

REV.  
E

AS21904™

RATIONALE

ADD NOTE: "WHEN MACHINED FROM BAR OR OVERSIZE FORGING, THE CENTER BODY DIMENSIONS SHALL CONFORM TO AS1376, TABLE 1." "INACTIVE" REMOVED FROM MATERIAL CODE "S" AND REPLACED BY EXPLANATORY NOTE /18D/. UPDATE PROCUREMENT SPECIFICATION NOTE TO CURRENT VERBIAGE.

NOTICE

THE INITIAL SAE PUBLICATION OF THIS DOCUMENT WAS TAKEN DIRECTLY FROM U.S. MILITARY STANDARD MS21904 AND RETAINS THE SAME PART NUMBERS ESTABLISHED BY THE ORIGINAL MILITARY DOCUMENT.

PROCUREMENT OF MS21904 PART NUMBERS TO THIS "AS" STANDARD MAY RESULT IN LOSS OF CONFIGURATION CONTROL WHERE DIFFERENCES IN THE CANCELLED MIL-F-18280 AND THE SUPERSEDING AS18280 PROCUREMENT SPECIFICATIONS EXIST. AS1004 IS A RECOMMENDED REPLACEMENT STANDARD THAT ELIMINATES THIS PROBLEM.

SAE Executive Standards Committee Rules provide that: " This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user." SAE reviews each technical report at least every five years at which time it may be revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

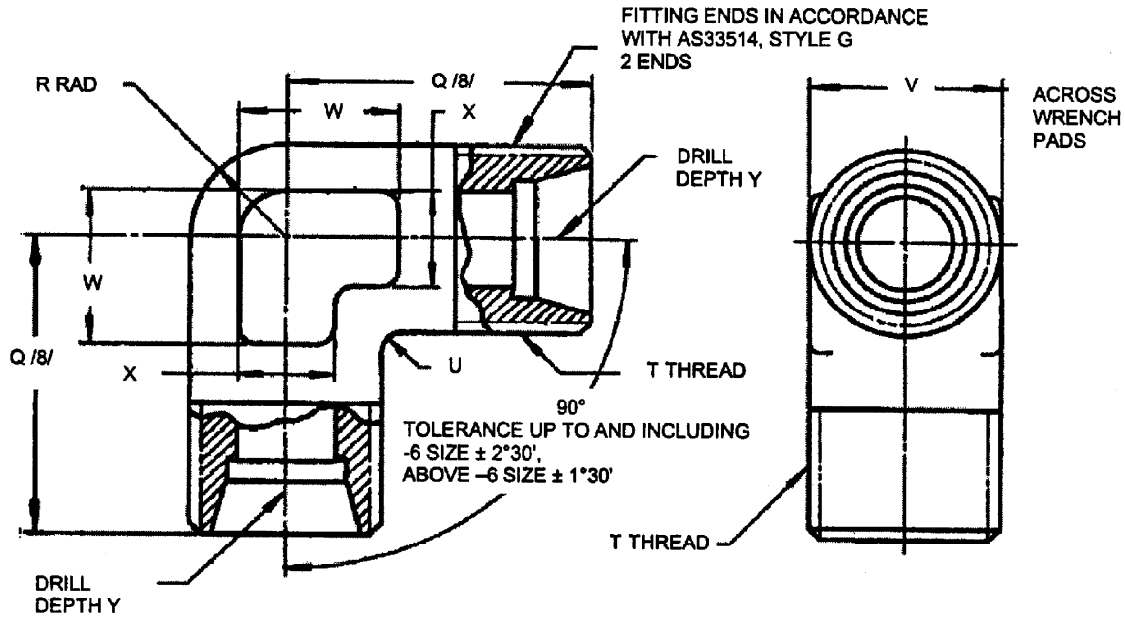
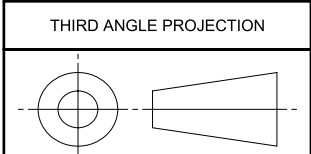


FIGURE 1 - ELBOW, FLARELESS TUBE, 90 DEGREES

For more information on this standard, visit  
<https://www.sae.org/standards/content/AS21904E/>



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: AS18280 /11/



**AEROSPACE STANDARD**

ELBOW,  
FLARELESS TUBE,  
90 DEGREES

AS21904™  
SHEET 1 OF 4

REV.  
E

ISSUED 1998-03 REAFFIRMED 2015-04 REVISED 2023-02

**TABLE 1A - DIMENSIONS Q-V**

DASH NO. /5/	NOMINAL TUBE SIZE REF	(T) THREAD AS8879	Q /8/	R RAD	U RAD	V
			+ .047 - .000			
-2	.125	.3125-24 UNJF-3A	.750	.156	.063	.313
-3	.188	.3750-24 UNJF-3A	.813	.188	.063	.375
-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. /5/	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

NOTES:

**NOTICE**

THIS DOCUMENT REFERENCES PARTS THAT CONTAIN CADMIUM AS A PLATING MATERIAL. CONSULT LOCAL OFFICIALS IF YOU HAVE QUESTIONS CONCERNING CADMIUM'S USE.

1. MATERIAL:

REFER TO PROCUREMENT SPECIFICATION  
 ALLOY STEEL  
 ALUMINUM ALLOY  
 CORROSION RESISTANT STEEL  
 TITANIUM ALLOY

2. FINISH: REFER TO 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'.

	<b>AEROSPACE STANDARD</b>	<b>AS21904™</b> SHEET 2 OF 4	<b>REV.</b> <b>E</b>
	ELBOW, FLARELESS TUBE, 90 DEGREES		