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AS21907

FEDERAL SUPPLY CLASS  
4730

RATIONALE

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

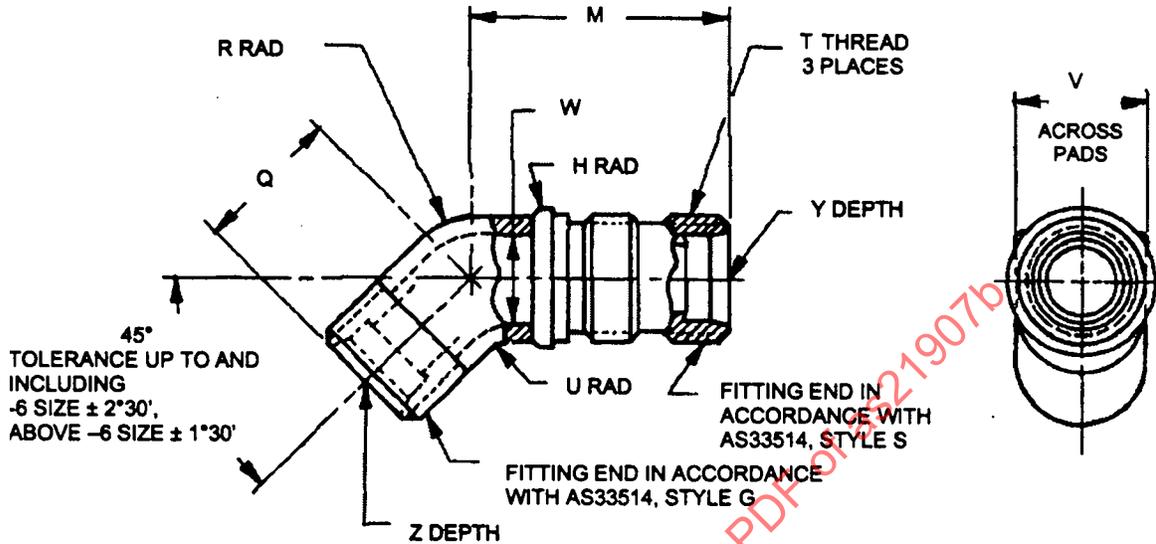


FIGURE 1 - ELBOW, BULKHEAD UNIVERSAL,  
45°, FLARELESS TUBE

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CUSTODIAN: SAE G-3/G-3B

PROCUREMENT SPECIFICATION: AS18280

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An SAE International Group

(R) **AEROSPACE STANDARD**  
ELBOW, BULKHEAD UNIVERSAL,  
45°, FLARELESS TUBE

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

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TABLE 1A - DIMENSIONS H-U

DASH NO.	NOMINAL TUBE SIZE	T THREAD AS8879	H RAD	M	Q	R RAD	U RAD
				+0.047 -0.000	+0.047 -0.000		
-2	.125	.3125-24 UNJF-3A	.062	1.281	.625	.156	.062
-3	.188	.3750-24 UNJF-3A	.062	1.328	.656	.187	.062
-4	.250	.4375-20 UNJF-3A	.062	1.453	.687	.219	.062
-5	.313	.5000-20 UNJF-3A	.094	1.453	.719	.250	.062
-6	.375	.5625-18 UNJF-3A	.094	1.562	.812	.281	.094
-8	.500	.7500-16 UNJF-3A	.094	1.812	.969	.375	.094
-10	.625	.8750-14 UNJF-3A	.094	2.047	1.062	.437	.094
-12	.750	1.0625-12 UNJ-3A	.094	2.250	1.250	.531	.094
-16	1.000	1.3125-12 UNJ-3A	.125	2.375	1.344	.656	.125
-20	1.250	1.6250-12 UNJ-3A	.125	2.406	1.437	.812	.125
-24	1.500	1.8750-12 UNJ-3A	.125	2.422	1.531	.937	.125
-32	2.000	2.5000-12 UNJ-3A	.125	2.578	1.812	1.250	.250

TABLE 1B - DIMENSIONS V-Z

DASH NO.	V	W APPROX	Y	Z	WEIGHT, LB/EA, APPROX, REF.		
			+0.047 -0.000	+0.047 -0.000	STEEL	AL ALLOY	TI ALLOY
-2	.312	.219	1.281	.641	.035	.015	.020
-3	.375	.219	1.359	.687	.051	.018	.029
-4	.437	.312	1.484	.719	.059	.024	.034
-5	.500	.312	1.500	.797	.098	.035	.056
-6	.562	.375	1.625	.875	.104	.039	.060
-8	.750	.500	1.859	1.078	.212	.072	.122
-10	.875	.625	2.125	1.156	.305	.109	.175
-12	1.062	.750	2.375	1.375	.493	.171	.284
-16	1.312	1.000	2.547	1.516	.670	.255	.386
-20	1.625	1.250	2.641	1.656	1.100	.410	.634
-24	1.875	1.500	2.687	1.797			
-32	2.562	2.000	2.703	2.187			

## NOTES:

- MATERIAL:  
SEE PROCUREMENT SPECIFICATION.  
ALLOY STEEL  
ALUMINUM ALLOY  
CORROSION RESISTANT STEEL  
TITANIUM ALLOY
- FINISH: SEE PROCUREMENT SPECIFICATION
- BREAK EDGES .003 TO .015 UNLESS OTHERWISE SPECIFIED.
- DIMENSIONS ARE IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: DECIMALS  $\pm 0.016$ , ANGLES  $\pm 0^{\circ}30'$ .

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## 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:

MS21907-4 ELBOW, .250 TUBING, 4130 ALLOY STEEL IS CANCELLED AND REPLACED, SEE 7 /A/  
 MS21907V4P ELBOW, .250 TUBING, CORROSION RESISTANT STEEL (15-5PH), CADMIUM PLATED  
 MS21907V4 ELBOW, .250 TUBING, CORROSION RESISTANT STEEL (15-5PH), NOT CADMIUM PLATED  
 MS21907D4 ELBOW, .250 TUBING, ALUMINUM ALLOY (2014) IS CANCELLED AND REPLACED, SEE 7 /C/  
 MS21907W4 ELBOW, .250 TUBING, ALUMINUM ALLOY (7075)  
 MS21907J4 ELBOW, .250 TUBING, CORROSION RESISTANT STEEL (TYPE 304)  
 MS21907K4 ELBOW, .250 TUBING, CORROSION RESISTANT STEEL (TYPE 316)  
 MS21907-4R ELBOW, .250 TUBING, CORROSION RESISTANT STEEL (TYPE 321)  
 MS21907-4S ELBOW, .250 TUBING, CORROSION RESISTANT STEEL (TYPE 347) IS CANCELLED, SEE 7 /D/  
 MS21907-4T 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.

TABLE 2 - CANCELLED AND SUPERSEDED DOCUMENT AND PART NUMBERS

CANCELLED DOCUMENT NUMBER	PART NUMBERS	SUPERSESSSION NOTES	SUPERSEDING DOCUMENT NUMBER	SUPERSEDING PART NUMBERS
MS21907	MS21907-(2 THRU 32)	/A/	AS21907	MS21907V(2 THRU 32)P
MS21907	MS21907C(2 THRU 32)	/B/	AS21907	MS21907J(2 THRU 32), MS21907K(2 THRU 32), OR MS21907-(2 THRU 32)R
MS21907	MS21907D(2 THRU 32)	/C/	AS21907	MS21907W(2 THRU 32)
MS21907	MS21907W(2 THRU 32)	NONE	AS21907	MS21907W(2 THRU 32)
MS21907	MS21907J(2 THRU 32)	NONE	AS21907	MS21907J(2 THRU 32)
MS21907	MS21907K(2 THRU 32)	NONE	AS21907	MS21907K(2 THRU 32)
MS21907	MS21907-(2 THRU 32)R	NONE	AS21907	MS21907-(2 THRU 32)R
MS21907	MS21907-(2 THRU 32)S	/D/	AS21907	MS21907-(2 THRU 32)R
MS21907	MS21907-(2 THRU 32)T	NONE	AS21907	MS21907-(2 THRU 32)T

/A/ PARTS CODED “-” FOR 4130 ALLOY STEEL ARE NOT TO BE MANUFACTURED. PARTS CODED “V(SIZE)P” FOR CORROSION RESISTANT STEEL (15-5PH) WITH CADMIUM PLATE SHALL BE FURNISHED IN LIEU OF “-” CODED (4130) PARTS. PARTS CODED “-” FOR 4130 ALLOY STEEL MAY BE PROCURED UNTIL 12-31-06.

/B/ PARTS CODED “C” FOR CORROSION RESISTANT STEEL (TYPE 303) ARE NOT TO BE MANUFACTURED. PARTS CODED “J”, “K” OR “R” FOR CORROSION RESISTANT STEEL (TYPES 304, 316, OR 321, RESPECTIVELY) SHALL BE FURNISHED IN LIEU OF “C” CODED PARTS AT SUPPLIERS OPTION.

/C/ PARTS CODED “D” FOR ALUMINUM ALLOY 2014 ARE NOT TO BE MANUFACTURED. PARTS CODED “W” FOR ALUMINUM ALLOY 7075 SHALL BE FURNISHED IN LIEU OF 2014 (D CODE) PARTS. PARTS CODED “D” FOR ALUMINUM ALLOY 2014 MAY BE PROCURED UNTIL 12-31-06.

/D/ PARTS CODED “S” FOR CORROSION RESISTANT STEEL (TYPE 347) ARE NOT TO BE MANUFACTURED. PARTS CODED “S” MAY BE USED UNTIL EXISTING STOCK IS DEPLETED. PARTS CODED “R” FOR CORROSION RESISTANT STEEL (TYPE 321) SHALL BE FURNISHED IN LIEU OF “S” CODED PARTS.

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