

REV.  
B

MA2117

FEDERAL SUPPLY CLASS  
4730

# RATIONALE

MA2117B HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

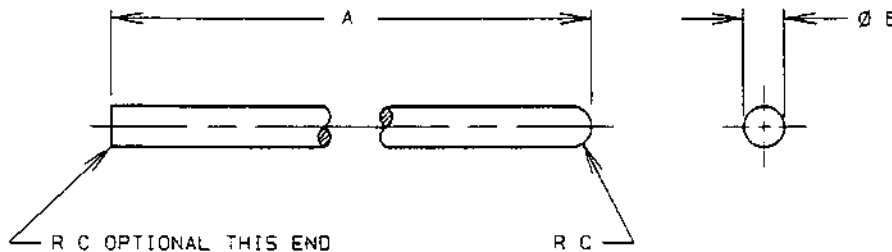


FIGURE 1 - WIRE

(R) TABLE 1 - DIMENSIONS AND WEIGHTS

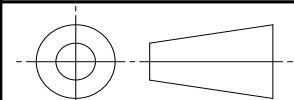
| BASIC NO.<br>MA2117 | (NOMINAL<br>TUBE<br>SIZE DN) | A     | B   | C    | KG/100<br>MAX |
|---------------------|------------------------------|-------|-----|------|---------------|
| /13/<br>SIZE CODE   | /13/                         |       |     | ±0.1 |               |
| 05                  | 5                            | 28.1  | 2.0 | 0.9  | 0.0710        |
| 06                  | 6                            | 33.6  | 2.0 | 0.9  | 0.0857        |
| 08                  | 8                            | 39.1  | 2.0 | 0.9  | 0.0994        |
| 10                  | 10                           | 45.4  | 2.0 | 0.9  | 0.116         |
| 12                  | 12                           | 51.9  | 2.5 | 1.1  | 0.208         |
| 14                  | 14                           | 58.2  | 2.5 | 1.1  | 0.234         |
| 16                  | 16                           | 64.5  | 2.5 | 1.1  | 0.258         |
| 20                  | 20                           | 80.2  | 3.0 | 1.4  | 0.322         |
| 25                  | 25                           | 99.1  | 3.0 | 1.4  | 0.398         |
| 32                  | 32                           | 125.8 | 3.0 | 1.4  | 0.732         |
| 40                  | 40                           | 151.1 | 3.5 | 1.6  | 1.20          |

## NOTES:

- MATERIAL:**
  - TYPE 302 CORROSION RESISTANT STEEL, ANNEALED CONDITION PER ASTM A 493 OR TYPE 305 CORROSION RESISTANT STEEL PER AMS 5685.
- FINISH:**
  - PASSIVATE PER QQ-P-35, TYPE VI OR VII. APPLY DRY FILM LUBRICANT PER MIL-L-46010, TYPE 1 ALL OVER.
- DN = NOMINAL TUBE OUTSIDE DIAMETER.
- PROCUREMENT SPECIFICATION: MA2005 (ISO 7169). THIS PART SHALL BE QUALIFIED TO THE PROCUREMENT SPECIFICATION AS APPLICABLE IN A COMPLETE ASSEMBLY. USERS OF THIS STANDARD ARE ADVISED TO CONTROL SOURCE APPROVAL(S) BY STANDARD PAGE SUPPLEMENT SHEET OR SIMILAR MEANS.
- THIS PART IS DESIGNED FOR USE WITH MA2047 SWIVEL NUT AND MA2014 AND MA2076 FITTING ENDS IN SYSTEMS AT TYPE II TEMPERATURE (-55 TO 135 °C) WITH OPERATING PRESSURES AS FOLLOWS:
  - ALL SIZES TITANIUM ALLOY AND CORROSION RESISTANT STEEL AND SIZES -05 THROUGH -20 ALUMINUM ALLOY AT CLASS E (21 000 kPa).
  - SIZES -25 AND -32 ALUMINUM ALLOY AT CLASS B (10 500 kPa).
  - SIZE -40 ALUMINUM ALLOY AT CLASS A (4000 kPa).
  - TYPE AND CLASSES PER MA2001 (ISO 6771).
- THE (R) 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. IF THE SYMBOL IS NEXT TO THE SPECIFICATION TITLE, IT INDICATES A COMPLETE REVISION OF THE SPECIFICATION.
- INVENTORIED PARTS CONFORMING TO THE PREVIOUS "LETTER CHANGE" OF THIS STANDARD SHALL NOT BE USED AS OF THE DATE OF THIS REVISION.
- INTERPRETATION OF DRAWING PER MAP4296.

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/MA2117B>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: /4/ MA2005 (ISO 7169)



## AEROSPACE STANDARD

WIRE, RETAINER, SWIVEL,  
METRIC

MA2117  
SHEET 1 OF 2

REV.  
B

Documents

NOTES (CONTINUED):

9. SURFACE TEXTURE: SYMBOLS PER ANSI Y14.36; REQUIREMENTS PER ANSI/ASME B46.1. UNLESS OTHERWISE SPECIFIED, MACHINED SURFACES TO BE  $3.2 \mu\text{m Ra}$ .
10. BREAK EDGES 0.1 TO 0.4 UNLESS OTHERWISE SPECIFIED.
11. DIMENSIONS AND TOLERANCING: ASME Y14.5M-1994
12. DIMENSIONS IN MILLIMETERS. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS  $\pm 0.5$ .
- 13/ EXAMPLE OF PART NUMBER: MA2117 - 24

BASIC PART NUMBER \_\_\_\_\_ SIZE CODE, TUBE SIZE DN

|                                                                                     |                                   |               |                  |
|-------------------------------------------------------------------------------------|-----------------------------------|---------------|------------------|
|  | <b>AEROSPACE STANDARD</b>         | <b>MA2117</b> | <b>REV.</b>      |
|                                                                                     | WIRE, RETAINER, SWIVEL,<br>METRIC | SHEET 2 OF 3  | <b>Documents</b> |

