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**AS27429**

FEDERAL SUPPLY CLASS  
5940

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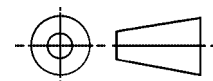
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THIRD ANGLE PROJECTION



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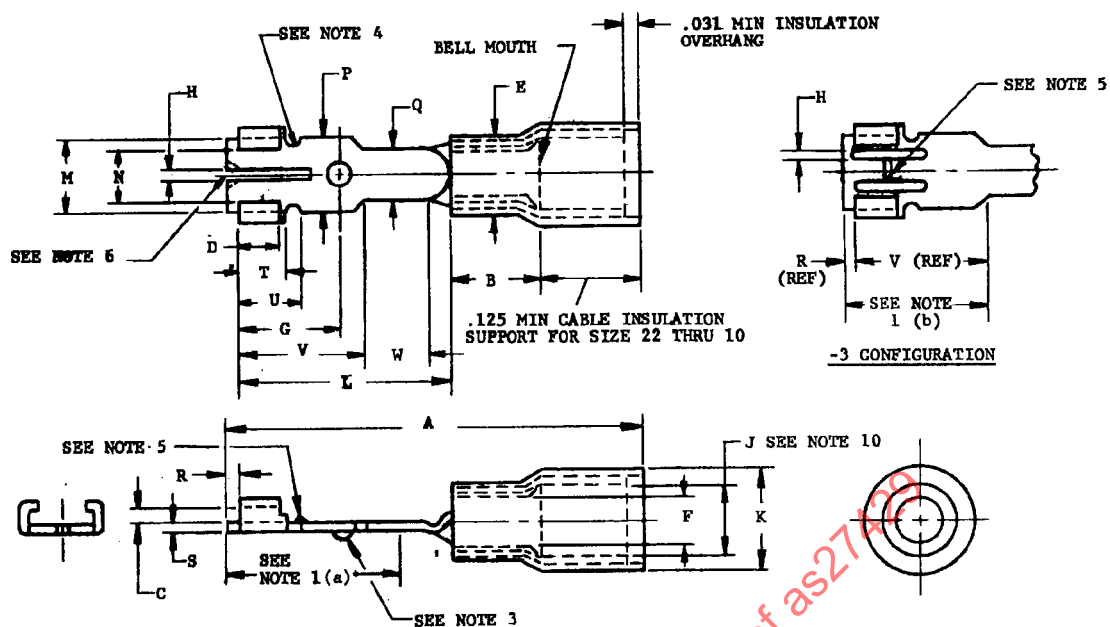
ACQUISITION SPECIFICATION: MIL-T-7928

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## AEROSPACE STANDARD

SPLICE, CONDUCTOR, DISCONNECT, CRIMP STYLE,  
COPPER, INSULATED BARREL, TYPE II, CLASS 1  
FOR 105°C TOTAL CONDUCTOR TEMPERATURE

**AS27429**  
SHEET 1 OF 4



| DASH NO. | WIRE SIZE      | A MAX | B MIN | C $\pm .005$ | D $\pm .005$ | E DIA        | F DIA        | G $\pm .020$ | H $\pm .005$ | J MIN DIA | K MAX | L $\begin{smallmatrix} +.000 \\ -.070 \end{smallmatrix}$ | M $\pm .005$ | N $\begin{smallmatrix} +.020 \\ -.000 \end{smallmatrix}$ |
|----------|----------------|-------|-------|--------------|--------------|--------------|--------------|--------------|--------------|-----------|-------|----------------------------------------------------------|--------------|----------------------------------------------------------|
| -1       | 22<br>20<br>18 | 1.00  | .156  | .040         | .100         | .215<br>.190 | .062<br>.056 | .275         | .016         | .120      | .280  | .540                                                     | .182         | .128                                                     |
| -2       | 16<br>14       |       |       |              |              | .240<br>.210 | .090<br>.081 |              |              | .153      |       |                                                          |              |                                                          |
| -3       | 12<br>10       | 1.30  | .234  | .050         | .160         | .300<br>.275 | .135<br>.129 | .475         | .050         | .210      | .361  | .760                                                     | .320         | .215                                                     |

| P $\pm .004$ | Q $\begin{smallmatrix} +.005 \\ -.010 \end{smallmatrix}$ | R $\pm .015$ | S    |      | T $\pm .005$ | U $\pm .020$ | V $\pm .020$ | W MIN | BARREL COLOR |
|--------------|----------------------------------------------------------|--------------|------|------|--------------|--------------|--------------|-------|--------------|
|              |                                                          |              | MAX  | MIN  |              |              |              |       |              |
| .186         | .122                                                     | .025         | .035 | .029 | .131         | .171         | .334         | .130  | RED          |
|              |                                                          |              |      |      |              |              |              |       | BLUE         |
| .315         | .210                                                     | .025         | .043 | .037 | .220         | .270         | .480         | .200  | YELLOW       |

SEE SHEET 3 FOR NOTES

FOR DESIGN FEATURE PURPOSES, THIS STANDARD TAKES PRECEDENCE OVER ACQUISITION DOCUMENTS REFERENCED HEREIN.

REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID.

## NOTES:

## 1. MATERIAL

- (a) FOR MS27429-1 AND MS27429-2:  
ASTM-B-36-66 52T ALLOY NO. 230, DISCONNECT PORTION HARD TEMPER ROCKWELL B65 MINIMUM, OR  
ASTM-B-152-66, DISCONNECT PORTION HARD TEMPER, ROCKWELL F92 MINIMUM.
- (b) FOR MS27429-3:  
ASTM-B-152-66 DISCONNECT PORTION HARD TEMPER, ROCKWELL F92 MINIMUM.
- (c) INSULATION SLEEVE: THERMOPLASTIC (NYLON OR POLYETHYLENE).

2. FINISH: ELECTRO-TIN, PLATE .0001 INCH MINIMUM-THICKNESS TO MIL-T-10727.

3. INDENT .015 MINIMUM TO PREVENT INCORRECT ASSEMBLING.

4. RELIEF TO ALLOW FLUSH MATING OF SURFACES.

5. UPSET TO ASSIST RETAINING ACTION .002-.012 (BETWEEN MATED SURFACES).

6. "V" CUTOUT OPTIONAL.

7. BREAK ALL SHARP EDGES AND REMOVE ALL BURRS.

8. THESE FITTINGS ARE USED IN PAIRS - WHEN MATING ANY TWO FITTINGS MUST FORM A TIGHT SECURE SPLICE.

9. QUALIFICATION: FOR QUALIFICATION; SPLICES (MATED) SHALL BE TESTED WITH ANY ONE OF THE FOLLOWING WIRES: MIL-W-5086, MIL-W-16878 EXCEPT /8, /9 OR /10, MIL-W-22759/1, /9 OR /11 OR MIL-W-81381/1, /3 OR /7 AND TOOLING AS FOLLOWS: MIL-C-22520/5-01 TOOLING WITH MIL-C-22520/5-100 DIES INSTALLED FOR SIZES 22 THROUGH 10 SPLICES; OR MIL-C-22520/10-01 TOOLING WITH MIL-C-22520/10-101 DIES INSTALLED FOR SIZES 22 THROUGH 14 SPLICES AND MIL-C-22520/10-100 DIES INSTALLED FOR SIZES 12 THROUGH 10 SPLICES. EXISTING MS90413 AND MS3316 TOOLS IN THE FIELD MAY BE USED UNTIL WORN OUT.

10. DIMENSION "J" REPRESENTS THE MINIMUM OPENING THAT WILL ACCEPT THE FINISHED WIRE.

11. CONTOUR INDICATED BY PHANTOM LINES MAY VARY FROM THAT SHOWN TO SUIT INDIVIDUAL MANUFACTURER'S DESIGN.

12. INSULATION SUPPORT AND TERMINAL BARREL MAY BE MULTIPLE PIECE CONSTRUCTION.

13. WIRE INSERTION SHALL BE FACILITATED BY BELL MOUTH.

14. THE GOVERNMENT HAS A ROYALTY-FREE LICENSE UNDER U.S. PATENT NO. 3,516,043 DATED JUNE 2, 1970, ENTITLED "HERMAPHRODITIC DISCONNECT TERMINAL" FOR THE BENEFIT OF MANUFACTURE OF THE ITEMS ILLUSTRATED HEREIN EITHER FOR THE GOVERNMENT OR FOR USE IN EQUIPMENT TO BE DELIVERED TO THE GOVERNMENT.