FEDERAL SUPPLY CLASS
4730

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ISSUED 1992-03 REAFFIRMED 2004-04 REVISED 2007-07 STABILIZED 2024-06

For more information on this standard, visit
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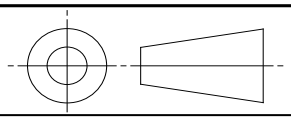
THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3A

PROCUREMENT SPECIFICATION: AS1650 /4/

SAE INTERNATIONAL

AEROSPACE STANDARD

MALE FERRULE, THREADLESS - FLEXIBLE, FIXED CAVITY, SELF-BONDING, SWAGED

AS1653™

REV. D

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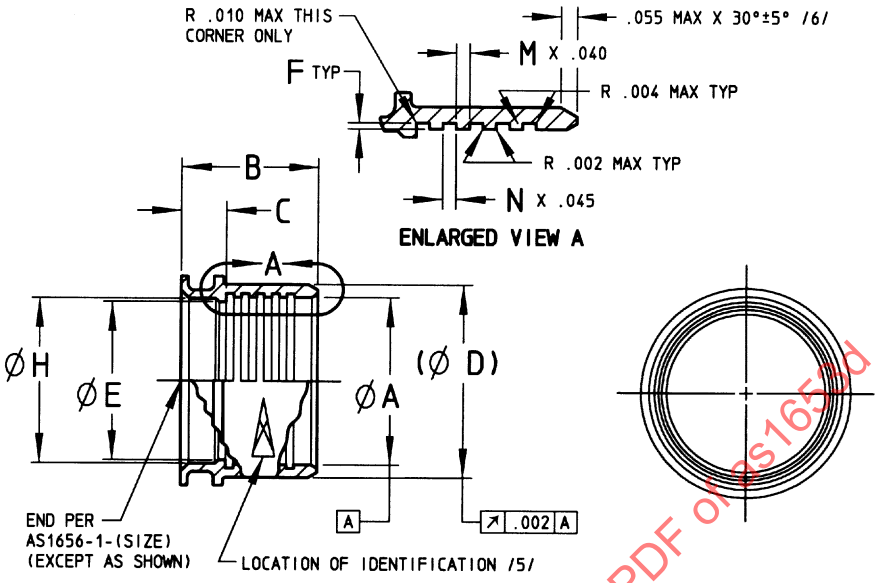

FIGURE 1 - MALE FERRULE

TABLE 1 - DIMENSIONS AND WEIGHTS /6/

BASIC NO. AS1653 /14/ SIZE CODE	NOM TUBE SIZE REF	A ±.003	B ±.010	C	D REF	E	F ±.001	H	M	N	LB/EA NOM REF ALUM	LB/EA NOM REF CRES	LB/EA NOM REF TI
08	.500	.507	.609	.170	.622	.470	.007	.518	3	4	.006	.018	.010
10	.625	.633	.609	.170	.747	.595	.007	.643	3	4	.008	.021	.012
12	.750	.758	.659	.220	.887	.720	.007	.777	3	4	.011	.031	.018
16	1.000	1.008	.762	.245	1.139	.970	.008	.987	4	5	.017	.048	.027
20	1.250	1.259	.762	.245	1.389	1.220	.008	1.247	4	5	.020	.058	.033
24	1.500	1.509	.851	.245	1.639	1.470	.009	1.514	5	6	.027	.077	.044
28	1.750	1.759	.851	.245	1.889	1.720	.009	1.764	5	6	.032	.089	.051
32	2.000	2.009	.861	.245	2.142	1.970	.009	2.027	5	6	.039	.109	.062
36	2.250	2.259	.892	.245	2.392	2.220	.009	2.277	5	6	.045	.126	.072
40	2.500	2.510	.892	.265	2.642	2.470	.011	2.522	5	6	.049	.138	.079
48	3.000	3.010	.892	.265	3.142	2.970	.011	3.020	5	6	.059	.165	.094
56	3.500	3.512	.922	.265	3.642	3.470	.012	3.523	6	7	.070	.198	.113
64	4.000	4.012	1.105	.265	4.151	3.970	.013	4.032	7	8	.101	.285	.162

NOTES:

/1/ MATERIAL:

a. CODE LETTER A - TYPE 2024-T6, T851, T8510 OR T8511 ALUMINUM ALLOY PER AMS-QQ-A-225/6, AMS 4120, AMS 4339, AMS-QQ-A-200/3, ASTM B 211, OR ASTM B 241.

b. CODE LETTER C -

1. TYPE 17-4PH, CONDITION H1075 STA, CORROSION RESISTANT STEEL PER AMS 5643.

2. TYPE 15-5PH, CONDITION H1150 STA, CORROSION RESISTANT STEEL PER AMS 5659.

c. CODE LETTER T - TYPE 6AL-4V, CONDITION A, TITANIUM ALLOY PER AMS 4928, AMS 4967, OR AMS 6931.

2. HEAT TREATMENT:

a. MATERIAL CODE LETTER A - IF THE RAW MATERIAL IS PROCURED IN THE SOLUTION TREATED CONDITION, AGE TO THE FINAL CONDITION PER AMS 2770.

b. MATERIAL CODE LETTER C -

1. TYPE 17-4PH - AGE TO CONDITION H1075 PER AMS-H-6875 OR AMS 2759/3.

2. TYPE 15-5PH - AGE TO CONDITION H1150 PER AMS-H-6875 OR AMS 2795/3.

c. MATERIAL CODE LETTER T - NONE.

3. FINISH:

a. MATERIAL CODE LETTER A - CHEMICAL CONVERSION COAT PER MIL-DTL-5541, TYPE 1, CLASS 3.

b. MATERIAL CODE LETTER C - PASSIVATE PER AMS 2700, METHOD 1, TYPE 2 OR TYPE 8, CLASS 1.

c. MATERIAL CODE LETTER T - NONE.

/4/ QUALIFICATION: FERRULES MANUFACTURED TO THIS SPECIFICATION SHALL BE MANUFACTURED BY AN ACCREDITED MANUFACTURER OR SUPPLIED BY AN ACCREDITED DISTRIBUTOR LISTED IN THE PERFORMANCE REVIEW INSTITUTE (PRI) QUALIFIED PRODUCTS LIST FOR PRI-QPL-AS1650 FOR THIS STANDARD. The QPL IS AVAILABLE AT www.eauditnet.com.

/5/ IDENTIFICATION: MARK PER AS478-30 USING .062 in OR LARGER CHARACTERS. MARK AS A MINIMUM THE MANUFACTURER'S NAME, TRADEMARK AND/OR CAGE CODE, COMPLETE "AS" NUMBER AND DATE OF MANUFACTURE IN QUARTERS (1Q98 = FIRST QUARTER 1998). SIZES 12 AND SMALLER MAY BE INDIVIDUALLY BAGGED WITH A TAG PER AS478-35D CONTAINING THE PREVIOUS INFORMATION.

/6/ OTHER DIMENSIONS AND TOLERANCES ARE SPECIFIED AND CONTROLLED BY THE SUPPLIER. THE SUPPLIER IS RESPONSIBLE TO ENSURE COMPATIBILITY WITH THE ASSEMBLY AND COMPLIANCE WITH THE REQUIREMENTS OF THE PROCUREMENT SPECIFICATION.

7. PARTS MANUFACTURED PRIOR TO REVISION C, INCLUDING PARTS MADE FROM MATERIAL PER WW-T-700/3, MAY BE USED TO DEPLETION.

8. THE CHANGE BAR (I) LOCATED IN THE LEFT MARGIN IS FOR THE CONVENIENCE OF THE USER IN LOCATING AREAS WHERE TECHNICAL REVISIONS, NOT EDITORIAL CHANGES, HAVE BEEN MADE TO THE PREVIOUS ISSUE OF THIS SPECIFICATION. AN (R) SYMBOL TO THE LEFT OF THE DOCUMENT TITLE INDICATES A COMPLETE REVISION OF THE DOCUMENT.

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.