

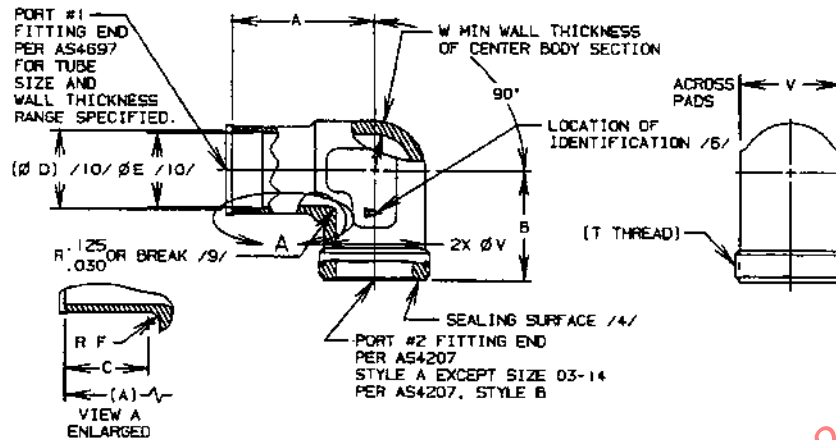
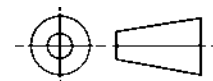


FIGURE 1 - FITTING, ELBOW, 90°

TABLE 1A - DIMENSIONS

BASIC NO. AS4232 /16/ SIZE AND TUBE WALL CODES	RANGE OF NOMINAL TUBE WALL FOR PORT #2 /7/ /18/	(NOMINAL TUBE SIZE)	PORT #1 STYLE /10/	T THREAD PER MIL-S-8879 CLASS 3A	A	B	C	D /10/
03-018	.016-.018	.188	A	.3750-28 UNJS	.832	.575	.530	.146
03-022	.019-.022	.188	A	.3750-28 UNJS	.832	.575	.530	.138
04-022	.019-.022	.250	B	.4375-24 UNJS	.832	.617	.500	.200
05-022	.019-.022	.312	B	.5000-24 UNJS	.887	.653	.520	.262
05-028	.023-.028	.312	B	.5000-24 UNJS	.887	.653	.520	.250
06-022	.019-.022	.375	B	.5625-20 UNJS	1.005	.704	.670	.325
06-028	.023-.028	.375	B	.5625-20 UNJS	1.005	.704	.670	.313
06-032	.029-.032	.375	B	.5625-20 UNJS	1.005	.704	.670	.305
08-022	.019-.022	.500	B	.7188-20 UNJS	1.180	.824	.700	.450
08-043	.033-.043	.500	B	.7188-20 UNJS	1.180	.824	.700	.408
10-028	.023-.028	.625	B	.8438-18 UNJS	1.243	.955	.660	.563
10-043	.033-.043	.625	B	.8438-18 UNJS	1.243	.955	.660	.533
10-055	.044-.055	.625	A	.8438-18 UNJS	1.243	.955	.660	.509
12-028	.023-.028	.750	B	1.0000-16 UNJ	1.392	1.062	.730	.688
12-055	.044-.055	.750	A	1.0000-16 UNJ	1.392	1.062	.730	.634
12-065	.056-.065	.750	A	1.0000-16 UNJ	1.392	1.062	.730	.614
14-032	.029-.032	.875	B	1.1250-16 UNJ	1.562	1.216	.840	.805
14-065	.056-.065	.875	A	1.1250-16 UNJ	1.562	1.216	.840	.739
16-043	.033-.043	1.000	B	1.2500-14 UNJS	1.617	1.246	.830	.908
16-078	.066-.078	1.000	A	1.2500-14 UNJS	1.617	1.246	.830	.838
16-089	.079-.089	1.000	A	1.2500-14 UNJS	1.617	1.246	.830	.816
20-055	.044-.055	1.250	B	1.5781-14 UNJS	1.750	1.387	.750	1.134
20-089	.079-.089	1.250	A	1.5781-14 UNJS	1.750	1.387	.750	1.066
24-055	.044-.055	1.500	B	1.8438-14 UNJS	1.900	1.688	.760	1.384

THIRD ANGLE PROJECTION



CUSTODIAN: SAE G-3/G-3B

PROCUREMENT SPECIFICATION: /5/ AS4510

SAE The Engineering Society
For Advancing Mobility
Land Sea Air and Space
INTERNATIONAL
400 Commonwealth Drive, Warrendale, PA 15096-0001

AEROSPACE STANDARD

FITTING, ELBOW, 90°, EXTERNAL THREAD,
BEAM SEAL TO INTEGRAL WELD RING

AS4232
SHEET 1 OF 3

TABLE 1B - DIMENSIONS AND WEIGHTS

BASIC NO. AS4232 /16/ SIZE AND TUBE WALL CODES	E /10/	F ±.005	V	W	RECOMMENDED MAXIMUM PRESSURE PSI /7/	LB/EA MAX CRES	LB/EA MAX TI
03-018	—	.080	.360- .377	.055	5000	.0397	.0227
03-022	—	.080	.360- .377	.055	5000	.0397	.0227
04-022	.184- .194	.080	.360- .377	.060	5000	.0422	.0241
05-022	.232- .242	.080	.423- .440	.060	4000	.0573	.0328
05-028	.232- .242	.080	.423- .440	.060	5000	.0573	.0328
06-022	.297- .307	.090	.485- .502	.060	3000	.0748	.0427
06-028	.297- .307	.090	.485- .502	.060	4000	.0748	.0427
06-032	.297- .307	.090	.485- .502	.060	5000	.0748	.0427
08-022	.398- .408	.090	.547- .565	.065	2000	.0982	.0561
08-043	.398- .408	.090	.547- .565	.065	5000	.0982	.0561
10-028	.512- .523	.125	.673- .691	.070	2000	.143	.0820
10-043	.512- .523	.125	.673- .691	.070	4000	.143	.0820
10-055	—	.125	.673- .691	.070	5000	.143	.0820
12-028	.649- .660	.125	.860- .878	.095	2000	.234	.133
12-055	—	.125	.860- .878	.095	4000	.234	.133
12-065	—	.125	.860- .878	.095	5000	.234	.133
14-032	.769- .780	.125	1.110-1.128	.105	2000	.461	.263
14-065	—	.125	1.110-1.128	.105	4000	.461	.263
16-043	.862- .874	.125	1.110-1.128	.110	2000	.413	.236
16-078	—	.125	1.110-1.128	.110	4000	.413	.236
16-089	—	.125	1.110-1.128	.110	5000	.413	.236
20-055	1.115-1.128	.180	1.355-1.380	.110	2000	.572	.327
20-089	—	.180	1.355-1.380	.110	4000	.572	.327
24-055	1.324-1.337	.180	1.605-1.630	.130	2000	.894	.511

NOTES:

- /1/ MATERIAL:
- CODE LETTER T - TYPE 6AL-4V TITANIUM ALLOY FORGING OR BAR PER AMS 4965.
 - CODE LETTER P - TYPE 17-4PH CORROSION RESISTANT STEEL FORGING OR BAR PER AMS 5643.
 - CODE LETTER V - TYPE 15-5PH CORROSION RESISTANT STEEL FORGING OR BAR PER AMS 5659.
2. HEAT TREATMENT:
- MATERIAL CODE LETTER T - NONE.
 - MATERIAL CODE LETTERS P AND V - HEAT TREAT TO CONDITION H 1075 PER AMS 2759/3.
3. FINISH: NONE
- /4/ DRY FILM LUBRICANT: APPLY DRY FILM LUBRICANT PER MIL-L-46010, TYPE I TO THE SEALING SURFACE OF AS4207 FITTING END. OVERSPRAY IN BORE IS NOT 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 AS4207 FITTING END SHALL HAVE BEEN QUALIFIED TO THE APPLICABLE REQUIREMENTS OF MIL-F-85421 OR MIL-F-85720. USERS OF THIS STANDARD ARE ADVISED TO CONTROL SOURCE APPROVAL(S) BY STANDARD PAGE SUPPLEMENT SHEET OR SIMILAR MEANS.
- /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.
- /7/ THIS PART IS DESIGNED FOR USE IN SYSTEMS WITH MAXIMUM OPERATING PRESSURES SHOWN IN TABLE 1 WITH THE 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. WHEN MACHINED FROM BAR OR OVERSIZED FORGINGS, THE CENTER BODY SECTION SHALL CONFORM TO AS1376, TABLE 4.
- /9/ RADIUS OR BREAK AT THE CORNER FOR TITANIUM ALLOY ONLY.
- /10/ IF PORT #1 IS STYLE A, ØD WILL EXTEND THE ID LENGTH AND ØE WILL NOT APPLY.
11. INTERPRETATION OF DRAWING PER ARP4296.