FEDERAL SUPPLY CLASS
4730

RATIONALE

1. FIX TYPOS, RETYPE TABLES, REVISE GRAPHICS AND GENERAL UPDATES.
2. REVISE NOTE 5 TO CHANGE PROCUREMENT SPECIFICATION AND TO CLARIFY QPL REQUIREMENTS. FOR THE REDUCED WELD WALL THICKNESS FITTINGS SHOWN IN TABLE 2B (SIZE 03-018, 08-022, ETC…), REFER TO AS4510/2 FOR REDUCED PRESSURE TESTING (LESS THAN AS85421) QUALIFICATION REQUIREMENTS.
3. REVISE TABLE 1 AND 2 TO CLARIFY PROCUREMENT SPECIFICATION, MATERIAL, RECOMMENDED OPERATING PRESSURES AND APPLICABLE SIZE AND TUBE WALL CODES.
4. SIZE 03-018 WAS INCORRECTLY RATED AT 5000 PSI, CHANGE TO 3000 PSI IN BOTH CRES AND TITANIUM TO MATCH PROCUREMENT SPECIFICATION. USERS SHOULD USE SIZE 03-022 FOR 5000 PSI APPLICATIONS.

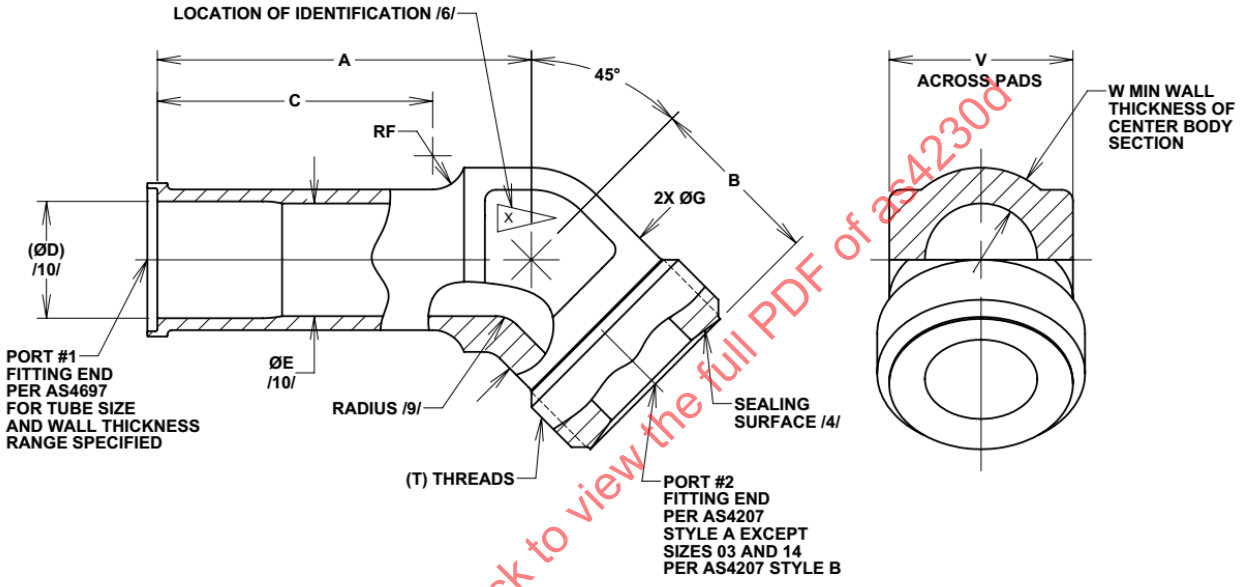

FIGURE 1 - FITTING, ELBOW, 45°

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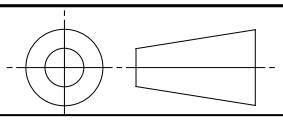
ISSUED 1996-05 REAFFIRMED 2015-04 REVISED 2019-08

THIRD ANGLE PROJECTION



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http://standards.sae.org/AS4230D

CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: AS85421 OR AS85720 /5/

AEROSPACE STANDARD

(R) FITTING, ELBOW, 45°, EXTERNAL THREAD, BEAM SEAL TO INTEGRAL WELD RING

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TABLE 1 - DIMENSIONS AND WEIGHTS

BASIC NO. AS4230 /16/ SIZE AND TUBE WALL CODES	(NOM. TUBE SIZE)	PORT #1 STYLE /10/	T THREAD PER AS8879 CLASS 3A	A	B	C	D	E	F ±.005	G MIN	V	W	LB/EA MAX CRES	LB/EA MAX TI
03-018	.188	A	.3750-28 UNJS	.832	.378	.610	.146	-	.080	.285	.360- .377	.055	.0175	.0100
03-022	.188	A	.3750-28 UNJS	.832	.378	.610	.138	-	.080	.285	.360- .377	.055	.0175	.0100
04-022	.250	B	.4375-24 UNJS	.832	.420	.680	.200	.184- .194	.080	.329	.360- .377	.060	.0204	.0116
05-022	.312	B	.5000-24 UNJS	.887	.438	.650	.262	.232- .242	.080	.391	.423- .440	.060	.0300	.0171
05-028	.312	B	.5000-24 UNJS	.887	.438	.650	.250	.232- .242	.080	.391	.423- .440	.060	.0300	.0171
06-022	.375	B	.5625-20 UNJS	1.005	.471	.740	.325	.297- .307	.090	.454	.485- .502	.060	.0388	.0222
06-028	.375	B	.5625-20 UNJS	1.005	.471	.740	.313	.297- .307	.090	.454	.485- .502	.060	.0388	.0222
06-032	.375	B	.5625-20 UNJS	1.005	.471	.740	.305	.297- .307	.090	.454	.485- .502	.060	.0388	.0222
08-022	.500	B	.7188-20 UNJS	1.180	.528	.820	.450	.398- .408	.090	.547	.547- .565	.065	.0592	.0338
08-043	.500	B	.7188-20 UNJS	1.180	.528	.820	.408	.398- .408	.090	.547	.547- .565	.065	.0592	.0338
10-028	.625	B	.8438-18 UNJS	1.243	.619	.880	.563	.512- .523	.125	.673	.673- .691	.070	.0874	.0500
10-043	.625	B	.8438-18 UNJS	1.243	.619	.880	.533	.512- .523	.125	.673	.673- .691	.070	.0874	.0500
10-055	.625	A	.8438-18 UNJS	1.243	.619	.880	.509	-	.125	.673	.673- .691	.070	.0874	.0500
12-028	.750	B	1.0000-16 UNJ	1.392	.685	.980	.688	.649- .660	.125	.860	.860- .878	.095	.132	.0753
12-055	.750	A	1.0000-16 UNJ	1.392	.685	.980	.634	-	.125	.860	.860- .878	.095	.132	.0753
12-065	.750	A	1.0000-16 UNJ	1.392	.685	.980	.614	-	.125	.860	.860- .878	.095	.132	.0753
14-032	.875	B	1.1250-16 UNJ	1.562	.753	1.090	.805	.769- .780	.125	1.110	1.110-1.128	.105	.234	.134
14-065	.875	A	1.1250-16 UNJ	1.562	.753	1.090	.739	-	.125	1.110	1.110-1.128	.105	.234	.134
16-043	1.000	B	1.2500-14 UNJS	1.617	.783	1.150	.908	.862- .874	.125	1.110	1.110-1.128	.110	.239	.136
16-078	1.000	A	1.2500-14 UNJS	1.617	.783	1.150	.838	-	.125	1.110	1.110-1.128	.110	.239	.136
16-089	1.000	A	1.2500-14 UNJS	1.617	.783	1.150	.816	-	.125	1.110	1.110-1.128	.110	.239	.136
20-055	1.250	B	1.5781-14 UNJS	1.750	.836	1.170	1.134	1.115-1.128	.180	1.360	1.355-1.380	.110	.344	.197
20-089	1.250	A	1.5781-14 UNJS	1.750	.836	1.170	1.066	-	.180	1.360	1.355-1.380	.110	.344	.197
24-055	1.500	B	1.8438-14 UNJS	1.900	1.003	1.270	1.384	1.324-1.337	.180	1.610	1.605-1.630	.130	.557	.318

TABLE 2 - SIZE AND TUBE WALL CODES, RECOMMENDED MAXIMUM SYSTEM PRESSURE

TABLE 2A - SIZE AND TUBE WALL CODES FOR AS85720, AS4510, AND AS4510/2

BASIC NO. AS4230 /16/ SIZE AND TUBE WALL CODES	RANGE OF NOMINAL TUBE WALL FOR PORT #1 /7/ /16/	RECOMMENDED MAXIMUM SYSTEM PRESSURE (PSI) /5/ /7/	
		TI	CRES
03-022	.019-.022	5000	5000
04-022	.019-.022	5000	5000
05-028	.023-.028	5000	5000
06-032	.029-.032	5000	5000
08-043	.033-.043	5000	5000
10-055	.044-.055	5000	5000
12-065	.056-.065	5000	5000
16-089	.079-.089	5000	5000

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TABLE 2B - SIZE AND TUBE WALL CODES FOR AS85421, AS4510, AND AS4510/2

BASIC NO. AS4230 /16/ SIZE AND TUBE WALL CODES	RANGE OF NOMINAL TUBE WALL FOR PORT #1 /7/ /16/	RECOMMENDED MAXIMUM SYSTEM PRESSURE (PSI) /5/ /7/	
		TI	CRES
03-018	.016-.018	3000	3000
05-022	.019-.022	4000	3000
06-022	.019-.022	3000	3000
06-028	.023-.028	4000	3000
08-022	.019-.022	2000	2000
10-028	.023-.028	2000	2000
10-043	.033-.043	4000	3000
12-028	.023-.028	2000	2000
12-055	.044-.055	4000	3000
14-032	.029-.032	2000	2000
14-065	.056-.065	4000	3000
16-043	.033-.043	2000	2000
16-078	.066-.078	4000	3000
20-055	.044-.055	2000	2000
20-089	.079-.089	4000	3000
24-055	.044-.055	2000	2000

NOTES:

/1/ MATERIAL:

a. CODE LETTER T - TYPE 6Al-4V TITANIUM ALLOY FORGING OR BAR PER AMS4965.

b. CODE LETTER P - TYPE 17-4PH CORROSION RESISTANT STEEL FORGING OR BAR PER AMS5643.

c. CODE LETTER V - TYPE 15-5PH CORROSION RESISTANT STEEL FORGING OR BAR PER AMS5659.

2. HEAT TREATMENT:

a. MATERIAL CODE LETTER T - NONE.

b. MATERIAL CODE LETTERS P AND V - HEAT TREAT TO CONDITION H1075 PER AMS2759/3.

3. FINISH:

a. MATERIAL CODE LETTER T - NONE.

b. MATERIAL CODE LETTER P AND V - PASSIVATE PER AMS2700, TYPE 2 OR 8.

/4/ SOLID FILM LUBRICANT: APPLY SOLID FILM LUBRICANT PER AS5272, TYPE I TO THE SEALING SURFACE OF THE AS4207 FITTING END. OVERSPRAY IN BORE IS NOT PERMITTED.

/5/ PROCUREMENT SPECIFICATION: AS85421 FOR MAXIMUM SYSTEM PRESSURE 4000 PSI AND BELOW OR AS85720 FOR MAXIMUM SYSTEM PRESSURE ABOVE 4000 PSI, SEE TABLES 2A AND 2B FOR APPLICABLE SIZE AND TUBE WALL CODES AND THE RECOMMENDED MAXIMUM SYSTEM PRESSURE. 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 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 NUMBER OR TRADEMARK, BASIC NUMBER, MATERIAL CODE LETTER, AND TUBE WALL CODE.

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