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SAE AS1002

FEDERAL SUPPLY CLASS
4730

RATIONALE

ERROR CORRECTION. ALSO, INACTIVATION FOR DESIGN IN PREVIOUS NOTE 25 WAS CHANGED TO A NOTE ON PAGE 1 INDICATING PREFERRED REPLACEMENT.

NOTE: THE NEW AS6042 FITTING IS PREFERRED REPLACEMENT BECAUSE OF IMPROVED LENGTH TOLERANCES AND IMPROVED FINISH OF THE CONICAL SEAL AREA.

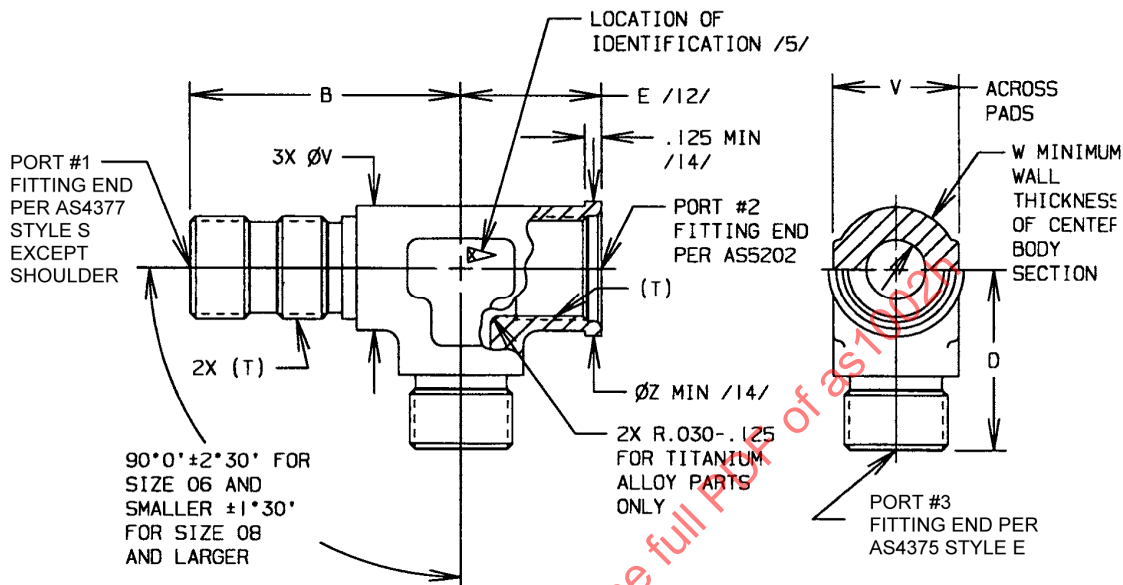


FIGURE 1 - FITTING, TEE, BULKHEAD END FOR OPTIONAL USE IN PORT INSTALLATION, PORT #2 SHOWN AS NON-REDUCER

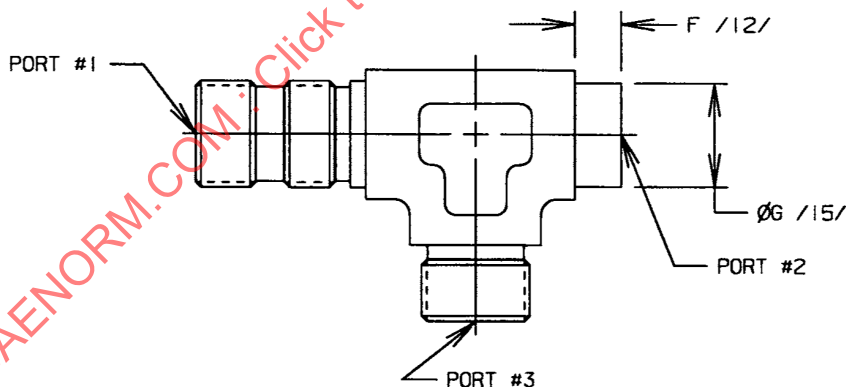
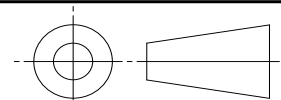


FIGURE 2 - FITTING, TEE, BULKHEAD END FOR OPTIONAL USE IN PORT INSTALLATION, PORT #2 SHOWN AS REDUCER, SAME AS FIGURE 1 EXCEPT AS SHOWN

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/AS1002H>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: /4/ AS18280

SAE Aerospace
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AEROSPACE STANDARD

FITTING, TEE, STANDARD AND REDUCER, BULKHEAD AND INTERNAL PORT ON RUN, FLARELESS

SAE AS1002
SHEET 1 OF 6

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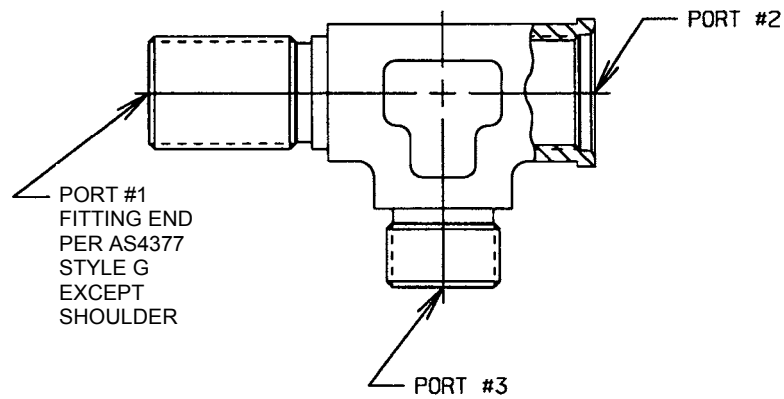


FIGURE 3 - FITTING, TEE, BULKHEAD END NOT FOR USE IN PORT INSTALLATION, PORT #2 SHOWN AS NON-REDUCER, SAME AS FIGURE 1 EXCEPT AS SHOWN

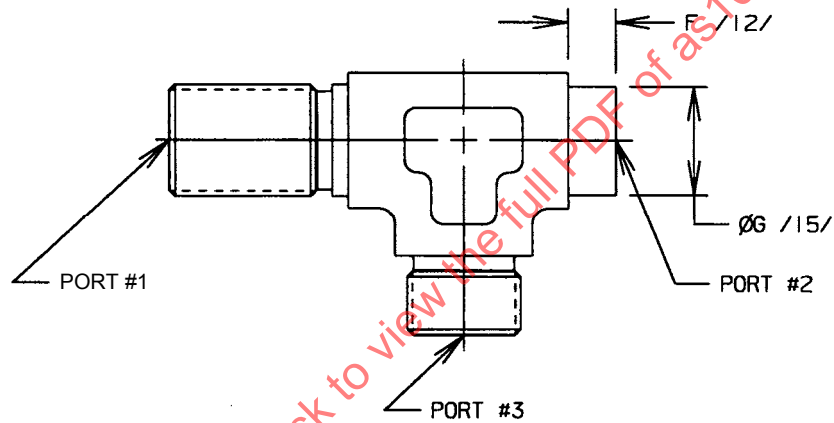


FIGURE 4 - FITTING, TEE, BULKHEAD END NOT FOR USE IN PORT INSTALLATION, PORT #2 SHOWN AS REDUCER, SAME AS FIGURE 1 EXCEPT AS SHOWN

TABLE 1 - DIMENSIONS AND WEIGHTS /16/

BASIC NO. AS1002 /13/ /24/ SIZE CODE	E /12/	F /12/	V	W	Z /14/	LB/EA APPROX REF ALUM	LB/EA APPROX REF STEEL	LB/EA APPROX REF TI
02	.648	-	.485-.502	.090	.562	.018	.051	.029
03	.711	-	.547-.565	.100	.625	.039	.104	.060
04	.773	.375	.735-.753	.110	-	.083	.233	.134
05	.773	.375	.735-.753	.120	.750	.099	.278	.160
06	.836	.375	.860-.878	.120	-	.116	.326	.188
08	1.023	.469	1.047-1.065	.150	-	.197	.554	.319
10	1.180	.625	1.047-1.065	.170	1.125	.206	.579	.334
12	1.367	.688	1.297-1.317	.185	1.375	.360	1.012	.583
14	1.507	.706	1.547-1.567	.200	-	-	-	-
16	1.555	.719	1.605-1.630	.205	1.625	.455	1.340	.773
20	1.742	.781	1.855-1.880	.240	1.938	.672	1.950	1.125

TABLE 2 - LEG LENGTH B /17/

FORGING SIZE /13/	TUBE SIZE OF PORT #1										
	02	03	04	05	06	08	10	12	14	16	20
02	1.398	-	-	-	-	-	-	-	-	-	-
03	1.430	1.477	-	-	-	-	-	-	-	-	-
04	1.585	1.632	1.695	-	-	-	-	-	-	-	-
05	1.585	1.632	1.695	1.695	-	-	-	-	-	-	-
06	1.758	1.805	1.868	1.868	1.914	-	-	-	-	-	-
08	1.727	1.774	1.837	1.837	1.883	2.055	-	-	-	-	-
10	1.804	1.851	1.914	1.914	1.960	2.132	2.273	-	-	-	-
12	1.883	1.930	1.993	1.993	2.039	2.211	2.352	2.461	-	-	-
14	2.040	2.087	2.150	2.150	2.196	2.368	2.509	2.618	2.618	-	-
16	2.102	2.149	2.212	2.212	2.258	2.430	2.571	2.680	2.680	2.680	-
20	2.242	2.289	2.352	2.352	2.398	2.570	2.711	2.820	2.820	2.820	2.820

TABLE 3 - LEG LENGTH D /17/

FORGING SIZE /13/	TUBE SIZE OF PORT #3										
	02	03	04	05	06	08	10	12	14	16	20
02	.867	-	-	-	-	-	-	-	-	-	-
03	.883	.930	-	-	-	-	-	-	-	-	-
04	1.039	1.086	1.117	-	-	-	-	-	-	-	-
05	1.039	1.086	1.117	1.117	-	-	-	-	-	-	-
06	1.086	1.133	1.164	1.164	1.180	-	-	-	-	-	-
08	1.180	1.227	1.258	1.258	1.274	1.367	-	-	-	-	-
10	1.273	1.320	1.351	1.351	1.367	1.460	1.523	-	-	-	-
12	1.351	1.398	1.429	1.429	1.445	1.538	1.601	1.644	-	-	-
14	1.492	1.593	1.870	1.570	1.586	1.679	1.724	1.867	1.867	-	-
16	1.554	1.601	1.632	1.632	1.648	1.741	1.804	1.867	1.867	1.867	-
20	1.695	1.742	1.773	1.773	1.789	1.882	1.945	2.008	2.008	2.008	2.008

TABLE 4 - MACHINED ØG /15/ /17/

FORGING SIZE /13/	TUBE SIZE OF PORT #2										
	02	03	04	05	06	08	10	12	14	16	20
02	-	-	-	-	-	-	-	-	-	-	-
03	-	-	-	-	-	-	-	-	-	-	-
04	.594	.656	-	-	-	-	-	-	-	-	-
05	.594	.656	-	-	-	-	-	-	-	-	-
06	.594	.656	.719	.781	-	-	-	-	-	-	-
08	.594	.656	.719	.781	.844	-	-	-	-	-	-
10	.594	.656	.719	.781	.844	-	-	-	-	-	-
12	.594	.656	.719	.781	.844	1.062	-	-	-	-	-
14	.594	.656	.719	.781	.844	1.062	1.188	1.438	-	-	-
16	.594	.656	.719	.781	.844	1.062	1.188	1.438	1.562	-	-
20	.594	.656	.719	.781	.844	1.062	1.188	1.438	1.562	1.688	-

TABLE 5 - TUBE SIZE AND CORRESPONDING THREAD

PORT SIZE	(NOMINAL TUBE SIZE)	T THREAD PER AS8879 CLASS 3A AND CLASS 3B
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

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. CODE LETTER DASH (-) - TYPE 4130 LOW ALLOY STEEL FORGING OR 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 OR TYPE 2014-T6 ALUMINUM ALLOY FORGING PER AMS4133. /2/
- c. CODE LETTER F - TYPE 4130 LOW ALLOY STEEL FORGING OR BAR PER AMS6370 OR AMS-S-6758 EXCEPT HEAT TREATMENT PER PROCUREMENT SPECIFICATION. /2/
- d. CODE LETTER J - TYPE 304 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS5639 OR AMS-QQ-S-763 EXCEPT HARDNESS PER PROCUREMENT SPECIFICATION. /2/
- e. CODE LETTER K - TYPE 316 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS5648 OR AMS-QQ-S-763 EXCEPT HARDNESS PER PROCUREMENT SPECIFICATION. /2/
- f. CODE LETTER R - TYPE 321 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS5645 OR AMS-QQ-S-763 EXCEPT HARDNESS PER PROCUREMENT SPECIFICATION. /2/
- g. CODE LETTER S - TYPE 347 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS5646 OR AMS-QQ-S-763 EXCEPT HARDNESS PER PROCUREMENT SPECIFICATION. /2/
- h. CODE LETTER T - TYPE 6AL-4V TITANIUM ALLOY FORGING OR BAR PER AMS4928.
- i. CODE LETTER W - TYPE 7075-T73 ALUMINUM ALLOY FORGING PER AMS4141 OR AMS-QQ-A-367; OR 7075-T7351 ALUMINUM ALLOY BAR PER AMS4124; OR 7075-T73 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/9. /2/