FEDERAL SUPPLY CLASS
4730

RATIONALE

CORRECT ERROR THAT RESTRICTED PORT #1 FROM BEING A REDUCER SIZE IN THIS CONFIGURATION, AND UPDATE QPL NOTE TO CONCUR WITH STANDARD POLICY. UPDATED ANODIZE SPECIFICATION FROM MIL-A-8625 TO MIL-PRF-8625.

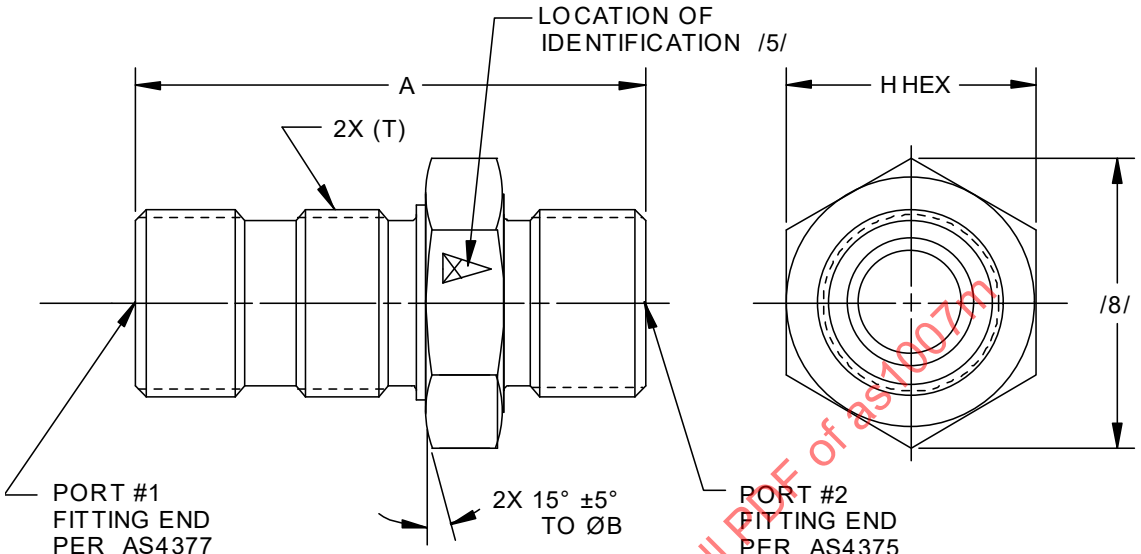
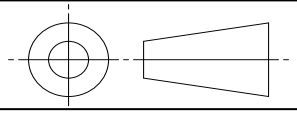


FIGURE 1 - FITTING, UNION, STANDARD AND REDUCER, BULKHEAD END FOR OPTIONAL USE IN PORT INSTALLATION, NON-REDUCER SHOWN /21/

ISSUED 1996-03 REVISED 2022-12

For more information on this standard, visit
https://www.sae.org/standards/content/AS1007M/

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: AS18280 /4/

SAE INTERNATIONAL

AEROSPACE STANDARD

FITTING, UNION,
STANDARD AND REDUCER,
BULKHEAD, FLARELESS

AS1007™
SHEET 1 OF 7

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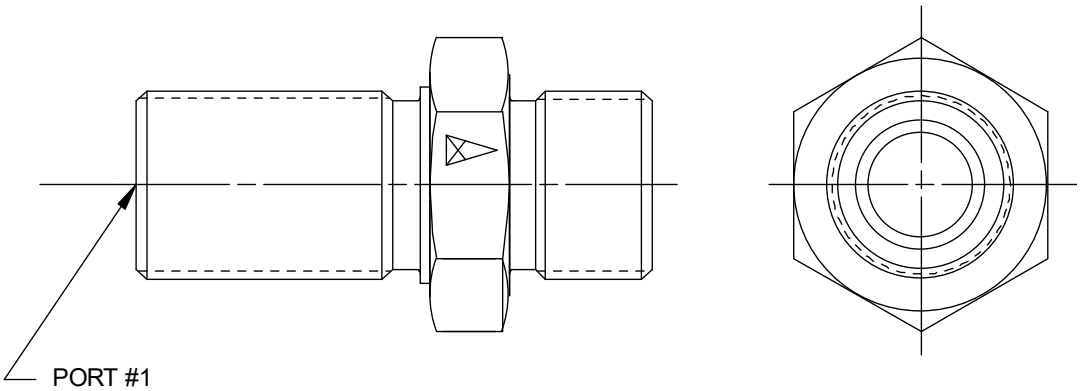

FIGURE 2 - FITTING, UNION, STANDARD AND REDUCER, BULKHEAD END NOT FOR USE IN PORT INSTALLATION, NON-REDUCER SHOWN, SAME AS FIGURE 1 EXCEPT AS SHOWN /21/

TABLE 1 - OVERALL LENGTH A /12/

SIZE OF PORT #2	SIZE OF PORT #1												
	02 ±.010	03 ±.010	04 ±.010	05 ±.010	06 ±.010	08 ±.010	10 ±.010	12 ±.010	14 ±.010	16 ±.010	20 ±.010	24 ±.010	32 ±.010
02	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
03	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
04	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
05	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
06	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
08	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
10	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
12	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
14	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
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 #2	SIZE OF PORT #1												
	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 #2	SIZE OF PORT #1												
	02	03	04	05	06	08	10	12	14	16	20	24	32
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	-	-	-	-	-	-	-	-	-	-	-	-	-

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 /20/ 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	2.109-2.135	.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.

/1/ MATERIAL:

a. DASH (-) AS MATERIAL CODE: 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/

e. CODE LETTER R: TYPE 321 CORROSION RESISTANT STEEL BAR PER AMS5645 OR AMS-QQ-S-763 EXCEPT HARDNESS PER PROCUREMENT SPECIFICATION. /2/

f. CODE LETTER S: TYPE 347 CORROSION RESISTANT STEEL BAR PER AMS5646 OR AMS-QQ-S-763 EXCEPT HARDNESS PER PROCUREMENT SPECIFICATION. /2/ /22/

g. CODE LETTER T: TYPE 6Al-4V TITANIUM ALLOY BAR PER AMS4928.

h. CODE LETTER W: TYPE 7075-T73 ALUMINUM ALLOY BAR PER AMS4124; OR 7075-T73 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/9. /2/

/2/ HEAT TREATMENT:

a. DASH (-) AS MATERIAL CODE: HARDNESS SHALL BE 92 HRB TO 40 HRC PER PROCUREMENT SPECIFICATION.

b. MATERIAL CODE LETTERS D AND W: ELECTRICAL CONDUCTIVITY AND HARDNESS PER PROCUREMENT SPECIFICATION.

c. MATERIAL CODE LETTERS J, K, R, AND S: HARDNESS SHALL BE 80 HRB MINIMUM PER PROCUREMENT SPECIFICATION.

d. OTHER MATERIAL CODES: NONE.

/3/ FINISH:

a. CODE LETTER (-): CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2.

b. MATERIAL CODE LETTER D: ANODIZE PER AMS2472 OR MIL-PRF-8625, TYPE II, CLASS 2, DYE GREEN SIMILAR TO COLOR 14187 OF AMS-STD-595.

c. MATERIAL CODE LETTERS J, K, R, AND S: PASSIVATE PER AMS2700 TYPE 6 OR 7.

d. MATERIAL CODE LETTER T: FLUORIDE PHOSPHATE CONVERSION COAT PER AMS2486 OR ANODIZE PER AMS2488, TYPE 2.

e. MATERIAL 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, EXCEPT AS SPECIFIED ON THIS STANDARD. PRODUCT MANUFACTURED TO THIS STANDARD SHALL MEET THE REQUIREMENTS SPECIFIED HEREIN AND THE PROCUREMENT SPECIFICATION. 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.