

RATIONALE

THIS STANDARD IS BASED ON THE AS1009 FITTING. IT INTRODUCES IMPROVED TOLERANCE END FITTING DESIGNS AS5863, AS5864 AND OTHER IMPROVEMENTS.

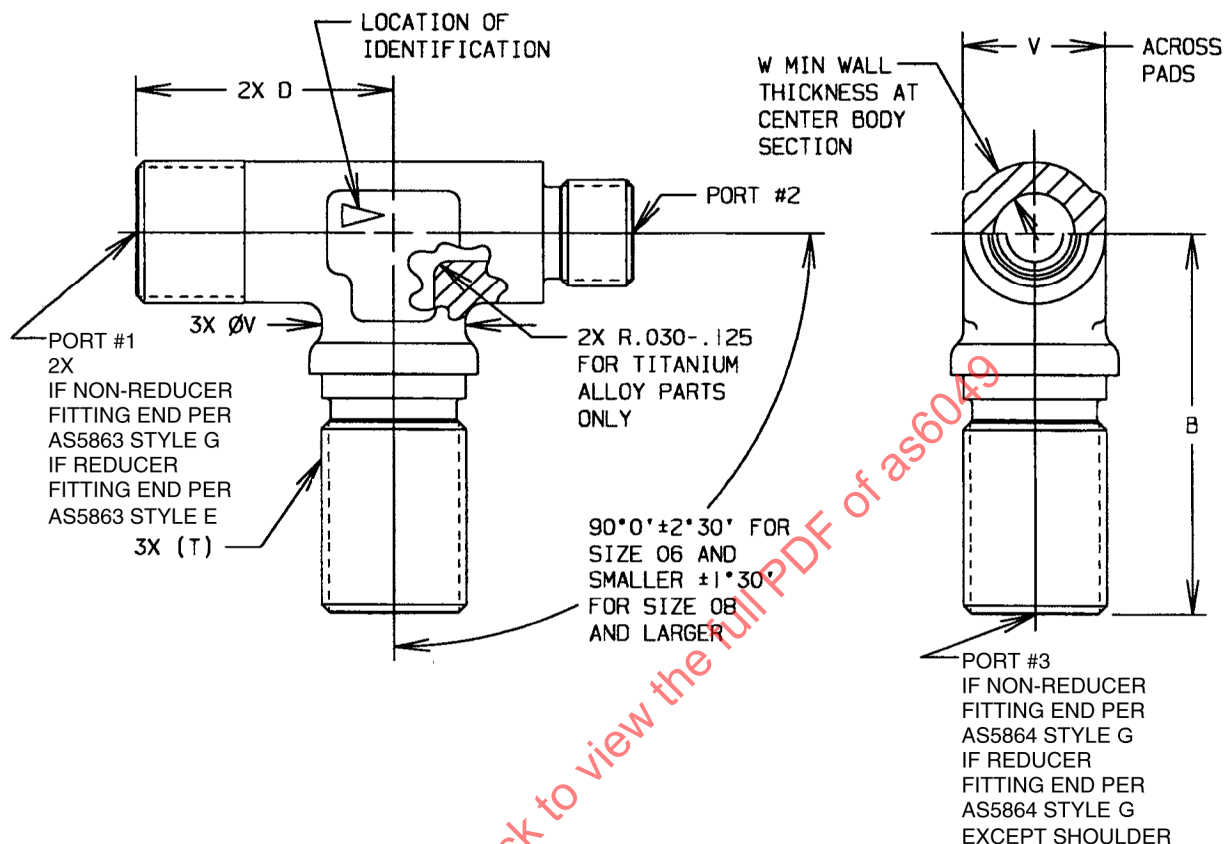
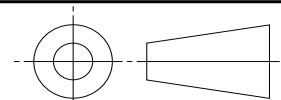


FIGURE 1 - FITTING, TEE, BULKHEAD END, PORT #2 SHOWN AS REDUCER

SAE values your input. To provide feedback
on this Technical Report, please visit
<http://www.sae.org/technical/standards/AS6049>

THIRD ANGLE PROJECTION



CUSTODIAN: SAE G-3/G-3B

PROCUREMENT SPECIFICATION: /5/ AS18280

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

FITTING, TEE, STANDARD
AND REDUCER, BULKHEAD
ON SIDE, FLARELESS, PRECISION TYPE

SAE AS6049
SHEET 1 OF 5

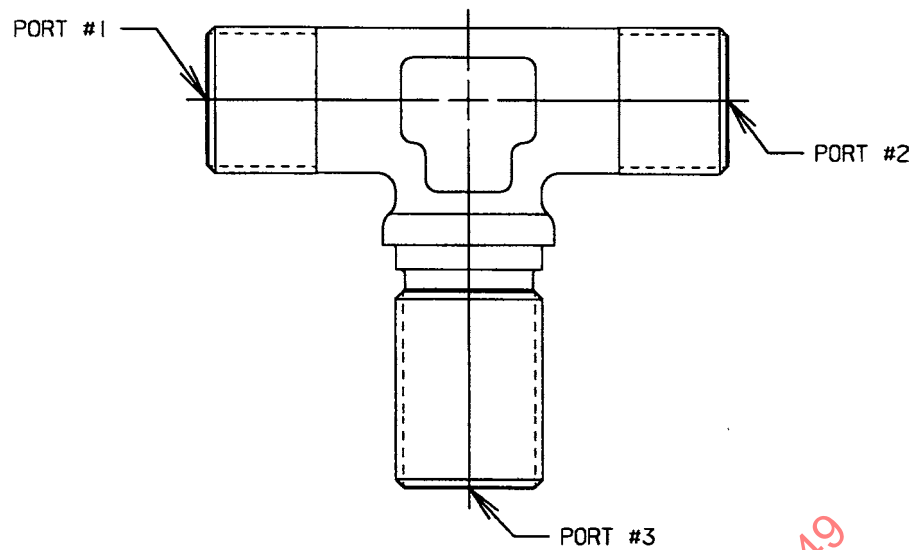


FIGURE 2 - FITTING, TEE, BULKHEAD, NON-REDUCER SHOWN, SAME
AS FIGURE 1 EXCEPT AS SHOWN

TABLE 1 - DIMENSIONS AND WEIGHTS /9/ /10/

BASIC NO. AS6049 /19/ SIZE CODE	V	W	LB/EA APPROX REF ALUM	LB/EA APPROX REF STEEL	LB/EA APPROX REF TI
02	.297- .314	.090	.0198	.0558	.0315
03	.360- .377	.100	.0252	.0702	.0405
04	.423- .440	.110	.0297	.0846	.0486
05	.485- .502	.120	.0432	.127	.0729
06	.547- .565	.120	.0522	.140	.0801
08	.735- .753	.150	.0972	.274	.158
10	.860- .878	.170	.149	.405	.233
12	1.047-1.065	.185	.230	.630	.363
14	1.173-1.191	.200	-	-	-
16	1.292-1.317	.205	.308	.868	.500
20	1.605-1.630	.240	.558	1.55	.893
24	1.855-1.880	.250	.734	2.00	1.15
32	2.542-2.572	.350	-	-	-

TABLE 2 - LEG LENGTH B /9/ /11/

FORGING SIZE	TUBE SIZE OF PORT #3												
	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 /9/ /11/

FORGING SIZE	TUBE SIZE OF PORT #1 OR #2												
	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	1.693	-	-	-	-
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 ISO 3161
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 T – TYPE 6AL-4V TITANIUM ALLOY PER PROCUREMENT SPECIFICATION
- b. CODE LETTER V – TYPE 15-5PH, CONDITION H1075 STA, CORROSION RESISTANT STEEL PER PROCUREMENT SPECIFICATION
- c. CODE LETTER W – TYPE 7075-T73 ALUMINUM ALLOY BAR OR FORGING, OR TYPE 7075-T7351 ALUMINUM ALLOY BAR PER PROCUREMENT SPECIFICATION

2. HEAT TREATMENT:

- a. MATERIAL CODE LETTER T – ANNEALED PER PROCUREMENT SPECIFICATION
- b. MATERIAL CODE LETTER V – AGE TO CONDITION H1075 PER PROCUREMENT SPECIFICATION
- c. MATERIAL CODE LETTER W – T73 OR T7351 PER PROCUREMENT SPECIFICATION

/3/ FINISH:

- a. MATERIAL CODE LETTER T – ANODIZE OR FLUORIDE PHOSPHATE CONVERSION COAT PER PROCUREMENT SPECIFICATION
- b. MATERIAL CODE LETTER V:
 1. V CODE PARTS TO BE PASSIVATED ONLY WILL HAVE NO FINISH CODE LETTER AFTER THE SIZE CODE IN THE PART NUMBER. THE FINISH WILL BE: PASSIVATE PER PROCUREMENT SPECIFICATION
 2. V CODE PARTS TO BE CADMIUM PLATED ONLY SHALL HAVE THE FINISH CODE LETTER "P" AFTER THE SIZE CODE IN THE PART NUMBER. THE FINISH WILL BE: CADMIUM PLATE PER PROCUREMENT SPECIFICATION
- c. MATERIAL CODE LETTER W – PER PROCUREMENT SPECIFICATION

/4/ OXYGEN SYSTEM AND COMPONENT CLEANING, SUFFIX LETTER A /19/:

- a. MATERIAL CODE LETTER P – CLEAN AND PACKAGE PER ARP1176 CATEGORY 1C
- b. MATERIAL CODE LETTER W – CLEAN AND PACKAGE PER ARP1176 CATEGORY 2

/5/ PROCUREMENT SPECIFICATION: AS18280 UNLESS OTHERWISE SPECIFIED ON THIS STANDARD. PRODUCT SUPPLIED TO THIS SPECIFICATION SHALL BE MANUFACTURED BY AN ACCREDITED MANUFACTURER AS LISTED IN THE PERFORMANCE REVIEW INSTITUTE (PRI) QUALIFIED PRODUCTS LIST PRI-QPL-AS18280 FOR THIS STANDARD. SEE <http://www.eauditnet.com> FOR CURRENT QPL ONLINE.