STEEL | LB/EA<br>APPROX<br>REF TI |
|--|--------|-------|------------------------------|------------------------------|---------------------------|
| 03                                       | .615-  | .628  | .0165                        | .0473                        | .0261                     |
| 04                                       | .678-  | .691  | .0180                        | .0518                        | .0286                     |
| 05                                       | .740-  | .753  | .0201                        | .0578                        | .0319                     |
| 06                                       | .802-  | .815  | .0290                        | .0833                        | .0460                     |
| 08                                       | .990-  | 1.003 | .0524                        | .150                         | .0829                     |
| 10                                       | 1.113- | 1.128 | .0762                        | .219                         | .121                      |
| 12                                       | 1.363- | 1.380 | .132                         | .378                         | .208                      |
| 16                                       | 1.613- | 1.630 | .177                         | .509                         | .281                      |
| 20                                       | 1.863- | 1.880 | .249                         | .715                         | .394                      |
| 24                                       | 2.109- | 2.135 | .325                         | .934                         | .516                      |
| 32                                       | 2.734- | 2.760 | .642                         | 1.84                         | 1.02                      |

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 ALLOY STEEL BAR PER AMS6370. /2/
- b. CODE LETTER D - TYPE 2024-T6 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/6 OR AMS4339 OR TYPE 2024-T851 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/6. /2/
- c. CODE LETTER J - TYPE 304 CORROSION RESISTANT STEEL BAR PER AMS5639.
- d. CODE LETTER K - TYPE 316 CORROSION RESISTANT STEEL BAR PER AMS5648.
- e. CODE LETTER R - TYPE 321 CORROSION RESISTANT STEEL BAR PER AMS5645.
- f. CODE LETTER T - TYPE 6AL-4V TITANIUM ALLOY BAR PER AMS4928.
- g. CODE LETTER V - TYPE 15-5PH CORROSION RESISTANT STEEL BAR PER AMS5659. /2/
- h. CODE LETTER W - TYPE 7075-T73 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/9 OR TYPE 7075-T7351 ALUMINUM ALLOY BAR PER AMS4124. /2/

/2/ HEAT TREATMENT:

- a. DASH AS MATERIAL CODE LETTER - SEE HARDNESS REQUIREMENT PER PROCUREMENT SPECIFICATION.
- b. MATERIAL CODE LETTERS D AND W - SEE ELECTRICAL CONDUCTIVITY AND HARDNESS REQUIREMENT PER PROCUREMENT SPECIFICATION.
- c. MATERIAL CODE LETTER V - HEAT TREAT TO CONDITION H-1075 PER AMS2759/3.
- d. OTHER CODE LETTERS - NONE.

|   |                                       |                               |                         |
|---|---------------------------------------|-------------------------------|-------------------------|
|  | <b>AEROSPACE STANDARD</b>             | <b>AS5238</b><br>SHEET 2 OF 4 | <b>REV.</b><br><b>B</b> |
|   | FITTING, ADAPTER, FLARELESS TO FLARED |                               |                         |

3. FINISH:

- a. DASH AS CODE MATERIAL LETTER - CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2 AND COAT WITH A LIGHT FILM OF OIL PER PROCUREMENT SPECIFICATION.
- b. MATERIAL CODE LETTER D - ANODIZE PER MIL-A-8625, TYPE II, CLASS 2, DYE GREEN, DUPLEX SEAL PER PROCUREMENT SPECIFICATION.
- c. MATERIAL CODE LETTER J, K, AND R - PASSIVATE PER AMS2700 PER PROCUREMENT SPECIFICATION.
- d. MATERIAL CODE LETTER T - ANODIZE PER AMS2488 OR FLUORIDE PHOSPHATE CONVERSION COAT PER AMS2486 WITH COLOR PER PROCUREMENT SPECIFICATION.
- e. MATERIAL CODE LETTER V:
  - (1) PASSIVATE PER AMS2700, TYPE 2 OR 8.
  - (2) SUFFIX FINISH CODE LETTER "P": CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2.
- f. MATERIAL CODE LETTER W - ANODIZE PER MIL-A-8625, TYPE II, CLASS 2, DYE BROWN, DUPLEX SEAL PER PROCUREMENT SPECIFICATION.

/4/ PROCUREMENT SPECIFICATION: AS18280 EXCEPT AS SPECIFIED ON THIS STANDARD. PRODUCT SUPPLIED TO THIS SPECIFICATION SHALL BE MANUFACTURED BY AN ACCREDITED MANUFACTURER AS LISTED IN THE PERFORMANCE REVIEW INSTITUTE (PRI) QUALIFIED PRODUCTS LIST PRI-QPL-AS18280 FOR THIS STANDARD. SEE <http://www.eAuditNet.com> FOR CURRENT QPL ONLINE.

NOTE: PRI-QPL LIMITATION - WITH REVISION A OF THIS STANDARD THE PROCUREMENT SPECIFICATION HAS BEEN CHANGED FROM AS4444 FOR 5000 PSI TO AS18280 FOR 3000 PSI. USERS OF THIS FITTING FOR 5000 PSI APPLICATIONS PER AS4444 MUST ARE ADVISED TO CONTROL SOURCE APPROVAL BY STANDARD PAGE SUPPLEMENT OR SIMILAR MEANS.

/5/ 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.

6. INTENDED USE:

- a. THIS STANDARD IS THE FUNCTIONAL EQUIVALENT FOR MS21900 AND MS24405 AND IS INTENDED TO BE SUITABLE AS A REPLACEMENT STANDARD.
- b. CLEANING OF ALUMINUM ALLOY AND CORROSION RESISTANT STEEL FITTINGS IN ACCORDANCE WITH ARP1176 (CODE LETTER "A") IS REQUIRED FOR OXYGEN SYSTEMS TO AVOID FIRE DUE TO PARTICLES OR OTHER CONTAMINANTS.

/7/ THE INTERNAL DIAMETER E SHALL END IN A CONICAL END OF 110 DEGREE MINIMUM INCLUDED ANGLE.

/8/ SUFFIX LETTER A: CODE A ALUMINUM AND CORROSION RESISTANT STEEL PARTS USED IN OXYGEN SYSTEMS SHALL BE CLEANED AND PACKAGED IN ACCORDANCE WITH ARP1176 CATEGORY 2 FOR ALUMINUM AND CATEGORY 1C FOR CORROSION RESISTANT STEEL.

/9/ THE HEX CORNERS MAY BE ROUNDED PER ARP1942.

10. INTERPRETATION OF DRAWING PER AS4296.

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

|   |                                       |                               |                         |
|---|---------------------------------------|-------------------------------|-------------------------|
|  | <b>AEROSPACE STANDARD</b>             | <b>AS5238</b><br>SHEET 3 OF 4 | <b>REV.</b><br><b>B</b> |
|   | FITTING, ADAPTER, FLARELESS TO FLARED |                               |                         |