

REV.
A

SAE AS5230

FEDERAL SUPPLY CLASS
4730

RATIONALE

PROCUREMENT SPECIFICATION CHANGED FROM AS4444 TO AS18280 AND PROCUREMENT NOTE CLARIFIED. WARNING NOTICE FOR CADMIUM PLATING HAS BEEN INSERTED. UPDATES MADE TO BRING MATERIAL, HEAT TREAT, FINISH, AND PROCUREMENT REQUIREMENTS INTO COMPLIANCE WITH AS18280C. ADDED OPTION FOR OXYGEN CLEANING AND PACKAGING TO ARP1176

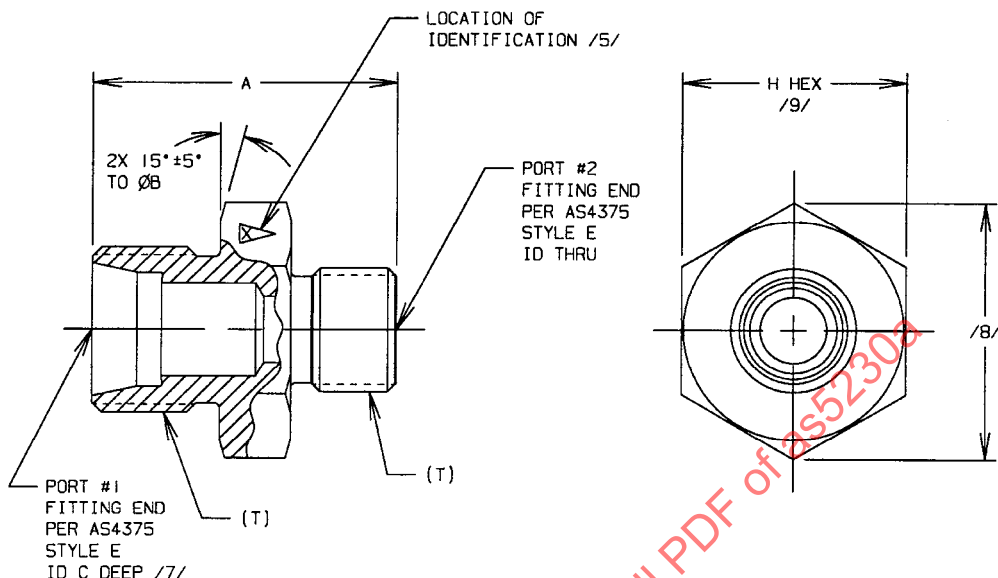


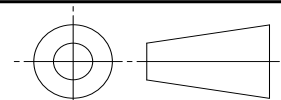
FIGURE 1 - FITTING, UNION AND REDUCER

TABLE 1 - DIMENSIONS /11/

PORT #1 /18/ SIZE CODE	PORT #2 SIZE CODE	PORT #2 SIZE CODE	PORT #2 SIZE CODE	PORT #2 SIZE CODE	PORT #2 SIZE CODE	PORT #2 SIZE CODE	PORT #2 SIZE CODE	PORT #2 SIZE CODE	PORT #2 SIZE CODE	PORT #2 SIZE CODE	PORT #2 SIZE CODE	PORT #2 SIZE CODE	PORT #2 SIZE CODE
02	1.063	-	-	-	-	-	-	-	-	-	-	-	-
03	1.047	1.094	-	-	-	-	-	-	-	-	-	-	-
04	1.094	1.141	1.063	-	-	-	-	-	-	-	-	-	-
05	-	-	1.156	1.063	-	-	-	-	-	-	-	-	-
06	1.156	1.203	1.219	1.219	1.188	-	-	-	-	-	-	-	-
08	1.250	1.297	1.344	1.344	1.344	1.375	-	-	-	-	-	-	-
10	-	-	1.438	-	1.625	1.531	1.563	-	-	-	-	-	-
12	-	-	1.531	1.531	1.531	1.625	1.688	1.750	-	-	-	-	-
14	-	-	1.531	1.531	1.531	1.625	1.688	1.750	1.750	-	-	-	-
16	-	-	1.531	-	-	-	1.688	1.750	-	1.750	-	-	-
20	-	-	1.531	-	-	-	-	1.813	-	1.750	1.750	-	-
24	-	-	-	-	-	-	-	-	-	1.750	1.750	1.750	-
32	-	-	-	-	-	-	-	-	-	-	-	-	1.813

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/AS5230A>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: /4/ AS18280

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

FITTING, UNION AND REDUCER, FLARELESS

SAE AS5230
SHEET 1 OF 4

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TABLE 1A – DIMENSIONS

PORT #1 /18/ SIZE CODE	C ± .031 PORT #2 SIZE CODE	C ± .031 PORT #2 SIZE CODE	C ± .031 PORT #2 SIZE CODE	C ± .031 PORT #2 SIZE CODE	C ± .031 PORT #2 SIZE CODE	C ± .031 PORT #2 SIZE CODE	C ± .031 PORT #2 SIZE CODE	C ± .031 PORT #2 SIZE CODE	C ± .031 PORT #2 SIZE CODE	C ± .031 PORT #2 SIZE CODE	C ± .031 PORT #2 SIZE CODE	C ± .031 PORT #2 SIZE CODE	C ± .031 PORT #2 SIZE CODE
02	-	-	-	-	-	-	-	-	-	-	-	-	-
03	.547	-	-	-	-	-	-	-	-	-	-	-	-
04	.594	.594	-	-	-	-	-	-	-	-	-	-	-
05	-	-	.578	-	-	-	-	-	-	-	-	-	-
06	.625	.625	.625	.625	-	-	-	-	-	-	-	-	-
08	.719	.719	.719	.719	.719	-	-	-	-	-	-	-	-
10	-	-	.781	-	.781	.781	-	-	-	-	-	-	-
12	-	-	.875	.875	.875	.875	.875	-	-	-	-	-	-
14	-	-	.875	.875	.875	.875	.875	.875	-	-	-	-	-
16	-	-	.875	-	-	-	.875	.875	-	-	-	-	-
20	-	-	.875	-	-	-	-	.875	-	.875	-	-	-
24	-	-	-	-	-	-	-	-	-	.875	.875	-	-
32	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 1B - DIMENSIONS AND WEIGHTS /10/

PORT SIZE CODE	(NOMINAL TUBE SIZE)	T THREAD PER AS8879 CLASS 3A	B ±.010	H	LB/EA APPROX REF AL	LB/EA APPROX REF STEEL	LB/EA APPROX REF TI
02	.125	.3125-24 UNJF	.542	.552-.565	.0138	.0396	.0218
03	.188	.3750-24 UNJF	.605	.615-.628	.0165	.0474	.0261
04	.250	.4375-20 UNJF	.668	.678-.691	.0164	.0470	.0259
05	.312	.5000-20 UNJF	.730	.740-.753	.0201	.0577	.0319
06	.375	.5625-18 UNJF	.792	.802-.815	.0286	.0821	.0453
08	.500	.7500-16 UNJF	.980	.990-1.003	.0508	.146	.0805
10	.625	.8750-14 UNJF	1.103	1.113-1.128	.0769	.221	.122
12	.750	1.0625-12 UNJ	1.353	1.363-1.380	.121	.348	.192
14	.875	1.1875-12 UNJ	1.478	1.488-1.505	.142	.408	.225
16	1.000	1.3125-12 UNJ	1.603	1.613-1.630	.167	.478	.264
20	1.250	1.6250-12 UNJ	1.853	1.863-1.880	.235	.676	.373
24	1.500	1.8750-12 UNJ	2.099	2.109-2.135	.279	.801	.442
32	2.000	2.5000-12 UNJ	2.724	2.734-2.760	.509	1.46	.807

NOTES:

NOTICE

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

/1/ MATERIAL:

- DASH AS CODE LETTER - TYPE 4130 ALLOY STEEL BAR PER AMS6370. /2/
- CODE LETTER D - TYPE 2024-T6 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/6 OR AMS4339 OR TYPE 2024-T851 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/6. /2/
- CODE LETTER J - TYPE 304 CORROSION RESISTANT STEEL BAR PER AMS5639.
- CODE LETTER K - TYPE 316 CORROSION RESISTANT STEEL BAR PER AMS5648.
- CODE LETTER R - TYPE 321 CORROSION RESISTANT STEEL BAR PER AMS5645.
- CODE LETTER T - TYPE 6AL-4V TITANIUM ALLOY BAR PER AMS4928.
- CODE LETTER W - TYPE 7075-T73 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/9 OR TYPE 7075-T7351 ALUMINUM ALLOY BAR PER AMS4124. /2/

/2/ HEAT TREATMENT:

- a. DASH AS CODE LETTER - SEE HARDNESS REQUIREMENT PER PROCUREMENT SPECIFICATION.
- b. CODE LETTERS D AND W - SEE ELECTRICAL CONDUCTIVITY AND HARDNESS REQUIREMENT PER PROCUREMENT SPECIFICATION.
- c. OTHER CODE LETTERS - NONE.

3. FINISH:

- a. DASH AS CODE LETTER - CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2 AND COAT WITH A LIGHT FILM OF OIL PER PROCUREMENT SPECIFICATION.
- b. CODE LETTER D - ANODIZE PER MIL-A-8625, TYPE II, CLASS 2, DYE GREEN, DUPLEX SEAL PER PROCUREMENT SPECIFICATION.
- c. CODE LETTER J, K AND R - PASSIVATE PER AMS2700 PER PROCUREMENT SPECIFICATION.
- d. CODE LETTER T - ANODIZE PER AMS2488 OR FLUORIDE PHOSPHATE CONVERSION COAT PER AMS2486 WITH COLOR PER PROCUREMENT SPECIFICATION.
- e. CODE LETTER W - ANODIZE PER MIL-A-8625, TYPE II, CLASS 2, DYE BROWN, DUPLEX SEAL PER PROCUREMENT SPECIFICATION.

/4/ PROCUREMENT SPECIFICATION: AS18280 EXCEPT AS SPECIFIED ON THIS STANDARD. 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://eauditnet.com> FOR CURRENT QPL ONLINE.

NOTE: PRI-QPL LIMITATION - WITH REVISION A OF THIS STANDARD THE PROCUREMENT SPECIFICATION HAS BEEN CHANGED FROM AS4444 FOR 5000 psi TO AS18280 FOR 3000 psi. USERS OF THIS FITTING FOR 5000 psi APPLICATIONS PER AS4444 ARE ADVISED TO CONTROL SOURCE APPROVAL BY STANDARD PAGE SUPPLEMENT OR SIMILAR MEANS.

/5/ IDENTIFICATION AT LOCATION SHOWN: MARK PER AS478 CLASS C, D OR METHOD 7A3, 15A3, OR 15B.

- a. FOR SIZE 06 AND SMALLER: MANUFACTURER'S NAME, CAGE CODE OR TRADEMARK, LETTER "AS" AND MATERIAL CODE LETTER.
- b. FOR SIZE 08 AND LARGER: MANUFACTURER'S NAME, CAGE CODE OR TRADEMARK, BASIC PART NUMBER AND MATERIAL CODE LETTER.

6. INTENDED USE:

- a. THIS STANDARD IS THE FUNCTIONAL EQUIVALENT OF MS21902 AND MS21916 AND IS INTENDED TO BE SUITABLE AS A REPLACEMENT STANDARD.
- b. CLEANING OF ALUMINUM ALLOY AND CORROSION RESISTANT STEEL FITTINGS IN ACCORDANCE WITH ARP1176 (CODE LETTER "A") IS REQUIRED FOR OXYGEN SYSTEMS TO AVOID FIRE DUE TO PARTICLES OR OTHER CONTAMINANTS

 An SAE International Group	AEROSPACE STANDARD	SAE AS5230 SHEET 3 OF 4	REV. A
	FITTING, UNION AND REDUCER, FLARELESS		