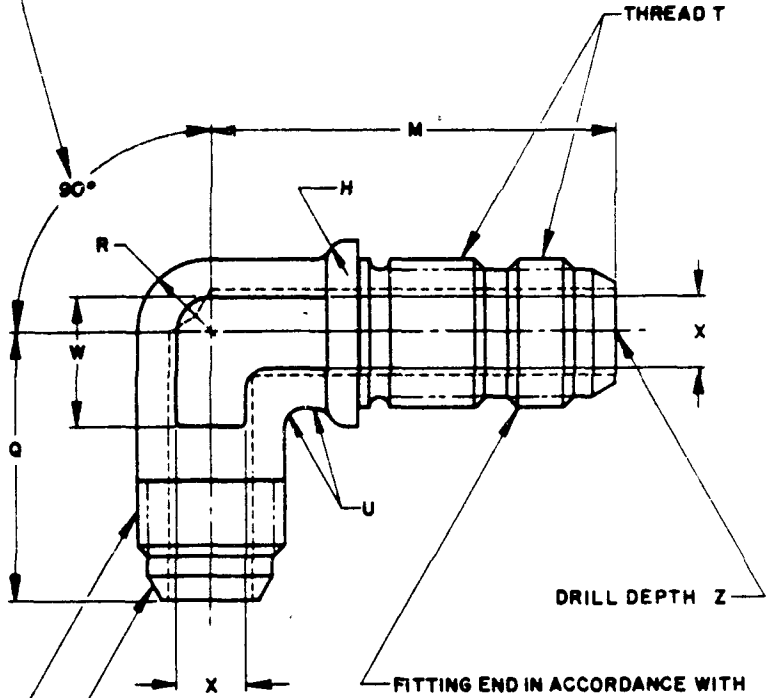
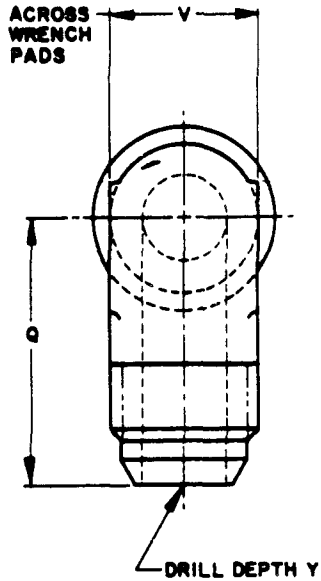


TOLERANCE UP TO AND INCLUDING -6 SIZE $\pm 2-1/2^\circ$,
ABOVE -6 SIZE $\pm 1-1/2^\circ$.



FITTING END IN ACCORDANCE WITH
MS33657, STYLE S, FOR TUBE
SIZE SPECIFIED.

THREAD T
FITTING END IN ACCORDANCE WITH MS33656,
STYLE G, FOR TUBE SIZE SPECIFIED.

MATERIAL: TITANIUM ALLOY - BARS, SHAPES OR FORGINGS.
STEEL-BARS, SHAPES, OR FORGINGS.
ALUMINUM 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.

- AN833-8 - ELBOW, 1/2 TUBING, STEEL.
- AN833-8D - ELBOW, 1/2 TUBING, ALUMINUM ALLOY (EXCEPT 7075-T73).
- AN833-8J - ELBOW, 1/2 TUBING, CORROSION RESISTANT STEEL, TYPE 304.
- AN833-8K - ELBOW, 1/2 TUBING, CORROSION RESISTANT STEEL, TYPE 316.
- AN833-8S - ELBOW, 1/2 TUBING, CORROSION RESISTANT STEEL, TYPE 347.
- AN833-8T - ELBOW, 1/2 TUBING, TITANIUM.
- AN833-8W - ELBOW, 1/2 TUBING, 7075-T73.

INSTALLATION TO BE IN ACCORDANCE WITH AND10064.
BREAK ALL SHARP EDGES AND REMOVE ALL HANGING BURRS AND SLIVERS WHICH MIGHT BECOME DISLOOED 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 - 89

INTERNATIONAL
INTEREST

AIR FORCE-NAVY AERONAUTICAL STANDARD

ELBOW - FLARED TUBE AND
BULKHEAD UNIVERSAL, 90°

AN833

PROCUREMENT SPECIFICATION
MIL - F - 5509

SUPERSEDES:

SHEET 1 OF 2

USER ACTIVITIES:

REVIEWER ACTIVITIES DLA-CS

This military standard is approved for use by all Departments and Agencies of the Department of Defense. Selection for all new engineering and design applications and for repetitive use shall be made from this document.

APPROVED 9 MAY 42 REVISED 7 16 APRIL 82 8 4 Aug. 82

USER ACTIVITIES

REVIEWER ACTIVITIES DLA-CS

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DASH NO.	TUBING OD	THREAD T (REF)	H RAD	M +3/64 -0	Q +3/64 -0
AN833-2	1/8	5/16-24UNJF-3A	1/32	1-13/32	53/64
AN833-3	3/16	3/8-24UNJF-3A		1-7/16	57/64
AN833-4	1/4	7/16-20UNJF-3A	1/16	1-37/64	51/64
AN833-5	5/16	1/2-20UNJF-3A		1-39/64	1-1/64
AN833-6	3/8	9/16-18UNJF-3A	3/32	1-51/64	1-5/64
AN833-8	1/2	3/4-16UNJF-3A		2-3/32	1-11/32
AN833-10	5/8	7/8-14UNJF-3A		2-3/8	1-35/64
AN833-12	3/4	1-1/16-12UNJ-3A		2-21/32	1-49/64
AN833-16	1	1-5/16-12UNJ-3A		2-25/32	1-59/64
AN833-20	1-1/4	1-5/8-12UNJ-3A		3-7/64	2-5/32
AN833-24	1-1/2	1-7/8-12UNJ-3A		3-13/32	2-21/64
AN833-28	1-3/4	2-1/4-12UNJ-3A		3-25/32	2-19/32
AN833-32	2	2-1/2-12UNJ-3A		4-3/32	2-7/8

DASH NO.	R RAD	U RAD	V	W APPROX	X APPROX	Y +3/64 -0	Z +3/64 -0
AN833-2	5/32	1/16	3/16	5/16	3/16	55/64	1-7/16
AN833-3	3/16		3/8		1/4	59/64	1-15/32
AN833-4	7/32		7/16	3/8	5/16	63/64	1-39/64
AN833-5	1/4	1/2	1/2	1-3/64		1-41/64	
AN833-6	9/32	3/32	9/16	1/2	7/16	1-7/64	1-53/64
AN833-8	3/8		3/4			3/8	1-3/8
AN833-10	7/16	1/8	7/8	3/4	1/2	1-41/64	2-15/32
AN833-12	17/32		1-1/16	7/8		1-55/64	2-3/4
AN833-16	21/32		1-5/16	1-1/16		5/8	2-1/64
AN833-20	13/16	3/16	1-5/8	1-1/4	3/4	2-9/32	3-15/64
AN833-24	15/16		1-7/8	1-7/16	7/8	2-31/64	3-19/64
AN833-28	1-1/8		2-1/4	1-3/4	1-1/16	2-25/32	4-1/16
AN833-32	1-1/4		2-9/16	1-15/16	1-3/16	2-15/16	4-29/64

ENTIRE STANDARD REVISED

P. A. AIR FORCE-82
Other Cust
ARMY - AV
NAVY - AS

INTERNATIONAL INTEREST

AIR FORCE-NAVY AERONAUTICAL STANDARD

ELBOW - FLARED TUBE AND BULKHEAD UNIVERSAL 90°

AN833

AIR FORCE-99
PROCUREMENT SPECIFICATION
MIL-F-5509

SUPERSEDES:

SHEET 2 OF 2

APPROVED 9 MAY 42 REVISED FOR CHANGES SEE PAGES 1 & 2.