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AS5172

FEDERAL SUPPLY CLASS
4730

PORT #1 - FITTING END PER
AS5202 EXCEPT AS SHOWN /7/

PORT #2 - FITTING END PER AS930
EXCEPT AS SHOWN

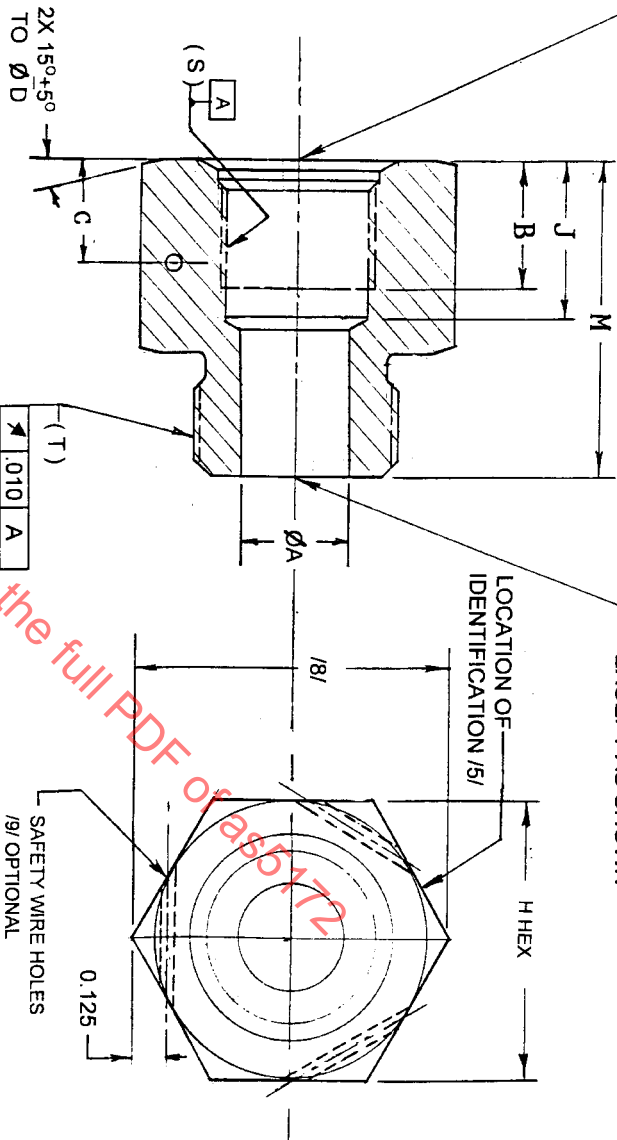
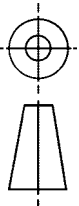


FIGURE 1 - FITTING-ADAPTER

THIRD ANGLE PROJECTION



ISSUED 2000-01

CUSTODIAN: SAE G-3/G-3B

PROCUREMENT SPECIFICATION: /4/ AS4875

SAE The Engineering Society
of Automobile Engineers
and Aerospace Engineers
INTERNATIONAL
400 Commonwealth Drive, Warrendale, PA 15096-0001

AEROSPACE STANDARD

FITTING, ADAPTER, PORT, REDUCER

AS5172
SHEET 1 OF 4

TABLE 1 - DIMENSIONS AND WEIGHTS

BASIC NO.	NOMINAL TUBE SIZE	NOMINAL TUBE SIZE	PORT #1	PORT #2	A	B	C	D	H	J	M	LB EA APPROX AL (Ref)	LB EA APPROX STL(Ref)	LB EA APPROX TI (Ref)
AS5172/115/	SIZE CODE	SIZE CODE	SIZE CODE	SIZE CODE	PER AS8879 CLASS 3A	PER AS8879 CLASS 3B	PER AS8879 CLASS 3C	PER AS8879 CLASS 3D	PER AS8879 CLASS 3E	PER AS8879 CLASS 3F	PER AS8879 CLASS 3G	PER AS8879 CLASS 3H	PER AS8879 CLASS 3I	PER AS8879 CLASS 3J
0405	.250	.312	.4375-20UNJF	.5000-20UNJF	.230 - .237	.456	.375	.730	.740 - .753	.620	1.150	.0477	.137	.0756
0406	.250	.375	.4375-20UNJF	.5625-18UNJF	.293 - .301	.456	.344	.793	.803 - .816	.620	1.103	.0579	.166	.0918
0408	.250	.500	.4375-20UNJF	.7500-16UNJF	.387 - .395	.568	.156	1.103	1.113 - 1.128	.671	.763	.119	.341	.188
0410	.250	.625	.4375-20UNJF	.8750-14UNJF	n/a	.568	.156	1.103	1.113 - 1.128	THRU	.753	.124	.356	.196
0412	.250	.750	.4375-20UNJF	1.0625-12UNJ	n/a	.568	.203	1.353	1.363 - 1.380	THRU	.855	.191	.550	.303
0416	.250	1.000	.4375-20UNJF	1.3125-12UNJ	n/a	.568	.203	1.603	1.613 - 1.630	THRU	.855	.278	.799	.441
0420	.250	1.250	.4375-20UNJF	1.6250-12UNJ	n/a	.568	.203	1.863	1.863 - 1.880	THRU	.855	.388	1.11	.615
0506	.312	.375	.5000-20UNJF	.5625-18UNJF	.293 - .301	.456	.344	.793	.803 - .816	.620	1.134	.0552	.159	.0875
0508	.312	.500	.5000-20UNJF	.7500-16UNJF	.387 - .395	.568	.313	.980	.990 - 1.003	.671	1.081	.0927	.266	.147
0510	.312	.625	.5000-20UNJF	.8750-14UNJF	n/a	.568	.156	1.103	1.113 - 1.128	THRU	.753	.121	.346	.191
0512	.312	.750	.5000-20UNJF	1.0625-12UNJ	n/a	.568	.203	1.353	1.363 - 1.380	THRU	.855	.188	.539	.297
0516	.312	1.000	.5000-20UNJF	1.3125-12UNJ	n/a	.568	.203	1.603	1.613 - 1.630	THRU	.855	.275	.788	.435
0520	.312	1.250	.5000-20UNJF	1.6250-12UNJ	n/a	.568	.203	1.863	1.863 - 1.880	THRU	.855	.384	1.10	.609
0608	.375	.500	.5625-18UNJF	.7500-16UNJF	.387 - .395	.470	.313	.980	.990 - 1.003	.630	1.153	.0905	.260	.143
0610	.375	.625	.5625-18UNJF	.8750-14UNJF	.484 - .488	.598	.313	1.103	1.113 - 1.128	.724	1.128	.118	.338	.187
0612	.375	.750	.5625-18UNJF	1.0625-12UNJ	n/a	.598	.203	1.353	1.363 - 1.380	THRU	.855	.184	.528	.291
0616	.375	1.000	.5625-18UNJF	1.3125-12UNJ	n/a	.598	.203	1.603	1.613 - 1.630	THRU	.855	.271	.777	.429
0620	.375	1.250	.5625-18UNJF	1.6250-12UNJ	n/a	.598	.203	1.863	1.863 - 1.880	THRU	.855	.380	1.09	.602
0810	.500	.625	.7500-16UNJF	.8750-14UNJF	.484 - .488	.562	.438	1.103	1.113 - 1.128	.750	1.316	.104	.298	.164
0812	.500	.750	.7500-16UNJF	1.0625-12UNJ	.604 - .614	.714	.203	1.353	1.363 - 1.380	.849	1.230	.169	.484	.267
0816	.500	1.000	.7500-16UNJF	1.3125-12UNJ	n/a	.714	.203	1.603	1.613 - 1.630	THRU	.855	.255	.733	.404
0820	.500	1.250	.7500-16UNJF	1.6250-12UNJ	n/a	.714	.203	1.863	1.863 - 1.880	THRU	.855	.365	1.05	.578
1012	.625	.750	.8750-14UNJF	1.0625-12UNJ	.604 - .614	.625	.203	1.353	1.363 - 1.380	.810	1.417	.155	.445	.246
1016	.625	1.000	.8750-14UNJF	1.3125-12UNJ	n/a	.625	.203	1.603	1.613 - 1.630	THRU	.855	.243	.697	.384
1020	.625	1.250	.8750-14UNJF	1.6250-12UNJ	n/a	.802	.203	1.863	1.863 - 1.880	THRU	.855	.352	1.01	.558
1216	.750	1.000	1.0625-12UNJ	1.3125-12UNJ	.839 - .851	.688	.203	1.603	1.613 - 1.630	.940	1.527	.213	.612	.338
1220	.750	1.250	1.0625-12UNJ	1.6250-12UNJ	n/a	.688	.203	1.863	1.863 - 1.880	THRU	.855	.330	.947	.523
1620	1.000	1.250	1.3125-12UNJ	1.6250-12UNJ	1.073 - 1.086	.688	.203	1.863	1.863 - 1.880	.970	1.542	.277	.795	.439

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 AN893 AND MS24397, 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/ SUFFIX LETTER L: CODE L PARTS SHALL HAVE SAFETY WIRE HOLES PER AS1043 STYLE G.

10. INTERPRETATION OF DRAWING PER ARP4296.

11. 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.

12. BREAK SHARP EDGES .003 TO .015 UNLESS OTHERWISE SPECIFIED.

13. DIMENSIONING AND TOLERANCING: ASME Y14.5M-1994.

14. DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS $\pm$.016, ANGULAR DIMENSIONS $\pm$ 0°30'.