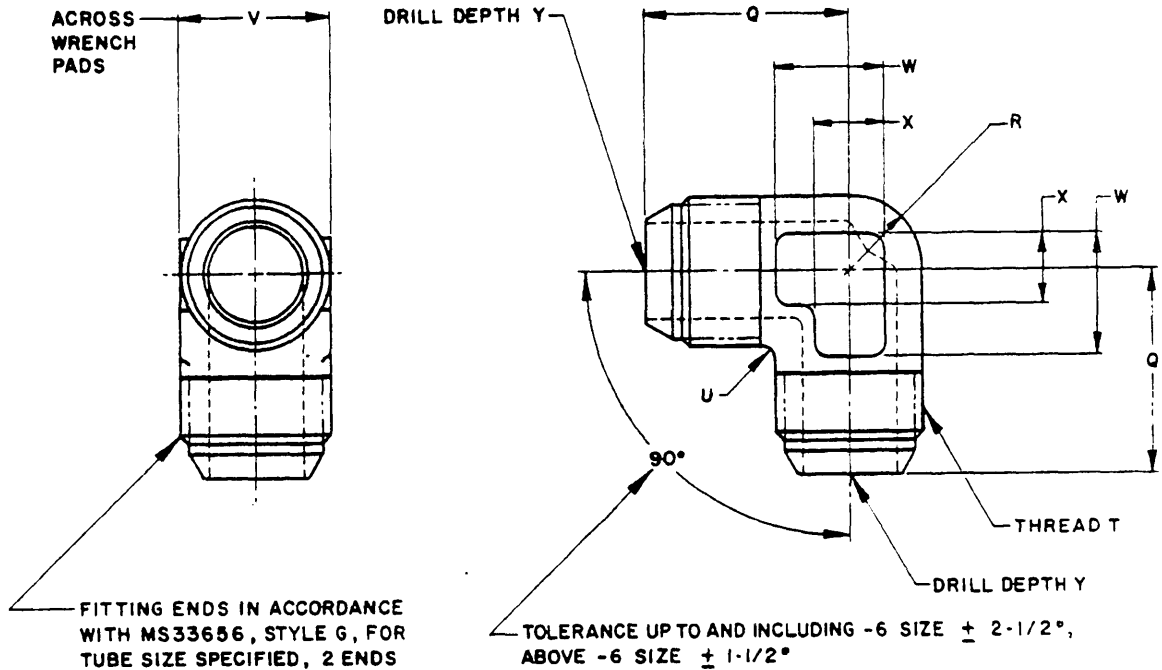


USER ACTIVITIES

REVIEWER ACTIVITIES DLA-CS

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(a) AT OPTION OF MANUFACTURER, BASIC DIMENSION Q MAY BE MADE 1/64 LESS THAN THE DIMENSIONS SPECIFIED, WITH THE PROVISION THAT BASIC DIMENSION Y IS ALSO MADE 1/64 LESS THAN THE DIMENSION SPECIFIED.

MATERIALS: STEEL - BARS, SHAPES, OR FORGINGS.
ALUMINUM ALLOY - BARS, SHAPES, OR FORGINGS.
TITANIUM ALLOY - BARS, SHAPES OR FORGINGS.
CORROSION RESISTANT STEEL - BARS, SHAPES, OR FORGINGS.
SEE PROCUREMENT SPECIFICATION.

FINISH: SEE PROCUREMENT SPECIFICATION.

NO CODE LETTER IN PART NUMBER FOR STEEL.
ADD D AFTER DASH NUMBER FOR ALUMINUM ALLOY (EXCEPT 7075-T73).
ADD J AFTER DASH NUMBER FOR CORROSION RESISTANT STEEL, TYPE 304.
ADD K AFTER DASH NUMBER FOR CORROSION RESISTANT STEEL, TYPE 316.
ADD S AFTER DASH NUMBER FOR CORROSION RESISTANT STEEL, TYPE 347.
ADD T AFTER DASH NUMBER FOR TITANIUM.
ADD W AFTER DASH NUMBER FOR 7075-T73.

EXAMPLE OF PART NUMBERS:
AN821-8 - ELBOW, 1/2 TUBING, STEEL
AN821-8D - ELBOW, 1/2 TUBING, ALUMINUM ALLOY (EXCEPT 7075-T73).
AN821-8J - ELBOW, 1/2 TUBING, CORROSION RESISTANT STEEL, TYPE 304.
AN821-8K - ELBOW, 1/2 TUBING, CORROSION RESISTANT STEEL, TYPE 316.
AN821-8S - ELBOW, 1/2 TUBING, CORROSION RESISTANT STEEL, TYPE 347.
AN821-8T - ELBOW, 1/2 TUBING TITANIUM.
AN821-8W - ELBOW, 1/2 TUBING 7075-T73.

BREAK ALL SHARP EDGES AND REMOVE ALL HANGING BURRS AND SLIVERS WHICH MIGHT BECOME DISLODGED UNDER USAGE.

DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: FRACTIONS $\pm 1/64$. DECIMALS $\pm .005$. ANGLES $\pm 1/2^\circ$.

TITANIUM NOT TO BE USED IN OXYGEN SYSTEMS.

8 ENTIRE STANDARD REVISED

| | | | | |
|---|---------------------------|---|--|--------------|
| P. A. AIR FORCE - 82 Other Cust ARMY - AV NAVY - AS AIR FORCE - 99 | INTERNATIONAL INTEREST | AIR FORCE-NAVY AERONAUTICAL STANDARD | | AN821 |
| | | ELBOW - FLARED TUBE , 90° | | |
| PROCUREMENT SPECIFICATION MIL - F - 8509 | SUPERSEDES: | SHEET 1 OF 2 | | |

APPROVED 13 DEC 40 REVISED 7 16 APRIL 82 8

FED. SUP CLASS
4730

| DASH NO. | TUBING OD | THREAD T (REF) | (a) Q +3/64 -0 | R RAD | U RAD | V | W APPROX | X APPROX | Y +3/64 -0 |
|----------|-----------|-----------------|-------------------------|----------|----------|--------|-------------|-------------|------------------|
| AN821-2 | 1/8 | 5/16-24UNJF-3A | 49/64 | 5/32 | 1/16 | 5/16 | 5/16 | 3/16 | 51/64 |
| AN821-3 | 3/16 | 3/8 -24UNJF-3A | 53/64 | 3/16 | | 3/8 | | | |
| AN821-4 | 1/4 | 7/16-20UNJF-3A | 57/64 | 7/32 | | 7/16 | 3/8 | 1/4 | 15/16 |
| AN821-5 | 5/16 | 1/2 -20UNJF-3A | 61/64 | 1/4 | | 1/2 | 1/2 | 5/16 | 1 |
| AN821-6 | 3/8 | 9/16-18UNJF-3A | 1- 1/16 | 9/32 | 3/32 | 9/16 | 5/8 | 7/16 | 1- 1/8 |
| AN821-8 | 1/2 | 3/4 -16UNJF-3A | 1- 1/4 | 3/8 | | 3/4 | | | |
| AN821-10 | 5/8 | 7/8 -14UNJF-3A | 1-29/64 | 7/16 | | 7/8 | 3/4 | 1-33/64 | |
| AN821-12 | 3/4 | 1-1/16-12UNJ 3A | 1-21/32 | 17/32 | 1/8 | 1-1/16 | 7/8 | 1/2 | 1-23/32 |
| AN821-16 | 1 | 1-5/16-12UNJ 3A | 1-13/16 | 21/32 | | 1-5/16 | | | |
| AN821-20 | 1-1/4 | 1-5/8 -12UNJ 3A | 2- 1/16 | 13/16 | | 1-5/8 | 1-1/4 | 3/4 | 2- 3/16 |
| AN821-24 | 1-1/2 | 1-7/8 -12UNJ 3A | 2-21/64 | 15/16 | | 1-7/8 | 1-7/16 | 7/8 | 2-41/64 |
| AN821-28 | 1-3/4 | 2-1/4 -12UNJ 3A | 2-13/16 | 1- 1/8 | 3/16 | 2-1/4 | 1-3/4 | 1-1/16 | 2-15/16 |
| AN821-32 | 2 | 2-1/2 -12UNJ 3A | 3- 1/16 | 1- 1/4 | 1/4 | 2-9/16 | 2 | 1-3/16 | 3- 1/4 |

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APPROVED 13 DEC 40 REVISED (B) FOR CHANGES SEE PAGES 1 & 2. 5 AUG 83

(B) ENTIRE STANDARD REVISED

| | | | |
|---|------------------------|---|--------------|
| P. A. AIR FORCE-82 Other Cust ARMY - AV NAVY - AS AIR FORCE-99 | INTERNATIONAL INTEREST | AIR FORCE-NAVY AERONAUTICAL STANDARD | AN821 |
| | | ELBOW-FLARED TUBE, 90° | |
| PROCUREMENT SPECIFICATION MIL-F-5509 | SUPERSEDES: | SHEET 2 OF 2 | |