FEDERAL SUPPLY CLASS
4730

RATIONALE

AS5173C HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

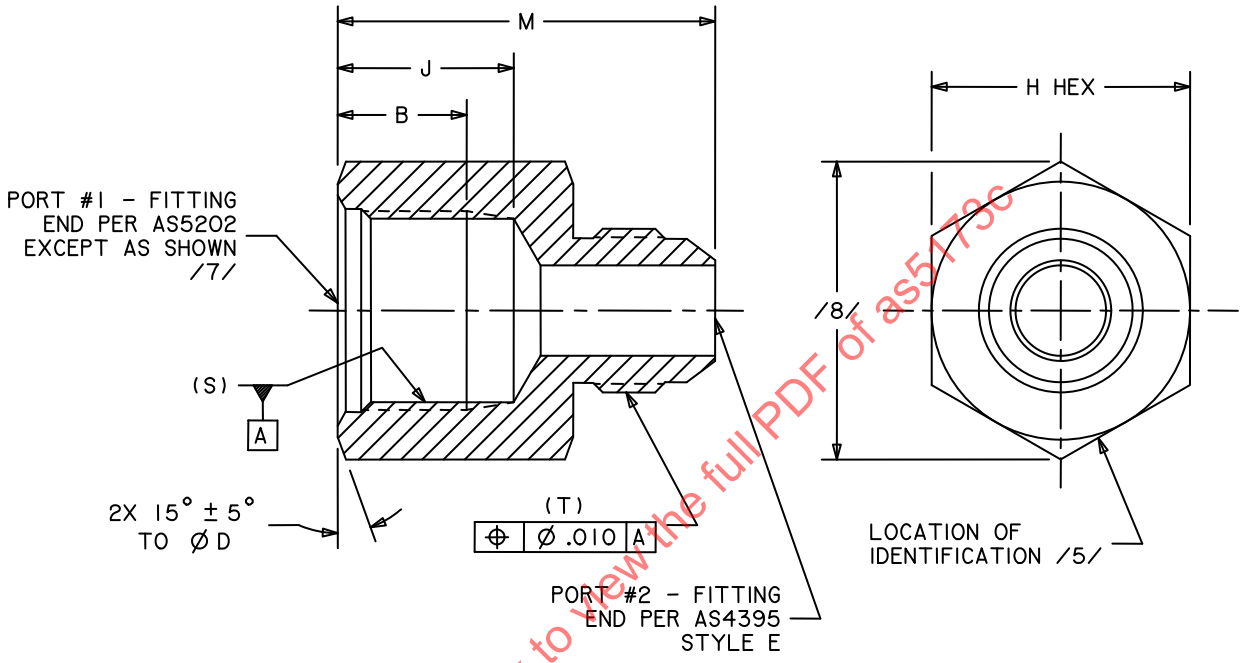
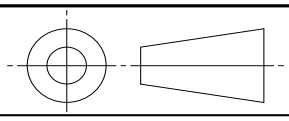


FIGURE 1 - FITTING

INACTIVE IN PART /17/

ISSUED 2000-01 REVISED 2008-10 REAFFIRMED 2015-04

THIRD ANGLE PROJECTION



SAE values your input. To provide feedback on this Technical Report, please visit
http://www.sae.org/technical/standards/AS5173C

CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: /4/ AS4875/1

SAE INTERNATIONAL

AEROSPACE STANDARD

(R) FITTING, BUSHING, PORT, REDUCER

AS5173
SHEET 1 OF 5

REV. C

TABLE 1 - DIMENSIONS AND WEIGHTS

BASIC NO. AS5173 /14/ SIZE CODE	NOMINAL TUBE SIZE PORT #1	NOMINAL TUBE SIZE PORT #2	S THREAD PER AS8879 CLASS 3B	T THREAD PER AS8879 CLASS 3A	B MIN	D ±.010	H	J	M	LB EA APPROX AL REF	LB EA APPROX STL REF	LB EA APPROX TI REF
0302	.188	.125	.3750-24UNJF	.3125-24UNJF	.538	.605	.615 - .628	.598	1.188	.0319	.0917	.0506
0402	.250	.125	.4375-20UNJF	.3125-24UNJF	.568	.668	.678 - .691	.672	1.297	.0362	.104	.0573
0403	.250	.188	.4375-20UNJF	.3750-24UNJF	.568	.668	.678 - .691	.672	1.297	.0378	.109	.0599
0504	.312	.250	.5000-20UNJF	.4375-20UNJF	.568	.730	.740 - .753	.672	1.500	.0433	.124	.0685
0604	.375	.250	.5625-18UNJF	.4375-20UNJF	.470	.793	.803 - .816	.630	1.391	.0511	.147	.0809
0605	.375	.313	.5625-18UNJF	.5000-20UNJF	.470	.793	.803 - .816	.630	1.375	.0534	.153	.0846
0804	.500	.250	.7500-16UNJF	.4375-20UNJF	.562	.980	.990 - 1.003	.750	1.609	.0649	.186	.103
0805	.500	.313	.7500-16UNJF	.5000-20UNJF	.562	.980	.990 - 1.003	.750	1.547	.0672	.193	.107
0806	.500	.375	.7500-16UNJF	.5625-18UNJF	.562	.980	.990 - 1.003	.750	1.547	.0698	.200	.111
1004	.625	.250	.8750-14UNJF	.4375-20UNJF	.625	1.103	1.113 - 1.128	.810	1.672	.0713	.205	.113
1005	.625	.313	.8750-14UNJF	.5000-20UNJF	.625	1.103	1.113 - 1.128	.810	1.656	.0737	.212	.117
1006	.625	.375	.8750-14UNJF	.5625-18UNJF	.625	1.103	1.113 - 1.128	.810	1.641	.0763	.219	.121
1008	.625	.500	.8750-14UNJF	.7500-16UNJF	.625	1.103	1.113 - 1.128	.810	1.750	.090	.258	.143
1206	.750	.375	1.0625-12UNJ	.5625-18UNJF	.688	1.353	1.363 - 1.380	.940	1.813	.102	.294	.162
1208	.750	.500	1.0625-12UNJ	.7500-16UNJF	.688	1.353	1.363 - 1.380	.940	1.922	.116	.334	.184
1210	.750	.625	1.0625-12UNJ	.8750-14UNJF	.688	1.353	1.363 - 1.380	.940	2.016	.131	.376	.207
1606	1.000	.375	1.3125-12UNJ	.5625-18UNJF	.688	1.603	1.613 - 1.630	.970	1.922	.123	.352	.194
1608	1.000	.500	1.3125-12UNJ	.7500-16UNJF	.688	1.603	1.613 - 1.630	.970	2.032	.136	.391	.216
1610	1.000	.625	1.3125-12UNJ	.8750-14UNJF	.688	1.603	1.613 - 1.630	.970	2.109	.151	.434	.293
1612	1.000	.750	1.3125-12UNJ	1.0625-12UNJ	.688	1.603	1.613 - 1.630	.970	2.203	.179	.514	.283
2008	1.250	.500	1.6250-12UNJ	.7500-16UNJF	.688	1.863	1.863 - 1.880	1.010	2.172	.137	.392	.216
2010	1.250	.625	1.6250-12UNJ	.8750-14UNJF	.688	1.863	1.863 - 1.880	1.010	2.250	.151	.435	.240
2012	1.250	.750	1.6250-12UNJ	1.0625-12UNJ	.688	1.863	1.863 - 1.880	1.010	2.328	.179	.515	.284
2016	1.250	1.000	1.6250-12UNJ	1.3125-12UNJ	.688	1.863	1.863 - 1.880	1.010	2.297	.224	.642	.354

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: TYPE 4130 STEEL BAR PER AMS6370 OR TYPE 4140 PER AMS6382.

b. CODE LETTER D: TYPE 2024-T6 ALUMINUM ALLOY BAR PER AMS-QQ-225/6, OR TYPE 2024-T851 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/6 OR AMS4339. /17/

c. CODE LETTER J - TYPE 304 CORROSION RESISTANT STEEL BAR PER AMS5639.

d. CODE LETTER K: TYPE 316 COND A CORROSION RESISTANT STEEL BAR PER AMS5648.

e. CODE LETTER R: TYPE 321 COND A CORROSION RESISTANT STEEL BAR PER AMS5645.

f. CODE LETTER S - TYPE 347 CORROSION RESISTANT STEEL BAR PER AMS5646. /17/

g. CODE LETTER T: TYPE 6AL-4V TITANIUM ALLOY BAR PER AMS4928.

h. CODE LETTER W: 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. 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 D:

1. ANODIZE PER AMS2472 OR MIL-A-8625, TYPE II, CLASS 2, DYE BLUE, DUPLEX SEAL PER PROCUREMENT SPECIFICATION.

2. D CODE PARTS TO BE COATED WITH HIGH PURITY ALUMINUM ONLY WILL HAVE THE FINISH CODE LETTER "V" AFTER THE SIZE CODE IN THE PART NUMBER. THE FINISH WILL BE: COAT WITH HIGH PURITY ALUMINUM PER MIL-DTL-83488, CLASS 3, TYPE II WITH MAXIMUM COATING THICKNESS OF .0005. GLASS BEAD PEEN PRESSURE SHALL BE 25 psi MAXIMUM.

c. MATERIAL CODE LETTER J: PASSIVATE PER AMS2700 TYPE 6 OR TYPE 7 OR METHOD 2.

d. MATERIAL CODE LETTER K: PASSIVATE PER AMS2700 TYPE 6 OR TYPE 7 OR METHOD 2.

e. MATERIAL CODE LETTER R: PASSIVATE PER AMS2700 TYPE 6 OR TYPE 7 OR METHOD 2.

f. MATERIAL CODE LETTER S: PASSIVATE PER AMS2700 TYPE 6 OR TYPE 7 OR METHOD 2.

g. MATERIAL CODE LETTER T: ANODIZE PER AMS2488 TYPE 2 OR FLUORIDE PHOSPHATE COAT PER AMS2486, COLOR PER PROCUREMENT SPECIFICATION. /16/

h. MATERIAL CODE LETTER W:

1. ANODIZE PER AMS2472 OR MIL-A-8625, TYPE II, CLASS 2, DYE BROWN, DUPLEX SEAL PER PROCUREMENT SPECIFICATION.

2. W CODE PARTS TO BE COATED WITH HIGH PURITY ALUMINUM ONLY WILL HAVE THE FINISH CODE LETTER "V" AFTER THE SIZE CODE IN THE PART NUMBER. THE FINISH WILL BE: COAT WITH HIGH PURITY ALUMINUM PER MIL-DTL-83488, CLASS 3, TYPE II WITH MAXIMUM COATING THICKNESS OF .0005. GLASS BEAD PEEN PRESSURE SHALL BE 25 psi MAXIMUM.

/4/ PROCUREMENT SPECIFICATION: AS4875/1 EXCEPT AS SPECIFIED ON THIS STANDARD. PRODUCT SUPPLIED TO THIS SPECIFICATION SHALL BE MANUFACTURED BY AN ACCREDITED MANUFACTURER LISTED IN THE NATIONAL AEROSPACE AND DEFENSE CONTRACTORS ACCREDITATION PROGRAM (NADCAP) QUALIFIED MANUFACTURER LIST 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 MANUFACTURER'S NAME, TRADEMARK OR CAGE CODE, BASIC PART NUMBER, AND MATERIAL CODE LETTER.

6. INTENDED USE: THIS PART IS DESIGNED FOR USE IN SYSTEMS WITH MAXIMUM OPERATING PRESSURES AS SHOWN IN TABLE 2.

TABLE 2 - OPERATING PRESSURES FOR ASSOCIATED MATERIAL

SIZE	MATERIAL	PSI
02-08	ALUMINUM ALLOY	3000
10-16	ALUMINUM ALLOY	1500
20	ALUMINUM ALLOY	1000
02-16	STEEL	3000
20	STEEL	1500
02-16	CORROSION RESISTANT STEEL	3000
20	CORROSION RESISTANT STEEL	1500

THIS STANDARD IS THE FUNCTIONAL EQUIVALENT OF AN894 AND MS24398, EXCEPT WITH LONGER "M" LENGTHS IN SOME SIZES, AND IS INTENDED TO BE SUITABLE AS A REPLACEMENT STANDARD.

/7/ THE INTERNAL DIAMETERS SHALL END IN A CONICAL END OF 115° MINIMUM INCLUDED ANGLE.

/8/ THE HEX CORNERS MAY BE ROUNDED PER ARP1942.

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 MAY BE 250 µin Ra.

11. BREAK SHARP 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 ±.016, ANGULAR DIMENSIONS ±0°30'.