FEDERAL SUPPLY CLASS
5940

RATIONALE

REVISION REQUIRED TO ADD NEW CRIMP TOOLS, CHANGE SILVER CONDUCTOR WIRE TO NICKEL CONDUCTOR WIRE FOR QUALIFICATION, AND MAKE MINOR EDITORIAL AND TECHNICAL CHANGES AS NEEDED.

NOTICE

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

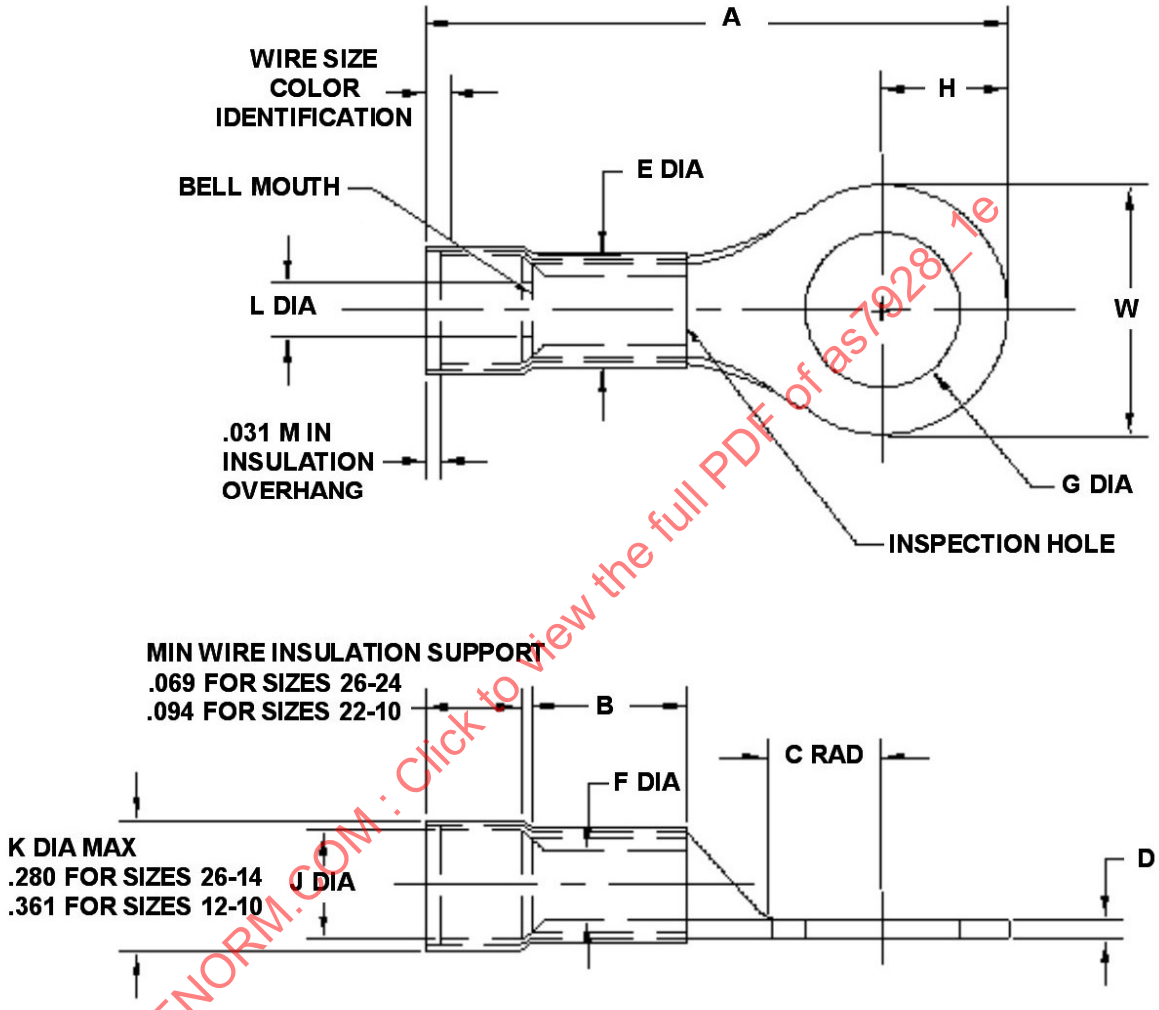
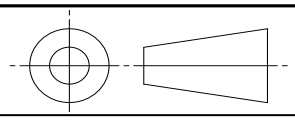


FIGURE 1 - TERMINAL CONSTRUCTION

For more information on this standard, visit
https://www.sae.org/standards/content/AS7928/1E

THIRD ANGLE PROJECTION



ISSUED 1999-04 REVISED 2021-09

CUSTODIAN: AE-8C2

PROCUREMENT SPECIFICATION: AS7928

SAE INTERNATIONAL

AEROSPACE STANDARD

TERMINALS, LUG AND SPLICES, CONDUCTOR, CRIMP STYLE, COPPER TERMINAL, LUG, CRIMP STYLE, COPPER, INSULATED, RING TONGUE, FOR THIN WALL WIRE, TYPE II CLASS 1 FOR 105 °C TOTAL CONDUCTOR TEMPERATURE

TABLE 1 - DIMENSIONS

DASH NO.	WIRE SIZE	STUD SIZE STUD	STUD SIZE DIA (IN)	A MAX	B MIN	C MIN RAD	D	E DIA	F DIA	G DIA MAX	G DIA MIN	J MIN DIA	L	W & H 1/ MAX	W & H 1/ MIN	INSUL. SLEEVE COLOR	WIRE SIZE COLOR
1	26	2	(.086)	.740	.126	.133	.028 / .022	.215 / .190	.033 / .022	.098	.090	.060	.028 / .022	.210	.133	YELLOW	BLACK
2		4	(.112)	.786		.171				.122	.114			.260	.193		
3		6	(.138)	.886		.202				.152	.142				.245		
4		8	(.164)							.178	.168			.330			
5		10	(.190)			.227				.203	.193						
6	24	2	(.086)	.740	.126	.133	.028 / .022	.215 / .190	.033 / .027	.098	.090	.070	.033 / .027	.210	.133	YELLOW	BLUE
7		4	(.112)	.786		.171				.122	.114			.260	.193		
8		6	(.138)	.886		.202				.152	.142				.245		
9		8	(.164)							.178	.168			.330			
10		10	(.190)			.227				.203	.193						
70	22	2	(.086)	.790	.156	.115	.037 / .029	.215 / .190	.070 / .034	.098	.090	.080	.039 / .034	.230	.198	RED	GREEN
11		4	(.112)	.801		.125				.122	.114				.210		
12		6	(.138)							.152	.142						
13		6	(.138)	.911		.202								.260	.245		
14		8	(.164)	.956						.178	.168			.320	.305		
15		10	(.190)			.234				.203	.193						
16		1/4	(.250)	1.136		.265				.275	.260			.473	.450		
17		5/16	(.312)			.296				.338	.323						
18		3/8	(.375)	1.366		.328				.400	.385			.540	.520		
19		1/2	(.500)			.453				.525	.510			.720	.705		
71	20	2	(.086)	.790	.156	.115	.037 / .029	.215 / .190	.070 / .042	.098	.090	.090	.048 / .042	.230	.198	RED	RED
20		4	(.112)	.801		.125				.122	.114				.210		
21		6	(.138)							.152	.142						
22		6	(.138)	.911		.202								.260	.245		
23		8	(.164)	.956						.178	.168			.320	.305		
24		10	(.190)			.234				.203	.193						
25		1/4	(.250)	1.136		.265				.275	.260			.473	.450		
26		5/16	(.312)			.296				.338	.323						
27		3/8	(.375)	1.366		.328				.400	.385			.540	.520		
28		1/2	(.500)			.453				.525	.510			.720	.705		
72	18	2	(.086)	.790	.156	.115	.037 / .029	.215 / .190	.070 / .052	.098	.090	.100	.056 / .052	.230	.198	RED	WHITE
29		4	(.112)	.801		.125				.122	.114				.210		
30		6	(.138)							.152	.142						
31		6	(.138)	.911		.202								.260	.245		
32		8	(.164)	.956						.178	.168			.320	.305		
33		10	(.190)			.234				.203	.193						
34		1/4	(.250)	1.136		.265				.275	.260			.473	.450		
35		5/16	(.312)			.296				.338	.323						
36		3/8	(.375)	1.366		.328				.400	.385			.540	.520		
37		1/2	(.500)			.453				.525	.510			.720	.705		

TABLE 1 - DIMENSIONS (CONTINUED)

DASH NO.	WIRE SIZE	STUD SIZE STUD	STUD SIZE DIA (IN)	A MAX	B MIN	C MIN RAD	D	E DIA	F DIA	G DIA MAX	G DIA MIN	J MIN DIA	L	W & H 1/ MAX	W & H 1/ MIN	INSUL. SLEEVE COLOR	WIRE SIZE COLOR
38	16	4	(.112)	.820	.156	.125	.037 / .029	.240 / .210	.090 / .059	.122	.114	.110	.063 / .054	.260	.240	BLUE	BLUE
39		6	(.138)							.152	.142						
40		6	(.138)	.956		.202								.317	.302		
41		8	(.164)							.178	.168						
42		10	(.190)	.961		.234				.203	.193						
43		1/4	(.250)	1.131		.265				.275	.260			.473	.450		
44		5/16	(.312)			.296				.338	.323						
45		3/8	(.375)	1.271		.328				.400	.385			.540	.520		
46		1/2	(.500)	1.366		.453				.525	.510			.720	.705		
47	14	4	(.112)	.820	.156	.125	.037 / .029	.240 / .210	.090 / .074	.122	.114	.130	.078 / .074	.260	.240	BLUE	GREEN
48		6	(.138)							.152	.142						
49		6	(.138)	.956		.202								.317	.302		
50		8	(.164)							.178	.168						
51		10	(.190)	.961		.234				.203	.193						
52		1/4	(.250)	1.131		.265				.275	.260			.473	.450		
53		5/16	(.312)			.296				.338	.323						
54		3/8	(.375)	1.271		.328				.400	.385			.540	.520		
55		1/2	(.500)	1.366		.453				.525	.510			.720	.705		
56	12	6	(.138)	1.198	.234	.202	.043 / .037	.300 / .275	.139 / .091	.152	.142	.150	.095 / .091	.380	.365	YELLOW	YELLOW
57		8	(.164)							.178	.168						
58		10	(.190)			.234				.203	.193						
59		1/4	(.250)	1.400		.265				.275	.260			.536	.516		
60		5/16	(.312)			.296				.338	.323						
61		3/8	(.375)	1.492		.328				.400	.385			.598	.573		
62		1/2	(.500)			.453				.525	.510			.720	.705		
63	10	6	(.138)	1.198	.234	.202	.043 / .037	.300 / .275	.139 / .115	.152	.142	.180	.118 / .115	.380	.365	YELLOW	BROWN
64		8	(.164)							.178	.168						
65		10	(.190)			.234				.203	.193						
66		1/4	(.250)	1.400		.265				.275	.260			.536	.516		
67		5/16	(.312)			.296				.338	.323						
68		3/8	(.375)	1.492		.328				.400	.385			.598	.573		
69		1/2	(.500)			.453				.525	.510			.720	.705		

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. INSULATION SUPPORT AND TERMINAL BARREL MAY BE MULTIPLE PIECE CONSTRUCTION. WIRE INSERTION IS FACILITATED BY BELL MOUTH.

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

   THE AVERAGE DIAMETER OF "E" AND AVERAGE DIAMETER OF "F" WITHIN THE LENGTH SPECIFIED BY B SHALL BE WITHIN SPECIFICATION DIMENSIONS (SEE FIGURE 1 AND TABLE 1).

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

   DIMENSION "L" REPRESENTS THE WIRE INSULATION STOP. THIS LUG DESIGN (DESIGN OPTIONAL) WILL NOT STOP INSULATION WITH A WALL THICKNESS OF LESS THAN .005 INCH.

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

   INSULATION SUPPORT AND TERMINAL BARREL MAY BE MULTIPLE PIECE CONSTRUCTION. WIRE INSERTION IS FACILITATED BY BELL MOUTH.

   REMOVE ALL BURRS AND SHARP EDGES.

2. MATERIAL:

   MATERIALS SHALL BE IN ACCORDANCE WITH AS7928.

   TIN PLATED FINISHED (SEE APPLICATION NOTES).

3. IDENTIFICATION OF PRODUCT MARKING:

   WIRE SIZE COLOR IDENTIFICATION SHALL BE IN ACCORDANCE WITH FIGURE 1 AND TABLE 1.

   A COLOR RING SHALL COVER A MINIMUM OF 315° OF THE CIRCUMFERENCE DESIGNATED BY DIMENSION B.

   IN LIEU OF THE WIRE SIZE COLOR RING, TWO OR MORE LONGITUDINAL STRIPES EQUALLY SPACED ON THE INSULATION PORTION OF THE TERMINAL MAY BE USED. THE STRIPES SHALL BE EXTENDED TO WITHIN 1/16 INCH OF THE INSULATION AND MUST NOT OBLITERATE THE BASIC SLEEVE COLOR.

   TERMINAL WIRE SIZE COLOR SHALL BE IN ACCORDANCE WITH TABLE 1 AND MIL-STD-104 CLASS 1. THERE SHALL BE A DISTINCT CONTRAST BETWEEN THE INSULATION SLEEVE COLOR AND THE WIRE SIZE COLOR.

4. PART NUMBER: