

RATIONALE

AS4218 HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

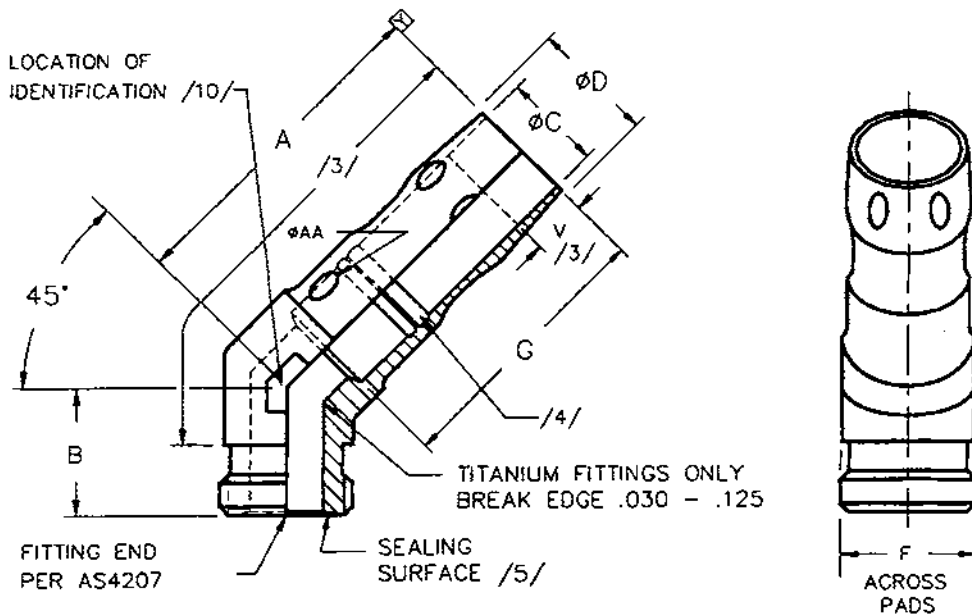


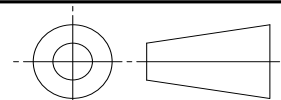
FIGURE 1 - ELBOW, 45°, BEAM SEAL, EXTERNAL THREAD

TABLE 1 - DIMENSIONS AND WEIGHTS

| BASIC NO.<br>AS4218<br>/16/<br>SIZE CODE | NOMINAL<br>TUBE<br>SIZE | A<br>±.015 | B     | C             | D     |       | F<br>±.015 | G<br>BORE<br>DEPTH<br>+.030<br>-.000 | V<br>/3/ | AA<br>/2/ | LB/EA<br>MAX<br>CRES | LB/EA<br>MAX<br>TI |
|------------------------------------------|-------------------------|------------|-------|---------------|-------|-------|------------|--------------------------------------|----------|-----------|----------------------|--------------------|
|                                          |                         |            |       |               | +.000 | -.003 |            |                                      |          |           |                      |                    |
| 03                                       | .188                    | .915       | .436  | .195 - .198   | .275  | .325  | .773       | .170 - .220                          | .13      | .0200     | .0110                |                    |
| 04                                       | .250                    | 1.125      | .530  | .257 - .260   | .338  | .390  | .915       | .190 - .240                          | .22      | .0300     | .0170                |                    |
| 05                                       | .312                    | 1.195      | .568  | .319 - .322   | .413  | .465  | .955       | .200 - .250                          | .22      | .0280     | .0160                |                    |
| 06                                       | .375                    | 1.276      | .630  | .382 - .385   | .480  | .545  | .990       | .220 - .270                          | .22      | .0600     | .0340                |                    |
| 08                                       | .500                    | 1.799      | .721  | .508 - .511   | .655  | .705  | 1.493      | .410 - .435                          | .50      | .129      | .0740                |                    |
| 10                                       | .625                    | 1.916      | .865  | .633 - .636   | .787  | .861  | 1.533      | .410 - .435                          | .50      | .199      | .114                 |                    |
| 12                                       | .750                    | 2.047      | .993  | .758 - .761   | .929  | 1.036 | 1.603      | .365 - .390                          | .50      | .293      | .168                 |                    |
| 16                                       | 1.000                   | 2.413      | 1.213 | 1.008 - 1.011 | 1.257 | 1.380 | 1.748      | .325 - .350                          | .50      | .609      | .352                 |                    |
| 20                                       | 1.250                   | 2.684      | 1.366 | 1.258 - 1.262 | 1.489 | 1.692 | 1.850      | .325 - .350                          | .50      | .962      | .552                 |                    |
| 24                                       | 1.500                   | 2.778      | 1.545 | 1.513 - 1.517 | 1.786 | 1.880 | 1.975      | .325 - .350                          | .50      | 1.24      | .718                 |                    |

SAE values your input. To provide feedback  
on this Technical Report, please visit  
<http://www.sae.org/technical/standards/AS4218>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: /6/ AS4459



AEROSPACE STANDARD

FITTING, ELBOW, 45°, BEAM SEAL, EXTERNAL  
THREAD, EXTERNAL SWAGE TUBE END,  
HYDRAULIC, 3000 PSI

AS4218  
SHEET 1 OF 2

Documents

**NOTES:**

- /1/ **MATERIAL:**  
a. CODE LETTER "-": 21-6-9 CRES BAR OR FORGINGS PER AMS 5656  
b. CODE LETTER "E": COMMERCIALLY PURE TITANIUM BAR OR FORGINGS PER AMS 4921  
2. HEAT TREATMENT: PER PROCUREMENT SPECIFICATIONS.  
/3/ **FINISH:**  
a. MATERIAL CODE LETTER "-": PASSIVATE THE WHOLE PART PER QQ-P-35 TYPE VII. PTFE COAT (COLOR GREEN) FITTING ID TO "V" DEPTH. OVERSPRAY ON /Y/ PERMISSIBLE.  
b. MATERIAL CODE LETTER "E": PTFE COAT (COLOR BLACK) EXTERNAL OD AS NOTED AND THE ID TO "V" DEPTH.  $\phi$ AA FREE OF PTFE COATING. SOLID FILM LUBRICATE AS NOTED. FLUORIDE PHOSPHATE COAT THREADS (ENTIRE PART OPTIONAL) PER AMS 2486.  
/4/ **FILL OUTER GROOVE WITH SILICONE ELASTOMER.**  
/5/ **SOLID FILM LUBRICANT: APPLY PER AS1701.**  
/6/ **PROCUREMENT SPECIFICATIONS: AS4459 AND MIL-F-85421. THIS PART SHALL BE QUALIFIED TO THE PROCUREMENT SPECIFICATIONS IN A COMPLETE ASSEMBLY. USERS OF THIS STANDARD ARE ADVISED TO CONTROL SOURCE APPROVAL(S) BY STANDARD PAGE SUPPLEMENT SHEET OR SIMILAR MEANS.**  
7. **PACKAGING: INDIVIDUALLY PACKAGE IN CLEAN CONTAINER WITH IDENTIFICATION PER AS4459.**  
8. **SPECIFIC DIMENSIONS AND TOLERANCES NOT DEFINED ON THIS STANDARD SHALL BE SPECIFIED AND CONTROLLED BY THE MANUFACTURER. THE MANUFACTURER IS RESPONSIBLE TO INSURE COMPATIBILITY WITH THE ASSEMBLY AND COMPLIANCE WITH THE REQUIREMENTS OF THE APPLICABLE PROCUREMENT SPECIFICATIONS.**  
9. **INTENDED USE: PER AS4459.**  
/10/ **IDENTIFICATION: PARTS SHALL BE IDENTIFIED IN THE AREA SHOWN PER AS4459.**  
11. **INTERPRETATION OF DRAWING PER ARP4296.**  
12. **SURFACE TEXTURE: SYMBOLS PER ANSI Y14.36; REQUIREMENT PER ANSI/ASME B46.1. UNLESS OTHERWISE SPECIFIED, MACHINED SURFACES TO BE 125  $\mu$ in Ra.**  
13. **BREAK EDGES .003 TO .015 UNLESS OTHERWISE SPECIFIED.**  
14. **DIMENSIONING AND TOLERANCING: ASME Y14.5M-1994**  
15. **DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS  $\pm$ .010, ANGULAR DIMENSIONS  $\pm$ 2°.**  
/16/ **EXAMPLE OF PART NUMBER: AS4218 E 08 N**

