

REV.
B

AS21916

FEDERAL SUPPLY CLASS
4730

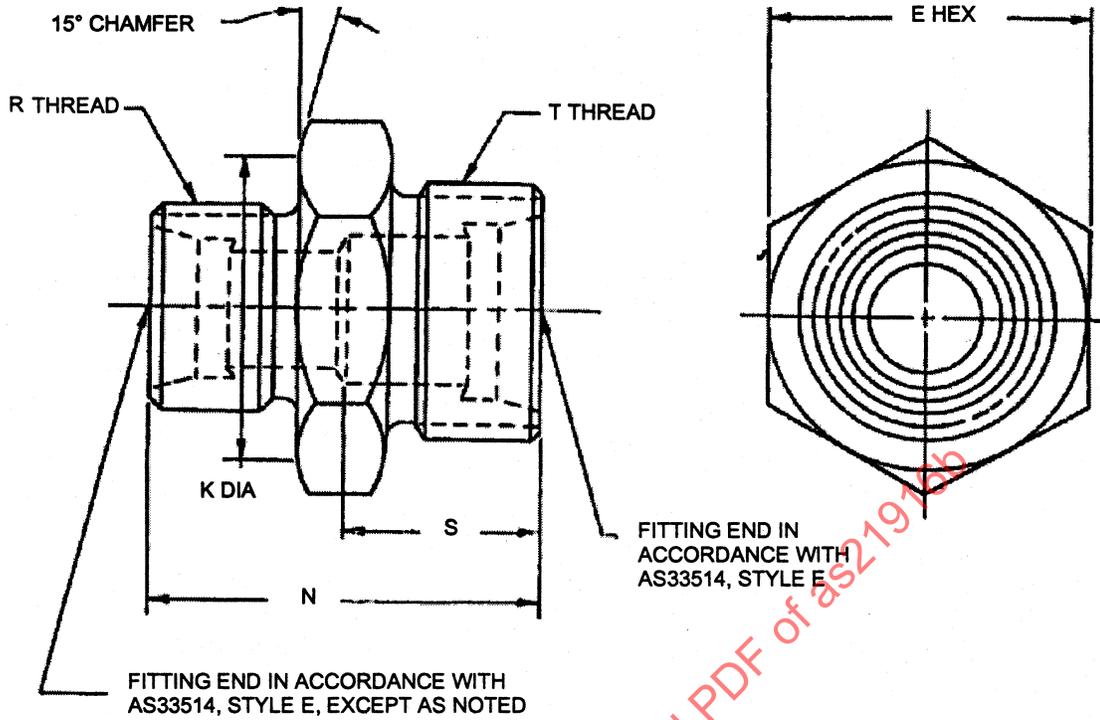


FIGURE 1 - REDUCER, EXTERNAL THREAD, FLARELESS TUBE

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ISSUED 1998-03 REVISED 2003-06

CUSTODIAN: SAE G-3/G-3B

PROCUREMENT SPECIFICATION: AS18280

SAE Aerospace
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AEROSPACE STANDARD

(R) REDUCER, EXTERNAL THREAD, FLARELESS TUBE

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TABLE 1A - DIMENSION E

DASH NO.	LARGE END		SMALL END		
	NOMINAL TUBE SIZE	T THREAD AS8879	NOMINAL TUBE SIZE	R THREAD AS8879	E HEX
-3-2	.188	.3750-24 UNJF-3A	.125	.3125-24 UNJF-3A	.621-.628
-4-2	.250	.4375-20 UNJF-3A	.125	.3125-24 UNJF-3A	.680-.687
-4-3	.250	.4375-20 UNJF-3A	.188	.3750-24 UNJF-3A	.680-.687
-5-4	.313	.5000-20 UNJF-3A	.250	.4375-20 UNJF-3A	.746-.753
-6-2	.375	.5625-18 UNJF-3A	.125	.3125-24 UNJF-3A	.809-.816
-6-3	.375	.5625-18 UNJF-3A	.188	.3750-24 UNJF-3A	.809-.816
-6-4	.375	.5625-18 UNJF-3A	.250	.4375-20 UNJF-3A	.809-.816
-6-5	.375	.5625-18 UNJF-3A	.313	.5000-20 UNJF-3A	.809-.816
-8-2	.500	.7500-16 UNJF-3A	.125	.3125-24 UNJF-3A	.996-1.003
-8-3	.500	.7500-16 UNJF-3A	.188	.3750-24 UNJF-3A	.996-1.003
-8-4	.500	.7500-16 UNJF-3A	.250	.4375-20 UNJF-3A	.996-1.003
-8-5	.500	.7500-16 UNJF-3A	.313	.5000-20 UNJF-3A	.996-1.003
-8-6	.500	.7500-16 UNJF-3A	.375	.5625-18 UNJF-3A	.996-1.003
-10-4	.625	.8750-14 UNJF-3A	.250	.4375-20 UNJF-3A	1.121-1.128
-10-6	.625	.8750-14 UNJF-3A	.375	.5625-18 UNJF-3A	1.121-1.128
-10-8	.625	.8750-14 UNJF-3A	.500	.7500-16 UNJF-3A	1.121-1.128
-12-4	.750	1.0625-12 UNJ-3A	.250	.4375-20 UNJF-3A	1.371-1.387
-12-5	.750	1.0625-12 UNJ-3A	.313	.5000-20 UNJF-3A	1.371-1.387
-12-6	.750	1.0625-12 UNJ-3A	.375	.5625-18 UNJF-3A	1.371-1.387
-12-8	.750	1.0625-12 UNJ-3A	.500	.7500-16 UNJF-3A	1.371-1.387
-12-10	.750	1.0625-12 UNJ-3A	.625	.8750-14 UNJF-3A	1.371-1.387
-16-4	1.000	1.3125-12 UNJ-3A	.250	.4375-20 UNJF-3A	1.609-1.641
-16-10	1.000	1.3125-12 UNJ-3A	.625	.8750-14 UNJF-3A	1.609-1.641
-16-12	1.000	1.3125-12 UNJ-3A	.750	1.0625-12 UNJ-3A	1.609-1.641
-20-4	1.250	1.6250-12 UNJ-3A	.250	.4375-20 UNJF-3A	1.859-1.891
-20-12	1.250	1.6250-12 UNJ-3A	.750	1.0625-12 UNJ-3A	1.859-1.891
-20-16	1.250	1.6250-12 UNJ-3A	1.000	1.3125-12 UNJ-3A	1.859-1.891
-24-16	1.500	1.8750-12 UNJ-3A	1.000	1.3125-12 UNJ-3A	2.105-2.145
-24-20	1.500	1.8750-12 UNJ-3A	1.250	1.6250-12 UNJ-3A	2.105-2.145

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TABLE 1B - DIMENSIONS K-S

DASH NO.	K			WEIGHT, LB/EA, APPROX, REF.		
	$\pm.010$ DIA	H	S $\pm.031$	STEEL	AL ALLOY	TI ALLOY
-3-2	.611	1.047	.547	.036	.014	.020
-4-2	.674	1.094	.594	.042	.016	.024
-4-3	.674	1.141	.594	.046	.017	.026
-5-4	.736	1.156	.563	.065	.019	.037
-6-2	.799	1.156	.625	.066	.021	.038
-6-3	.799	1.203	.625	.067	.023	.038
-6-4	.799	1.219	.625	.068	.024	.039
-6-5	.799	1.219	.625	.070	.025	.040
-8-2	.985	1.250	.719	.101	.037	.058
-8-3	.985	1.297	.719	.108	.038	.062
-8-4	.985	1.344	.719	.115	.039	.056
-8-5	.985	1.344	.719	.118	.040	.058
-8-6	.985	1.344	.719	.120	.042	.069
-10-4	1.111	1.438	.781	.155	.053	.089
-10-6	1.111	1.625	.781	.204	.072	.117
-10-8	1.111	1.531	.781	.222	.081	.128
-12-4	1.361	1.531	.875	.230	.084	.132
-12-5	1.361	1.531	.875	.235	.086	.135
-12-6	1.361	1.531	.875	.240	.088	.138
-12-8	1.361	1.625	.844	.250	.090	.144
-12-10	1.361	1.688	.875	.260	.098	.150
-16-4	1.599	1.631	.588	.327	.120	.188
-16-10	1.599	1.688	.875	.335	.115	.193
-16-12	1.599	1.750	.875	.342	.122	.197
-20-4	1.849	1.631	.719	.439	.162	.253
-20-12	1.849	1.813	.904	.485	.172	.219
-20-16	1.849	1.750	.875	.450	.165	.259
-24-16	2.095	1.750	.875	.525	.193	.302
-24-20	2.095	1.750	.875	.570	.209	.328

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 $\pm.016$, 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 (2024): 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:

MS21916-8-4 REDUCER, .500 TUBING TO .250 TUBING, 4130 ALLOY STEEL IS CANCELLED AND REPLACED, SEE 7 /A/
MS21916V8-4P REDUCER, .500 TUBING TO .250 TUBING, CORROSION RESISTANT STEEL (15-5PH), CADMIUM PLATED
MS21916V8-4 REDUCER, .500 TUBING TO .250 TUBING, CORROSION RESISTANT STEEL (15-5PH), NOT CADMIUM PLATED
MS21916D8-4 REDUCER, .500 TUBING TO .250 TUBING, ALUMINUM ALLOY (2024) IS CANCELLED AND REPLACED, SEE 7 /C/
MS21916W8-4 REDUCER, .500 TUBING TO .250 TUBING, ALUMINUM ALLOY (7075)
MS21916J8-4 REDUCER, .500 TUBING TO .250 TUBING, CORROSION RESISTANT STEEL (TYPE 304)
MS21916K8-4 REDUCER, .500 TUBING TO .250 TUBING, CORROSION RESISTANT STEEL (TYPE 316)
MS21916-8-4R REDUCER, .500 TUBING TO .250 TUBING, CORROSION RESISTANT STEEL (TYPE 321)
MS21916-8-4S REDUCER, .500 TUBING TO .250 TUBING, CORROSION RESISTANT STEEL (TYPE 347) IS CANCELLED, SEE 7 /D/
MS21916-8-4T REDUCER, .500 TUBING TO .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. 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.
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12. INTERPRETATION OF DRAWING PER ARP4296.
13. FLUID PASSAGE, HOLE CONTOUR: ARP4266 (OPTIONAL)