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REV.
D

AS21916

FEDERAL SUPPLY CLASS
4730

RATIONALE

AS21916D HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

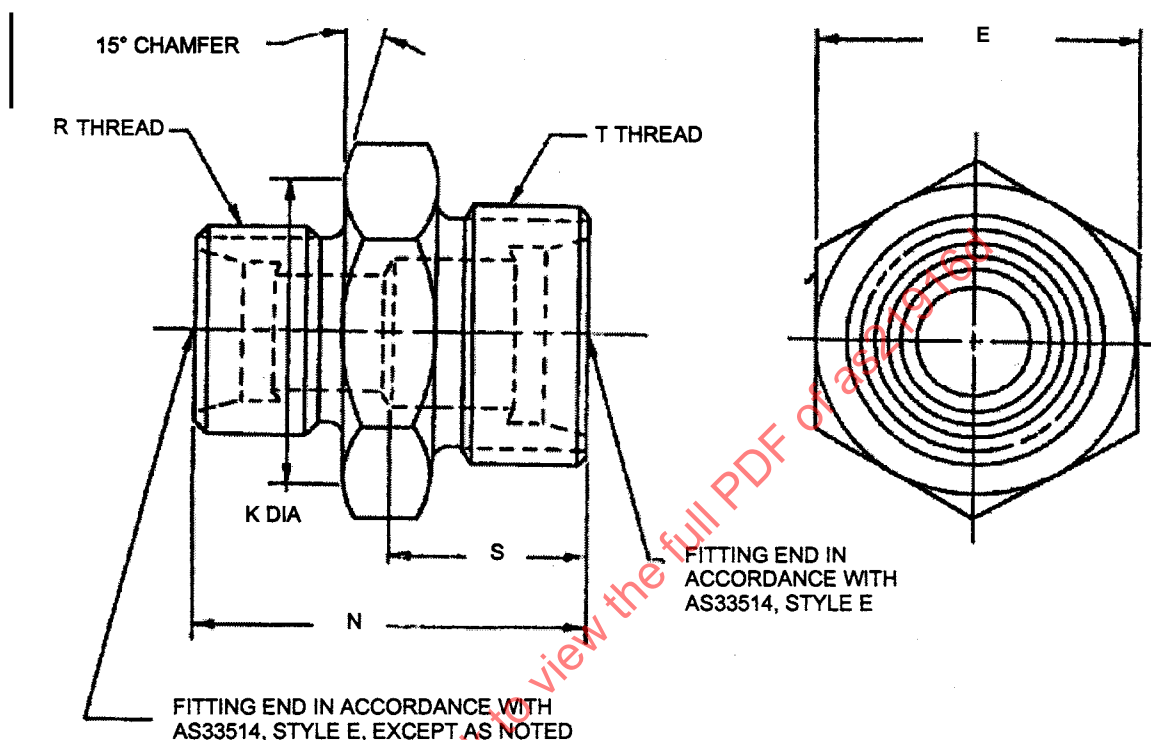
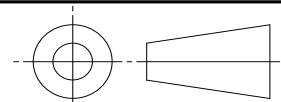


FIGURE 1 - REDUCER, EXTERNAL THREAD, FLARELESS TUBE

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on this Technical Report, please visit
<http://www.sae.org/technical/standards/AS21916D>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: /10/ AS18280



AEROSPACE STANDARD

REDUCER, EXTERNAL THREAD, FLARELESS TUBE

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TABLE 1A - DIMENSION E

DASH NO. /5/	LARGE END		SMALL END		E /4/
	NOMINAL TUBE SIZE	T THREAD AS8879	NOMINAL TUBE SIZE	R THREAD AS8879	
-3-2	.188	.3750-24 UNJF-3A	.125	.3125-24 UNJF-3A	.625
-4-2	.250	.4375-20 UNJF-3A	.125	.3125-24 UNJF-3A	.688
-4-3	.250	.4375-20 UNJF-3A	.188	.3750-24 UNJF-3A	.688
-5-4	.313	.5000-20 UNJF-3A	.250	.4375-20 UNJF-3A	.750
-6-2	.375	.5625-18 UNJF-3A	.125	.3125-24 UNJF-3A	.813
-6-3	.375	.5625-18 UNJF-3A	.188	.3750-24 UNJF-3A	.813
-6-4	.375	.5625-18 UNJF-3A	.250	.4375-20 UNJF-3A	.813
-6-5	.375	.5625-18 UNJF-3A	.313	.5000-20 UNJF-3A	.813
-8-2	.500	.7500-16 UNJF-3A	.125	.3125-24 UNJF-3A	1.000
-8-3	.500	.7500-16 UNJF-3A	.188	.3750-24 UNJF-3A	1.000
-8-4	.500	.7500-16 UNJF-3A	.250	.4375-20 UNJF-3A	1.000
-8-5	.500	.7500-16 UNJF-3A	.313	.5000-20 UNJF-3A	1.000
-8-6	.500	.7500-16 UNJF-3A	.375	.5625-18 UNJF-3A	1.000
-10-4	.625	.8750-14 UNJF-3A	.250	.4375-20 UNJF-3A	1.125
-10-6	.625	.8750-14 UNJF-3A	.375	.5625-18 UNJF-3A	1.125
-10-8	.625	.8750-14 UNJF-3A	.500	.7500-16 UNJF-3A	1.125
-12-4	.750	1.0625-12 UNJ-3A	.250	.4375-20 UNJF-3A	1.375
-12-5	.750	1.0625-12 UNJ-3A	.313	.5000-20 UNJF-3A	1.375
-12-6	.750	1.0625-12 UNJ-3A	.375	.5625-18 UNJF-3A	1.375
-12-8	.750	1.0625-12 UNJ-3A	.500	.7500-16 UNJF-3A	1.375
-12-10	.750	1.0625-12 UNJ-3A	.625	.8750-14 UNJF-3A	1.375
-16-4	1.000	1.3125-12 UNJ-3A	.250	.4375-20 UNJF-3A	1.625
-16-10	1.000	1.3125-12 UNJ-3A	.625	.8750-14 UNJF-3A	1.625
-16-12	1.000	1.3125-12 UNJ-3A	.750	1.0625-12 UNJ-3A	1.625
-20-4	1.250	1.6250-12 UNJ-3A	.250	.4375-20 UNJF-3A	1.875
-20-12	1.250	1.6250-12 UNJ-3A	.750	1.0625-12 UNJ-3A	1.875
-20-16	1.250	1.6250-12 UNJ-3A	1.000	1.3125-12 UNJ-3A	1.875
-24-16	1.500	1.8750-12 UNJ-3A	1.000	1.3125-12 UNJ-3A	2.125
-24-20	1.500	1.8750-12 UNJ-3A	1.250	1.6250-12 UNJ-3A	2.125



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REDUCER, EXTERNAL THREAD, FLARELESS TUBE

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TABLE 1B - DIMENSIONS K-S

DASH NO. /5/	K ±.010 DIA	N	S ±.031	WEIGHT, LB/EA, APPROX. REF.		
				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	.066
-8-5	.985	1.344	.719	.118	.040	.068
-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	1.531	.688	.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	1.531	.719	.439	.162	.253
-20-12	1.849	1.813	.906	.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:

NOTICE

THIS DOCUMENT REFERENCES A PART WHICH CONTAINS CADMIUM AS PLATING MATERIAL. CONSULT LOCAL OFFICIALS IF YOU HAVE QUESTIONS CONCERNING CADMIUM'S USE.

1. MATERIAL:

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

2. FINISH: SEE PROCUREMENT SPECIFICATION.

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	REDUCER, EXTERNAL THREAD, FLARELESS TUBE		

3. BREAK EDGES .003 TO .015 UNLESS OTHERWISE SPECIFIED.

4. DIMENSIONS ARE IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: DECIMALS ± 0.016 , ANGLES $\pm 0^{\circ}30'$. FOR HEX TOLERANCES USE ARP1201.

/5/ PART NUMBERS:

DASH “-” IN PART NUMBER FOR 4130 ALLOY STEEL IS CANCELLED AND REPLACED, SEE TABLE 2 /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 TABLE 2 /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 TABLE 2 /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 TABLE 2 /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 TABLE 2 /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 TABLE 2 /D/
MS21916-8-4T	REDUCER, .500 TUBING TO .250 TUBING, TITANIUM ALLOY (6AL-4V)

6. TITANIUM SHALL NOT BE USED FOR 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.

10. PRODUCT SUPPLIED TO THIS SPECIFICATION SHALL BE MANUFACTURED BY AN ACCREDITED MANUFACTURER AS LISTED IN THE PERFORMANCE REVIEW INSTITUTE (PRI) QUALIFIED PRODUCTS LIST PRI-QPL-AS18280 FOR THIS STANDARD. SEE <http://www.eauditnet.com> FOR CURRENT QPL ONLINE.

11. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M; REQUIREMENTS PER ASME B46.1; UNLESS OTHERWISE SPECIFIED MACHINED SURFACES SHALL BE 125 Ra.

12. A 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, INCLUDING TECHNICAL REVISIONS. CHANGE BARS AND (R) ARE NOT USED IN ORIGINAL PUBLICATIONS, NOR IN DOCUMENTS THAT CONTAIN EDITORIAL CHANGES ONLY.

13. INTERPRETATION OF DRAWING PER ARP4296.

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

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