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REV. F
AS7928™/12

FEDERAL SUPPLY CLASS
5940

RATIONALE

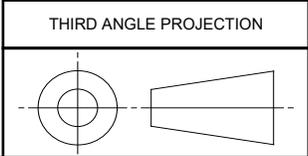
AS7928/12 IS BEING STABILIZED BECAUSE THE COMMITTEE DOES NOT ANTICIPATE FUTURE TECHNICAL CHANGES. STABILIZATION DOES NOT IMPLY THE PROCESS OR PRODUCT IS UNACCEPTABLE FOR APPLICATIONS FOR WHICH IT IS DESIGNED. THE TERMINAL DEFINED BY THIS SPECIFICATION IS THE TIN WHISKER RESISTANT VERSION OF THE AS25036 TERMINAL. THERE ARE NO QUALIFIED SUPPLIERS. FOR PROCUREMENT, USERS ARE RECOMMENDED TO USE THE QUALITY ASSURANCE REQUIREMENTS OF AS7928 AND A QUALIFIED AS25036 SUPPLIER. ANY TECHNICAL CHANGES NOTED BY A SUPPLIER OR USER WHICH RESULTS IN A PRODUCT OR REQUIREMENT CHANGE WILL BE ADDRESSED BY A NEW REVISION.

STABILIZED NOTICE

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|-------------------|--|-----------------------------------|--|
| CUSTODIAN: AE-8C2 | | PROCUREMENT SPECIFICATION: AS7928 | |
| | AEROSPACE STANDARD TERMINAL, LUG, CRIMP STYLE, COPPER, INSULATED, RING TONGUE, BELL-MOUTHED, TIN WHISKER RESISTANT, TYPE II, CLASS 1 (FOR 105 °C TOTAL CONDUCTOR TEMPERATURE) | | AS7928™/12 REV. F |
| | | | |

ISSUED 2007-07 REVISED 2020-04 STABILIZED 2023-07

NOTICE

THE COMPLETE REQUIREMENTS FOR PROCURING THE PRODUCT DESCRIBED HEREIN SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS7928.

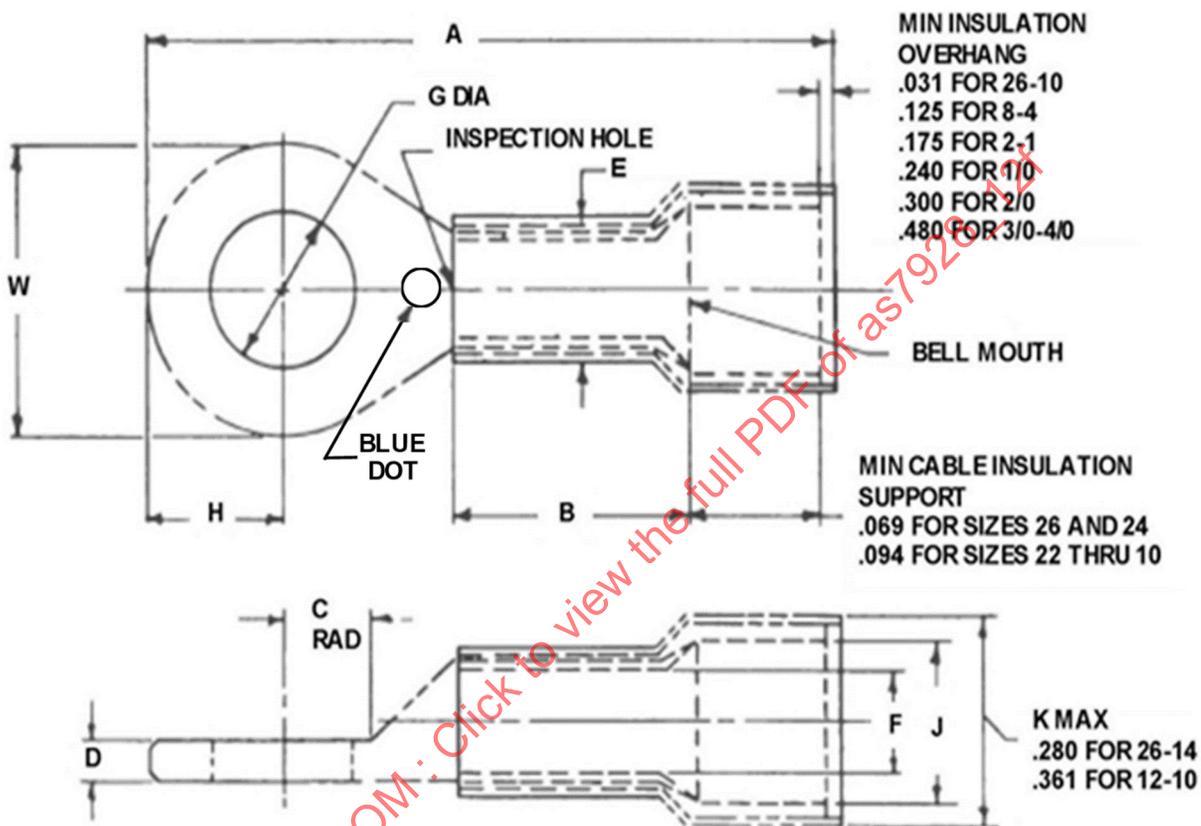


FIGURE 1 - TERMINAL CONSTRUCTION

| | | | |
|---|---|---|---------------------------------|
|  | <p>AEROSPACE STANDARD</p> | <p>AS7928™/12 SHEET 1 OF 7</p> | <p>REV. F</p> |
| | <p>TERMINAL, LUG, CRIMP STYLE, COPPER, INSULATED, RING TONGUE, BELL-MOUTHED, TIN WHISKER RESISTANT, TYPE II, CLASS 1 (FOR 105 °C TOTAL CONDUCTOR TEMPERATURE)</p> | | |

TABLE 1 - DIMENSIONS

| DASH NO. | WIRE SIZE | STUD SIZE | | A MAX | B MIN | C MIN RAD | D | | E DIA | F DIA | G DIA | | J MIN DIA | W & H 1/ | | INSULATING SLEEVE COLOR |
|----------|-----------|-----------|------|-------|-------|-----------|------|------|-----------|-----------|-------|------|-----------|----------|------|-------------------------|
| | | MAX | MIN | | | | MAX | MIN | | | MAX | MIN | | MAX | MIN | |
| 143 | 26-24 | 2 | .086 | .740 | .126 | .133 | .028 | .022 | .215/.190 | .033/.027 | .098 | .090 | .084 | .210 | .133 | Yellow |
| 144 | 26-24 | 4 | .112 | .755 | .126 | .171 | .028 | .022 | .215/.190 | .033/.027 | .122 | .114 | .084 | .260 | .193 | Yellow |
| 145 | 26-24 | 6 | .138 | .855 | .126 | .202 | .028 | .022 | .215/.190 | .033/.027 | .152 | .142 | .084 | .260 | .245 | Yellow |
| 146 | 26-24 | 8 | .164 | .855 | .126 | .202 | .028 | .022 | .215/.190 | .033/.027 | .178 | .168 | .084 | .330 | .245 | Yellow |
| 147 | 26-24 | 10 | .190 | .865 | .126 | .227 | .028 | .022 | .215/.190 | .033/.027 | .203 | .193 | .084 | .330 | .245 | Yellow |
| 159 | 22-18 | 2 | .086 | .755 | .156 | .115 | .035 | .027 | .215/.190 | .073/.052 | .098 | .090 | .120 | .230 | .198 | Red |
| 148 | 22-18 | 4 | .112 | .755 | .156 | .125 | .035 | .027 | .215/.190 | .073/.052 | .122 | .114 | .120 | .230 | .210 | Red |
| 101 | 22-18 | 6 | .138 | .790 | .156 | .125 | .035 | .027 | .215/.190 | .073/.052 | .152 | .142 | .120 | .230 | .210 | Red |
| 102 | 22-18 | 6 | .138 | .865 | .156 | .202 | .035 | .027 | .215/.190 | .073/.052 | .152 | .142 | .120 | .260 | .245 | Red |
| 149 | 22-18 | 8 | .164 | .930 | .156 | .202 | .035 | .027 | .215/.190 | .073/.052 | .178 | .168 | .120 | .320 | .305 | Red |
| 103 | 22-18 | 10 | .190 | 1.090 | .156 | .234 | .035 | .027 | .215/.190 | .073/.052 | .203 | .193 | .120 | .320 | .305 | Red |
| 150 | 22-18 | 1/4 | .250 | 1.090 | .156 | .265 | .035 | .027 | .215/.190 | .073/.052 | .275 | .260 | .120 | .473 | .450 | Red |
| 104 | 22-18 | 5/16 | .313 | 1.090 | .156 | .296 | .035 | .027 | .215/.190 | .073/.052 | .338 | .323 | .120 | .473 | .450 | Red |
| 105 | 22-18 | 3/8 | .375 | 1.320 | .156 | .328 | .035 | .027 | .215/.190 | .073/.052 | .400 | .385 | .120 | .540 | .520 | Red |
| 151 | 22-18 | 1/2 | .500 | 1.320 | .156 | .453 | .035 | .027 | .215/.190 | .073/.052 | .525 | .510 | .120 | .720 | .705 | Red |
| 152 | 16-14 | 4 | .112 | .774 | .156 | .125 | .035 | .029 | .240/.210 | .095/.081 | .122 | .114 | .153 | .260 | .240 | Blue |
| 106 | 16-14 | 6 | .138 | .815 | .156 | .125 | .035 | .029 | .240/.210 | .095/.081 | .152 | .142 | .153 | .260 | .240 | Blue |
| 107 | 16-14 | 6 | .138 | .910 | .156 | .202 | .035 | .029 | .240/.210 | .095/.081 | .152 | .142 | .153 | .317 | .302 | Blue |
| 153 | 16-14 | 8 | .164 | .955 | .156 | .202 | .035 | .029 | .240/.210 | .095/.081 | .178 | .168 | .153 | .317 | .302 | Blue |
| 108 | 16-14 | 10 | .190 | .955 | .156 | .234 | .035 | .029 | .240/.210 | .095/.081 | .203 | .193 | .153 | .317 | .302 | Blue |



AEROSPACE STANDARD
 TERMINAL, LUG, CRIMP STYLE, COPPER,
 INSULATED, RING TONGUE, BELL-MOUTHED,
 TIN WHISKER RESISTANT, TYPE II, CLASS 1
 (FOR 105 °C TOTAL CONDUCTOR TEMPERATURE)

AS7928™/12
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REV.
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TABLE 1 - DIMENSIONS (CONTINUED)

| DASH NO. | WIRE SIZE | STUD SIZE | A MAX | B MIN | C MIN | D | | E DIA | F DIA | G DIA | | J MIN DIA | | W & H 1/ | | INSULATING SLEEVE COLOR |
|----------|-----------|-----------|-------|-------|-------|------|------|-------|-----------|-----------|------|-----------|------|----------|------|-------------------------|
| | | | | | | MAX | MIN | | | MAX | MIN | MAX | MIN | MAX | MIN | |
| 154 | 16-14 | 1/4 | .250 | 1.085 | .156 | .265 | .035 | .029 | .240/.210 | .095/.081 | .275 | .260 | .153 | .473 | .450 | Blue |
| 109 | 16-14 | 5/16 | .313 | 1.085 | .156 | .296 | .035 | .029 | .240/.210 | .095/.081 | .338 | .323 | .153 | .473 | .450 | Blue |
| 110 | 16-14 | 3/8 | .375 | 1.225 | .156 | .328 | .035 | .029 | .240/.210 | .095/.081 | .400 | .385 | .153 | .540 | .520 | Blue |
| 155 | 16-14 | 1/2 | .500 | 1.320 | .156 | .453 | .035 | .029 | .240/.210 | .095/.081 | .525 | .510 | .153 | .720 | .705 | Blue |
| 111 | 12-10 | 6 | .138 | 1.120 | .234 | .202 | .043 | .037 | .300/.275 | .139/.129 | .152 | .142 | .210 | .380 | .365 | Yellow |
| 156 | 12-10 | 8 | .164 | 1.120 | .234 | .202 | .043 | .037 | .300/.275 | .139/.129 | .178 | .168 | .210 | .380 | .365 | Yellow |
| 112 | 12-10 | 10 | .190 | 1.120 | .234 | .234 | .043 | .037 | .300/.275 | .139/.129 | .203 | .193 | .210 | .380 | .365 | Yellow |
| 157 | 12-10 | 1/4 | .250 | 1.322 | .234 | .265 | .043 | .037 | .300/.275 | .139/.129 | .275 | .260 | .210 | .536 | .516 | Yellow |
| 113 | 12-10 | 5/16 | .313 | 1.322 | .234 | .296 | .043 | .037 | .300/.275 | .139/.129 | .338 | .323 | .210 | .536 | .516 | Yellow |
| 114 | 12-10 | 3/8 | .375 | 1.414 | .234 | .328 | .043 | .037 | .300/.275 | .139/.129 | .400 | .385 | .210 | .598 | .573 | Yellow |
| 158 | 12-10 | 1/2 | .500 | 1.414 | 0.234 | .453 | .043 | .037 | .300/.275 | .139/.129 | .525 | .510 | .210 | .720 | .705 | Yellow |
| 115 | 8 | 10 | .190 | 1.402 | .315 | .234 | .084 | .038 | .350/.300 | .186/.176 | .203 | .193 | .257 | .429 | .386 | Red |
| 116 | 8 | 1/4 | .250 | 1.466 | .315 | .265 | .084 | .038 | .350/.300 | .186/.176 | .275 | .260 | .257 | .478 | .435 | Red |
| 117 | 8 | 5/16 | .313 | 1.544 | .315 | .296 | .084 | .038 | .350/.300 | .186/.176 | .338 | .323 | .257 | .590 | .547 | Red |
| 118 | 8 | 3/8 | .375 | 1.544 | .315 | .328 | .084 | .038 | .350/.300 | .186/.176 | .400 | .385 | .257 | .590 | .547 | Red |
| 119 | 6 | 10 | .190 | 1.599 | .375 | .238 | .084 | .043 | .410/.360 | .232/.222 | .203 | .193 | .310 | .503 | .460 | Blue |
| 120 | 6 | 1/4 | .250 | 1.599 | .375 | .265 | .084 | .043 | .410/.360 | .232/.222 | .275 | .260 | .310 | .503 | .460 | Blue |
| 121 | 6 | 5/16 | .313 | 1.762 | .375 | .305 | .084 | .043 | .410/.360 | .232/.222 | .338 | .323 | .310 | .623 | .580 | Blue |
| 122 | 6 | 3/8 | .375 | 1.762 | .375 | .328 | .084 | .043 | .410/.360 | .232/.222 | .400 | .385 | .310 | .623 | .580 | Blue |
| 123 | 4 | 1/4 | .250 | 1.812 | .437 | .276 | .096 | .047 | .500/.425 | .290/.280 | .275 | .260 | .370 | .570 | .480 | Yellow |



AEROSPACE STANDARD
 TERMINAL, LUG, CRIMP STYLE, COPPER,
 INSULATED, RING TONGUE, BELL-MOUTHED,
 TIN WHISKER RESISTANT, TYPE II, CLASS 1
 (FOR 105 °C TOTAL CONDUCTOR TEMPERATURE)

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 SHEET 3 OF 7

REV.
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TABLE 1 - DIMENSIONS (CONTINUED)

| DASH NO. | WIRE SIZE | STUD SIZE | A MAX | B MIN | C MIN RAD | D | | E DIA | F DIA | G DIA | | J MIN DIA | W & H 1/2 | | INSULATING SLEEVE COLOR |
|----------|-----------|-----------|-------|-------|-----------|------|------|-------|------------|-----------|------|-----------|-----------|-------|-------------------------|
| | | | | | | MAX | MIN | | | MAX | MIN | | MAX | MIN | |
| 124 | 4 | 5/16 | .313 | 1.879 | .437 | .308 | .096 | .047 | .500/.425 | .290/.280 | .338 | .323 | .648 | .605 | Yellow |
| 125 | 4 | 3/8 | .375 | 1.879 | .437 | .328 | .096 | .047 | .500/.425 | .290/.280 | .400 | .385 | .648 | .605 | Yellow |
| 126 | 2 | 1/4 | .250 | 2.069 | .505 | .343 | .109 | .054 | .560/.510 | .365/.355 | .275 | .260 | .711 | .668 | Red |
| 127 | 2 | 3/8 | .375 | 2.069 | .505 | .343 | .109 | .054 | .560/.510 | .365/.355 | .400 | .385 | .711 | .668 | Red |
| 128 | 2 | 1/2 | .500 | 2.269 | .505 | .453 | .109 | .054 | .560/.510 | .365/.355 | .525 | .510 | .804 | .740 | Red |
| 129 | 1 | 1/4 | .250 | 2.150 | .565 | .383 | .125 | .070 | .620/.560 | .398/.388 | .275 | .260 | .783 | .740 | Clear |
| 130 | 1 | 3/8 | .375 | 2.150 | .565 | .383 | .125 | .070 | .620/.560 | .398/.388 | .400 | .385 | .783 | .740 | Clear |
| 131 | 1 | 1/2 | .500 | 2.370 | .565 | .453 | .125 | .070 | .620/.560 | .398/.388 | .525 | .510 | .887 | .740 | Clear |
| 132 | 0 | 1/4 | .250 | 2.401 | .630 | .418 | .125 | .070 | .685/.625 | .458/.438 | .275 | .260 | .853 | .810 | Blue |
| 133 | 0 | 3/8 | .375 | 2.401 | .630 | .418 | .125 | .070 | .685/.625 | .458/.438 | .400 | .385 | .853 | .810 | Blue |
| 134 | 0 | 1/2 | .500 | 2.525 | .630 | .453 | .125 | .070 | .685/.625 | .458/.438 | .525 | .510 | .903 | .860 | Blue |
| 135 | 00 | 5/16 | .313 | 2.750 | .700 | .473 | .129 | .075 | .755/.685 | .520/.500 | .338 | .323 | .956 | .913 | Yellow |
| 136 | 00 | 3/8 | .375 | 2.750 | .700 | .473 | .129 | .075 | .755/.685 | .520/.500 | .400 | .385 | .956 | .913 | Yellow |
| 137 | 00 | 1/2 | .500 | 2.750 | .700 | .473 | .129 | .075 | .755/.685 | .520/.500 | .525 | .510 | .956 | .913 | Yellow |
| 138 | 000 | 3/8 | .375 | 3.000 | .718 | .513 | .140 | .085 | .840/.729 | .577/.557 | .400 | .385 | 1.053 | 1.010 | Red |
| 139 | 000 | 1/2 | .500 | 3.000 | .718 | .513 | .140 | .085 | .840/.729 | .577/.557 | .525 | .510 | 1.053 | 1.010 | Red |
| 140 | 0000 | 3/8 | .375 | 3.300 | .734 | .560 | .150 | .095 | 1.000/.802 | .645/.622 | .400 | .385 | 1.148 | 1.095 | Blue |
| 141 | 0000 | 1/2 | .500 | 3.300 | .734 | .560 | .150 | .095 | 1.000/.802 | .645/.622 | .525 | .510 | 1.148 | 1.095 | Blue |

1/ H MAX AND MIN DIMENSIONS SHALL BE ONE-HALF OF THE W MAX AND MIN DIMENSIONS, RESPECTIVELY.

REQUIREMENTS: ALL REQUIREMENTS SHALL CONSIST OF THIS DOCUMENT AND THE LATEST ISSUE OF AS7928.

1. CONFIGURATION:

CONFIGURATION SHALL BE IN ACCORDANCE WITH FIGURE 1 AND TABLE 1.

CONTOUR INDICATED BY PHANTOM LINES IN FIGURE 1 MAY VARY FROM THAT SHOWN TO SUIT INDIVIDUAL MANUFACTURER'S DESIGN.

DIMENSIONS ARE IN INCHES (SEE TABLE 1 AND FIGURE 1).

DIMENSION "C RAD" REPRESENTS THE MINIMUM WASHER CLEARANCE RADIUS.

THE AVERAGE DIAMETER OF E THROUGHOUT THE LENGTH DEFINED BY DIMENSION B SHALL NOT VIOLATE THE SPECIFIED LIMITS OF DIMENSION E. THE E DIMENSION WILL VARY WITH PROCESSING; MEASUREMENTS AT THE POINT WHERE THE PROCESS VARIATION OCCURS SHALL NOT BE USED AS A BASIS FOR REJECTION.

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

THIN WALL INSULATED WIRES WITH AN OUTSIDE DIAMETER SMALLER THAN DIMENSION "F" WILL PERMIT THE INSULATION PORTION OF THE WIRE TO ENTER THE CONDUCTOR CRIMP AREA. THE CONDUCTOR MUST BE POSITION BY EYE SIGHT IN TO THE CRIMP BARREL AREA TO INSURE A RELIABLE CRIMP.

INSULATION SUPPORT AND TERMINAL BARREL MAY BE MULTIPLE PIECE CONSTRUCTION.

REMOVE ALL BURRS AND SHARP EDGES.

2. MATERIALS:

MATERIAL SHALL BE IN ACCORDANCE WITH AS7928.

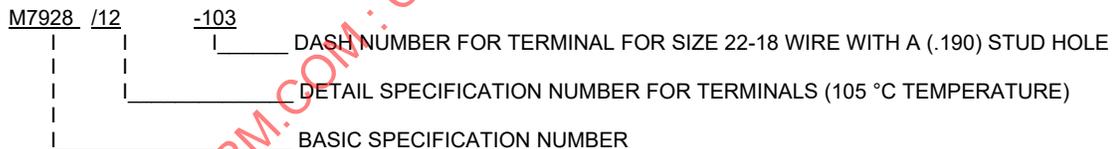
TIN PLATED (WHISKER RESISTANT) SHALL BE PER ASTM B545, ALLOYED WITH 3% BY WEIGHT, MINIMUM LEAD. PLATING THICKNESS SHALL BE .0002 INCH MINIMUM (REFER TO AS7928 AND GEIA-STD-0005-2 FOR MORE DETAILS).

3. IDENTIFICATION OF PRODUCT MARKING:

TERMINAL WIRE SIZE SHALL BE IN BE AS SPECIFIED BY THE SLEEVE COLOR IN TABLE 1 AND COLORED IN ACCORDANCE WITH EIA-359-A (CLASS 1).

TIN WHISKER RESISTANT PLATING: PLATING SHALL BE IDENTIFIED BY A COLOR DOT OR DASH LOCATED NEAR THE INSPECTION HOLE AS SHOWN IN FIGURE 1.

4. PART NUMBER:



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| | | | |
|---|---|-----------------------------------|-------------------------|
|  | AEROSPACE STANDARD | AS7928™/12 SHEET 5 OF 7 | REV. F |
| | TERMINAL, LUG, CRIMP STYLE, COPPER, INSULATED, RING TONGUE, BELL-MOUTHED, TIN WHISKER RESISTANT, TYPE II, CLASS 1 (FOR 105 °C TOTAL CONDUCTOR TEMPERATURE) | | |