

REV.
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AS4228

FEDERAL SUPPLY CLASS
4730

RATIONALE

1. ADD PROCUREMENT SPECIFICATION AS85720 IN ADDITION TO AS85421.
2. REVISE NOTE /5/ TO AGREE WITH THE PROCUREMENT SPECIFICATION CHANGED.
3. ADD NOTES 15 AND 16 TO SUPPORT GOVERNMENT PROCUREMENTS.
4. ADD TABLES 2A AND 2B WELDED FITTING END WITH PIN FOR 5000 PSI AND 4000 PSI AND BELOW TO BE USED WITH 5000 PSI AND 4000 PSI BEAM SEAL FITTINGS LISTED IN QPL-AS85720 AND QPL-AS85421.

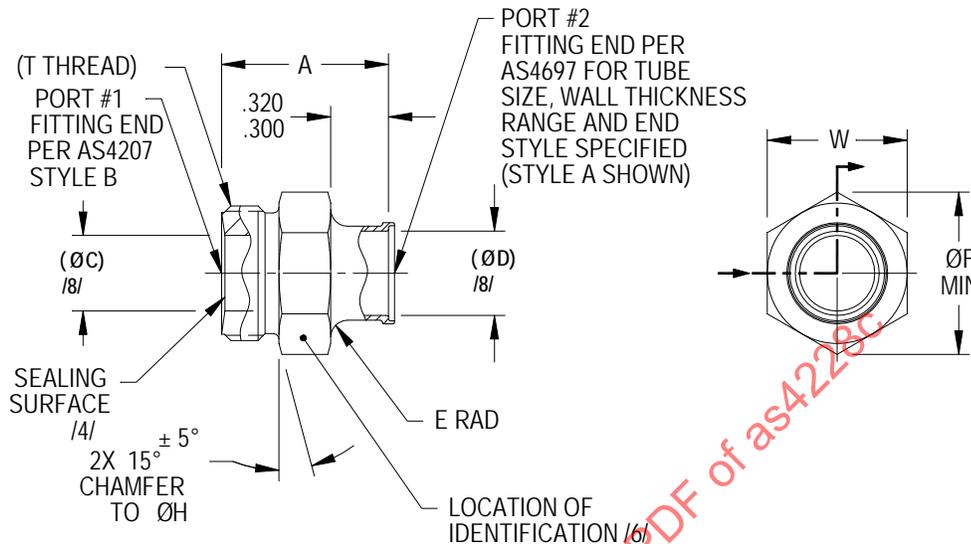


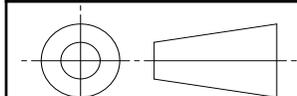
FIGURE 1 - FITTING, ADAPTER

TABLE 1A - DIMENSIONS

BASIC NO. AS4228 /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 ±.010	C /8/
03-018	.016-.018	.188	.3750-28 UNJS	A	.733	---
03-022	.019-.022	.188	.3750-28 UNJS	A	.733	---
04-022	.019-.022	.250	.4375-24 UNJS	B	.775	.189
05-022	.019-.022	.312	.5000-24 UNJS	B	.806	.237
05-028	.023-.028	.312	.5000-24 UNJS	B	.806	.237
06-022	.019-.022	.375	.5625-20 UNJS	B	.836	.302
06-028	.023-.028	.375	.5625-20 UNJS	B	.836	.302
06-032	.029-.032	.375	.5625-20 UNJS	B	.836	.302
08-022	.019-.022	.500	.7188-20 UNJS	B	.895	.403
08-043	.033-.043	.500	.7188-20 UNJS	A	.895	---
10-028	.023-.028	.625	.8438-18 UNJS	B	.977	.518
10-043	.033-.043	.625	.8438-18 UNJS	B	.977	.518
10-055	.044-.055	.625	.8438-18 UNJS	A	.977	---

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THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: /5/ AS85421 OR AS85720



AEROSPACE STANDARD

(R) FITTING, ADAPTER, EXTERNAL THREAD, BEAM SEAL TO INTEGRAL WELD RING

AS4228
SHEET 1 OF 5

REV.
C

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TABLE 1A - DIMENSIONS (CONTINUED)

BASIC NO. AS4228 /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 ±.010	C /8/
12-028	.023-.028	.750	1.0000-16 UNJ	B	1.014	.654
12-055	.044-.055	.750	1.0000-16 UNJ	A	1.014	---
12-065	.056-.065	.750	1.0000-16 UNJ	A	1.014	---
14-032	.029-.032	.875	1.1250-16 UNJ	B	1.036	.774
14-065	.056-.065	.875	1.1250-16 UNJ	A	1.036	---
16-043	.033-.043	1.000	1.2500-14 UNJ	B	1.065	.868
16-078	.066-.078	1.000	1.2500-14 UNJS	A	1.065	---
16-089	.079-.089	1.000	1.2500-14 UNJS	A	1.065	---
20-055	.044-.055	1.250	1.5781-14 UNJS	B	1.125	1.122
20-089	.079-.089	1.250	1.5781-14 UNJS	A	1.125	---
24-055	.044-.055	1.500	1.8438-14 UNJS	B	1.210	1.330

TABLE 1B - DIMENSIONS AND WEIGHTS

BASIC NO. AS4228 /14/ SIZE AND TUBE WALL CODES	D /8/	E	F	H ±.010	W	RECOMMENDED MAXIMUM PRESSURE PSI /7/	APPROX MASS CRES LB/100	APPROX MASS TI LB/100
03-018	.146	.080	.495	.418	.428- .440	5000	1.54	.882
03-022	.138	.080	.495	.418	.428- .440	5000	1.54	.882
04-022	.200	.080	.568	.480	.490- .502	5000	2.25	1.29
05-022	.262	.080	.638	.542	.552- .565	4000	3.04	1.74
05-028	.250	.080	.638	.542	.552- .565	5000	3.04	1.74
06-022	.325	.090	.709	.605	.615- .628	3000	3.70	2.11
06-028	.313	.090	.709	.605	.615- .628	4000	3.70	2.11
06-032	.305	.090	.709	.605	.615- .628	5000	3.70	2.11
06-022	.305	.090	.709	.605	.615- .628	5000	3.70	2.11
08-022	.450	.090	.851	.730	.740- .753	2000	6.17	3.52
08-043	.408	.090	.851	.730	.740- .753	5000	6.17	3.52
10-028	.563	.125	.993	.855	.865- .878	2000	8.64	4.94
10-043	.533	.125	.993	.855	.865- .878	4000	8.64	4.94
10-055	.509	.125	.993	.855	.865- .878	5000	8.64	4.94
12-028	.688	.125	1.190	1.040	1.050-1.065	2000	12.00	6.85
12-055	.634	.125	1.190	1.040	1.050-1.065	4000	12.00	6.85
12-065	.614	.125	1.190	1.040	1.050-1.065	5000	12.00	6.85
14-032	.805	.125	1.330	1.166	1.176-1.191	2000	14.60	8.35
14-065	.739	.125	1.330	1.166	1.176-1.181	4000	14.60	8.35
16-043	.908	.125	1.470	1.290	1.300-1.317	2000	18.30	10.50
16-078	.838	.125	1.470	1.290	1.300-1.317	4000	18.30	10.50
16-089	.816	.125	1.470	1.290	1.300-1.317	5000	18.30	10.50
20-055	1.134	.180	1.788	1.603	1.613-1.630	2000	30.60	17.50
20-089	1.066	.180	1.788	1.603	1.613-1.630	4000	30.60	17.50
24-055	1.384	.180	2.063	1.853	1.863-1.880	2000	43.30	24.80

NOTES:

/1/ MATERIAL:

- a. CODE LETTER P – TYPE 17-4PH, CORROSION RESISTANT STEEL PER AMS5643.
- b. CODE LETTER T – TYPE 6Al-4V, TITANIUM ALLOY BAR PER AMS4965.
- c. CODE LETTER V – TYPE 15-5PH, CONDITION H1075 STA, CORROSION RESISTANT STEEL PER AMS5659.
- d. CODE LETTER Y – TYPE 718, CORROSION AND HEAT RESISTANT NICKEL ALLOY PER AMS5663.

2. HEAT TREATMENT:

- a. MATERIAL CODE LETTER P – CONDITION H1075 PER AMS2759/3.
- b. MATERIAL CODE LETTER T, Y – NONE.
- c. MATERIAL CODE LETTER V – AGE TO CONDITION H1075 PER AMS-H-6875 OR AMS2759/3.

3. FINISH:

- a. MATERIAL CODE LETTER P – PASSIVATE PER AMS2700, TYPE 2 OR 8.
- b. MATERIAL CODE LETTER T, Y – NONE.
- c. MATERIAL CODE LETTER V – PASSIVATE PER AMS2700, TYPE 2 OR 8.

/4/ DRY FILM LUBRICANT

- a. MATERIAL CODE LETTERS: P, V, T, (400 °F MAX) LUBRICANT PER AS5272 TYPE I OR TYPE III.
- b. MATERIAL CODE: LETTER Y, (1300 °F MAX) LUBRICANT PER AS1701 CLASS IV.

APPLY DRY FILM LUBRICANT TO SEALING SURFACE. OVER SPRAY IN BORE IS NOT PERMITTED.

/5/ PROCUREMENT SPECIFICATION: AS85421 FOR SYSTEM PRESSURE 4000 PSI AND BELOW OR AS85720 FOR SYSTEM PRESSURE ABOVE 4000 PSI. THESE PARTS SHALL BE QUALIFIED TO THE APPLICABLE REQUIREMENT OF PROCUREMENT SPECIFICATION AS A COMPLETE ASSEMBLY. THE WELDED FITTING END AND WELDED FITTING PARTS SHALL MEET THE PERFORMANCE REQUIREMENTS OF AS4510. PRODUCT SUPPLIED TO THIS SPECIFICATION SHALL BE MANUFACTURED BY THE ACCREDITED MANUFACTURER LISTED IN THE PERFORMANCE REVIEW INSTITUTE (PRI) QUALIFIED PRODUCT LIST (QPL) PRI-QPL-AS85421 OR PRI-QPL-AS85720 AS APPLICABLE FOR THIS STANDARD. SEE <http://www.eAuditNet.com> FOR CURRENT QPL ONLINE.

/6/ IDENTIFICATION AT LOCATION SHOWN: MARK PER AS478 CLASS C OR D, OR METHOD 7A3, 15A3, OR 15B. MANUFACTURER'S IDENTIFICATION: CAGE CODE 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, ØD WILL EXTEND THROUGHOUT THE PART AND ØC WILL NOT APPLY.

9. INTERPRETATION OF DRAWING PER AS4296.

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

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

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

13. DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS ±.005, ANGULAR DIMENSIONS ±0°30'.

	AEROSPACE STANDARD	AS4228 SHEET 3 OF 5	REV. C
	(R) FITTING, ADAPTER, EXTERNAL THREAD, BEAM SEAL TO INTEGRAL WELD RING		

TABLE 2A - FITTINGS, WELDED END, MEET THE PERFORMANCE REQUIREMENTS OF AS4510 AND AS4510/2, 5000 PSI SYSTEM

DASH NUMBER	TUBE WALL CODE	FITTING PART NUMBER			RECOMMENDED PRESSURE (PSI) MAX
		TITANIUM	15-5 CRES	17-4 CRES	
03	.018	AS4228T03-018	AS4228V03-018	AS4228P03-018	5000
03	.022	AS4228T03-022	AS4228V03-022	AS4228P03-022	5000
04	.022	AS4228T04-022	AS4228V04-022	AS4228P04-022	5000
05	.028	AS4228T05-028	AS4228V05-028	AS4228P05-028	5000
06	.032	AS4228T06-032	AS4228V06-032	AS4228P06-032	5000
08	.043	AS4228T08-043	AS4228V08-043	AS4228P08-043	5000
10	.055	AS4228T10-055	AS4228V10-055	AS4228P10-055	5000
12	.065	AS4228T12-065	AS4228V12-065	AS4228P12-065	5000
16	.089	AS4228T16-089	AS4228V16-089	AS4228P16-089	5000

TABLE 2B - FITTINGS, WELDED END, MEET THE PERFORMANCE REQUIREMENTS OF AS4510 AND AS4510/2, 4000 PSI SYSTEM AND BELOW

DASH NUMBER	TUBE WALL CODE	FITTING PART NUMBER			RECOMMENDED PRESSURE (PSI) MAX
		TITANIUM	15-5 CRES	17-4 CRES	
05	.022	AS4228T05-022	AS4228V05-022	AS4228P05-022	4000
06	.022	AS4228T06-022	AS4228V06-022	AS4228P06-022	3000
06	.028	AS4228T06-028	AS4228V06-028	AS4228P06-028	4000
08	.022	AS4228T08-022	AS4228V08-022	AS4228P08-022	2000
10	.028	AS4228T10-028	AS4228V10-028	AS4228P10-028	2000
10	.043	AS4228T10-043	AS4228V10-043	AS4228P10-043	4000
12	.028	AS4228T12-028	AS4228V12-028	AS4228P12-028	2000
12	.055	AS4228T12-055	AS4228V12-055	AS4228P12-055	4000
14	.032	AS4228T14-032	AS4228V14-032	AS4228P14-032	2000
14	.065	AS4228T14-065	AS4228V14-065	AS4228P14-065	4000
16	.043	AS4228T16-043	AS4228V16-043	AS4228P16-043	2000
16	.078	AS4228T16-078	AS4228V16-078	AS4228P16-078	4000
20	.055	AS4228T20-055	AS4228V20-055	AS4228P20-055	2000
20	.089	AS4228T20-089	AS4228V20-089	AS4228P20-089	4000
24	.055	AS4228T24-055	AS4228V24-055	AS4228P24-055	2000

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