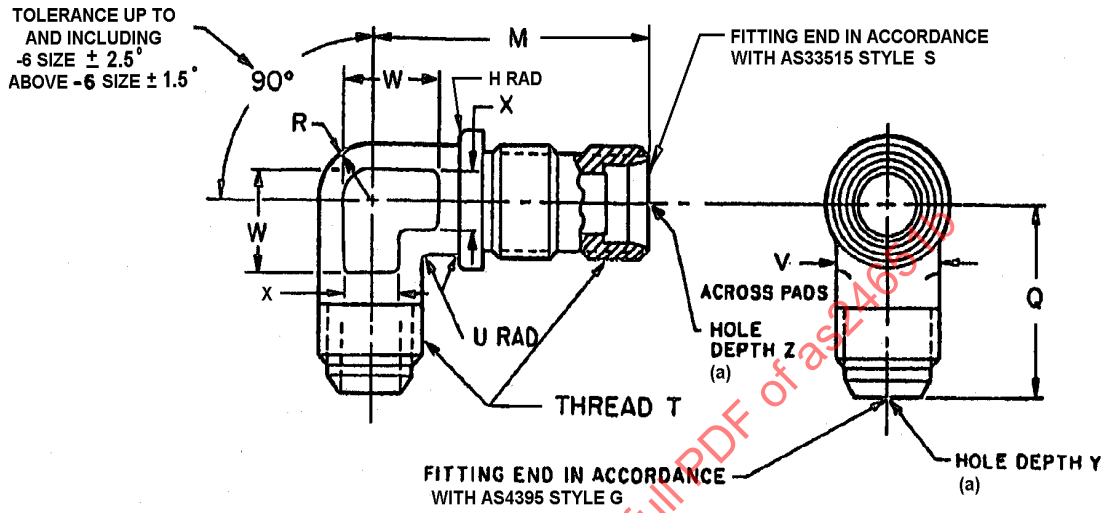
FEDERAL SUPPLY CLASS
4730

RATIONALE

ADD NOTE: "WHEN MACHINED FROM BAR OR OVERSIZE FORGING, THE CENTER BODY DIMENSIONS SHALL CONFORM TO AS1376, TABLE 1". NOTES 6, 7, 12, 14 AND 15 ADDED TO HARMONIZE THIS STANDARD WITH OTHER AS219XX STANDARDS. UPDATE PROCUREMENT SPECIFICATION NOTE TO CURRENT VERBIAGE.

NOTICE

THE INITIAL PUBLICATION OF THIS DOCUMENT WAS TAKEN DIRECTLY FROM U.S. MILITARY STANDARD MS24651. AS5240 IS THE SUGGESTED REPLACEMENT STANDARD. AS5240 ELIMINATES THE POSSIBILITIES OF PART NUMBER DISCREPANCIES ORIGINATING FROM MS24651 PART NUMBERS.



(a) DEPTHS Y AND Z SHOULD BE MACHINED SUCH THAT THE CROSS-SECTIONAL AREA AT THE JUNCTION OF THE PASSAGES IS NOT SMALLER THAN THE CROSS-SECTIONAL AREA OF THE SMALLER HOLE. Y AND Z AT THEIR DEEPEST POINTS SHALL NOT EXCEED BEYOND THE WALL ESTABLISHED BY THE INTERSECTING HOLE.

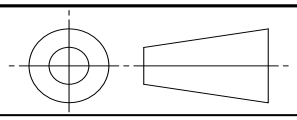
FIGURE 1 - ELBOW, TUBE, 90° BULKHEAD, FLARELESS TO FLARED

TABLE 1 - DIMENSIONS H-X

DASH NO. /5/	TUBE OD	THREAD T AS8879 CLASS 3A	H RAD	M +.047 - 000	Q +.047 - 000	R RAD	U RAD	V	W APPROX	X APPROX
-3	.188	.3750-24UNJF	.063	1.391	.891	.188	.063	.375	.313	.250
-4	.250	.4375-20UNJF	.063	1.500	.953	.219	.063	.438	.375	.250
-5	.313	.5000-20UNJF	.094	1.531	1.016	.250	.063	.500	.500	.313
-6	.375	.5625-18UNJF	.094	1.688	1.078	.281	.094	.563	.500	.313
-8	.500	.7500-16UNJF	.094	1.969	1.344	.325	.094	.750	.625	.438
-10	.625	.8750-14UNJF	.094	2.250	1.547	.438	.125	.875	.750	.438
-12	.750	1.0625-12UNJ	.094	2.469	1.766	.531	.125	1.063	.875	.500
-16	1.000	1.3125-12UNJ	.125	2.594	1.922	.656	.125	1.313	1.063	.625
-20	1.250	1.6250-12UNJ	.125	2.875	2.156	.813	.188	1.625	1.250	.750
-24	1.500	1.8750-12UNJ	.125	3.156	2.328	.938	.188	1.875	1.438	.875
-32	2.000	2.5000-12UNJ	.125	3.750	2.875	1.250	.188	2.563	1.938	1.188

For more information on this standard, visit
https://www.sae.org/standards/content/AS24651B/

THIRD ANGLE PROJECTION



ISSUED 1999-07 REAFFIRMED 2004-04 REVISED 2023-01

CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: AS18280 /10/

NOTES:

NOTICE

THIS DOCUMENT REFERENCES A PART WHICH CONTAINS CADMIUM AS PLATING MATERIAL. CONSULT LOCAL OFFICIALS IF YOU HAVE QUESTIONS CONCERNING CADMIUM USE.

1. MATERIALS: REFER TO PROCUREMENT SPECIFICATION.

   CARBON STEEL
   CORROSION RESISTANT STEEL
   ALUMINUM ALLOY
   TITANIUM ALLOY

2. FINISH: REFER TO PROCUREMENT SPECIFICATION.

3. BREAK SHARP EDGES .003 TO .015, UNLESS OTHERWISE SPECIFIED.

4. DIMENSIONS ARE IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: DECIMALS ±.016, ANGLES ±0°30'.

/5/ PART NUMBERS:

DASH "-" IN PART NUMBER FOR 4130 ALLOY STEEL IS REPLACED BY CODE LETTER "F" SEE TABLE 2. /17A/
ADD "F" IN PLACE OF DASH FOR 4130 ALLOY STEEL IS REPLACEMENT FOR CODE "-"
ADD "V (SIZE)P" IN PLACE OF DASH FOR CORROSION RESISTANT STEEL (15-5PH), CADMIUM PLATED
ADD "V" IN PLACE OF DASH FOR CORROSION RESISTANT STEEL (15-5PH), NOT CADMIUM PLATED
ADD "D" AFTER DASH NUMBER FOR ALUMINUM ALLOY (2024) IS REPLACED SEE TABLE 2. /17C/
ADD "W" AFTER DASH NUMBER FOR ALUMINUM ALLOY (7075)
ADD "J" AFTER DASH NUMBER FOR CORROSION-RESISTANT STEEL, (TYPE 304)
ADD "K" AFTER DASH NUMBER FOR CORROSION-RESISTANT STEEL, (TYPE 316)
ADD "R" AFTER DASH NUMBER FOR CORROSION-RESISTANT STEEL, (TYPE 321)
ADD "S" AFTER DASH NUMBER FOR CORROSION RESISTANT STEEL (TYPE 347) IS REPLACED BY CODE "R" SEE TABLE 2. /17D/
ADD "T" AFTER DASH NUMBER FOR TITANIUM ALLOY (6AL-4V)

EXAMPLES OF PART NUMBERS:

MS24651-4	ELBOW, .250 TUBING, 90°, "-" CODE FOR 4130 ALLOY STEEL IS REPLACED SEE TABLE 2. /17A/
MS24651F4	ELBOW, .250 TUBING, 90°, FOR 4130 ALLOY STEEL
MS24651V4P	ELBOW, .250 TUBING, 90°, CORROSION RESISTANT STEEL (15-5PH) CADMIUM PLATED
MS24651V4	ELBOW, .250 TUBING, 90°, CORROSION RESISTANT STEEL (15-5PH), NOT CADMIUM PLATED
MS24651-8D	ELBOW, .500 TUBING, 90°, ALUMINUM ALLOY (2024) IS REPLACED SEE TABLE 2. /17C/
MS24651-8W	ELBOW, .500 TUBING, 90°, ALUMINUM ALLOY (7075)
MS24651-8J	ELBOW, .500 TUBING, 90°, CORROSION RESISTANT STEEL (TYPE 304)
MS24651-8K	ELBOW, .500 TUBING, 90°, CORROSION RESISTANT STEEL (TYPE 316)
MS24651-8R	ELBOW, .500 TUBING, 90°, CORROSION RESISTANT STEEL (TYPE 321)
MS24651-8S	ELBOW, .500 TUBING, 90°, CORROSION RESISTANT STEEL (TYPE 347) IS REPLACED SEE TABLE 2. /17D/
MS24651-8T	ELBOW, .500 TUBING, 90°, TITANIUM ALLOY (6AL-4V)

6. PART MARKING: REFER TO PROCUREMENT SPECIFICATION.

7. DIMENSIONING AND TOLERANCING: ASME Y14.5M-1982.

8. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID.

9. IN THE EVENT OF A CONFLICT BETWEEN THE TEXT OF THIS STANDARD AND THE REFERENCES CITED HEREIN, THE TEXT OF THIS STANDARD SHALL TAKE PRECEDENCE.

/10/ PROCUREMENT SPECIFICATION: AS18280 EXCEPT AS SPECIFIED ON THIS STANDARD. PRODUCT MANUFACTURED TO THIS STANDARD SHALL MEET THE REQUIREMENTS SPECIFIED HEREIN AND THE PROCUREMENT SPECIFICATION. ORIGINAL COMPONENT MANUFACTURERS (OCM) SHALL BE LISTED IN THE PRI QUALIFIED PRODUCTS LIST (QPL) PRI-QPL-AS18280 FOR THIS STANDARD. SEE www.eAuditNet.com FOR CURRENT QPL ONLINE.

11. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M. REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, MACHINED SURFACE SHALL BE 125 MICROINCHES Ra.