

REV.
A

SAE AS4227

FEDERAL SUPPLY CLASS
4030

RATIONALE

AS4227A HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

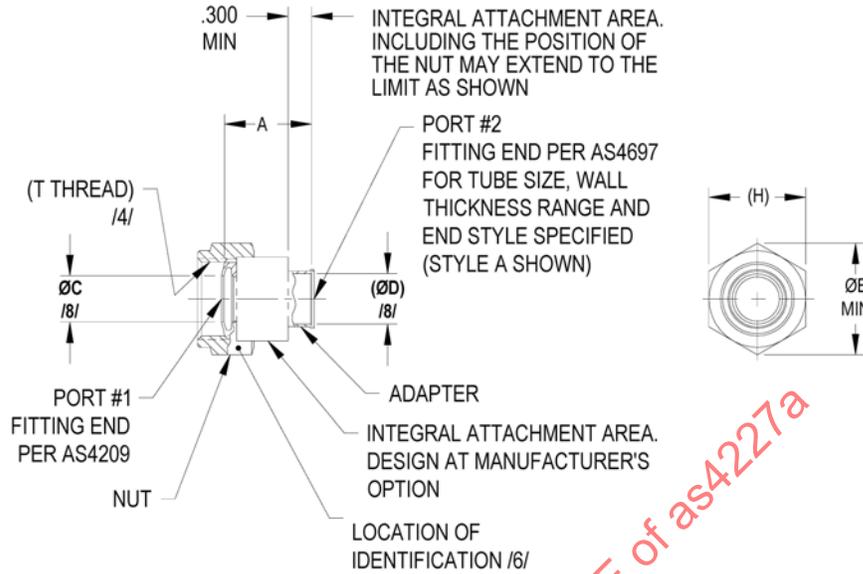


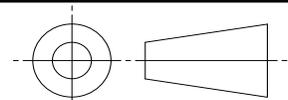
FIGURE 1 - FITTING ASSEMBLY, ADAPTER

TABLE 1A - DIMENSIONS

BASIC NO. AS4227 /14/ SIZE AND TUBE	FLANGE OF NOMINAL TUBE WALL FOR PORT #2 /7/ /14/	(NOMINAL TUBE SIZE)	T THREAD PER AS8879 CLASS 3B	PORT #2 STYLE /8/	A
03-018	.016-.018	.188	.3750-28 UNJS	A	.635
03-022	.019-.022	.188	.3750-28 UNJS	A	.635
04-022	.019-.022	.250	.4375-24 UNJS	B	.747
05-022	.019-.022	.312	.5000-24 UNJS	B	.675
05-028	.023-.028	.312	.5000-24 UNJS	B	.675
06-022	.019-.022	.375	.5625-20 UNJS	B	.781
06-028	.023-.028	.375	.5625-20 UNJS	B	.781
06-032	.029-.032	.375	.5625-20 UNJS	B	.781
08-022	.019-.022	.500	.7188-20 UNJS	B	.788
08-043	.033-.043	.500	.7188-20 UNJS	A	.788
10-028	.023-.028	.625	.8438-18 UNJS	B	.857
10-043	.033-.043	.625	.8438-18 UNJS	B	.857
10-055	.044-.055	.625	.8438-18 UNJS	A	.857
12-028	.023-.028	.750	1.0000-16 UNJ	B	.898
12-055	.044-.055	.750	1.0000-16 UNJ	A	.899
12-065	.056-.065	.750	1.0000-16 UNJ	A	.899

SAE values your input. To provide feedback
on this Technical Report, please visit
<http://www.sae.org/technical/standards/AS4227A>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: /5/ AS4510

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

FITTING ASSEMBLY, ADAPTER,
INTERNAL THREAD,
BEAM SEAL TO INTEGRAL WELD RING

SAE AS4227
SHEET 1 OF 4

**REV.
A**

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TABLE 1A (CONTINUED)

BASIC NO. AS4227 /14/ SIZE AND TUBE WALL CODES	RANGE OF NOMINAL TUBE WALL FOR PORT #2 /7/ /14/	(NOMINAL TUBE SIZE)	T THREAD PER AS8879 CLASS 3B	PORT #2 STYLE /8/	A
14-032	.029-.032	.875	1.1250-16 UNJ	B	.944
14-065	.056-.065	.875	1.1250-16 UNJ	A	.944
16-043	.033-.043	1.000	1.2500-14 UNJ	B	.997
16-078	.066-.078	1.000	1.2500-14 UNJS	A	.997
16-078	.079-.089	1.000	1.2500-14 UNJS	A	.997
20-055	.044-.055	1.250	1.5781-14 UNJS	B	1.043
20-089	.079-.089	1.250	1.5781-14 UNJS	A	1.043
24-055	.044-.055	1.500	1.8438-14 UNJS	B	1.450

TABLE 1B - DIMENSIONS AND WEIGHTS

BASIC NO. AS4227 /14/ SIZE AND TUBE WALL CODES	C /8/	D /8/	E	H	RECOMMENDED MAXIMUM PRESSURE PSI /7/	APPROX MASS CRES LBS/100	APPROX MASS TI LBS/100
03-018	---	.146	.568	.500	5000	2.18	1.24
03-022	---	.138	.568	.500	5000	2.18	1.24
04-022	.184- .194	.200	.638	.562	5000	2.99	1.71
05-022	.232- .242	.262	.709	.625	4000	3.71	2.12
05-028	.232- .242	.250	.709	.625	5000	3.71	2.20
06-022	.297- .307	.325	.780	.688	3000	4.73	2.70
06-028	.297- .307	.313	.780	.688	4000	4.73	2.70
06-032	.297- .307	.305	.780	.688	5000	4.73	2.70
08-022	.398- .408	.450	.993	.875	2000	7.87	4.50
08-043	---	.408	.993	.875	5000	7.87	4.50
10-028	.512- .523	.563	1.120	1.000	2000	11.10	6.33
10-043	.512- .523	.533	1.120	1.000	4000	11.10	6.33
10-055	---	.509	1.120	1.000	5000	11.10	6.33
12-028	.649- .660	.688	1.260	1.125	2000	13.40	7.66
12-055	---	.634	1.260	1.125	4000	13.40	7.66
12-065	---	.614	1.280	1.125	5000	13.40	7.66
14-032	.769- .780	.805	1.540	1.375	2000	22.30	12.70
14-065	---	.739	1.540	1.375	4000	22.30	12.70
16-043	.862- .874	.908	1.650	1.500	2000	29.60	16.90
16-078	---	.838	1.650	1.500	4000	29.60	16.90
16-089	---	.816	1.500	1.500	5000	29.60	16.90
20-055	1.115-1.128	1.134	2.063	1.875	2000	45.80	26.20
20-089	---	1.066	2.063	1.875	4000	45.80	26.20
24-055	1.324-1.337	1.384	2.338	2.125	2000	67.30	38.50

NOTES:

/1/ MATERIAL:

- a. CODE LETTER P – TYPE 17-4PH CORROSION RESISTANT STEEL PER AMS 5643.
- b. CODE LETTER T – TYPE 6AL-4V TITANIUM ALLOY BAR PER AMS 4965.
- c. CODE LETTER V – TYPE 15-5PH, CONDITION H1075 STA, CORROSION RESISTANT STEEL PER AMS 5659.
- d. CODE LETTER Y – TYPE 718 CORROSION AND HEAT RESISTANT NICKEL ALLOY PER AMS 5663

2. HEAT TREATMENT:

- a. MATERIAL CODE LETTER P – CONDITION H1075 PER AMS 2759/3.
- b. MATERIAL CODE LETTER T, Y – NONE.
- c. MATERIAL CODE LETTER V – AGE TO CONDITION H1075 PER AMS-H-6875 OR AMS 2759/3.

3. FINISH:

- a. MATERIAL CODE LETTER P – PASSIVATE PER AMS-QQ-P-35, TYPE VI OR VII.
- b. MATERIAL CODE LETTER T – NONE.
- c. MATERIAL CODE LETTER V – PASSIVATE PER AMS-QQ-P-35, TYPE VI OR VII.

/4/ DRY FILM LUBRICANT

- a. MATERIAL CODES: P, V, T, (400°F MAX) LUBRICANT CODE "L" AS5272 TYPE I
- b. MATERIAL CODE:Y, (1300°F MAX) LUBRICANT CODE "H" AS1701 TYPE IV

APPLY DRY FILM LUBRICANT TO THE THREADS OF THE NUT.
MINOR OVER SPRAY ON THE OUTSIDE OF THE NUT IS PERMITTED.

/5/ PROCUREMENT SPECIFICATION: AS4510 EXCEPT AS SPECIFIED ON THIS STANDARD. THIS PART SHALL BE QUALIFIED TO THE PROCUREMENT SPECIFICATION IN A COMPLETE ASSEMBLY. The AS4209 FITTING END SHALL HAVE BEEN QUALIFIED TO THE APPLICABLE REQUIREMENTS ON AS85421 OR AS85721. USERS OF THIS STANDARD SHALL PROCURE THE PRODUCT FROM ACCREDITED MANUFACTURER(S), OR ACCREDITED DISTRIBUTOR(S), AS LISTED IN THE PERFORMANCE REVIEW INSTITUTE (PRI) QUALIFIED PRODUCTS LIST (QPL) PRI-QPL-AS85421 FOR THIS STANDARD. SEE <http://www.pri.sae.org/QPL/AS85421/> FOR CURRENT QPL ON-LINE.

/6/ IDENTIFICATION AT LOCATION SHOWN: MARK PER AS478 CLASS C OR D, OR METHOD 7A3, 15A3, OR 15B. MANUFACTURER'S IDENTIFICATION, CAGE CODE NUMBER OR TRADEMARK, BASIC PART NUMBER, MATERIAL CODE LETTER AND TUBE WALL.

/7/ THIS PART IS DESIGNED FOR USE IN SYSTEMS WITH MAXIMUM OPERATING PRESSURES SHOWN IN TABLE 1B WITH RECOMMENDATION THAT THE MINIMUM WALL THICKNESS OF THE TUBING WELDED TO THE AS4697 FITTING END OF PORT #2 BE THE VALUE SHOWN FOR THE APPROPRIATE OPERATING PRESSURE IN ARP4698. THINNER WALL THICKNESSES MAY BE USED.

/8/ IF PORT #2 IS STYLE A, OD WILL EXTEND THROUGHOUT THE PART AND ØC WILL NOT APPLY.

9. INTERPRETATION OF DRAWING PER ARP4296.

10. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M; REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, MACHINED SURFACES TO BE 125 µin Ra. SURFACES OF HEX FLATS ON NUT MAY BE 250 µin Ra.

11. BREAK EDGES .003 TO .015 UNLESS OTHERWISE SPECIFIED.

12. DIMENSIONING AND TOLERANCING: ASME Y14.5M-1994.

15. DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS ±.010, ANGULAR DIMENSIONS ±0°30'.

 An SAE International Group	AEROSPACE STANDARD	SAE AS4227 SHEET 3 OF 4	REV. A
	FITTING ASSEMBLY, ADAPTER, INTERNAL THREAD, BEAM SEAL TO INTEGRAL WELD RING		