

REV.
D

SAE AS897

FEDERAL SUPPLY CLASS
4730

RATIONALE

CORRECTED SAE TEMPLATE TO ADD REVISION BLOCKS; GENERAL SAE CLEANUP IN TABLES 2 AND 5 TO ADD PARENTHESIS TO DIMENSIONS P, T, W AND X AND ADDED OMITTED INACTIVATION DATE IN NOTE /4/a.

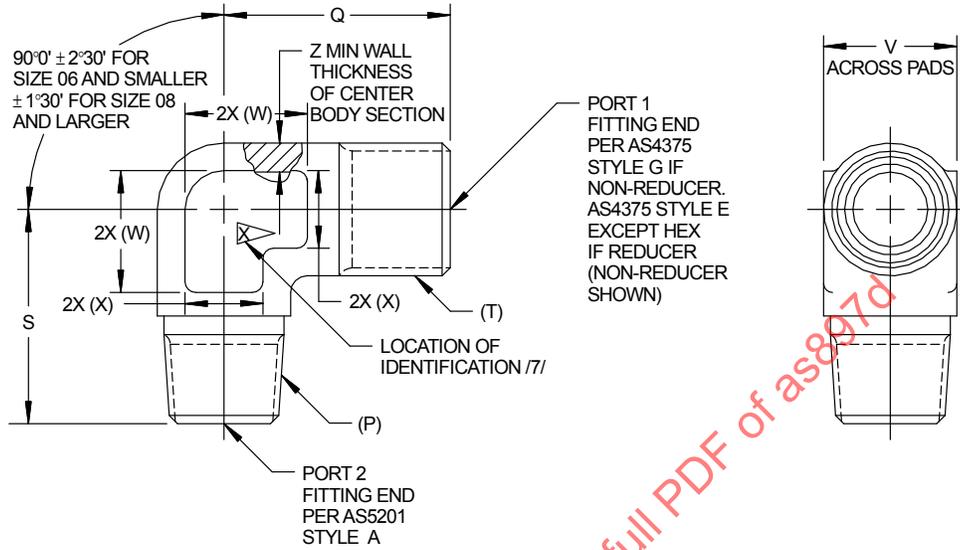


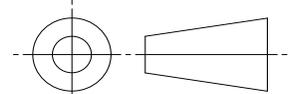
FIGURE 1 - FITTING, ELBOW, 90°, STANDARD AND REDUCER, FLARELESS TUBE TO PIPE, EXTERNAL THREAD

INACTIVE IN PART /4/

SAENORM.COM : Click to view the full PDF of as897d

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/AS897D>

THIRD ANGLE PROJECTION



CUSTODIAN: SAE G-3/G-3B

PROCUREMENT SPECIFICATION: /6/ AS4842/2

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

FITTING, ELBOW, 90°, STANDARD AND REDUCER, FLARELESS TUBE TO PIPE, EXTERNAL THREAD

SAE AS897
SHEET 1 OF 6

REV. D

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user." SAE reviews each technical report at least every five years at which time it may be reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions.

ISSUED 1976-01 REAFFIRMED 2007-08 REVISED 2009-11

TABLE 1 - FORGING SIZE /8/

SIZE OF PORT 2	SIZE OF PORT 1											
02	02	03	04	05	06	08	10	12	16	20	24	32
02	03	03	04	05	06	08	10	12	16	20	24	32
04	06	06	06	06	06	08	10	12	16	20	24	32
06	08	08	08	08	08	08	10	12	16	20	24	32
08	10	10	10	10	10	10	10	12	16	20	24	32
12	12	12	12	12	12	12	12	12	16	20	24	32
16	16	16	16	16	16	16	16	16	16	20	24	32
20	20	20	20	20	20	20	20	20	20	20	24	32
24	24	24	24	24	24	24	24	24	24	24	24	32
32	32	32	32	32	32	32	32	32	32	32	32	32

TABLE 2 - DIMENSIONS V - Z

BASIC NO. AS897 /8/ /15/					
SIZE CODE	V		(W)	(X)	Z
03	.360-	.377	.375	.250	.090
04	.423-	.440	.500	.250	.110
05	.485-	.502	.500	.312	.120
06	.547-	.565	.625	.312	.120
08	.735-	.753	.625	.438	.150
10	.860-	.878	.750	.438	.170
12	1.047-	1.065	.875	.500	.185
16	1.292-	1.317	1.062	.625	.205
20	1.606-	1.630	1.250	.750	.240
24	1.855-	1.880	1.438	.875	.250
32	2.542-	2.572	2.000	1.188	.350

SAENORM.COM: Click to view the full PDF of as897d

 An SAE International Group	AEROSPACE STANDARD	SAE AS897 SHEET 2 OF 6	REV. D
	FITTING, ELBOW, 90°, STANDARD AND REDUCER, FLARELESS TUBE TO PIPE, EXTERNAL THREAD		

TABLE 3 - LEG LENGTH Q

FORGING SIZE	SIZE OF PORT 1 02	SIZE OF PORT 1 03	SIZE OF PORT 1 04	SIZE OF PORT 1 05	SIZE OF PORT 1 06	SIZE OF PORT 1 08	SIZE OF PORT 1 10	SIZE OF PORT 1 12	SIZE OF PORT 1 16	SIZE OF PORT 1 20	SIZE OF PORT 1 24	SIZE OF PORT 1 32
03	.789	.836										
04	.820	.867	.898									
05	.883	.930	.961	.961								
06	.961	1.008	1.039	1.039	1.055							
08	1.806	1.133	1.164	1.164	1.180	1.273						
10	1.180	1.226	1.258	1.258	1.274	1.367	1.430					
12	1.272	1.320	1.351	1.351	1.367	1.460	1.523	1.586				
16	1.429	1.476	1.507	1.507	1.523	1.616	1.679	1.742	1.742			
20	1.585	1.632	1.663	1.663	1.679	1.772	1.835	1.898	1.898	1.898		
24	1.710	1.757	1.788	1.788	1.804	1.897	1.960	2.023	2.023	2.023	2.023	
32	2.148	2.159	2.226	2.226	2.242	2.335	2.398	2.461	2.461	2.461	2.461	2.461

TABLE 4 - LEG LENGTH S ±.031

FORGING SIZE	SIZE OF PORT 2 02	SIZE OF PORT 2 04	SIZE OF PORT 2 06	SIZE OF PORT 2 08	SIZE OF PORT 2 12	SIZE OF PORT 2 16	SIZE OF PORT 2 20	SIZE OF PORT 2 24	SIZE OF PORT 2 32
03	.727								
04	.789								
05	.789								
06	.898	1.085							
08	.993	1.196	1.211						
10	1.087	1.290	1.305	1.477					
12	1.179	1.382	1.397	1.569	1.585				
16	1.368	1.571	1.586	1.758	1.774	1.961			
20	1.758	1.961	1.976	2.148	2.164	2.351	2.383		
24	1.883	2.086	2.101	2.273	2.289	2.476	2.508	2.524	
32	2.337	2.540	2.555	2.727	2.743	2.930	2.962	2.977	3.008

TABLE 5 - TUBE SIZE AND CORRESPONDING THREAD

PORT SIZE	NOMINAL		(P) THREAD
	TUBE SIZE	(T) THREAD PER AS8879	PER AS71051 ANPT
02	.125	.3125-24 UNJF-3A	1/8 -27
03	.188	.3750-24 UNJF-3A	----
04	.250	.4375-20 UNJF-3A	1/4 -18
05	.312	.5000-20 UNJF-3A	----
06	.375	.5625-18 UNJF-3A	3/8 -18
08	.500	.7500-16 UNJF-3A	1/2 -14
10	.625	.8750-14 UNJF-3A	----
12	.750	1.0625-12 UNJ-3A	3/4 -14
16	1.000	1.3125-12 UNJ-3A	1-11 1/2
20	1.250	1.6250-12 UNJ-3A	1 1/4 -11 1/2
24	1.500	1.8750-12 UNJ-3A	1 1/2 -11 1/2
32	2.000	2.5000-12 UNJ-3A	2 -11 1/2

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:

- a. DASH AS CODE LETTER - TYPE 4130 STEEL FORGING OR BAR PER AMS-S-6758 OR AMS6370.
- b. CODE LETTER D - TYPE 2014-T6 ALUMINUM ALLOY FORGING PER AMS4133, OR 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. /4/
- c. CODE LETTER J - TYPE 304 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS-QQ-S-763 OR AMS5639.
- d. CODE LETTER K - TYPE 316 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS-QQ-S-763 OR AMS5648.
- e. CODE LETTER R - TYPE 321 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS-QQ-S-763 OR AMS5645.
- f. CODE LETTER S - TYPE 347 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS-QQ-S-763 OR AMS5646. /4/
- g. CODE LETTER W - TYPE 7075-T73 ALUMINUM ALLOY FORGING PER AMS-QQ-A-367 OR AMS4141, OR TYPE 7075-T73 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/9, OR TYPE 7075-T7351 ALUMINUM ALLOY BAR PER AMS4124.