

RATIONALE

AS933D HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

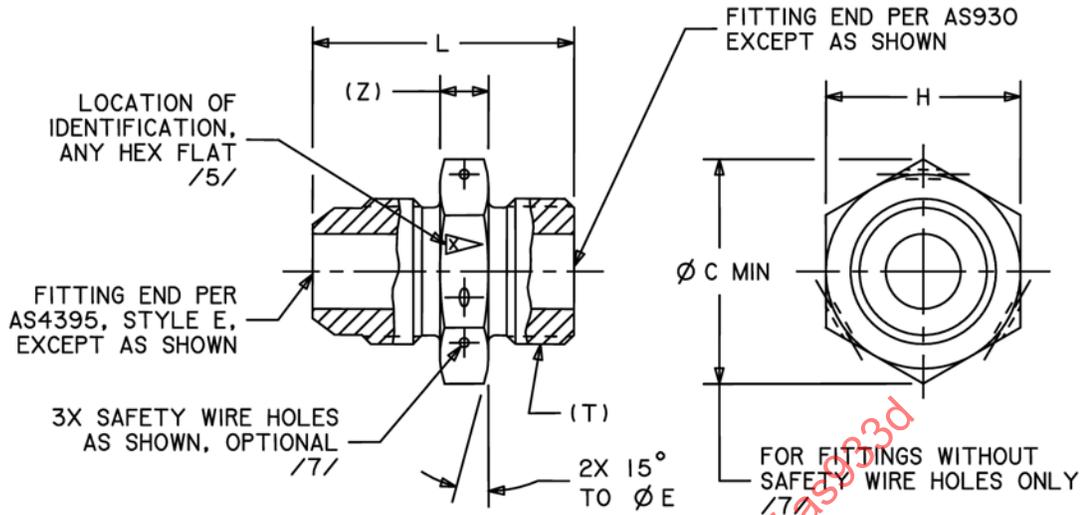


FIGURE 1 – FITTING, ADAPTER, UNION

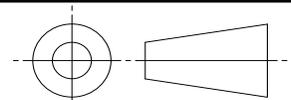
TABLE 1 – DIMENSIONS AND WEIGHTS

BASIC NO. AS933 /15/ SIZE CODE	(NOMINAL TUBE SIZE)	T THREAD PER AS8879 CLASS 3A	C	E ±.010	H	L	Z	LB/EA APPROX REF AL	LB/EA APPROX REF STEEL	LB/EA APPROX REF TI
02	.125	.3125-24 UNJF	.638	.542	.552-.565	1.028	.220	.0113	.0323	.0178
03	.188	.3750-24 UNJF	.709	.605	.615-.628	1.059	.220	.0146	.0420	.0232
04	.250	.4375-20 UNJF	.780	.668	.678-.691	1.185	.235	.0198	.0567	.0313
05	.312	.5000-20 UNJF	.851	.730	.740-.753	1.185	.235	.0234	.0672	.0371
06	.375	.5625-18 UNJF	.922	.792	.802-.815	1.206	.250	.0275	.0790	.0436
08	.500	.7500-16 UNJF	1.120	.980	.990-1.003	1.347	.250	.0498	.143	.0790
10	.625	.8750-14 UNJF	1.260	1.103	1.113-1.128	1.510	.312	.0727	.209	.115
12	.750	1.0625-12 UNJ	1.540	1.353	1.363-1.380	1.719	.375	.122	.350	.193
16	1.000	1.3125-12 UNJ	1.788	1.603	1.613-1.630	1.766	.375	.164	.472	.260
20	1.250	1.6250-12 UNJ	2.063	1.853	1.863-1.880	1.813	.375	.232	.666	.367
24	1.500	1.8750-12 UNJ	2.338	2.099	2.109-2.135	1.938	.375	.299	.857	.473
32	2.000	2.5000-12 UNJ	3.025	2.724	2.734-2.760	2.250	.437	.592	1.70	.938

INACTIVE IN PART - SEE NOTE /16/

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/AS933D>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: /4/ AS4875/1

**SAE Aerospace**  
An SAE International Group

**AEROSPACE STANDARD**

FITTING, ADAPTER, UNION,  
FLARED TO BOSS

**SAE AS933**  
SHEET 1 OF 3

**REV. D**

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REV. D

SAE AS933

NOTES:

/1/ MATERIAL:

- a. DASH AS CODE LETTER –TYPE 4130 STEEL BAR PER AMS-S-6758 OR AMS 6370. TYPES 1137 AND 1141 CARBON STEEL ARE SUPERSEDED BY TYPE 4130.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 AMS 4339.
- c. CODE LETTER J – TYPE 304 CORROSION RESISTANT STEEL BAR PER AMS-QQ-S-763 OR AMS 5639.
- d. CODE LETTER K – TYPE 316 CORROSION RESISTANT STEEL BAR PER AMS-QQ-S-763 OR AMS 5648.
- e. CODE LETTER R – TYPE 321 CORROSION RESISTANT STEEL BAR PER AMS-QQ-S-763 OR AMS 5645.
- f. CODE LETTER S – TYPE 347 CORROSION RESISTANT STEEL BAR PER AMS-QQ-S-763 OR AMS 5646. /16/
- g. CODE LETTER T – TYPE 6AL-4V TITANIUM ALLOY BAR PER AMS 4928.
- h. CODE LETTER W – TYPE 7075-T73 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/9, OR TYPE 7075-T7351 ALUMINUM ALLOY BAR PER AMS 4124.

/2/ HEAT TREATMENT:

- a. DASH AS CODE LETTER – SEE HARDNESS REQUIREMENT PER PROCUREMENT SPECIFICATION.
- b. OTHER MATERIAL CODE LETTERS - NONE.

3. FINISH:

- a. DASH AS CODE LETTER – CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2, DYE BLACK AND COAT WITH A LIGHT FILM OF OIL PER PROCUREMENT SPECIFICATION. /14/
- b. MATERIAL CODE LETTER D:
  1. ANODIZE PER AMS 2472 OR MIL-A-8625, TYPE II, CLASS 2, DYE BLUE, DUPLEX SEAL PER PROCUREMENT SPECIFICATION.
  2. D 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. THE FINISH WILL BE: COAT WITH HIGH PURITY ALUMINUM PER MIL-DTL-83488, CLASS 3, TYPE II WITH MAXIMUM COATING THICKNESS OF .0005. GLASS BEAD PEEN PRESSURE SHALL BE 25 psi MAXIMUM.
- c. MATERIAL CODE LETTER J – PASSIVATE PER AMS-QQ-P-35, TYPE VI OR VII.
- d. MATERIAL CODE LETTER K – PASSIVATE PER AMS-QQ-P-35, TYPE VI OR VII.
- e. MATERIAL CODE LETTER R – PASSIVATE PER AMS-QQ-P-35, TYPE VI OR VII.
- f. MATERIAL CODE LETTER T – ANODIZE PER AMS 2488 OR FLUORIDE PHOSPHATE CONVERSION COAT PER AMS 2486 WITH COLOR PER PROCUREMENT SPECIFICATION.
- g. MATERIAL CODE LETTER W:
  1. ANODIZE PER AMS 2472 OR MIL-A-8625, TYPE II, CLASS 2, DYE BROWN, DUPLEX SEAL PER PROCUREMENT SPECIFICATION.
  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. THE FINISH WILL BE: COAT WITH HIGH PURITY ALUMINUM PER MIL-DTL-83488, CLASS 3, TYPE II WITH MAXIMUM COATING THICKNESS OF .0005. GLASS BEAD PEEN PRESSURE SHALL BE 25 psi MAXIMUM.

/4/ PROCUREMENT SPECIFICATION: AS4875/1 EXCEPT AS SPECIFIED ON THIS STANDARD. USERS OF THIS STANDARD SHALL PROCURE THIS PRODUCT FROM ACCREDITED MANUFACTURER(S), OR ACCREDITED DISTRIBUTOR(S), AS LISTED IN THE PERFORMANCE REVIEW INSTITUTE (PRI) QUALIFIED MANUFACTURERS LIST (QML) FOR THIS TYPE OF PRODUCT.

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

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

 An SAE International Group	<b>AEROSPACE STANDARD</b>	<b>SAE AS933</b> SHEET 2 OF 3	<b>REV.</b> <b>D</b>
	FITTING, ADAPTER, UNION, FLARED TO BOSS		