

AS5173

FEDERAL SUPPLY CLASS
4730

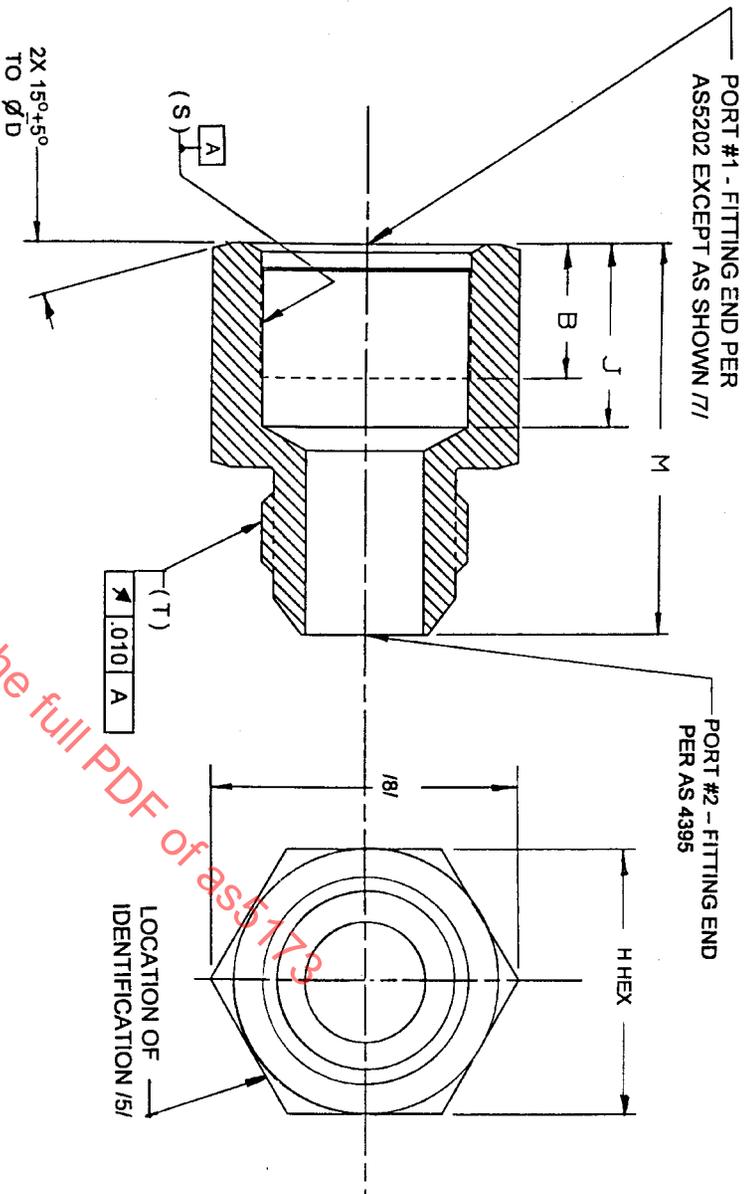


FIGURE 1 - FITTING

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THIRD ANGLE PROJECTION

ISSUED 2000-01

CUSTODIAN: SAE G-3/G-3B

PROCUREMENT SPECIFICATION: /4/ AS4875

SAE The Engineering Society
of Automobile Engineers
Land Sea Air and Space
INTERNATIONAL
400 Commonwealth Drive, Warrendale, PA 15096-0001

AEROSPACE STANDARD
FITTING, BUSHING, PORT, REDUCER

AS5173
SHEET 1 OF 4

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AS5173

TABLE 1 - DIMENSIONS AND WEIGHTS

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

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NOTES:

/1/ MATERIAL:

- a. NO CODE LETTER: CARBON STEEL BAR, TYPE 4130 PER AMS 6370 OR TYPE 4140 PER AMS 6382.
- b. CODE LETTER D: TYPE 2024-T6 ALUMINUM ALLOY BAR PER AMS-QQ-225/6 OR AMS 4339, OR TYPE 2024-T851 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/6.
- c. CODE LETTER J: TYPE 304 COND A CORROSION RESISTANT STEEL BAR PER AMS 5639 OR QQ-S-763.
- d. CODE LETTER K: TYPE 316 COND A CORROSION RESISTANT STEEL BAR PER AMS 5648 OR QQ-S-763.
- e. CODE LETTER R: TYPE 321 COND A CORROSION RESISTANT STEEL BAR PER AMS 5645 OR QQ-S-763.
- f. CODE LETTER T: TYPE 6AL-4V TITANIUM ALLOY BAR PER AMS 4928.
- g. CODE LETTER W: TYPE 7075-T73 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/9 OR TYPE 7075-T7351 ALUMINUM ALLOY BAR PER AMS 4124.

2. HEAT TREATMENT: NONE, EXCEPT FOR NO MATERIAL CODE LETTER, SEE PROCUREMENT SPECIFICATION FOR HARDNESS REQUIREMENTS.

3. FINISH:

- a. NO MATERIAL CODE LETTER: CADMIUM PLATE PER QQ-P-416 TYPE II, CLASS 2, DYED BLACK. DIP IN MIL-PRF-6083 OR MIL-PRF-87253 FLUID.
- b. MATERIAL CODE LETTER D: ANODIZE PER AMS 2472 OR MIL-A-8625, TYPE II, CLASS 2, DYED BLUE, DUPLEX SEALED.
- c. MATERIAL CODE LETTER J, K, OR R: PASSIVATE PER AMS-QQ-P-35, TYPE VI OR VII.
- d. MATERIAL CODE LETTER T: ANODIZE PER AMS 2488 TYPE 2 OR FLUORIDE PHOSPHATE COAT PER AMS 2486, COLOR PER PROCUREMENT SPECIFICATION.
- e. MATERIAL CODE LETTER W: ANODIZE PER AMS 2472 OR MIL-A-8625, TYPE II, CLASS 2, DYE BROWN, DUPLEX SEAL PER PROCUREMENT SPECIFICATION.

/4/ PROCUREMENT SPECIFICATION: AS4875. USERS OF THIS STANDARD ARE ADVISED TO CONTROL SOURCE APPROVALS BY STANDARD PAGE SUPPLEMENT SHEET OR SIMILAR MEANS.

/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 OPERATING PRESSURES AS FOLLOWS:

- a. SIZES 02 THROUGH 16 IN ALL MATERIALS EXCEPT -16 ALUMINUM - 3000 psi.
- b. SIZE 16 ALUMINUM AND SIZES 20 THROUGH 32 IN ALL MATERIALS - 1500 psi.

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 ANSI Y14.36. REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, MACHINED SURFACES TO BE 125 μ in Ra. SURFACES OF HEX FLATS MAY BE 250 μ in 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 \pm .016, ANGULAR DIMENSIONS \pm 0°30'.