

RATIONALE

ERROR CORRECTION UNDER /19/ PART NUMBER. CLARIFICATION NOTE /21/ ADDED

REV.  
H

SAE AS1007

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.

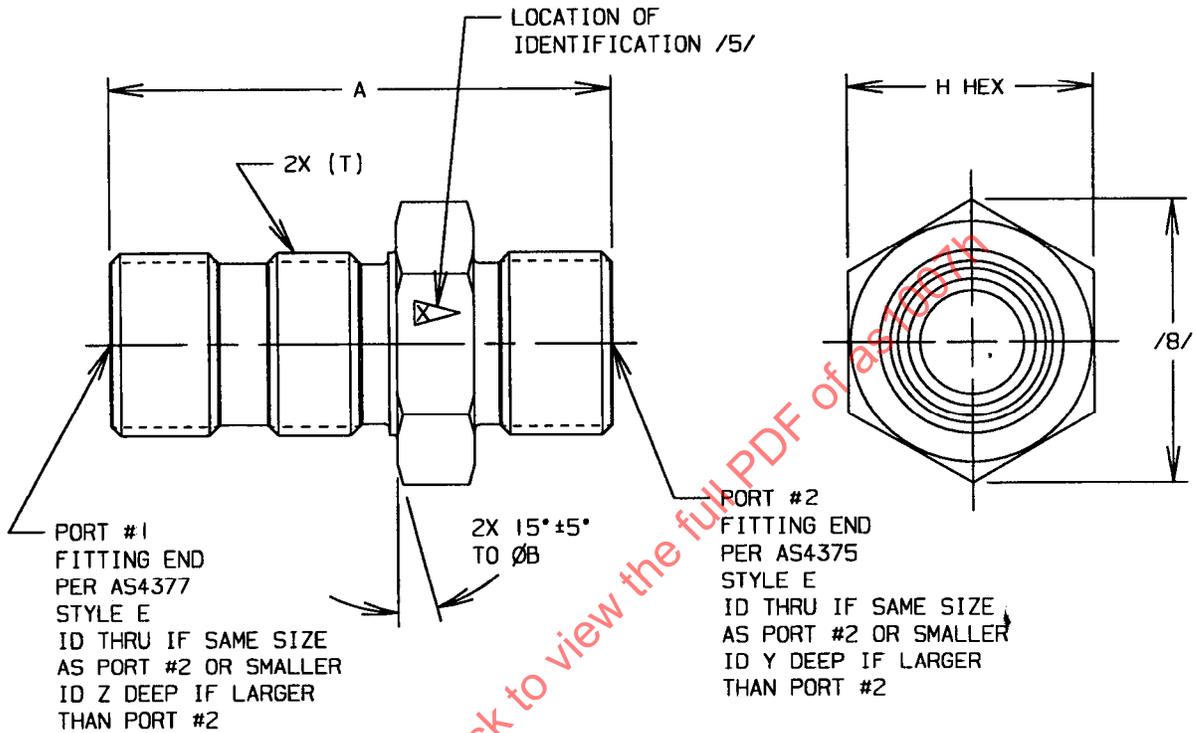


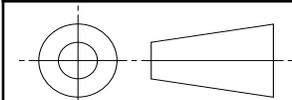
FIGURE 1 - FITTING, UNION, STANDARD AND REDUCER, BULKHEAD END FOR OPTIONAL USE IN PORT INSTALLATION, NON-REDUCER SHOWN

INACTIVE /20/

SAENORM.COM: Click to view the full PDF of this report

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/AS1007H>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: /4/ AS18280

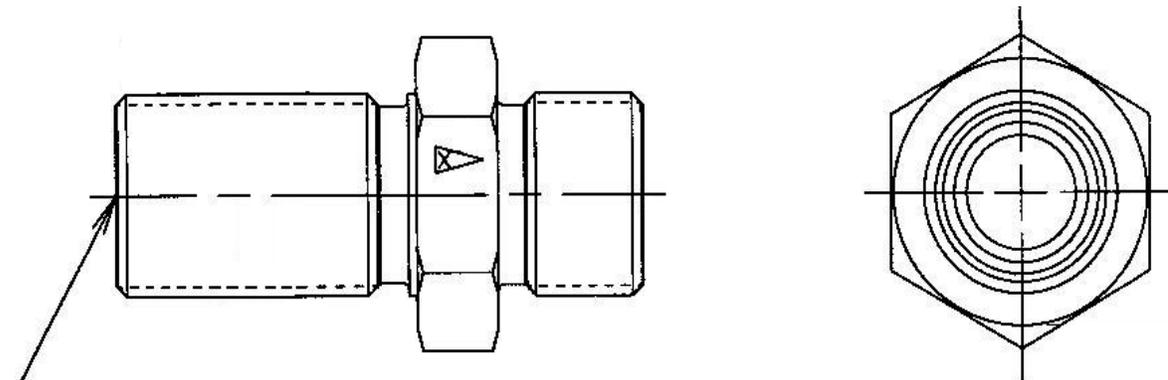
**SAE Aerospace**  
An SAE International Group

**AEROSPACE STANDARD**

FITTING, UNION,  
STANDARD AND REDUCER,  
BULKHEAD, FLARELESS

**SAE AS1007**  
SHEET 1 OF 6

**REV.  
H**



PORT #1  
 FITTING END PER  
 AS4377 STYLE H  
 IF SAME SIZE OR  
 SMALLER THAN PORT #2  
 ID THRU  
 IF LARGER THAN PORT #2  
 ID Z DEEP

FIGURE 2 - FITTING, UNION, STANDARD AND REDUCER, BULKHEAD END  
 NOT FOR USE IN PORT INSTALLATION, NON-REDUCER SHOWN, SAME AS  
 FIGURE 1 EXCEPT AS SHOWN

TABLE 1 - OVERALL LENGTH A /12

SIZE OF PORT #2	SIZE OF PORT #1												
	02	03	04	05	06	08	10	12	14	16	20	24	32
02	±.010	±.010	±.010	±.010	±.010	±.010	±.010	±.010	±.010	±.010	±.010	±.010	±.010
03	1.484	1.516	1.578	1.609	1.703	1.844	2.000	2.156	2.156	2.156	2.156	2.156	2.422
04	1.516	1.563	1.625	1.656	1.750	1.891	2.047	2.203	2.203	2.203	2.203	2.203	2.469
05	1.547	1.594	1.656	1.688	1.781	1.922	2.078	2.234	2.234	2.234	2.234	2.234	2.500
06	1.578	1.625	1.688	1.688	1.781	1.922	2.078	2.324	2.234	2.234	2.234	2.234	2.500
08	1.641	1.688	1.750	1.750	1.797	1.938	2.094	2.250	2.250	2.250	2.250	2.250	2.516
10	1.734	1.781	1.844	1.844	1.891	2.031	2.188	2.344	2.344	2.344	2.344	2.344	2.609
12	1.813	1.859	1.922	1.922	1.969	2.109	2.250	2.406	2.406	2.406	2.406	2.406	2.672
14	1.922	1.969	2.031	2.031	2.078	2.219	2.360	2.484	2.469	2.469	2.469	2.469	2.734
16	1.922	1.969	2.031	2.031	2.078	2.219	2.360	2.469	2.469	2.469	2.469	2.469	2.734
20	1.922	1.969	2.031	2.031	2.078	2.219	2.360	2.469	2.469	2.469	2.469	2.469	2.734
24	1.922	1.969	2.031	2.031	2.078	2.219	2.360	2.469	2.469	2.469	2.469	2.469	2.734
32	1.984	2.031	2.094	2.094	2.141	2.281	2.422	2.531	2.531	2.531	2.531	2.531	2.734

TABLE 2 - HOLE DEPTH Y /12/

SIZE OF PORT	SIZE OF PORT #1													
	#2	02	03	04	05	06	08	10	12	14	16	20	24	32
02	-	-	-	-	-	-	-	-	-	-	-	-	-	-
03	.469	-	-	-	-	-	-	-	-	-	-	-	-	-
04	.484	.484	-	-	-	-	-	-	-	-	-	-	-	-
05	.500	.500	.516	-	-	-	-	-	-	-	-	-	-	-
06	.547	.531	.562	.562	-	-	-	-	-	-	-	-	-	-
08	.594	.594	.625	.625	.641	-	-	-	-	-	-	-	-	-
10	.656	.656	.672	.672	.703	.672	-	-	-	-	-	-	-	-
12	.719	.719	.734	.750	.766	.750	.750	-	-	-	-	-	-	-
14	.688	.688	.704	.719	.735	.719	.719	.861	-	-	-	-	-	-
16	.656	.656	.672	.672	.703	.688	.688	.719	.688	-	-	-	-	-
20	.594	.594	.609	.609	.641	.625	.625	.656	.625	.703	-	-	-	-
24	.516	.516	.531	.547	.562	.641	.656	.578	.547	.641	.656	-	-	-
32	.453	.438	.469	.469	.469	.469	.469	.516	.485	.562	.578	.656	-	-

TABLE 3 - HOLE DEPTH Z /12/

SIZE OF PORT	SIZE OF PORT #1												
	#2	02	03	04	05	06	08	10	12	14	16	20	24
02	-	1.016	1.062	1.078	1.156	1.250	1.391	1.500	1.477	1.438	1.375	1.297	1.438
03	-	-	1.047	1.078	1.141	1.250	1.391	1.500	1.471	1.422	1.375	1.297	1.422
04	-	-	-	1.094	1.172	1.281	1.406	1.516	1.494	1.453	1.391	1.312	1.453
05	-	-	-	-	1.172	1.281	1.422	1.531	1.500	1.453	1.391	1.328	1.453
06	-	-	-	-	-	1.297	1.438	1.547	1.523	1.391	1.422	1.344	1.484
08	-	-	-	-	-	-	1.453	1.562	1.533	1.484	1.438	1.359	1.391
10	-	-	-	-	-	-	-	1.562	1.537	1.500	1.438	1.359	1.500
12	-	-	-	-	-	-	-	-	1.574	1.531	1.468	1.406	1.531
14	-	-	-	-	-	-	-	-	-	1.566	1.503	1.430	1.559
16	-	-	-	-	-	-	-	-	-	-	1.516	1.453	1.562
20	-	-	-	-	-	-	-	-	-	-	-	1.468	1.594
24	-	-	-	-	-	-	-	-	-	-	-	-	-
32	-	-	-	-	-	-	-	-	-	-	-	-	-

SAENORM.COM . Click to view the full PDF of as1007h

TABLE 4 - TUBE SIZE AND CORRESPONDING THREAD

PORT SIZE	(NOMINAL TUBE SIZE)	T THREAD PER AS8879 CLASS 3A
02	.125	.3125-24 UNJF
03	.188	.3750-24 UNJF
04	.250	.4375-20 UNJF
05	.312	.5000-20 UNJF
06	.375	.5625-18 UNJF
08	.500	.7500-16 UNJF
10	.625	.8750-14 UNJF
12	.750	1.0625-12 UNJ
14	.875	1.1875-12 UNJ
16	1.000	1.3125-12 UNJ
20	1.250	1.6250-12 UNJ
24	1.500	1.8750-12 UNJ
32	2.000	2.5000-12 UNJ

TABLE 5 - HEX DIMENSION AND WEIGHTS /11/

BASIC NO. AS1007 /19/ LARGEST PORT SIZE CODE	B ±.010	H		LB/EA APPROX REF ALUM	LB/EA APPROX REF STEEL	LB/EA APPROX REF TI
02	.542	.552-	.565	.00990	.0279	.0153
03	.605	.615-	.628	.0162	.0432	.0243
04	.668	.678-	.691	.0207	.0558	.0315
05	.730	.740-	.753	.0261	.0702	.0405
06	.792	.802-	.815	.0315	.0855	.0486
08	.980	.990-	1.003	.0576	.158	.0900
10	1.103	1.113-	1.128	.0810	.210	.126
12	1.353	1.363-	1.380	.120	.325	.187
14	1.478	1.488-	1.505	-	-	-
16	1.603	1.613-	1.630	.182	.437	.286
20	1.853	1.863-	1.880	.224	.610	.332
24	2.099	2.109-	2.225	.266	.733	.422
32	2.724	2.734-	2.760	-	-	-

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.

/11/ MATERIAL:

- a. CODE LETTER DASH (-) - TYPE 4130 LOW ALLOY STEEL BAR PER AMS6370 OR AMS-S-6758 EXCEPT HEAT TREATMENT PER PROCUREMENT SPECIFICATION. /2/
- b. CODE LETTER D - TYPE 2024-T6 OR -T851 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/6. /2/
- c. CODE LETTER J - TYPE 304 CORROSION RESISTANT STEEL BAR PER AMS5639 OR AMS-QQ-S-763 EXCEPT HARDNESS PER PROCUREMENT SPECIFICATION. /2/
- d. CODE LETTER K - TYPE 316 CORROSION RESISTANT STEEL BAR PER AMS5648 OR AMS-QQ-S-763 EXCEPT HARDNESS PER PROCUREMENT SPECIFICATION. /2/

 An SAE International Group	<b>AEROSPACE STANDARD</b>	<b>SAE AS1007</b> SHEET 4 OF 6	<b>REV. H</b>
	FITTING, UNION, STANDARD AND REDUCER, BULKHEAD, FLARELESS		