FEDERAL SUPPLY CLASS
4730

RATIONALE

THIS DOCUMENT HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE 5-YEAR REVIEW POLICY.

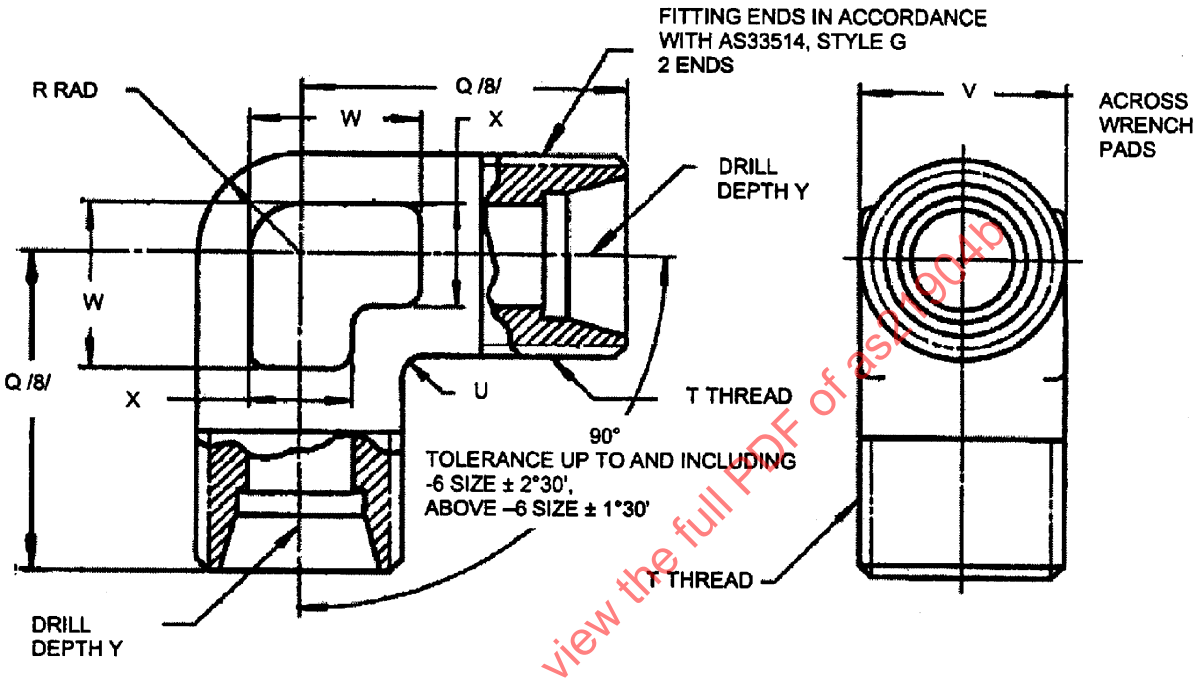

FIGURE 1 - ELBOW, FLARELESS TUBE, 90°

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ISSUED 1998-03 REVISED 2003-06 REAFFIRMED 2007-07

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TABLE 1A - DIMENSIONS G-V

DASH NO.	NOMINAL TUBE SIZE	T THREAD AS8879	Q /8/ +.047 -.000	R RAD	U RAD	V
-2	.125	.3125-24 UNJF-3A	.75	.156	.063	.313
-3	.188	.3750-24 UNJF-3A	.813	.188	.063	.875
-4	.250	.4375-20 UNJF-3A	.875	.219	.063	.438
-5	.313	.5000-20 UNJF-3A	.938	.250	.063	.500
-6	.375	.5625-18 UNJF-3A	1.031	.281	.094	.563
-8	.500	.7500-16 UNJF-3A	1.250	.375	.094	.750
-10	.625	.8750-14 UNJF-3A	1.406	.438	.094	.875
-12	.750	1.0625-12 UNJ-3A	1.563	.531	.094	1.063
-16	1.000	1.3125-12 UNJ-3A	1.719	.656	.125	1.313
-20	1.250	1.6250-12 UNJ-3A	1.875	.813	.125	1.625
-24	1.500	1.8750-12 UNJ-3A	2.000	.938	.125	1.875
-32	2.000	2.5000-12 UNJ-3A	2.438	1.250	.250	2.563

TABLE 1B - DIMENSIONS W-Y

DASH NO.	W APPROX	X APPROX	Y +.047 -.000	WEIGHT, LB/EA, APPROX, REF. STEEL	AL ALLOY	TI ALLOY
-2	.313	.188	.781	.040	.014	.023
-3	.313	.250	.844	.056	.020	.032
-4	.375	.250	.922	.062	.022	.035
-5	.500	.313	.984	.086	.031	.049
-6	.500	.313	1.063	.104	.037	.060
-8	.625	.438	1.313	.191	.064	.110
-10	.750	.438	1.469	.258	.087	.148
-12	.875	.500	1.625	.402	.135	.231
-16	1.063	.625	1.844	.535	.200	.308
-20	1.250	.750	2.000	.792	.265	.456
-24	1.438	.875	2.313	1.262	.463	.728
-32	2.000	1.188	2.688	3.062	1.125	1.766

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NOTES:

1. MATERIAL:

   SEE PROCUREMENT SPECIFICATION.
   ALLOY STEEL
   ALUMINUM ALLOY
   CORROSION RESISTANT STEEL
   TITANIUM ALLOY

2. FINISH: SEE PROCUREMENT SPECIFICATION

3. BREAK 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 CANCELLED AND REPLACED, SEE 7 /A/
   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" IN PLACE OF DASH FOR ALUMINUM ALLOY (2014): CANCELLED AND REPLACED, SEE 7 /C/
   ADD "W" IN PLACE OF DASH FOR ALUMINUM ALLOY (7075)
   ADD "J" IN PLACE OF DASH FOR CORROSION RESISTANT STEEL (TYPE 304)
   ADD "K" IN PLACE OF DASH 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): CANCELLED, SEE 7 /D/
   ADD "T" AFTER DASH NUMBER FOR TITANIUM ALLOY (6AL-4V)

   EXAMPLES OF PART NUMBERS:

MS21904-4	ELBOW, .250 TUBING, 4130 ALLOY STEEL IS CANCELLED AND REPLACED, SEE 7 /A/
MS21904V4P	ELBOW, .250 TUBING, CORROSION RESISTANT STEEL (15-5PH), CADMIUM PLATED
MS21904V4	ELBOW, .250 TUBING, CORROSION RESISTANT STEEL (15-5PH), NOT CADMIUM PLATED
MS21904D4	ELBOW, .250 TUBING, ALUMINUM ALLOY (2014) IS CANCELLED AND REPLACED, SEE 7 /C/
MS21904W4	ELBOW, .250 TUBING, ALUMINUM ALLOY (7075)
MS21904J4	ELBOW, .250 TUBING, CORROSION RESISTANT STEEL (TYPE 304)
MS21904K4	ELBOW, .250 TUBING, CORROSION RESISTANT STEEL (TYPE 316)
MS21904-4R	ELBOW, .250 TUBING, CORROSION RESISTANT STEEL (TYPE 321)
MS21904-4S	ELBOW, .250 TUBING, CORROSION RESISTANT STEEL (TYPE 347) IS CANCELLED, SEE 7 /D/
MS21904-4T	ELBOW, .250 TUBING, TITANIUM ALLOY (6AL-4V)

6. TITANIUM NOT RECOMMENDED FOR USE IN OXYGEN SYSTEMS.

7. SEE TABLE 2 FOR CANCELLED AND SUPERSEDED DOCUMENT AND PART NUMBERS.

/8/ AT THE OPTION OF THE MANUFACTURER, BASIC DIMENSION Q MAY BE .016 LESS THAN THE DIMENSIONS SPECIFIED, WITH THE PROVISION THAT BASIC DIMENSION Y IS ALSO MADE .016 LESS THAN THE DIMENSION SPECIFIED.

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

10. 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.

11. USERS OF THIS STANDARD SHALL PROCURE THE PRODUCT FROM ACCREDITED MANUFACTURERS OR ACCREDITED DISTRIBUTORS AS LISTED IN THE PERFORMANCE REVIEW INSTITUTE (PRI) QUALIFIED PRODUCTS LIST PRI-QPL-AS18280 FOR THIS STANDARD. SEE http://www.pri.sae.org/QPL/as18280.pdf FOR CURRENT QPL ONLINE. NOTE THAT MANUFACTURERS ARE ACCREDITED BY PART NUMBER, SIZE AND MATERIALS ON PRI-QPL-AS18280.

12. THE CHANGE BAR (I) LOCATED IN THE LEFT MARGIN IS FOR THE CONVENIENCE OF THE USER IN LOCATING AREAS WHERE TECHNICAL REVISIONS, NOT EDITORIAL CHANGES, HAVE BEEN MADE TO THE PREVIOUS ISSUE OF THIS DOCUMENT. AN (R) SYMBOL TO THE LEFT OF THE DOCUMENT TITLE INDICATES A COMPLETE REVISION OF THE DOCUMENT.

13. INTERPRETATION OF DRAWING PER ARP4296.

14. FLUID PASSAGE, HOLE CONTOUR: ARP4266 (OPTIONAL)

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