

REV.
D

AS5195™

RATIONALE

"INACTIVE" STATUS REPLACED BY "NOT RECOMMENDED." CADMIUM WARNING NOTE RELOCATED AS FIRST NOTE. ALTERNATE MATERIALS ADDED TO NOTE 1. SPECIFICATION CALLOUTS UPDATED TO CURRENT ISSUE. NOTE 3.g.2 REVISED. QML STATEMENT REVISED. "INTENDED USE" NOTE REVISED. NEW NOTE 18 ADDED.

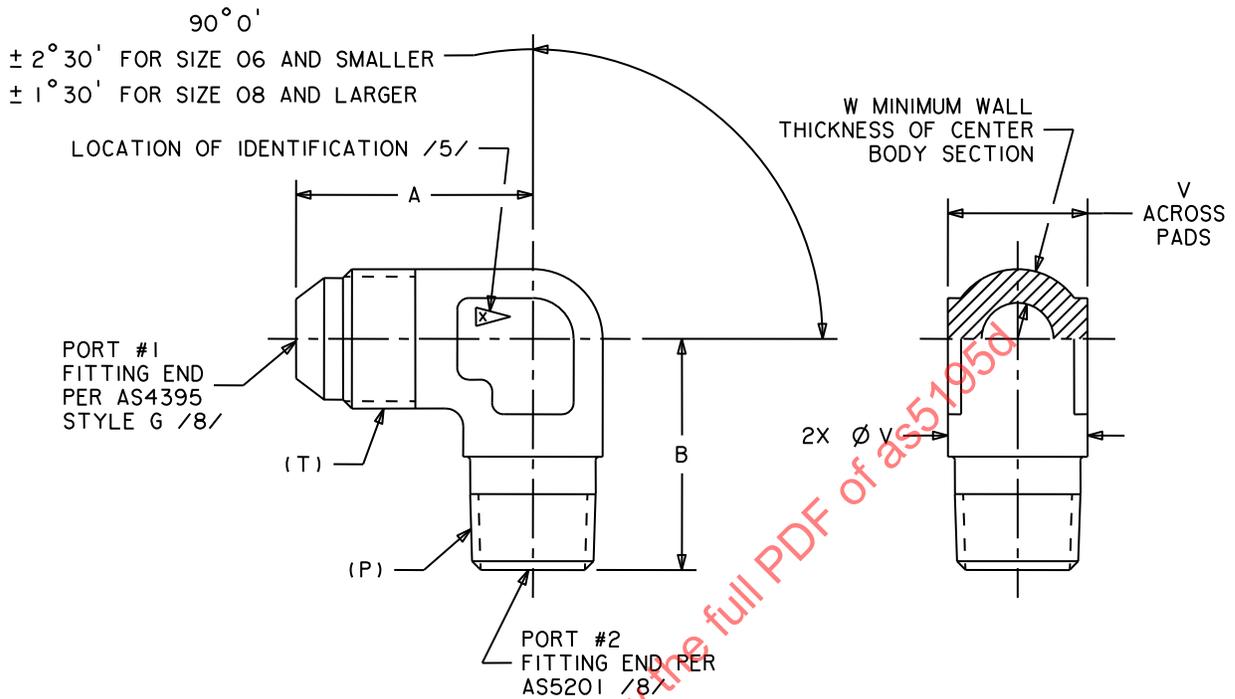
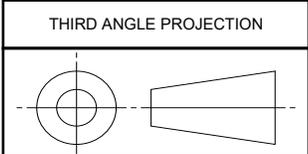


FIGURE 1 - FITTING, ELBOW, 90°

NOT RECOMMENDED IN PART - SEE NOTE /17/

For more information on this standard, visit
<https://www.sae.org/standards/content/AS5195D>



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: AS4842/1 /4/



AEROSPACE STANDARD

(R) FITTING, ELBOW, 90°,
FLARED TO PIPE

AS5195™
SHEET 1 OF 5

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TABLE 1 - DIMENSIONS A-B

BASIC NO. AS5195 /16/ SIZE CODE	(NOMINAL TUBE SIZE) PORT #1	(NOMINAL PIPE SIZE) PORT #2	P THREAD PER AS71051 ANPT	T THREAD PER AS8879 CLASS 3A	PORT #2 STYLE	A	B
0202	.125	.125	1/8-27	.3125-24 UNJF	B	.790	.743
0302	.188	.125	1/8-27	.3750-24 UNJF	B	.852	.743
0402	.250	.125	1/8-27	.4375-20 UNJF	C	.915	.805
0404	.250	.250	1/4-18	.4375-20 UNJF	A	1.055	1.086
0502	.312	.125	1/8-27	.5000-20 UNJF	C	.977	.805
0504	.312	.250	1/4-18	.5000-20 UNJF	A	1.055	1.086
0602	.375	.125	1/8-27	.5625-18 UNJF	C	1.055	.899
0604	.375	.250	1/4-18	.5625-18 UNJF	A	1.086	1.118
0606	.375	.375	3/8-18	.5625-18 UNJF	C	1.212	1.212
0608	.375	.500	1/2-14	.5625-18 UNJF	C	1.336	1.462
0806	.500	.375	3/8-18	.7500-16 UNJF	C	1.274	1.243
1008	.625	.500	1/2-14	.8750-14 UNJF	C	1.477	1.493

TABLE 1A - DIMENSIONS V-W AND WEIGHTS

BASIC NO. AS5195 /16/ SIZE CODE	V	W	LB/EA APPROX REF AL	LB/EA APPROX REF COPPER	LB/EA APPROX REF STEEL
0202	.297-.314	.090	.0122	.0370	.0349
0302	.360-.377	.100	.0177	.0537	.0507
0402	.423-.440	.110	.0251	.0762	.0720
0404	.547-.565	.120	.0485	.147	.139
0502	.485-.502	.120	.0334	.101	.0958
0504	.547-.565	.120	.0476	.145	.137
0602	.547-.565	.120	.0454	.138	.130
0604	.547-.565	.120	.0473	.144	.136
0606	.735-.753	.150	.0953	.290	.274
0608	.860-.878	.170	.149	.452	.427
0806	.735-.753	.150	.0971	.295	.279
1008	.860-.878	.170	.146	.443	.419

TABLE 1B - DIMENSIONS A-B

BASIC NO. AS5195 /16/ SIZE CODE	(NOMINAL TUBE SIZE) PORT #1	(NOMINAL PIPE SIZE) PORT #2	P THREAD PER AS71051 ANPT	T THREAD PER AS8879 CLASS 3A	PORT #2 STYLE	A	B
1012	.625	.750	3/4-14	.8750-14 UNJF	A	1.649	1.586
1208	.750	.500	1/2-14	1.0625-12 UNJ	C	1.649	1.586
1212	.750	.750	3/4-14	1.0625-12 UNJ	A	1.680	1.618
1216	.750	1.000	1-11 1/2	1.0625-12 UNJ	A	1.805	1.962
1612	1.000	.750	3/4-14	1.3125-12 UNJ	C	1.836	1.743
1616	1.000	1.000	1-11 1/2	1.3125-12 UNJ	A	1.836	1.993
2016	1.250	1.000	1-11 1/2	1.6250-12 UNJ	C	2.055	2.399
2020	1.250	1.250	1 1/4-11 1/2	1.6250-12 UNJ	B	2.086	2.399
2420	1.500	1.250	1 1/4-11 1/2	1.8750-12 UNJ	C	2.227	2.524
2824	1.750	1.500	1 1/2-11 1/2	2.2500-12 UNJ	C	2.836	2.805
3232	2.000	2.000	2-11 1/2	2.5000-12 UNJ	C	3.086	3.024

TABLE 1C - DIMENSIONS V-W AND WEIGHTS

BASIC NO. AS5195 /16/ SIZE CODE	V	W	LB/EA APPROX REF AL	LB/EA APPROX REF COPPER	LB/EA APPROX REF STEEL
1012	1.047-1.065	.185	.237	.721	.681
1208	1.047-1.065	.185	.245	.745	.704
1212	1.047-1.065	.185	.230	.698	.659
1216	1.292-1.317	.205	.407	1.24	1.17
1612	1.292-1.317	.205	.395	1.20	1.13
1616	1.292-1.317	.205	.369	1.12	1.06
2016	1.605-1.630	.240	.728	2.21	2.09
2020	1.605-1.630	.240	.622	1.89	1.79
2420	1.855-1.880	.250	.944	2.87	2.71
2824	2.230-2.260	.350	1.63	4.96	4.69
3232	2.542-2.572	.350	2.36	7.17	6.77

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. DASH AS CODE LETTER – LOW ALLOY STEEL FORGING OR BAR, TYPE 4130 PER AMS-S-6758 OR AMS6370, OR TYPE 4140 PER AMS6349 OR AMS6382.
- b. CODE LETTER B – TYPE 377 COPPER ALLOY FORGING PER ASTM B124/B-124M OR AMS4614, OR BAR PER ASTM B138/B-138M.

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	(R) FITTING, ELBOW, 90°, FLARED TO PIPE		

- c. CODE LETTER D – TYPE 2014-T6 ALUMINUM ALLOY FORGING PER AMS-QQ-A-367 OR AMS4133, OR TYPE 2024-T6 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/6, OR TYPE 2024-T851 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/6 OR AMS4339. /17/
 - d. CODE LETTER J – TYPE 304 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS-QQ-S-763 OR AMS5639.
 - e. CODE LETTER K – TYPE 316 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS-QQ-S-763 OR AMS5648.
 - f. CODE LETTER R – TYPE 321 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS-QQ-S-763 OR AMS5645.
 - g. CODE LETTER W – TYPE 7075-T73 ALUMINUM ALLOY FORGING PER AMS-QQ-A-367 OR AMS4141, OR TYPE 7075-T73 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/9, OR TYPE 7075-T7351 ALUMINUM ALLOY BAR PER AMS4124.
2. HEAT TREATMENT:
- a. DASH AS CODE LETTER – SEE HARDNESS REQUIREMENT PER PROCUREMENT SPECIFICATION.
 - b. MATERIAL CODE LETTERS D AND W – SEE ELECTRICAL CONDUCTIVITY AND HARDNESS REQUIREMENT PER PROCUREMENT SPECIFICATION.
 - c. OTHER MATERIAL CODE LETTERS – NONE.
3. FINISH:
- a. DASH AS CODE LETTER – CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2, DYE BLACK AND COAT WITH A LIGHT FILM OF OIL PER PROCUREMENT SPECIFICATION.
 - b. MATERIAL CODE LETTER B – CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 3 OR NONE.
 - c. MATERIAL CODE LETTER D – ANODIZE PER AMS2472 OR MIL-A-8625, TYPE II, CLASS 2, DYE BLUE, DUPLEX SEAL PER PROCUREMENT SPECIFICATION.
 - d. MATERIAL CODE LETTER J – PASSIVATE PER AMS2700, TYPE 6 OR 7.
 - e. MATERIAL CODE LETTER K – PASSIVATE PER AMS2700, 6 OR 7.
 - f. MATERIAL CODE LETTER R – PASSIVATE PER AMS2700, 6 OR 7.
 - g. MATERIAL CODE LETTER W:
 - 1. ANODIZE PER AMS2472 OR MIL-A-8625, TYPE II, CLASS 2, DYE BROWN, DUPLEX SEAL PER PROCUREMENT SPECIFICATION.
 - 2. MATERIAL CODE W PARTS TO BE COATED WITH HIGH PURITY ALUMINUM ONLY WILL HAVE THE FINISH CODE LETTER "V" AFTER THE SIZE CODE IN THE PART NUMBER. HIGH PURITY ALUMINUM COAT PER PROCUREMENT SPECIFICATION. /16/
- /4/ PROCUREMENT SPECIFICATION: AS4842/1 EXCEPT AS SPECIFIED ON THIS STANDARD. PRODUCT MANUFACTURED TO THIS STANDARD SHALL MEET THE REQUIREMENTS SPECIFIED HEREIN AND THE PROCUREMENT SPECIFICATION. ORIGINAL COMPONENT MANUFACTURERS (OCM) AND VALUE ADDED DISTRIBUTORS (VAD) SHALL BE LISTED IN THE NADCAP QUALIFIED MANUFACTURER LIST (QML) FOR THIS PRODUCT TYPE. THE QML IS AVAILABLE AT www.eAuditNet.com.
- /5/ IDENTIFICATION AT LOCATION SHOWN: MARK PER AS478 CLASS C OR D, OR METHOD 7A3, 15A3, OR 15B.
- a. FOR SIZES 06 AND SMALLER: MANUFACTURER'S NAME, CAGE CODE OR TRADEMARK, LETTERS "AS," AND MATERIAL CODE LETTER.
 - b. FOR SIZES 08 AND LARGER: MANUFACTURER'S NAME, CAGE CODE OR TRADEMARK, BASIC PART NUMBER, AND MATERIAL CODE LETTER.
6. INTENDED USE: THIS PART IS DESIGNED FOR USE IN SYSTEMS WITH MAXIMUM OPERATING PRESSURES AS SPECIFIED IN THE PROCUREMENT SPECIFICATION.
7. THIS STANDARD IS A FUNCTIONAL EQUIVALENT OF MS20822 AND IS INTENDED TO BE SUITABLE AS A REPLACEMENT STANDARD.
- /8/ AT THE OPTION OF THE MANUFACTURER, THE SMALLEST ID OF EITHER THE AS4395 OR AS5201 FITTING ENDS FOR A GIVEN PART NUMBER MAY BE MACHINED INTO THE OTHER FITTING ENDS FOR THAT PART NUMBER.

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