

REV.
H

SAE AS1008

RATIONALE

ERROR CORRECTION. ALSO, INACTIVATION FOR DESIGN IN PREVIOUS NOTE 22 WAS CHANGED TO A NOTE ON PAGE 1 INDICATING PREFERRED REPLACEMENT.

NOTE: THE NEW AS6048 FITTING IS PREFERRED REPLACEMENT BECAUSE OF IMPROVED LENGTH TOLERANCES AND IMPROVED FINISH OF THE CONICAL SEAL AREA.

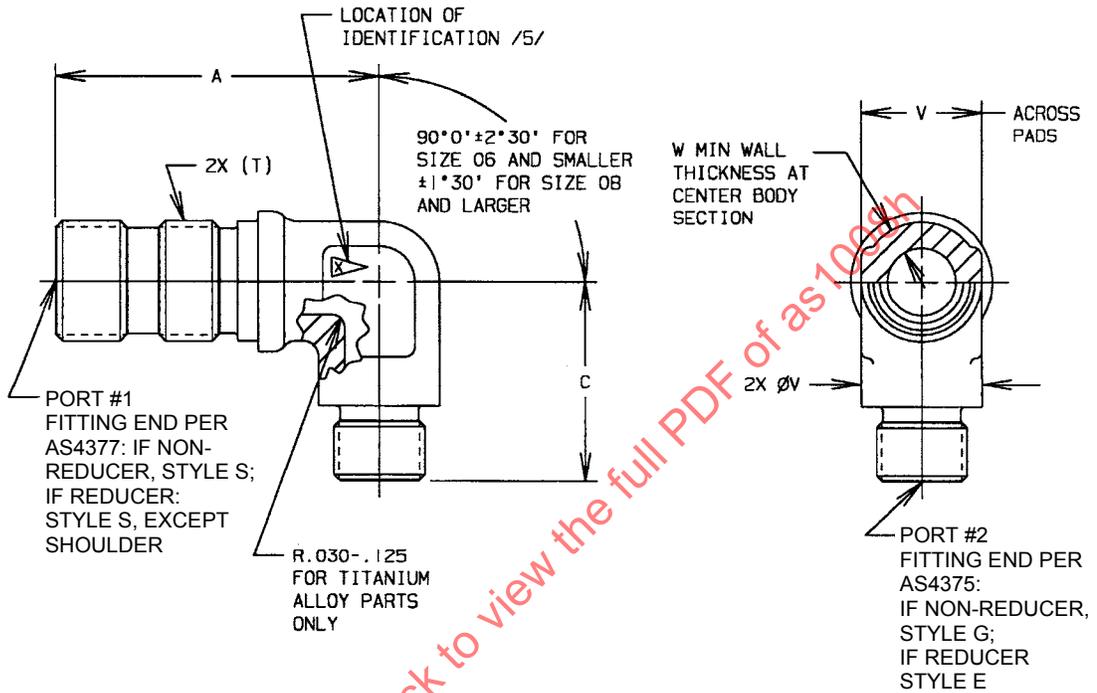
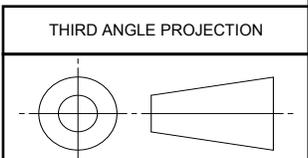


FIGURE 1 - FITTING, ELBOW, 90°, BULKHEAD END FOR OPTIONAL USE IN PORT INSTALLATION, PORT #2 SHOWN AS REDUCER

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CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: /4/ AS18280

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

FITTING, ELBOW, 90 DEGREE,
STANDARD AND REDUCER,
BULKHEAD, FLARELESS

SAE AS1008
SHEET 1 OF 7

REV. H

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ISSUED 1966-03 REAFFIRMED 2005-06 REVISED 2012-04

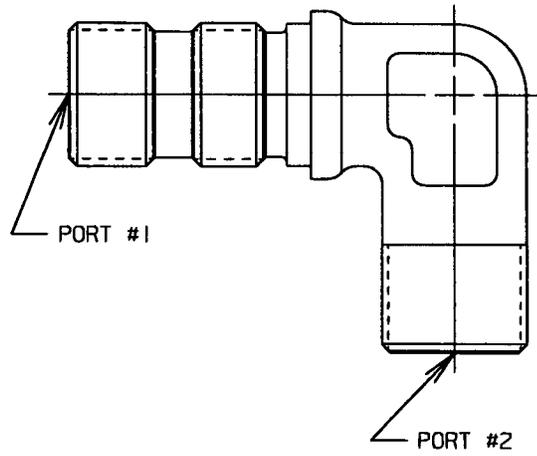


FIGURE 2 - FITTING, ELBOW, 90 DEGREE, BULKHEAD END FOR OPTIONAL USE IN PORT INSTALLATION, SHOWN AS NON-REDUCER, SAME AS FIGURE 1 EXCEPT AS SHOWN

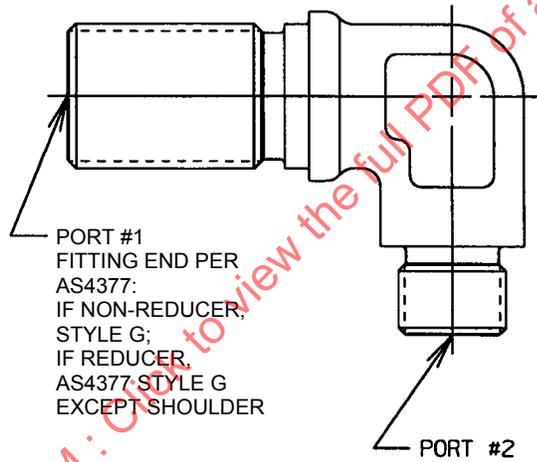


FIGURE 3 - FITTING, ELBOW, 90 DEGREE, BULKHEAD END NOT FOR USE IN PORT INSTALLATION, PORT #2 SHOWN AS REDUCER, SAME AS FIGURE 1 EXCEPT AS SHOWN

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| | | | |
|---|--|-----------------------------------|-------------------------|
|  An SAE International Group | AEROSPACE STANDARD | SAE AS1008 SHEET 2 OF 7 | REV. H |
| | FITTING, ELBOW, 90 DEGREE, STANDARD AND REDUCER, BULKHEAD, FLARELESS | | |

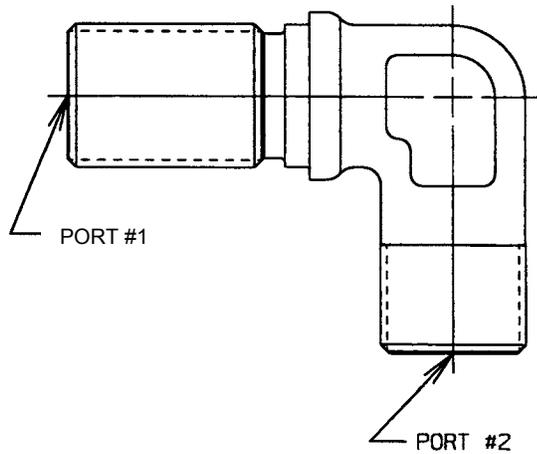


FIGURE 4 - FITTING, ELBOW, 90 DEGREE, BULKHEAD END NOT FOR USE IN PORT INSTALLATION, SHOWN AS NON-REDUCER, SAME AS FIGURE 2 EXCEPT AS SHOWN

TABLE 1 - DIMENSIONS AND WEIGHTS /13/

| BASIC NO. AS1008 /12/ /21/ SIZE CODE | V | W | LB/EA APPROX REF ALUM | LB/EA APPROX REF STEEL | LB/EA APPROX REF TI |
|---|-------------|------|--------------------------------|---------------------------------|------------------------------|
| 02 | .297- .314 | .090 | .0153 | .0432 | .0243 |
| 03 | .360- .377 | .100 | .0207 | .0576 | .0324 |
| 04 | .423- .440 | .110 | .0225 | .0639 | .0360 |
| 05 | .485- .502 | .120 | .0342 | .0918 | .0522 |
| 06 | .547- .565 | .120 | .0486 | .111 | .0630 |
| 08 | .735- .753 | .150 | .0819 | .213 | .122 |
| 10 | .860- .878 | .170 | .120 | .360 | .207 |
| 12 | 1.047-1.065 | .185 | .171 | .504 | .274 |
| 14 | 1.173-1.191 | .200 | - | - | - |
| 16 | 1.292-1.317 | .205 | .279 | .828 | .477 |
| 20 | 1.605-1.630 | .240 | .472 | 1.20 | .681 |
| 24 | 1.855-1.880 | .250 | .630 | 1.76 | 1.02 |
| 32 | 2.542-2.572 | .350 | - | - | - |

TABLE 2 - LEG LENGTH A /14/

| FORGING SIZE /12/ | TUBE SIZE OF PORT #1 | | | | | | | | | | | | |
|-------------------------|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 02 | 03 | 04 | 05 | 06 | 08 | 10 | 12 | 14 | 16 | 20 | 24 | 32 |
| 02 | 1.336 | - | - | - | - | - | - | - | - | - | - | - | - |
| 03 | 1.367 | 1.414 | - | - | - | - | - | - | - | - | - | - | - |
| 04 | 1.413 | 1.460 | 1.523 | - | - | - | - | - | - | - | - | - | - |
| 05 | 1.445 | 1.492 | 1.555 | 1.555 | - | - | - | - | - | - | - | - | - |
| 06 | 1.555 | 1.602 | 1.665 | 1.665 | 1.711 | - | - | - | - | - | - | - | - |
| 08 | 1.664 | 1.711 | 1.774 | 1.774 | 1.820 | 1.992 | - | - | - | - | - | - | - |
| 10 | 1.804 | 1.851 | 1.914 | 1.914 | 1.960 | 2.132 | 2.273 | - | - | - | - | - | - |
| 12 | 1.914 | 1.961 | 2.024 | 2.024 | 2.070 | 2.242 | 2.383 | 2.492 | - | - | - | - | - |
| 14 | 2.024 | 2.071 | 2.134 | 2.134 | 2.180 | 2.352 | 2.493 | 2.617 | 2.543 | - | - | - | - |
| 16 | 2.039 | 2.086 | 2.149 | 2.149 | 2.195 | 2.367 | 2.508 | 2.617 | 2.617 | 2.617 | - | - | - |
| 20 | 2.320 | 2.367 | 2.430 | 2.430 | 2.476 | 2.648 | 2.789 | 2.898 | 2.898 | 2.898 | 2.898 | - | - |
| 24 | 2.602 | 2.649 | 2.712 | 2.712 | 2.758 | 2.930 | 3.071 | 3.180 | 3.180 | 3.180 | 3.180 | 3.180 | - |
| 32 | 2.992 | 3.039 | 3.102 | 3.102 | 3.148 | 3.320 | 3.461 | 3.570 | 3.570 | 3.570 | 3.570 | 3.570 | 3.773 |

TABLE 3 - LEG LENGTH C /14/

| FORGING SIZE /12/ | TUBE SIZE OF PORT #2 | | | | | | | | | | | | |
|-------------------------|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 02 | 03 | 04 | 05 | 06 | 08 | 10 | 12 | 14 | 16 | 20 | 24 | 32 |
| 02 | .804 | - | - | - | - | - | - | - | - | - | - | - | - |
| 03 | .883 | .930 | - | - | - | - | - | - | - | - | - | - | - |
| 04 | .883 | .930 | .961 | - | - | - | - | - | - | - | - | - | - |
| 05 | .977 | 1.024 | 1.055 | 1.055 | - | - | - | - | - | - | - | - | - |
| 06 | .992 | 1.039 | 1.070 | 1.070 | 1.086 | - | - | - | - | - | - | - | - |
| 08 | 1.149 | 1.196 | 1.227 | 1.227 | 1.243 | 1.336 | - | - | - | - | - | - | - |
| 10 | 1.274 | 1.320 | 1.352 | 1.352 | 1.368 | 1.461 | 1.524 | - | - | - | - | - | - |
| 12 | 1.335 | 1.383 | 1.414 | 1.414 | 1.430 | 1.523 | 1.586 | 1.649 | - | - | - | - | - |
| 14 | 1.398 | 1.445 | 1.476 | 1.476 | 1.492 | 1.585 | 1.648 | 1.742 | 1.693 | - | - | - | - |
| 16 | 1.429 | 1.476 | 1.507 | 1.507 | 1.523 | 1.616 | 1.679 | 1.742 | 1.742 | 1.742 | - | - | - |
| 20 | 1.710 | 1.757 | 1.788 | 1.788 | 1.804 | 1.897 | 1.960 | 2.023 | 2.023 | 2.023 | 2.023 | - | - |
| 24 | 1.898 | 1.945 | 1.976 | 1.976 | 1.992 | 2.085 | 2.148 | 2.211 | 2.211 | 2.211 | 2.211 | 2.211 | - |
| 32 | 2.085 | 2.132 | 2.163 | 2.163 | 2.179 | 2.272 | 2.335 | 2.398 | 2.398 | 2.398 | 2.398 | 2.398 | 2.398 |

TABLE 4 - TUBE SIZE AND CORRESPONDING THREAD

| PORT SIZE | (NOMINAL TUBE SIZE) | T THREAD PER AS8879 CLASS 3A |
|--------------|---------------------------|------------------------------------|
| 02 | .125 | .3125-24 UNJF |
| 03 | .188 | .3750-24 UNJF |
| 04 | .250 | .4375-20 UNJF |
| 05 | .312 | .5000-20 UNJF |
| 06 | .375 | .5625-18 UNJF |
| 08 | .500 | .7500-16 UNJF |
| 10 | .625 | .8750-14 UNJF |
| 12 | .750 | 1.0625-12 UNJ |
| 14 | .875 | 1.1875-12 UNJ |
| 16 | 1.000 | 1.3125-12 UNJ |
| 20 | 1.250 | 1.6250-12 UNJ |
| 24 | 1.500 | 1.8750-12 UNJ |
| 32 | 2.000 | 2.5000-12 UNJ |

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. CODE LETTER DASH (-) - TYPE 4130 LOW ALLOY STEEL FORGING OR BAR PER AMS6370 OR AMS-S-6758 EXCEPT HEAT TREATMENT PER PROCUREMENT SPECIFICATION. /2/
- b. CODE LETTER D - TYPE 2024-T6 OR -T851 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/6 OR TYPE 2014-T6 ALUMINUM ALLOY FORGING PER AMS4133. /2/
- c. CODE LETTER F - TYPE 4130 LOW ALLOY STEEL FORGING OR BAR PER AMS6370 OR AMS-S-6758 EXCEPT HEAT TREATMENT PER PROCUREMENT SPECIFICATION. /2/
- d. CODE LETTER J - TYPE 304 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS5639 OR AMS-QQ-S- 763 EXCEPT HARDNESS PER PROCUREMENT SPECIFICATION. /2/
- e. CODE LETTER K - TYPE 316 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS5648 OR AMS-QQ- S-763 EXCEPT HARDNESS PER PROCUREMENT SPECIFICATION. /2/
- f. CODE LETTER R - TYPE 321 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS5645 OR AMS-QQ- S-763 EXCEPT HARDNESS PER PROCUREMENT SPECIFICATION. /2/
- g. CODE LETTER S - TYPE 347 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS5646 OR AMS-QQ- S-763 EXCEPT HARDNESS PER PROCUREMENT SPECIFICATION. /2/
- h. CODE LETTER T - TYPE 6AL-4V TITANIUM ALLOY FORGING OR BAR PER AMS4928.
- i. CODE LETTER W - TYPE 7075-T73 ALUMINUM ALLOY FORGING PER AMS4141 OR AMS-QQ-A-367; OR 7075- T7351 ALUMINUM ALLOY BAR PER AMS4124; OR 7075-T73 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/9. /2/

/2/ HEAT TREATMENT:

- a. MATERIAL CODE LETTER (-) AND F - HARDNESS SHALL BE 92 HRB TO 40 HRC PER PROCUREMENT SPECIFICATION.
- b. MATERIAL CODE LETTERS D AND W - ELECTRICAL CONDUCTIVITY AND HARDNESS PER PROCUREMENT SPECIFICATION.
- c. MATERIAL CODE LETTERS J, K, R AND S - HARDNESS SHALL BE 80 HRB MINIMUM PER PROCUREMENT SPECIFICATION.
- d. OTHER MATERIAL CODES - NONE.

3. FINISH:

- a. MATERIAL CODE LETTER (-) AND F - CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2.
- b. MATERIAL CODE LETTER D - ANODIZE PER AMS2472 OR MIL-A-8625, TYPE II, CLASS 2, DYE GREEN SIMILAR TO COLOR 14187 OF FED-STD-595.
- c. MATERIAL CODE LETTERS J, K, R AND S - PASSIVATE PER AMS2700 TYPE 6 OR 7.
- d. MATERIAL CODE LETTER T - FLUORIDE PHOSPHATE CONVERSION COAT PER AMS2486 OR ANODIZE PER AMS2488, TYPE 2.
- e. MATERIAL CODE LETTER W - ANODIZE PER AMS2472 OR MIL-A-8625, TYPE II, CLASS 2, DYE BROWN SIMILAR TO COLOR 10080 OF FED-STD-595.

| | | | |
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| | FITTING, ELBOW, 90 DEGREE, STANDARD AND REDUCER, BULKHEAD, FLARELESS | | |