

REV.  
D

AS85421™/11

RATIONALE

DOCUMENT CUSTODIAN REVISED TO REFLECT G-3B SUB-COMMITTEE. CORRECT TYPO, CHANGE AMS2700 TYPE 6 OR 7 TO 2 OR 8. UPDATE PROCUREMENT SPECIFICATION NOTE TO CURRENT QPL VERBIAGE. TITANIUM USAGE NOTE 9 REMOVED (THIS NOTE SHOULD NOT BE PART OF THE PART STANDARD). REVISE OUTDATED SPECIFICATIONS BY CURRENT REPLACEMENT. INVENTORY DISPOSITION NOTE 17 ADDED.

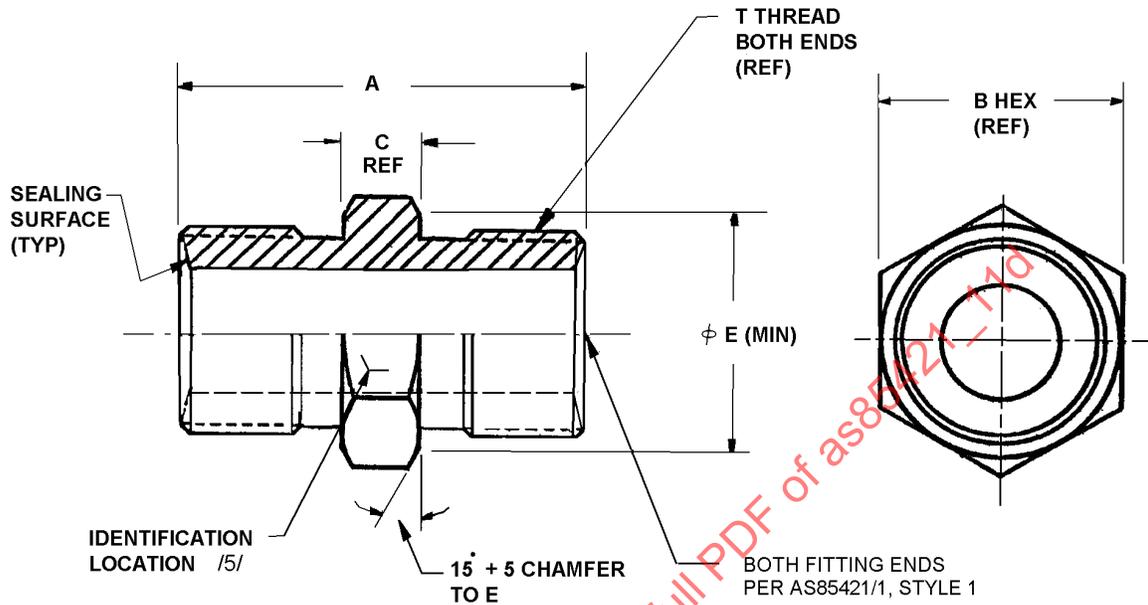


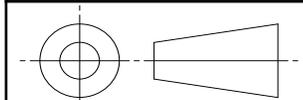
FIGURE 1

TABLE 1 - DIMENSIONS A-E AND WEIGHTS

| DASH NO. | TUBE OD | T THREAD AS8879  | A     | B (REF) | C (REF) | ØE (MIN) | MASS, LB/EA, APPROX, REF |      |
|----------|---------|------------------|-------|---------|---------|----------|--------------------------|------|
|          |         |                  |       |         |         |          | TI                       | CRES |
| 03       | .188    | .3750-28UNJS-3A  | .637  | .375    | .156    | .350     | .010                     | .017 |
| 04       | .250    | .4375-24UNJS-3A  | .727  | .438    | .162    | .413     | .015                     | .026 |
| 05       | .312    | .5000-24UNJS-3A  | .739  | .500    | .174    | .475     | .019                     | .034 |
| 06       | .375    | .5625-20UNJS-3A  | .793  | .562    | .188    | .537     | .023                     | .041 |
| 08       | .500    | .7188-20UNJS-3A  | .873  | .750    | .242    | .725     | .045                     | .079 |
| 10       | .625    | .8438-18UNJS-3A  | 1.051 | .875    | .292    | .850     | .067                     | .118 |
| 12       | .750    | 1.0000-16UNJ-3A  | 1.139 | 1.000   | .300    | .975     | .080                     | .142 |
| 14       | .875    | 1.1250-16UNJ-3A  | 1.181 | 1.125   | .306    | 1.100    | .098                     | .173 |
| 16       | 1.000   | 1.2500-14UNJS-3A | 1.307 | 1.250   | .372    | 1.225    | .132                     | .234 |
| 20       | 1.250   | 1.5781-14UNJS-3A | 1.341 | 1.625   | .412    | 1.600    | .224                     | .397 |
| 24       | 1.500   | 1.8438-14UNJS-3A | 1.537 | 1.875   | .438    | 1.850    | .335                     | .593 |

For more information on this standard, visit  
<https://www.sae.org/standards/content/AS85421/11D>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: AS85421 /4/



AEROSPACE STANDARD

FITTING, UNION, BEAM SEAL,  
3000/4000 PSI, MALE ENDS

AS85421™/11  
SHEET 1 OF 3

REV.  
D

SAE Executive Standards Committee Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user." SAE reviews each technical report at least every five years at which time it may be revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

NOTES:

/1/ MATERIAL:

- a. CODE LETTER P: TYPE 17-4PH CORROSION RESISTANT STEEL PER AMS5643.
- b. CODE LETTER T: TYPE 6AL-4V TITANIUM ALLOY BAR PER AMS4928 OR AMS4965.
- c. CODE LETTER V: TYPE 15-5PH, CORROSION RESISTANT STEEL PER AMS5659.

2. HEAT TREATMENT:

- a. MATERIAL CODE LETTER P: CONDITION H1075 PER AMS2759/3.
- b. MATERIAL CODE LETTER T: NONE.
- c. MATERIAL CODE LETTER V: AGE TO CONDITION H1075 PER AMS-H-6875 OR AMS2759/3.

3. FINISH:

- a. MATERIAL CODE LETTER P: PASSIVATE PER AMS2700, TYPE 2 OR 8.
- b. MATERIAL CODE LETTER T : NONE.
- c. MATERIAL CODE LETTER V: PASSIVATE PER AMS2700, TYPE 2 OR 8.

/4/ PROCUREMENT SPECIFICATION: AS85421, 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) SHALL BE LISTED IN THE PRI QUALIFIED PRODUCTS LIST (QPL) PRI-QPL-AS85421 FOR THIS STANDARD. SEE [www.eAuditNet.com](http://www.eAuditNet.com) FOR CURRENT QPL ONLINE.

/5/ IDENTIFICATION AT LOCATION SHOWN: MARK PER AS578 CLASS C OR D, OR METHOD 7A3, 15A3, OR 15B.

- a. FOR SIZES 06 AND SMALLER: MANUFACTURER'S NAME, CAGE CODE OR TRADEMARK, LETTERS "AS" AND MATERIAL CODE LETTER, AND FORGING MANUFACTURER'S IDENTIFICATION WHEN MADE FROM FORGING.
  - b. FOR SIZES 08 AND LARGER: MANUFACTURER'S NAME, CAGE CODE OR TRADEMARK, BASIC PART NUMBER AND MATERIAL CODE LETTER, AND FORGING MANUFACTURER'S IDENTIFICATION WHEN MADE FROM FORGING.
6. INVENTORIED PARTS CONFORMING TO THE PREVIOUS "LETTER CHANGE" MAY BE USED TO DEPLETION.
7. INTENDED USE: THIS PART IS DESIGNED FOR USE IN SYSTEMS WITH MAXIMUM OPERATING PRESSURES AS FOLLOWS:
- a. CORROSION RESISTANCE STEEL AT 3000 PSI.
  - b. TITANIUM ALLOY AT 4000 PSI.
8. DRY FILM LUBRICANT: APPLY DRY FILM LUBRICANT PER AS5272, TYPE I TO SEALING SURFACE. OVERSPRAY IN BORE IS NOT PERMITTED.
9. INTERPRETATION OF DRAWING PER AS4296.
10. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M. REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, MACHINED SURFACES TO BE 125 MICROINCHES Ra. FORGED SURFACES MAY BE 250 MICROINCHES Ra.
11. BREAK EDGES .003 TO .015, UNLESS OTHERWISE SPECIFIED.
12. DIMENSIONING AND TOLERANCING: ASME Y14.5M-1994.
13. DIMENSIONS ARE IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS  $\pm 0.015$ , ANGULAR DIMENSIONS  $\pm 0^{\circ}30'$ .

|   |  |                                    |                         |
|---|--|------------------------------------|-------------------------|
|  | <b>AEROSPACE STANDARD</b>                              | <b>AS85421™/11</b><br>SHEET 2 OF 3 | <b>REV.</b><br><b>D</b> |
|   | FITTING, UNION, BEAM SEAL,<br>3000/4000 PSI, MALE ENDS |                                    |                         |