

REV.  
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AS21925

FEDERAL SUPPLY CLASS  
4730

RATIONALE

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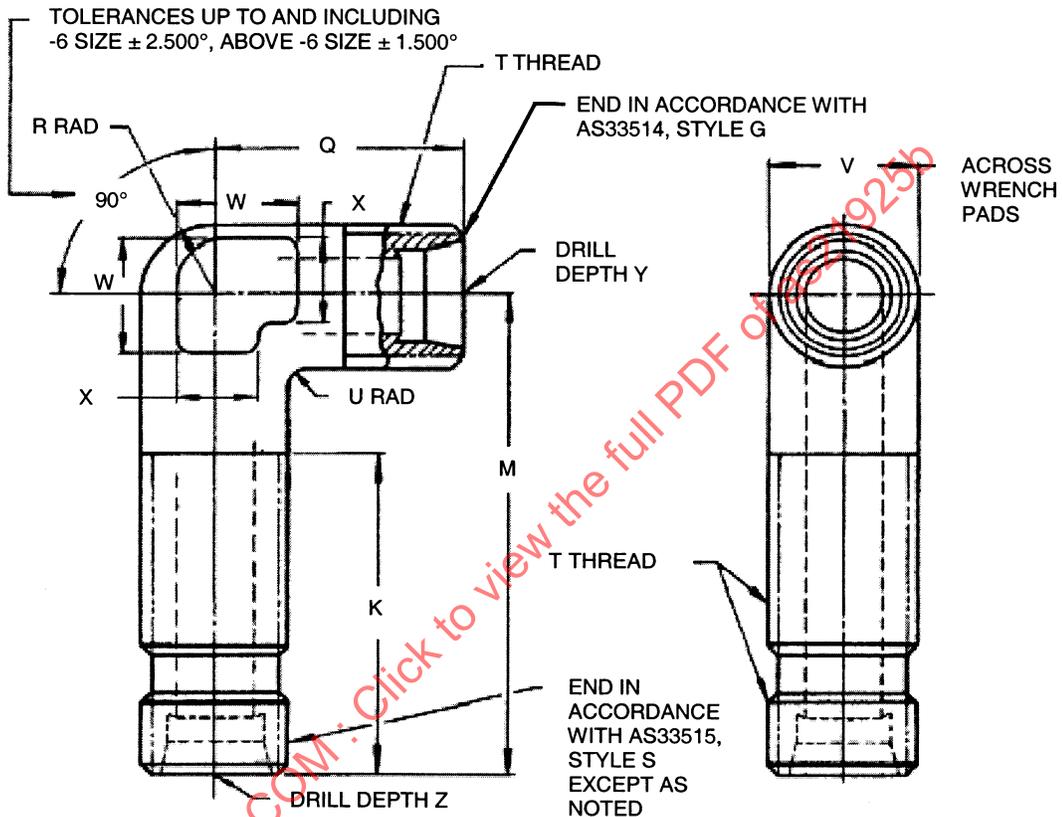


FIGURE 1 - ELBOW, 90° UNIVERSAL, FLARELESS TUBE, HIGH PROFILE

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

CUSTODIAN: SAE G-3/G-3B

PROCUREMENT SPECIFICATION: AS18280

**SAE Aerospace**  
An SAE International Group

**AEROSPACE STANDARD**  
(R) ELBOW, 90° UNIVERSAL, FLARELESS TUBE,  
HIGH PROFILE

**AS21925**  
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TABLE 1A - DIMENSIONS K-U

DASH NO.	NOMINAL TUBE SIZE	T THREAD AS8879	K	M	Q	R	U
			MIN FULL THD	+0.07 -0.00	+0.07 -0.00		
-4	.250	.4375-20 UNJF-3A	.81	1.756	.940	.218	.062
-5	.313	.5000-20 UNJF-3A	.81	1.846	1.030	.250	.062
-6	.375	.5625-18 UNJF-3A	.85	2.076	1.060	.281	.093
-8	.500	.7500-16 UNJF-3A	1.01	2.545	1.310	.375	.093
-10	.625	.8750-14 UNJF-3A	1.14	3.065	1.500	.437	.125
-12	.750	1.0625-12 UNJ-3A	1.25	3.375	1.620	.531	.125
-16	1.000	1.3125-12 UNJ-3A	1.25	3.755	1.720	.656	.125
-20	1.250	1.6250-12 UNJ-3A	1.25	4.335	2.000	.812	.187

TABLE 1B - DIMENSIONS V-Z

DASH NO.	V	W APPROX	X APPROX	Y	Z	WEIGHT, LB/EA, APPROX, REF.		
				+0.07 -0.00	+0.07 -0.00	STEEL	AL ALLOY	TI ALLOY
-4	.437	.375	.250	.969	1.790	.085	.031	.049
-5	.500	.500	.312	1.062	1.880			
-6	.562	.500	.312	1.094	2.110	.148	.054	.085
-8	.750	.625	.438	1.344	2.580	.319	.117	.184
-10	.875	.750	.438	1.562	3.130			
-12	1.060	.875	.500	1.719	3.470			
-16	1.310	1.062	.625	1.812	3.850	1.203	.442	.694
-20	1.620	1.250	.750	2.125	4.460			

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 ±0.016, ANGLES ±0°30'.

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## 5. PART NUMBER:

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 FOR TITANIUM ALLOY (6AL-4V).

## EXAMPLES OF PART NUMBERS:

MS21925-4 ELBOW, .250 TUBING, 4130 ALLOY STEEL IS CANCELLED AND REPLACED, SEE 7 /A/  
 MS21925V4P ELBOW, .250 TUBING, CORROSION RESISTANT STEEL (15-5PH), CADMIUM PLATED  
 MS21925V4 ELBOW, .250 TUBING, CORROSION RESISTANT STEEL (15-5PH), NOT CADMIUM PLATED  
 MS21925D4 ELBOW, .250 TUBING, ALUMINUM ALLOY (2014) IS CANCELLED AND REPLACED, SEE 7 /C/  
 MS21925W4 ELBOW, .250 TUBING, ALUMINUM ALLOY (7075).  
 MS21925J4 ELBOW, .250 TUBING, CORROSION RESISTANT STEEL (TYPE 304).  
 MS21925K4 ELBOW, .250 TUBING, CORROSION RESISTANT STEEL (TYPE 316).  
 MS21925-4R ELBOW, .250 TUBING, CORROSION RESISTANT STEEL (TYPE 321).  
 MS21925-4S ELBOW, .250 TUBING, CORROSION RESISTANT STEEL (TYPE 347) IS CANCELLED, SEE 7 /D/  
 MS21925-4T 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	SUPERSESSION NOTES	SUPERSEDING DOCUMENT NUMBER	SUPERSEDING PART NUMBERS
MS21925	MS21925-(4 THRU 20)	/A/	AS21925	MS21925V(4 THRU 20)P
MS21925	MS21925C(4 THRU 20)	/B/	AS21925	MS21925J(4 THRU 20), MS21925K(4 THRU 20), OR MS21925-(4 THRU 20)R
MS21925	MS21925-(4 THRU 20)D	/C/	AS21925	MS21925W(4 THRU 20)
MS21925	MS21925W(4 THRU 20)	NONE	AS21925	MS21925W(4 THRU 20)
MS21925	MS21925J(4 THRU 20)	NONE	AS21925	MS21925J(4 THRU 20)
MS21925	MS21925K(4 THRU 20)	NONE	AS21925	MS21925K(4 THRU 20)
MS21925	MS21925-(4 THRU 20)R	NONE	AS21925	MS21925-(4 THRU 20)R
MS21925	MS21925-(4 THRU 20)S	/D/	AS21925	MS21925-(4 THRU 20)R
MS21925	MS21925-(4 THRU 20)T	NONE	AS21925	MS21925-(4 THRU 20)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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