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SAE AS1010

RATIONALE

ERROR CORRECTION. ALSO, INACTIVATION FOR DESIGN IN PREVIOUS NOTE 22 WAS CHANGED TO A NOTE ON PAGE 1 INDICATING PREFERRED REPLACEMENT.

NOTE: THE NEW AS6050 FITTING IS PREFERRED REPLACEMENT BECAUSE OF IMPROVED LENGTH TOLERANCES AND IMPROVED FINISH OF THE CONICAL SEAL AREA.

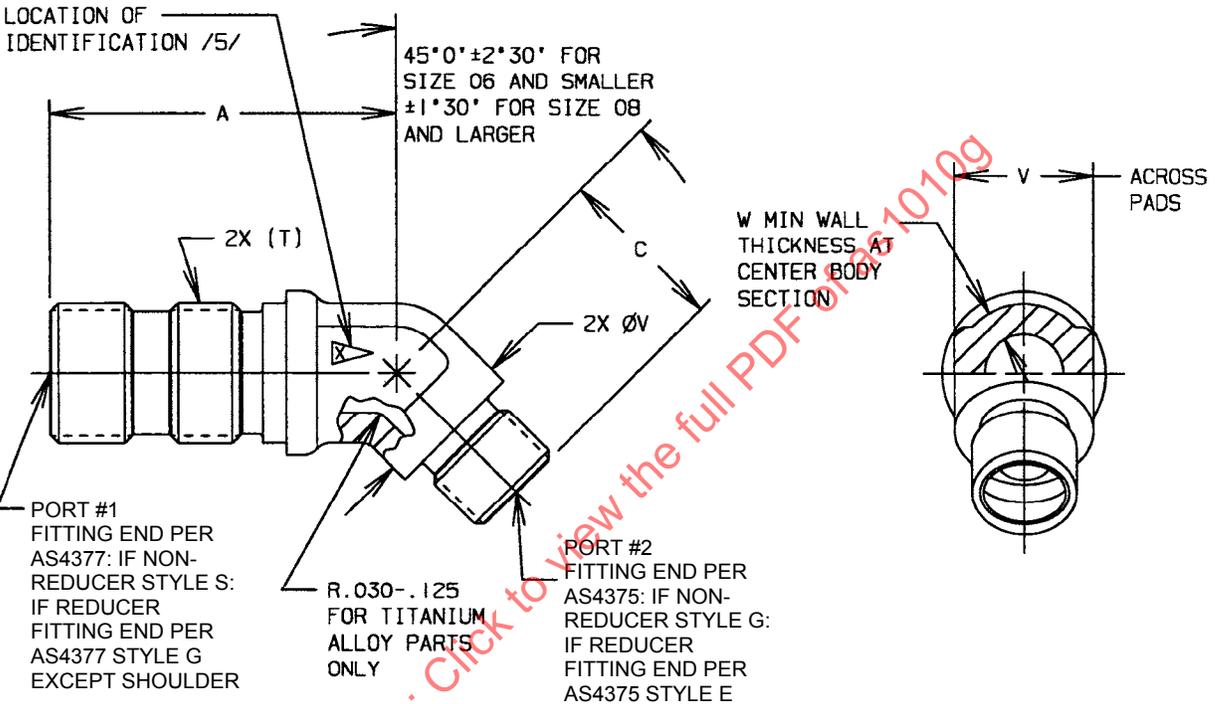
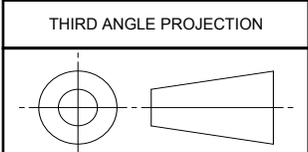


FIGURE 1 - FITTING, ELBOW, 45 DEGREE, BULKHEAD END FOR OPTIONAL USE IN PORT INSTALLATION, PORT #1 SHOWN AS NON-REDUCER, PORT #2 SHOWN AS REDUCER

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/AS1010G>



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: /4/ AS18280

**SAE Aerospace**  
An SAE International Group

**AEROSPACE STANDARD**

FITTING, ELBOW, 45 DEGREE, STANDARD AND REDUCER, BULKHEAD, FLARELESS

**SAE AS1010**  
SHEET 1 OF 6

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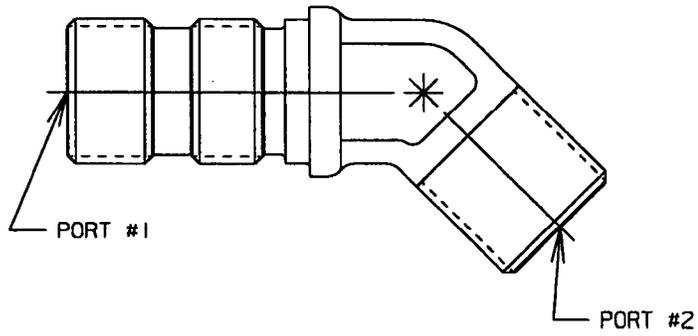


FIGURE 2 - FITTING, ELBOW, 45 DEGREE, BULKHEAD END FOR OPTIONAL USE IN PORT INSTALLATION, NON-REDUCER SHOWN, SAME AS FIGURE 1 EXCEPT AS SHOWN

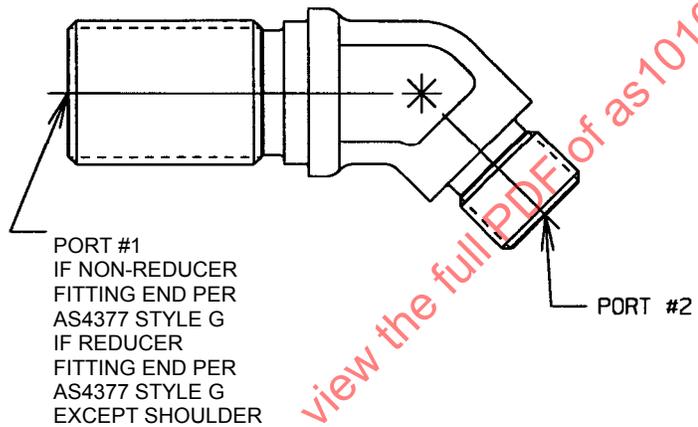


FIGURE 3 - FITTING, ELBOW, 45 DEGREE, BULKHEAD END NOT FOR USE IN INSTALLATION, PORT #1 SHOWN AS NON-REDUCER, PORT #2 SHOWN AS REDUCER, SAME AS FIGURE 1 EXCEPT AS SHOWN

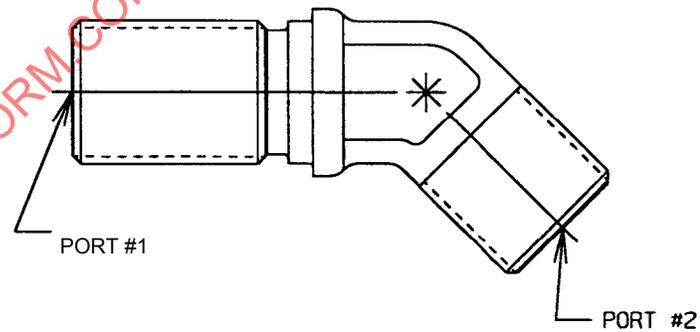


FIGURE 4 - FITTING, ELBOW, 45 DEGREE, BULKHEAD END NOT FOR USE IN PORT INSTALLATION, NON-REDUCER SHOWN, SAME AS FIGURE 2 EXCEPT AS SHOWN

 An SAE International Group	<b>AEROSPACE STANDARD</b>	<b>SAE AS1010</b> SHEET 2 OF 6	<b>REV.</b> <b>G</b>
	FITTING, ELBOW, 45 DEGREE, STANDARD AND REDUCER, BULKHEAD, FLARELESS		

TABLE 1 - DIMENSIONS AND WEIGHTS /13/

BASIC NO. AS1010 /12/ /21/ SIZE CODE	V	W	LB/EA APPROX REF ALUM	LB/EA APPROX REF STEEL	LB/EA APPROX REF TI
02	.297- .314	.090	.0135	.0315	.0180
03	.360- .377	.100	.0162	.0459	.0261
04	.423- .440	.110	.0243	.0531	.0306
05	.485- .502	.120	.0315	.0882	.0504
06	.547- .565	.120	.0351	.0936	.054
08	.735- .753	.150	.0648	.191	.110
10	.860- .878	.170	.0981	.275	.158
12	1.047-1.065	.185	.157	.363	.256
14	1.173-1.191	.200	-	-	-
16	1.292-1.317	.205	.230	.603	.347
20	1.605-1.630	.240	.369	.990	.571
24	1.855-1.880	.250	-	-	-
32	2.542-2.572	.350	-	-	-

TABLE 2 - LEG LENGTH A

FORGING SIZE /12/	TUBE SIZE OF PORT #1 /14/												
	02	03	04	05	06	08	10	12	14	16	20	24	32
02	1.305	-	-	-	-	-	-	-	-	-	-	-	-
03	1.305	1.352	-	-	-	-	-	-	-	-	-	-	-
04	1.367	1.414	1.477	-	-	-	-	-	-	-	-	-	-
05	1.367	1.414	1.477	1.477	-	-	-	-	-	-	-	-	-
06	1.430	1.477	1.540	1.540	1.586	-	-	-	-	-	-	-	-
08	1.508	1.555	1.618	1.618	1.664	1.836	-	-	-	-	-	-	-
10	1.601	1.648	1.711	1.711	1.757	1.929	2.070	-	-	-	-	-	-
12	1.695	1.742	1.805	1.805	1.851	2.023	2.164	2.273	-	-	-	-	-
14	1.789	1.836	1.899	1.899	1.945	2.117	2.258	2.367	2.336	-	-	-	-
16	1.820	1.867	1.930	1.930	1.976	2.148	2.289	2.398	2.398	2.398	-	-	-
20	1.852	1.899	1.962	1.962	2.008	2.180	2.321	2.430	2.430	2.430	2.430	-	-
24	1.867	1.914	1.977	1.977	2.023	2.195	2.336	2.445	2.445	2.445	2.445	2.445	-
32	1.821	1.868	1.931	1.931	1.977	2.149	2.290	2.399	2.399	2.399	2.399	2.399	2.602

TABLE 3 - LEG LENGTH C

FORGING SIZE /12/	TUBE SIZE OF PORT #2 /14/												
	02	03	04	05	06	08	10	12	14	16	20	24	32
02	.649	-	-	-	-	-	-	-	-	-	-	-	-
03	.633	.680	-	-	-	-	-	-	-	-	-	-	-
04	.633	.680	.711	-	-	-	-	-	-	-	-	-	-
05	.664	.711	.742	.742	-	-	-	-	-	-	-	-	-
06	.742	.789	.820	.820	.836	-	-	-	-	-	-	-	-
08	.805	.852	.883	.883	.899	.992	-	-	-	-	-	-	-
10	.836	.883	.914	.914	.930	1.023	1.086	-	-	-	-	-	-
12	.960	1.007	1.038	1.038	1.054	1.147	1.210	1.273	-	-	-	-	-
14	1.023	1.070	1.101	1.101	1.117	1.210	1.273	1.336	1.305	-	-	-	-
16	1.054	1.101	1.132	1.132	1.148	1.241	1.304	1.367	1.367	1.367	-	-	-
20	1.148	1.195	1.226	1.226	1.243	1.335	1.398	1.461	1.461	1.461	1.461	-	-
24	1.242	1.289	1.320	1.320	1.336	1.429	1.492	1.555	1.555	1.555	1.555	1.555	-
32	1.523	1.570	1.601	1.601	1.617	1.710	1.773	1.836	1.836	1.836	1.836	1.836	1.836

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

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/

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