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**AS39029/48**

FEDERAL SUPPLY CLASS  
5935

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THIS DOCUMENT HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE 5-YEAR REVIEW POLICY.

# NOTICE

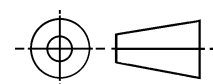
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THIRD ANGLE PROJECTION



ISSUED 2000-07 REAFFIRMED 2007-06

PREPARED BY SAE SUBCOMMITTEE AE-8C1

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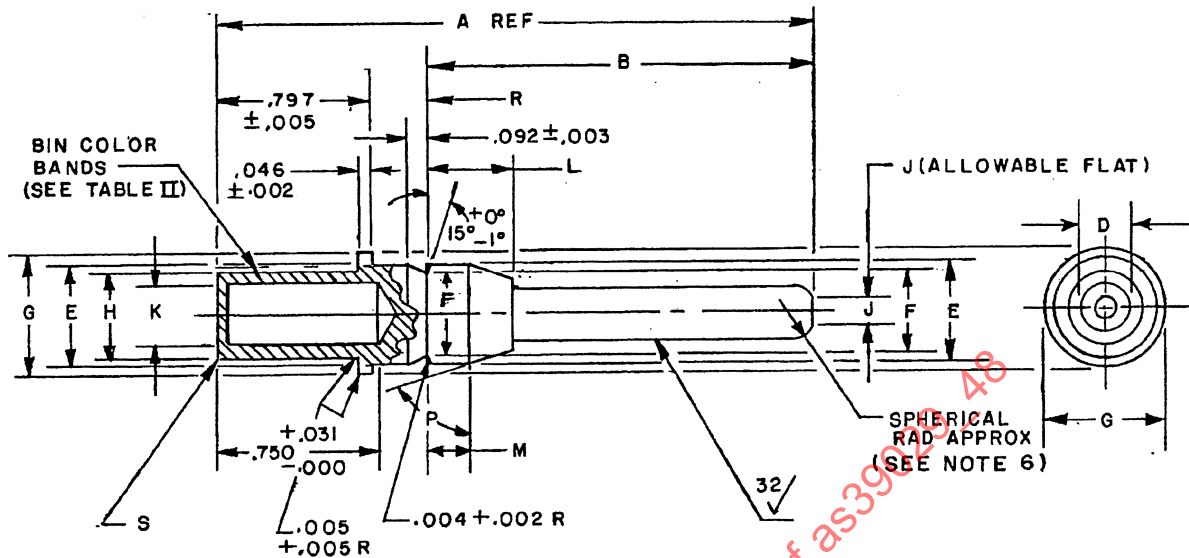
## AEROSPACE STANDARD

CONTACTS, ELECTRICAL CONNECTOR,  
PIN, CRIMP REMOVABLE  
(FOR MIL-C-22992 CLASS L CONNECTORS)

**AS39029/48**  
SHEET 1 OF 8

THE COMPLETE REQUIREMENTS FOR ACQUIRING THE CONTACTS DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION AND THE LATEST ISSUE OF MIL-C-39029.

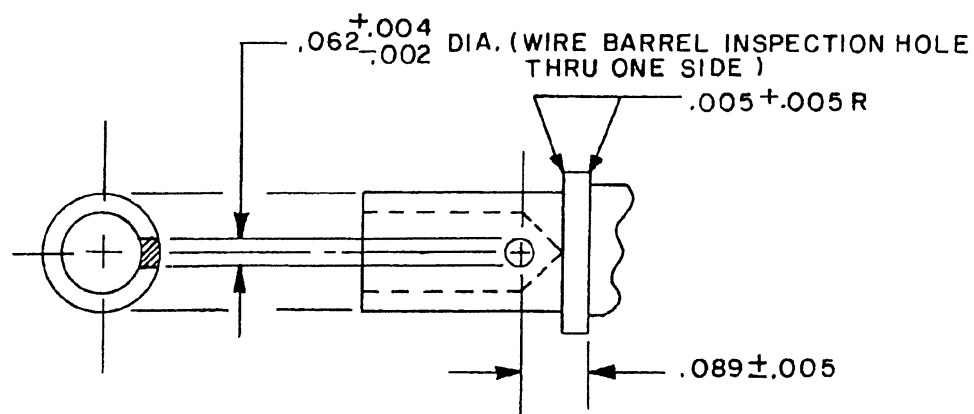
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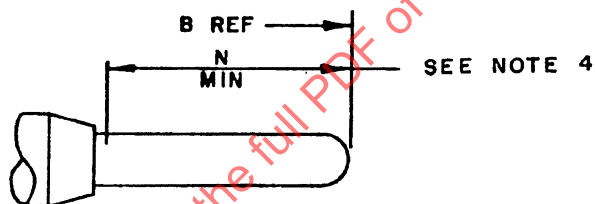
NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Dimensions shown apply after plating.
4. At indicated area, hardness to be as listed in table.
5. Unless otherwise specified, tolerances are  $\pm .010$  and  $\pm .020$ .
6. Spherical end dimension shall conform to MIL-C-39029.
7. To properly crimp a wire of a smaller gauge than the contact wire barrel, the appropriate MS 3348 bushing must be used.
8. Manufacturer's trademark location optional.

FIGURE 1. DIMENSIONS AND CONFIGURATION.



**WIRE BARREL (BORE BARREL CRIMP DEPTH)**



| BIN<br>code | N<br>MIN | ROCKWELL<br>HARDNESS<br>MIN |
|-------------|----------|-----------------------------|
| 317         | 1.406    | F80                         |
| 318         | 1.531    |                             |
| 319         | 1.375    |                             |
| 320         | 1.406    |                             |
| 321         | 1.531    |                             |
| 322         | 1.375    |                             |
| 323         | 1.719    | OPTIONAL                    |
| 324         | 1.844    |                             |
| 325         | 1.719    |                             |
| 326         | 1.844    |                             |
| 237         | 1.719    |                             |
| 328         | 1.844    |                             |

| INCHES | MM    |
|--------|-------|
| 1.375  | 34.93 |
| 1.406  | 35.71 |
| 1.531  | 38.89 |
| 1.719  | 43.66 |
| 1.844  | 46.84 |

FIGURE 1. DIMENSIONS AND CONFIGURATION - CONTINUED.



## REQUIREMENTS:

Dimensions, design characteristics, and configuration: See figure 1 and tables I and II.

Wire barrel: Wire barrel ranges and size shall be as specified in table IV.

Tools: See table III.

Vibration: In accordance with method 2005 of MIL-STD-1344, test condition III. The following detail and exceptions shall apply.

- a. Normal locking means only, no safety wire shall be used.
- b. The cable or wire bundle shall be clamped to nonvibrating points at least 8 inches from the rear of the connectors. The clamping length may be selected or changed to avoid resonance of the cable or wire.
- c. The system ground contacts of class L grounding connectors shall not be wired into the series monitoring circuit.

Shock: MIL-C-39029/48 contacts shall be tested in accordance with the drop test (class L) and high impact shock test as specified in MIL-C-22992, using a MIL-C-22992 qualified connector that has been approved for listing on the applicable qualified products list.

Mating contact: MIL-C-39029/49.

Material: Copper alloy SAE CA145; SAE CA147. Hard temper; CABRA 147 or equivalent.

Finish: Silver plate .0002 inch thick minimum in accordance with QQ-S-365. Use underplate of .00005 inch minimum nickel in accordance with QQ-N-290.

Concentricity: .004 TIR(RFS), machined surfaces 63  $\sqrt{\text{V}}$  unless otherwise specified.

Contacts may be soldered or crimped.

Qualification: Shall include the crimping of these contacts utilizing MS3448 bushings to accommodate smaller wire sizes.

QPL evaluating activity: Defense Electronics Supply Center (DESC-E), Dayton, Ohio 45444.

International interest: NEPR 57, class L only.

Military part number: See table V.

TABLE II. DESIGN CHARACTERISTICS.

| Bin code | Color bands |       |        | Mating end size | Wire barrel size | Type | Class |
|----------|-------------|-------|--------|-----------------|------------------|------|-------|
|          | 1st         | 2nd   | 3rd    |                 |                  |      |       |
| 317      | Orange      | Brown | Violet | 6               | 6                | A    | A     |
| 318      | Orange      | Brown | Gray   | 6N <u>1</u> /   | 6                |      |       |
| 319      | Orange      | Brown | White  | 6G <u>1</u> /   | 6                |      |       |
| 320      | Orange      | Red   | Black  | 4               | 4                |      |       |
| 321      | Orange      | Red   | Brown  | 4N <u>1</u> /   | 4                |      |       |
| 322      | Orange      | Red   | Red    | 4G <u>1</u> /   | 4                |      |       |
| 323      | Orange      | Red   | Orange | 1/0             | 1                |      |       |
| 324      | Orange      | Red   | Yellow | 1/0N <u>1</u> / | 1                |      |       |
| 325      | Orange      | Red   | Green  | 2/0             | 2/0              |      |       |
| 326      | Orange      | Red   | Blue   | 2/0N <u>1</u> / | 2/0              |      |       |
| 327      | Orange      | Red   | Violet | 4/0             | 4/0              |      |       |
| 328      | Orange      | Red   | Gray   | 4/0N <u>1</u> / | 4/0              |      |       |

1/ "N" designation indicates a neutral pin. "G" designation indicates a grounding pin.