

AS4232

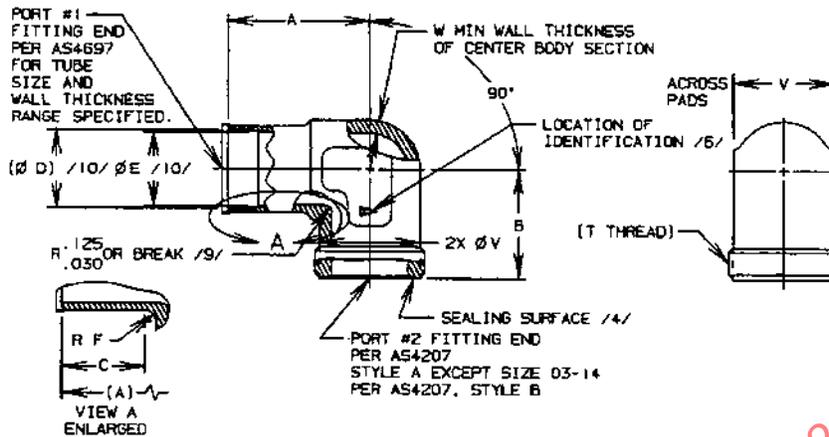
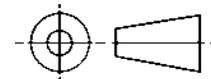


FIGURE 1 - FITTING, ELBOW, 90°

TABLE 1A - DIMENSIONS

| BASIC NO.<br>AS4232 /16/<br>SIZE AND TUBE<br>WALL CODES | RANGE OF<br>NOMINAL<br>TUBE WALL<br>FOR PORT #2<br>/11/118/ | (NOMINAL<br>TUBE<br>-SIZE) | PORT #1<br>STYLE<br>/10/ | T THREAD<br>PER MIL-S-8879<br>CLASS 3A | ACROSS PADS |       |      | D<br>/10/ |
|---|---|----------------------------|--------------------------|--|-------------|-------|------|-----------|
|   |   |                            |                          |  | A           | B     | C    |           |
| 03-018  | .016-.018   | .188                       | A                        | .3750-28 UNJS                          | .832        | .575  | .530 | .146      |
| 03-022  | .019-.022   | .188                       | A                        | .3750-28 UNJS                          | .832        | .575  | .530 | .138      |
| 04-022  | .019-.022   | .250                       | B                        | .4375-24 UNJS                          | .832        | .617  | .500 | .200      |
| 05-022  | .019-.022   | .312                       | B                        | .5000-24 UNJS                          | .887        | .653  | .520 | .262      |
| 05-028  | .023-.028   | .312                       | B                        | .5000-24 UNJS                          | .887        | .653  | .520 | .250      |
| 06-022  | .019-.022   | .375                       | B                        | .5625-20 UNJS                          | 1.005       | .704  | .670 | .325      |
| 06-028  | .023-.028   | .375                       | B                        | .5625-20 UNJS                          | 1.005       | .704  | .670 | .313      |
| 06-032  | .029-.032   | .375                       | B                        | .5625-20 UNJS                          | 1.005       | .704  | .670 | .305      |
| 08-022  | .019-.022   | .500                       | B                        | .7188-20 UNJS                          | 1.180       | .824  | .700 | .450      |
| 08-043  | .033-.043   | .500                       | B                        | .7188-20 UNJS                          | 1.180       | .824  | .700 | .408      |
| 10-028  | .023-.028   | .625                       | B                        | .8438-18 UNJS                          | 1.243       | .955  | .660 | .563      |
| 10-043  | .033-.043   | .625                       | B                        | .8438-18 UNJS                          | 1.243       | .955  | .660 | .533      |
| 10-055  | .044-.055   | .625                       | A                        | .8438-18 UNJS                          | 1.243       | .955  | .660 | .509      |
| 12-028  | .023-.028   | .750                       | B                        | 1.0000-16 UNJ                          | 1.392       | 1.062 | .730 | .688      |
| 12-055  | .044-.055   | .750                       | A                        | 1.0000-16 UNJ                          | 1.392       | 1.062 | .730 | .634      |
| 12-065  | .056-.065   | .750                       | A                        | 1.0000-16 UNJ                          | 1.392       | 1.062 | .730 | .614      |
| 14-032  | .029-.032   | .875                       | B                        | 1.1250-16 UNJ                          | 1.562       | 1.216 | .840 | .805      |
| 14-065  | .056-.065   | .875                       | A                        | 1.1250-16 UNJ                          | 1.562       | 1.216 | .840 | .739      |
| 16-043  | .033-.043   | 1.000                      | B                        | 1.2500-14 UNJS                         | 1.617       | 1.246 | .830 | .908      |
| 16-078  | .066-.078   | 1.000                      | A                        | 1.2500-14 UNJS                         | 1.617       | 1.246 | .830 | .838      |
| 16-089  | .079-.089   | 1.000                      | A                        | 1.2500-14 UNJS                         | 1.617       | 1.246 | .830 | .816      |
| 20-055  | .044-.055   | 1.250                      | B                        | 1.5781-14 UNJS                         | 1.750       | 1.387 | .750 | 1.134     |
| 20-089  | .079-.089   | 1.250                      | A                        | 1.5781-14 UNJS                         | 1.750       | 1.387 | .750 | 1.066     |
| 24-055  | .044-.055   | 1.500                      | B                        | 1.8438-14 UNJS                         | 1.900       | 1.688 | .760 | 1.384     |

THIRD ANGLE PROJECTION



CUSTODIAN: SAE G-3/G-3B

PROCUREMENT SPECIFICATION: /5/ AS4510



**AEROSPACE STANDARD**

FITTING, ELBOW, 90°, EXTERNAL THREAD,  
BEAM SEAL TO INTEGRAL WELD RING

**AS4232**  
SHEET 1 OF 3

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ISSUED 1996-05 REAFFIRMED 2001-12

TABLE 1B - DIMENSIONS AND WEIGHTS

| BASIC NO.<br>AS4232 /16/<br>SIZE AND TUBE<br>WALL CODES | E<br>/10/   | F<br>±.005 | V           | W    | RECOMMENDED<br>MAXIMUM<br>PRESSURE<br>PSI /7/ | LB/EA<br>MAX<br>CRES | LB/EA<br>MAX<br>TI |
|---|-------------|------------|-------------|------|---|----------------------|--------------------|
|   |             |            |             |      |   |                      |                    |
| 03-018  | —           | .080       | .360- .377  | .055 | 5000  | .0397                | .0227              |
| 03-022  | —           | .080       | .360- .377  | .055 | 5000  | .0397                | .0227              |
| 04-022  | .184- .194  | .080       | .360- .377  | .060 | 5000  | .0422                | .0241              |
| 05-022  | .232- .242  | .080       | .423- .440  | .060 | 4000  | .0573                | .0328              |
| 05-028  | .232- .242  | .080       | .423- .440  | .060 | 5000  | .0573                | .0328              |
| 06-022  | .297- .307  | .090       | .485- .502  | .060 | 3000  | .0748                | .0427              |
| 06-028  | .297- .307  | .090       | .485- .502  | .060 | 4000  | .0748                | .0427              |
| 06-032  | .297- .307  | .090       | .485- .502  | .060 | 5000  | .0748                | .0427              |
| 08-022  | .398- .408  | .090       | .547- .565  | .065 | 2000  | .0982                | .0561              |
| 08-043  | .398- .408  | .090       | .547- .565  | .065 | 5000  | .0982                | .0561              |
| 10-028  | .512- .523  | .125       | .673- .691  | .070 | 2000  | .143                 | .0820              |
| 10-043  | .512- .523  | .125       | .673- .691  | .070 | 4000  | .143                 | .0820              |
| 10-055  | —           | .125       | .673- .691  | .070 | 5000  | .143                 | .0820              |
| 12-028  | .649- .660  | .125       | .860- .878  | .095 | 2000  | .234                 | .133               |
| 12-055  | —           | .125       | .860- .878  | .095 | 4000  | .234                 | .133               |
| 12-065  | —           | .125       | .860- .878  | .095 | 5000  | .234                 | .133               |
| 14-032  | .769- .780  | .125       | 1.110-1.128 | .105 | 2000  | .461                 | .263               |
| 14-065  | —           | .125       | 1.110-1.128 | .105 | 4000  | .461                 | .263               |
| 16-043  | .862- .874  | .125       | 1.110-1.128 | .110 | 2000  | .413                 | .236               |
| 16-078  | —           | .125       | 1.110-1.128 | .110 | 4000  | .413                 | .236               |
| 16-089  | —           | .125       | 1.110-1.128 | .110 | 5000  | .413                 | .236               |
| 20-055  | 1.115-1.128 | .180       | 1.355-1.380 | .110 | 2000  | .572                 | .327               |
| 20-089  | —           | .180       | 1.355-1.380 | .110 | 4000  | .572                 | .327               |
| 24-055  | 1.324-1.337 | .180       | 1.605-1.630 | .130 | 2000  | .894                 | .511               |

## NOTES:

- /1/ MATERIAL:
- CODE LETTER T - TYPE 6AL-4V TITANIUM ALLOY FORGING OR BAR PER AMS 4965.
  - CODE LETTER P - TYPE 17-4PH CORROSION RESISTANT STEEL FORGING OR BAR PER AMS 5643.
  - CODE LETTER V - TYPE 15-5PH CORROSION RESISTANT STEEL FORGING OR BAR PER AMS 5659.
2. HEAT TREATMENT:
- MATERIAL CODE LETTER T - NONE.
  - MATERIAL CODE LETTERS P AND V - HEAT TREAT TO CONDITION H 1075 PER AMS 2759/3.
3. FINISH: NONE
- /4/ DRY FILM LUBRICANT: APPLY DRY FILM LUBRICANT PER MIL-L-46010, TYPE I TO THE SEALING SURFACE OF AS4207 FITTING END. OVERSPRAY IN BORE IS NOT PERMITTED.
- /5/ PROCUREMENT SPECIFICATION: AS4510 EXCEPT AS SPECIFIED ON THIS STANDARD. THIS PART SHALL BE QUALIFIED TO THE PROCUREMENT SPECIFICATION IN A COMPLETE ASSEMBLY. THE AS4207 FITTING END SHALL HAVE BEEN QUALIFIED TO THE APPLICABLE REQUIREMENTS OF MIL-F-85421 OR MIL-F-85720. USERS OF THIS STANDARD ARE ADVISED TO CONTROL SOURCE APPROVAL(S) BY STANDARD PAGE SUPPLEMENT SHEET OR SIMILAR MEANS.
- /6/ IDENTIFICATION AT LOCATION SHOWN: MARK PER AS478 CLASS C OR D OR METHOD 7A3, 15A3, OR 15B MANUFACTURER'S IDENTIFICATION, CAGE CODE NUMBER OR TRADEMARK, BASIC NUMBER, MATERIAL CODE LETTER, AND TUBE WALL CODE.
- /7/ THIS PART IS DESIGNED FOR USE IN SYSTEMS WITH MAXIMUM OPERATING PRESSURES SHOWN IN TABLE 1 WITH THE RECOMMENDATION THAT THE MINIMUM WALL THICKNESS OF THE TUBING WELDED TO THE AS4697 FITTING END OF PORT #2 BE THE VALUE SHOWN FOR THE APPROPRIATE OPERATING PRESSURE IN ARP4698. THINNER WALL THICKNESSES MAY BE USED.
8. WHEN MACHINED FROM BAR OR OVERSIZED FORGINGS, THE CENTER BODY SECTION SHALL CONFORM TO AS1376, TABLE 4.
- /9/ RADIUS OR BREAK AT THE CORNER FOR TITANIUM ALLOY ONLY.
- /10/ IF PORT #1 IS STYLE A, ØD WILL EXTEND THE ID LENGTH AND ØE WILL NOT APPLY.
11. INTERPRETATION OF DRAWING PER ARP4296.