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REV.
D

AS21900

FEDERAL SUPPLY CLASS
4730

RATIONALE

STANDARD UPDATED TO CORRECT SAE TEMPLATE TO ADD A REVISION BLOCK AND GENERAL SAE UPDATING. UPDATES AND CORRECTIONS TO NOTE /5/ AND TABLE 2. RESTRICTIONS ON USE HAVE BEEN CLARIFIED.

NOTICE

THE INITIAL SAE PUBLICATION OF THIS DOCUMENT WAS TAKEN DIRECTLY FROM U.S. MILITARY STANDARD MS21900. THE AS5238 IS THE SUGGESTED REPLACEMENT STANDARD. AS5238 ELIMINATES THE POSSIBILITIES OF PART NUMBER DISCREPANCIES ORIGINATING FROM MS21900 PART NUMBERS.

NOTE: PROCUREMENT OF MS21900 PART NUMBERS TO AS21900 PART STANDARDS MAY RESULT IN LOSS OF CONFIGURATION CONTROL WHERE DIFFERENCES IN THE CANCELLED MIL-F-18280 AND THE SUPERSEDING AS18280 PROCURMENT SPECIFICATIONS EXIST.

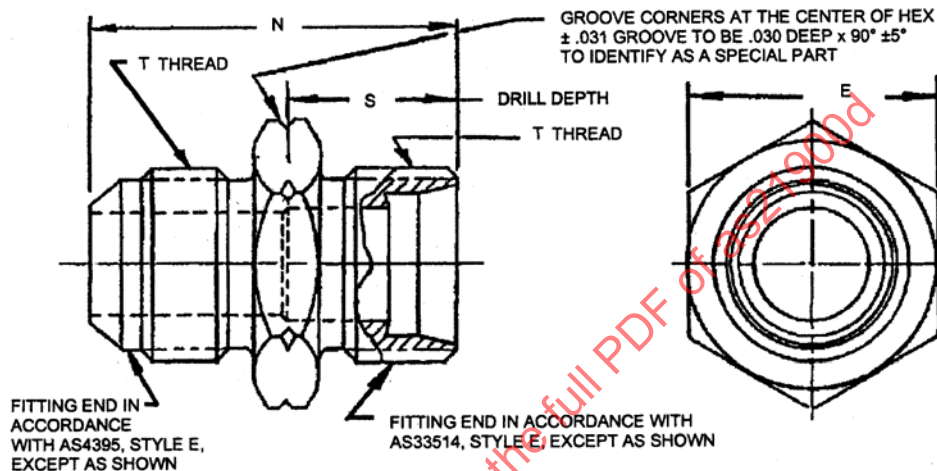


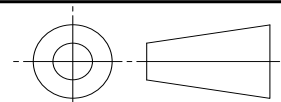
FIGURE 1 - ADAPTER, FLARELESS TUBE TO A FLARED TUBE

TABLE 1 - DIMENSIONS

DASH NO. /5/	NOMINAL TUBE SIZE REF	(T) THREAD AS8879	WEIGHT, LB/EA, APPROX, REF.						
			E	N	S ±.031	STEEL	AL ALLOY	TI ALLOY	
-3	.188	.3750-24 UNJF-3A	.615 - .628	1.156	THRU	.044	.015	.025	
-4	.250	.4375-20 UNJF-3A	.678 - .691	1.188	.563	.053	.019	.030	
-5	.313	.5000-20 UNJF-3A	.740 - .753	1.156	THRU	.060	.021	.034	
-6	.375	.5625-18 UNJF-3A	.803 - .816	1.281	THRU	.073	.026	.042	
-8	.500	.7500-16 UNJF-3A	.990 - 1.003	1.469	.688	.133	.046	.076	
-10	.625	.8750-14 UNJF-3A	1.113 - 1.128	1.688	.781	.182	.065	.105	
-12	.750	1.0625-12 UNJ-3A	1.363 - 1.380	1.938	.875	.305	.109	.175	
-16	1.000	1.3125-12 UNJ-3A	1.613 - 1.630	1.969	.844	.414	.145	.328	
-20	1.250	1.6250-12 UNJ-3A	1.863 - 1.880	2.000	.875	.625	.209	.360	
-24	1.500	1.8750-12 UNJ-3A	2.109 - 2.135	2.156	.875	.820	.280	.473	
-32	2.000	2.5000-12 UNJ-3A	2.734 - 2.760	2.469	.906	1.596	.510	.920	

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/AS21900D>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: AS18280 /9/



AEROSPACE STANDARD

(R) ADAPTER, FLARELESS TUBE TO A FLARED TUBE

AS21900
SHEET 1 OF 4

REV.
D

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ISSUED 1998-03 REAFFIRMED 2007-07 REVISED 2014-03

NOTES:

NOTICE

THIS DOCUMENT REFERENCES PARTS THAT CONTAIN 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.

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

4. DIMENSIONS ARE IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: DECIMALS ±.016, ANGLES ±0 DEGREES 30 MINUTES.

/5/ PART NUMBERS:

ADD "F" IN PLACE OF "-" FOR 4130 ALLOY STEEL IS THE REPLACEMENT FOR THE PREVIOUS CODE "-" FOR 4130 ALLOY STEEL. PARTS WITH "-"(DASH) SUFFIX MAY BE USED WHERE APPLICABLE UNTIL STOCKS ARE DEPLETED
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) 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) IS REPLACED BY CODE "R" (TYPE 321).
SEE TABLE 2 /D/.
ADD "T" AFTER DASH NUMBER FOR TITANIUM ALLOY (6AL-4V)


EXAMPLES OF PART NUMBERS:

MS21900-4	ADAPTER, .250 TUBING, "-" CODE FOR 4130 ALLOY STEEL IS REPLACED. SEE TABLE 2 /A/.
MS21900F4	ADAPTER, .250 TUBING, ALLOY STEEL (4130)
MS21900V4P	ADAPTER, .250 TUBING, CORROSION RESISTANT STEEL (15-5PH), CADMIUM PLATED
MS21900V4	ADAPTER, .250 TUBING, CORROSION RESISTANT STEEL (15-5PH), NOT CADMIUM PLATED
MS21900C4	ADAPTER, .250 TUBING, CORROSION RESISTANT STEEL TYPE 303, IS REPLACED. SEE TABLE 2 /B/.
MS21900D4	ADAPTER, .250 TUBING, ALUMINUM ALLOY (2024), IS REPLACED. SEE TABLE 2 /C/.
MS21900W4	ADAPTER, .250 TUBING, ALUMINUM ALLOY (7075)
MS21900J4	ADAPTER, .250 TUBING, CORROSION RESISTANT STEEL (TYPE 304)
MS21900K4	ADAPTER, .250 TUBING, CORROSION RESISTANT STEEL (TYPE 316)
MS21900-4R	ADAPTER, .250 TUBING, CORROSION RESISTANT STEEL (TYPE 321)
MS21900-4S	ADAPTER, .250 TUBING, CORROSION RESISTANT STEEL (TYPE 347), IS REPLACED. SEE TABLE 2 /D/.
MS21900-4T	ADAPTER, .250 TUBING, TITANIUM ALLOY (6AL-4V)

6. DIMENSIONING AND TOLERANCING PER ASME Y14.5M 1982.

7. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID.

8. 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.

	AEROSPACE STANDARD	AS21900 SHEET 2 OF 4	REV. D
	(R) ADAPTER, FLARELESS TUBE TO A FLARED TUBE		

/9/ PROCUREMENT SPECIFICATION: AS18280 EXCEPT AS SPECIFIED ON THIS STANDARD. PRODUCT SUPPLIED TO THIS SPECIFICATION SHALL BE MANUFACTURED BY AN ACCREDITED MANUFACTURER LISTED IN THE PERFORMANCE REVIEW INSTITUTE (PRI) QUALIFIED PRODUCTS LIST (QPL) PRI-QPL-AS18280 FOR THIS STANDARD. SEE www.eAuditNet.com FOR CURRENT QPL ON-LINE.

10. INTERPRETATION OF DRAWING PER AS4296

11. PART MARKING: SEE PROCUREMENT SPECIFICATION.

**TABLE 2 - OLD DOCUMENT AND OLD PART NUMBERS VERSUS NEW DOCUMENT
WITH RETAINED AND CURRENT PART NUMBERS**

CANCELLED DOCUMENT NUMBER	OLD PART NUMBERS	SUPERSEDING DOCUMENT NUMBER	RETAINED PART NUMBERS MIL-F-18280E	CURRENT PART NUMBERS AS18280
MS21900	MS21900-(3 THRU 32)	AS21900	/A/	MS21900F(3 THRU 32)
MS21900	MS21900-(3 THRU 32)	AS21900	/A/	MS21900V(3 THRU 32)P
MS21900	MS21900V(3 THRU 32)	AS21900	/A/	MS21900V(3 THRU 32)
MS21900	MS21900C(3 THRU 32)	AS21900	/B/	MS21900J(3 THRU 32),
MS21900	MS21900C(3 THRU 32)	AS21900	/B/	MS21900K(3 THRU 32),
MS21900	MS21900C(3 THRU 32)	AS21900	/B/	MS21900-(3 THRU 32)R
MS21900	MS21900D(3 THRU 32)	AS21900	/C/	MS21900W(3 THRU 32)
MS21900	MS21900W(3 THRU 32)	AS21900	MS21900W(3 THRU 32)	
MS21900	MS21900J(3 THRU 32)	AS21900	MS21900J(3 THRU 32)	
MS21900	MS21900K(3 THRU 32)	AS21900	MS21900K(3 THRU 32)	
MS21900	MS21900-(3 THRU 32)R	AS21900	MS21900-(3 THRU 32)R	
MS21900	MS21900-(3 THRU 32)S	AS21900	/D/	MS21900-(3 THRU 32)R
MS21900	MS21900-(3 THRU 32)T	AS21900	MS21900-(3 THRU 32)T	

/A/ PARTS CODED "-" FOR 4130 ALLOY STEEL ARE REPLACED BY PARTS CODED "F".

/B/ PARTS CODED "C" FOR CORROSION RESISTANT STEEL (TYPE 303) ARE REPLACED BY PARTS CODED "J," "K," OR "R" (TYPE 304, TYPE 316, OR TYPE 321). .

/C/ PARTS CODED "D" FOR ALUMINUM ALLOY 2014 AND 2024. .

/D/ PARTS CODED "S" FOR CORROSION RESISTANT STEEL (TYPE 347) ARE REPLACED BY CODE "R" MATERIAL (TYPE 321). .

EXPLANATORY NOTES:

TO /A/ CODE "F" FOR 4130 STEEL: WITH REVISION OF MIL-F-18280F DATED JULY 1995 THE CARBON STEELS 1137, 1141 AND LOW STRENGTH ALLOY STEEL 4130 WERE DELETED AND REPLACED BY CORROSION RESISTANT STEEL. IN THE AS18280 PROCUREMENT SPECIFICATION AND ASSOCIATED AS18280 SERIES PART STANDARDS, THE 4130 LOW STRENGTH ALLOY STEEL HAS BEEN REDESIGNATED AS A NEW CODE LETTER "F", REPLACING THE PREVIOUS "-" DASH-CODE.

TO /B/ CODE "C": CORROSION RESISTANT STEEL HISTORIC INFORMATION. THE MS21900-SERIES PART STANDARDS RELEASED AFTER 1963 SHOW A NOTE "ITEMS CODED "C" ON PREVIOUS ISSUES OF THIS STANDARD ARE NO LONGER TO BE FURNISHED. UNLESS OTHERWISE SPECIFIED, PARTS CODED "J", "K", OR "R" (AT SUPPLIER'S OPTION) SHALL BE FURNISHED IN LIEU OF "C" CODED PARTS." CODE "C" WAS DISCONTINUED SINCE IT PERMITTED THE USE OF TYPE 302 AND TYPE 303 CORROSION RESISTANT STEEL.

TO /C/ CODE "D" ALUMINUM (2024, 2014): DESIGNERS AND USERS SHOULD NOTE THAT RESISTANCE TO CORROSION AND STRESS CORROSION FOR 2014 AND 2024 ALLOYS IS POOR. WHEN USED IN SALT LADEN ENVIRONMENTS. IT IS RECOMMENDED THAT 7075, CODE "W" MATERIAL BE CONSIDERED AS AN ALTERNATIVE.

TO /D/ CODE "S" (TYPE 347) CORROSION RESISTANT STEEL: HISTORIC INFORMATION. CODE LETTER "S" WAS DELETED FROM MIL-F-18280 WITH REVISION "F" DATED 1995. SOME PART STANDARDS DATED PRIOR TO 1995 SHOW A NOTE "PARTS ARE NOT TO BE MANUFACTURED FROM TYPE 347 AFTER 30 SEPT. 1990. HOWEVER, TYPE CODE "S" PARTS MAY BE USED UNTIL EXISTING STOCKS ARE DEPLETED."

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	(R) ADAPTER, FLARELESS TUBE TO A FLARED TUBE		