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REV.
E

AS1791™

FEDERAL SUPPLY CLASS
4730

RATIONALE

ADD MATERIAL CODE "B" FOR 305 CORROSION-RESISTANT STEEL MATERIAL. ADD SUFFIX LETTER L FOR MATERIAL CODE "C" TO ALLOW FOR AS5272 SOLID FILM LUBRICANT OPTION. ADD AS18280 TO NOTE /5/. ADD AS4323 TO NOTE 4. UPDATE MATERIAL SPECIFICATIONS FOR MATERIAL "-" AND "C."

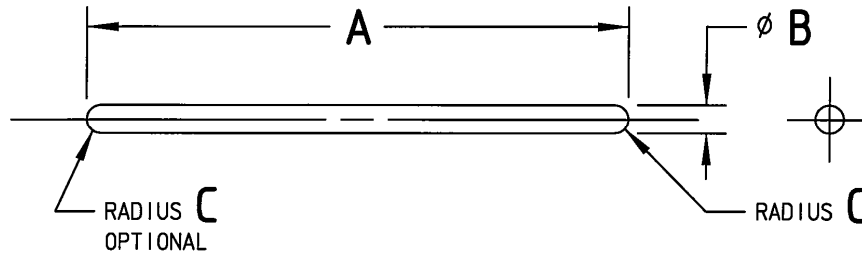


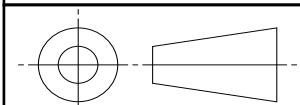
FIGURE 1 - WIRE, RETAINER

TABLE 1 - DIMENSIONS AND WEIGHTS

BASIC NO. AS1791 /13/ /6/ CODE SIZE	NOMINAL TUBE SIZE	A /7/	B ±.002	C MIN	APPROX WT LB/100 REF ALUMINUM	APPROX WT LB/100 REF CRES
02	.125	.821	.070	.026	--	.0894
03	.188	1.010	.070	.026	--	.110
04	.250	1.184	.070	.026	--	.129
05	.312	1.378	.078	.030	--	.186
06	.375	1.558	.078	.030	--	.211
08	.500	2.116	.093	.037	.144	.407
10	.625	2.478	.093	.037	.168	.476
12	.750	3.028	.123	.050	.360	1.018
14	.875	3.437	.123	.050	.408	1.156
16	1.000	3.814	.123	.050	.453	1.283
20	1.250	4.796	.123	.050	.570	1.613
24	1.500	5.591	.123	.050	.664	1.880
32	2.000	7.556	.123	.050	.898	2.541

For more information on this standard, visit
<https://www.sae.org/standards/content/AS1791E/>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: /5/



AEROSPACE STANDARD

WIRE, RETAINER -
TUBE COUPLING NUT

AS1791™
SHEET 1 OF 3

REV.
E

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ISSUED 1983-03 REAFFIRMED 2015-01 REVISED 2023-10

NOTES:

1. MATERIAL:

NO MATERIAL CODE (-): CORROSION-RESISTANT STEEL WIRE, TYPE 302 OR TYPE 305 CONDITION A, COLD FINISHED PER ASTM A580, OR TYPE 302 PER AMS5637, OR TYPE 305 PER AS5685.

MATERIAL CODE "B": CORROSION-RESISTANT STEEL WIRE, TYPE 305, CONDITION A, COLD FINISHED PER ASTM A580 OR TYPE 305 PER AS5685.

MATERIAL CODE "D": 2024-T351 OR -T4 ALUMINUM ALLOY WIRE PER AMS-QQ-A-225/6 OR AMS4120. /6/

MATERIAL CODE "C": CORROSION-RESISTANT STEEL WIRE, TYPE 302, CONDITION A, COLD FINISHED PER ASTM A580 OR TYPE 302 PER AMS5637.

2. FINISH:

NO MATERIAL CODE (-): PASSIVATE PER AMS2700 METHOD I, TYPE 6 OR TYPE 7. APPLY SOLID FILM LUBRICANT PER AS5272, TYPE I.

MATERIAL CODE "B": PASSIVATE PER AMS2700 METHOD I, TYPE 6 OR TYPE 7. APPLY SOLID FILM LUBRICANT PER AS5272, TYPE I.

MATERIAL CODE "C":

a. NO SUFFIX LETTER - PASSIVATE PER AMS2700 METHOD 1, TYPE 6 OR TYPE 7. APPLY SOLID FILM LUBRICANT PER AS1701, CLASS III. AS1701, CLASS III SOLID FILM LUBRICANT IS INTENDED FOR HIGH TEMPERATURE APPLICATIONS.

b. SUFFIX LETTER "L" - PASSIVATE PER AMS2700 METHOD 1, TYPE 6 OR TYPE 7. APPLY SOLID FILM LUBRICANT PER AS5272, TYPE I.

MATERIAL CODE "D": CHEMICAL CONVERSION COAT PER MIL-DTL-5541, CLASS 3. APPLY SOLID FILM LUBRICANT PER AS5272, TYPE I. /6/

3. INTENDED USE: THIS PART MAY BE USED FOR ASSEMBLY WITH MS27073, AS1790, AS4323, OR AS4370 WIRED ON NUTS.

4. INVENTORIED PARTS CONFORMING TO THE PREVIOUS LETTER CHANGE MAY BE USED TO DEPLETION.

/5/ APPLICABLE PROCUREMENT SPECIFICATIONS: MIL-DTL-5070, AS4841, AS18280.

/6/ ALUMINUM ALLOY WIRES AVAILABLE IN SIZE CODE -08 AND LARGER.

/7/ LENGTH "A" DETERMINED IN ACCORDANCE WITH ARP4988.

8. INTERPRETATION OF DRAWING PER AS4296.

9. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M. REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE 125 MICROINCHES (3.2 MICROMETERS) Ra.

10. BREAK EDGES .003 TO .015, UNLESS OTHERWISE SPECIFIED.

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

12. DIMENSIONS ARE IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS ± 0.015 , ANGULAR DIMENSIONS $\pm 5^\circ$.

/13/ EXAMPLE OF PART NUMBER:

AS1791 - 08 L

BASIC PART NUMBER _____

MATERIAL CODE (SEE NOTE 1) _____

SIZE CODE (TUBE SIZE IN .0625 INCH INCREMENTS)
(08 = .500 INCH) _____

SUFFIX LETTER "L" - AS5272 SOLID FILM LUBRICANT CODE, FOR MATERIAL CODE "C" ONLY



AEROSPACE STANDARD

WIRE, RETAINER -
TUBE COUPLING NUT

AS1791™
SHEET 2 OF 3

REV.
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