

REV.
E

AS931™

FEDERAL SUPPLY CLASS
4730

RATIONALE

ADDED CLASS 3A TO THREAD HEADING IN TABLE 1. CADMIUM WARNING NOTE RELOCATED TO TOP OF THE NOTES. REMOVED "INACTIVE" STATUS FOR MATERIAL CODE LETTER "S" AND REPLACED IT WITH "NOT RECOMMENDED." COLOR ADDED TO ALLOY STEEL FINISH NOTE. UPDATED QPL NOTE TO CURRENT WORDING AND INCLUDED PROC SPEC AS4875 FOR THE STRAIGHT THREADED END. REMOVED SECOND PART OF QPL NOTE; REQUIRED QPL EFFECTIVITY DATE HAS PASSED.

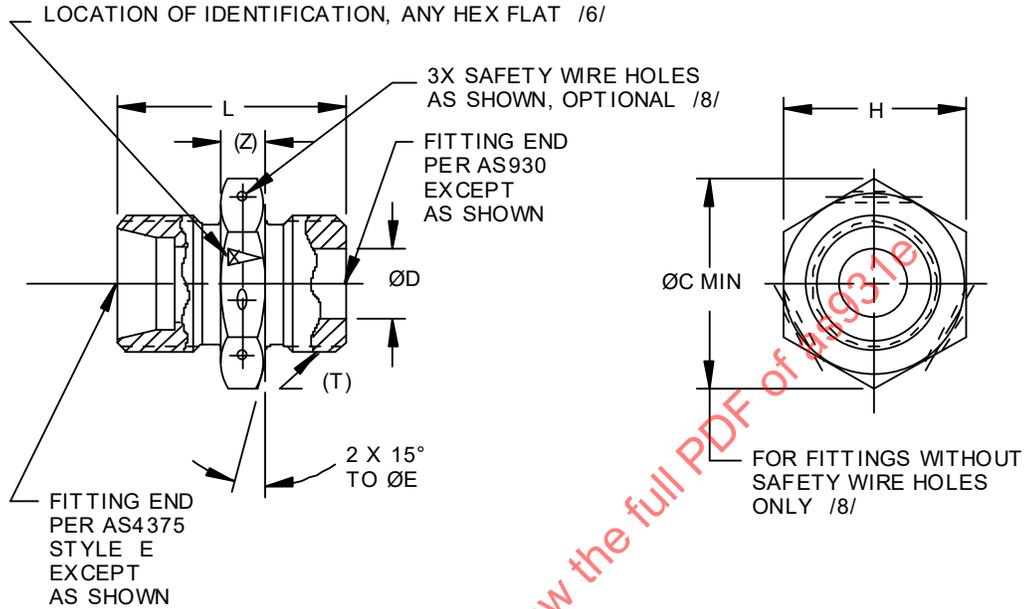
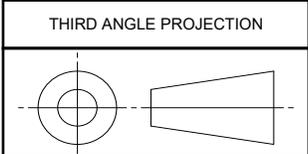


FIGURE 1 - FITTING, ADAPTER, UNION

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CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: AS18280 /4/



AEROSPACE STANDARD

FITTING, ADAPTER, UNION,
FLARELESS TO BOSS

AS931™
SHEET 1 OF 4

REV.
E

ISSUED 1984-10 REAFFIRMED 2013-01 REVISED 2022-12

TABLE 1A - DIMENSIONS

BASIC NO. AS931 /16/ SIZE CODE	NOMINAL TUBE SIZE	T THREAD PER AS8879 CLASS 3A	C	D ±.003	E ±.010
02	.125	.3125-24 UNJF	.638	.093	.542
03	.188	.3750-24 UNJF	.709	.125	.605
04	.250	.4375-20 UNJF	.780	.187	.668
05	.312	.5000-20 UNJF	.851	.234	.730
06	.375	.5625-18 UNJF	.922	.297	.792
08	.500	.7500-16 UNJF	1.120	.422	.980
10	.625	.8750-14 UNJF	1.260	.500	1.103
12	.750	1.0625-12 UNJ	1.540	.656	1.353
16	1.000	1.3125-12 UNJ	1.788	.875	1.603
20	1.250	1.6250-12 UNJ	2.063	1.093	1.853
24	1.500	1.8750-12 UNJ	2.338	1.344	2.099
32	2.000	2.500-12 UNJ	3.025	1.813	2.724

TABLE 1B - DIMENSIONS AND WEIGHTS

BASIC NO. AS931 /16/ SIZE CODE	H	L	Z	LB/EA APPROX REF AL	LB/EA APPROX REF STEEL	LB/EA APPROX REF TI
02	.552-.565	.955	.220	.0111	.0318	.0175
03	.615-.628	1.002	.220	.0148	.0426	.0235
04	.678-.691	1.088	.235	.0193	.0553	.0305
05	.740-.753	1.088	.235	.0232	.0666	.0367
06	.802-.815	1.119	.250	.0272	.0781	.0431
08	.990-1.003	1.252	.250	.0482	.138	.0764
10	1.113-1.128	1.377	.312	.0704	.202	.111
12	1.363-1.380	1.543	.375	.113	.325	.179
16	1.613-1.630	1.543	.375	.153	.439	.242
20	1.863-1.880	1.543	.375	.214	.614	.339
24	2.109-2.135	1.543	.375	.255	.733	.404
32	2.734-2.760	1.605	.437	.464	1.33	.735

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NOTES:

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:

- a. DASH AS CODE LETTER: TYPE 4130 CARBON STEEL BAR PER AMS-S-6758 OR AMS6370. TYPES 1137 AND 1141 CARBON STEEL ARE SUPERSEDED BY TYPE 4130. /2/
- b. CODE LETTER D: TYPE 2024-T6 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/6, OR TYPE 2024-T851 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/6 OR AMS4339.
- c. CODE LETTER J: TYPE 304 CORROSION RESISTANT STEEL BAR PER AMS-QQ-S-763 OR AMS5639.
- d. CODE LETTER K: TYPE 316 CORROSION RESISTANT STEEL BAR PER AMS-QQ-S-763 OR AMS5648.
- e. CODE LETTER R: TYPE 321 CORROSION RESISTANT STEEL BAR PER AMS-QQ-S-763 OR AMS5645. /7/
- f. CODE LETTER S: TYPE 347 CORROSION RESISTANT STEEL BAR IS NOT RECOMMENDED FOR NEW DESIGN AND SUPERSEDED BY TYPE 321 CORROSION RESISTANT STEEL (CODE LETTER R). /7/
- g. CODE LETTER T: TYPE 6Al-4V TITANIUM ALLOY BAR PER AMS4928.
- h. 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. COLOR PER PROCUREMENT SPECIFICATION, AS18280.
- b. CODE LETTER D: ANODIZE PER MIL-PRF-8625, TYPE II, CLASS 2, DYED GREEN PER PROCUREMENT SPECIFICATION.
- c. CODE LETTERS J, K, AND R: PASSIVATE PER AMS2700, TYPE 6 OR 7.
- d. CODE LETTER T: ANODIZE PER AMS2488 OR FLUORIDE PHOSPHATE CONVERSION COAT PER AMS2486 WITH COLOR PER PROCUREMENT SPECIFICATION.
- e. CODE LETTER W:
 - 1. W CODE PARTS TO BE ANODIZED ONLY WILL HAVE NO FINISH CODE LETTER AFTER THE SIZE CODE IN THE PART NUMBER. THE FINISH WILL BE ANODIZE PER AMS2472 OR PER MIL-PRF-8625, TYPE II, CLASS 2 DYED BROWN SIMILAR TO COLOR 10080 OF AMS-STD-595.
 - 2. W CODE PARTS TO BE COATED WITH HIGH PURITY ALUMINUM ONLY WILL HAVE THE FINISH CODE LETTER "V" AFTER THE SIZE CODE IN THE PART NUMBER. SEE PROCUREMENT SPECIFICATION FOR REQUIREMENTS.

/4/ PROCUREMENT SPECIFICATION:AS18280 FOR THE 24 DEGREE FLARELESS FITTING END AND AS4875 FOR THE STRAIGHT THREADED END; EXCEPT AS SPECIFIED ON THIS STANDARD. PRODUCT MANUFACTURED TO THIS STANDARD SHALL MEET THE REQUIREMENTS SPECIFIED HEREIN AND THE PROCUREMENT SPECIFICATIONS. ORIGINAL COMPONENT MANUFACTURERS (OCM) AND VALUE ADDED DISTRIBUTORS (VAD) SHALL BE LISTED IN THE PRI QUALIFIED PRODUCTS LIST (QPL) PRI-QPL-AS18280 FOR THIS STANDARD. SEE www.eAuditNet.com FOR CURRENT QPL ONLINE.

	AEROSPACE STANDARD	AS931™ SHEET 3 OF 4	REV. E
	FITTING, ADAPTER, UNION, FLARELESS TO BOSS		