

REV.
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AS1003™

FEDERAL SUPPLY CLASS
4730

RATIONALE

DRAWING NOTE #11 INCORRECTLY REFERENCED AS1376 TABLE 2. ALSO, QPL NOTE /4/ HAS BEEN CHANGED, PER THE NEWLY ADOPTED VERBIAGE AGREED TO DURING OUR SEPTEMBER G3 CONFERENCE.

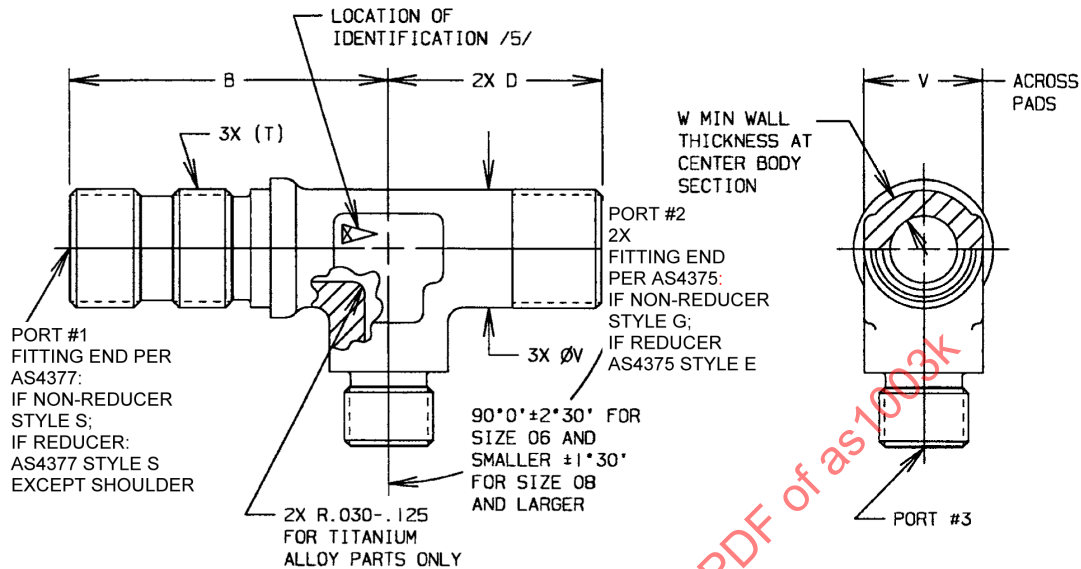


FIGURE 1 - FITTING, TEE, BULKHEAD END FOR OPTIONAL USE IN PORT INSTALLATION, PORT #3 SHOWN AS REDUCER

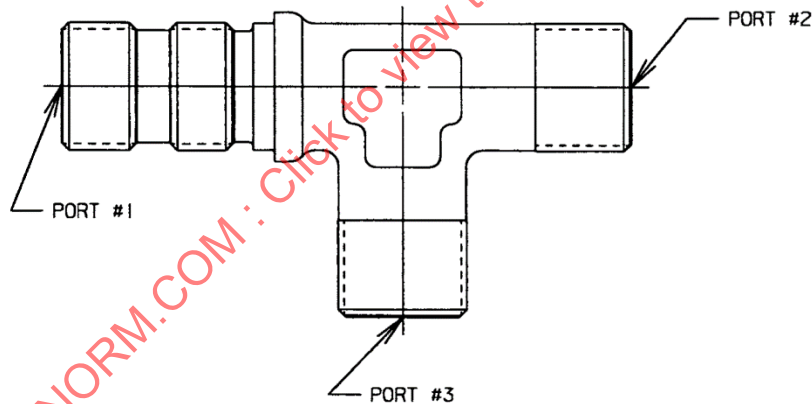
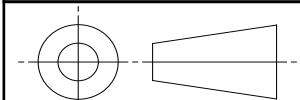


FIGURE 2 - FITTING, TEE, BULKHEAD END FOR OPTIONAL USE IN PORT INSTALLATION, NON-REDUCER SHOWN, SAME AS FIGURE 1 EXCEPT AS SHOWN

For more information on this standard, visit
<https://www.sae.org/standards/content/AS1003K/>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: AS18280 /4/



AEROSPACE STANDARD

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

AS1003™
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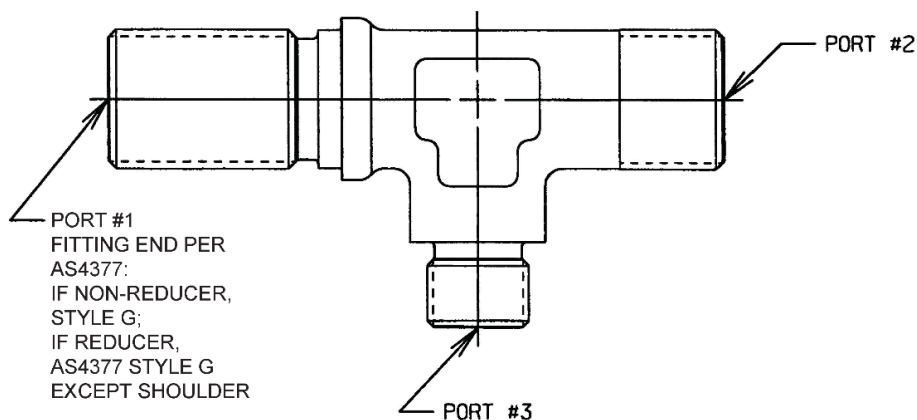


FIGURE 3 - FITTING, TEE, BULKHEAD END NOT FOR USE IN PORT INSTALLATION, PORT #3 SHOWN AS REDUCER, SAME AS FIGURE 1 EXCEPT AS SHOWN

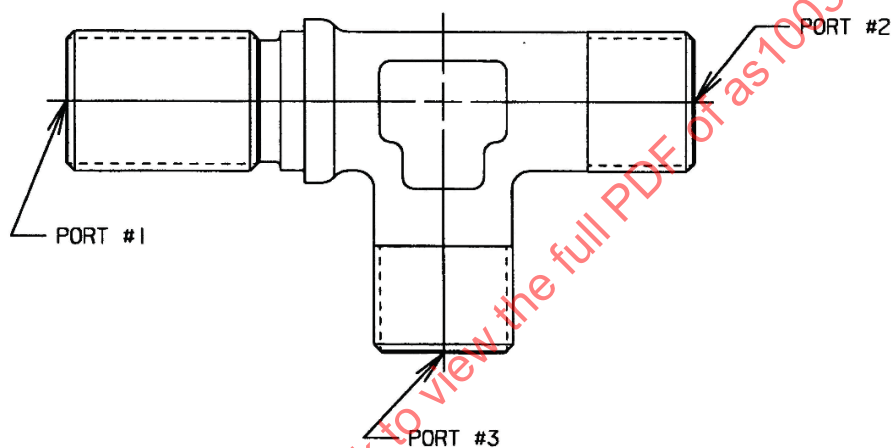


FIGURE 4 - FITTING, TEE, BULKHEAD END NOT FOR USE IN PORT INSTALLATION, NON-REDUCER SHOWN, SAME AS FIGURE 2 EXCEPT AS SHOWN

TABLE 1 - DIMENSIONS AND WEIGHTS /13/

BASIC NO. AS1003 /12/ /22/ SIZE CODE	V	W	LB/EA APPROX REF ALUM	LB/EA APPROX REF STEEL	LB/EA APPROX REF TI
02	.297- .314	.090	.0185	.0531	.0293
03	.360- .377	.100	.0289	.0830	.0458
04	.423- .440	.110	.0373	.107	.0591
05	.485- .502	.120	.0498	.143	.0789
06	.547- .565	.120	.0612	.176	.0969
08	.735- .753	.150	.125	.358	.198
10	.860- .878	.170	.162	.466	.257
12	1.047-1.065	.185	.277	.798	.440
14	1.173-1.191	.200	.372	1.07	.590
16	1.292-1.317	.205	.400	1.15	.634
20	1.605-1.630	.240	.701	2.01	1.11
24	1.855-1.880	.250	.908	2.61	1.44
32	2.542-2.572	.350	1.95	5.60	3.09

TABLE 2 - LEG LENGTH B /14/

FORGING SIZE /12/	TUBE SIZE OF PORT #1												
	02	03	04	05	06	08	10	12	14	16	20	24	32
02	1.336	-	-	-	-	-	-	-	-	-	-	-	-
03	1.367	1.414	-	-	-	-	-	-	-	-	-	-	-
04	1.413	1.460	1.523	-	-	-	-	-	-	-	-	-	-
05	1.445	1.492	1.555	1.555	-	-	-	-	-	-	-	-	-
06	1.555	1.602	1.665	1.665	1.711	-	-	-	-	-	-	-	-
08	1.664	1.711	1.774	1.774	1.820	1.992	-	-	-	-	-	-	-
10	1.804	1.851	1.914	1.914	1.960	2.132	2.273	-	-	-	-	-	-
12	1.914	1.961	2.024	2.024	2.070	2.242	2.383	2.492	-	-	-	-	-
14	2.024	2.071	2.134	2.134	2.180	2.352	2.493	2.617	2.543	-	-	-	-
16	2.039	2.086	2.149	2.149	2.195	2.367	2.508	2.617	2.617	2.617	-	-	-
20	2.320	2.367	2.430	2.430	2.476	2.648	2.789	2.898	2.898	2.898	2.898	-	-
24	2.602	2.649	2.712	2.712	2.758	2.930	3.071	3.180	3.180	3.180	3.180	3.180	-
32	2.992	3.039	3.102	3.102	3.148	3.320	3.461	3.570	3.570	3.570	3.570	3.570	3.773

TABLE 3 - LEG LENGTH D /14/

FORGING SIZE /12/	TUBE SIZE OF PORT #2 OR #3												
	02	03	04	05	06	08	10	12	14	16	20	24	32
02	.804	-	-	-	-	-	-	-	-	-	-	-	-
03	.883	.930	-	-	-	-	-	-	-	-	-	-	-
04	.883	.930	.961	-	-	-	-	-	-	-	-	-	-
05	.977	1.024	1.055	1.055	-	-	-	-	-	-	-	-	-
06	.992	1.039	1.070	1.070	1.086	-	-	-	-	-	-	-	-
08	1.149	1.196	1.227	1.227	1.243	1.336	-	-	-	-	-	-	-
10	1.274	1.320	1.352	1.352	1.368	1.461	1.524	-	-	-	-	-	-
12	1.335	1.383	1.414	1.414	1.430	1.523	1.586	1.649	-	-	-	-	-
14	1.398	1.445	1.476	1.476	1.492	1.585	1.648	1.742	2.023	-	-	-	-
16	1.429	1.476	1.507	1.507	1.523	1.616	1.679	1.742	1.742	1.742	-	-	-
20	1.710	1.757	1.788	1.788	1.804	1.897	1.960	2.023	2.023	2.023	2.023	-	-
24	1.898	1.945	1.976	1.976	1.992	2.085	2.148	2.211	2.211	2.211	2.211	2.211	-
32	2.085	2.132	2.163	2.163	2.179	2.272	2.335	2.398	2.398	2.398	2.398	2.398	2.398

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



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STANDARD AND REDUCER,
BULKHEAD ON RUN, FLARELESS

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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/

/2/ HEAT TREATMENT:

- a. MATERIAL CODE LETTER (-) AND F: 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. MATERIAL CODE LETTER (-) AND F: CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2.
- b. MATERIAL CODE LETTER D: ANODIZE PER AMS2472 OR MIL-A-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 MIL-A-8625, TYPE II, CLASS 2, DYE 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.

	AEROSPACE STANDARD		AS1003™ SHEET 4 OF 6	REV. K
	FITTING, TEE, STANDARD AND REDUCER, BULKHEAD ON RUN, FLARELESS			