

REV.  
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RATIONALE

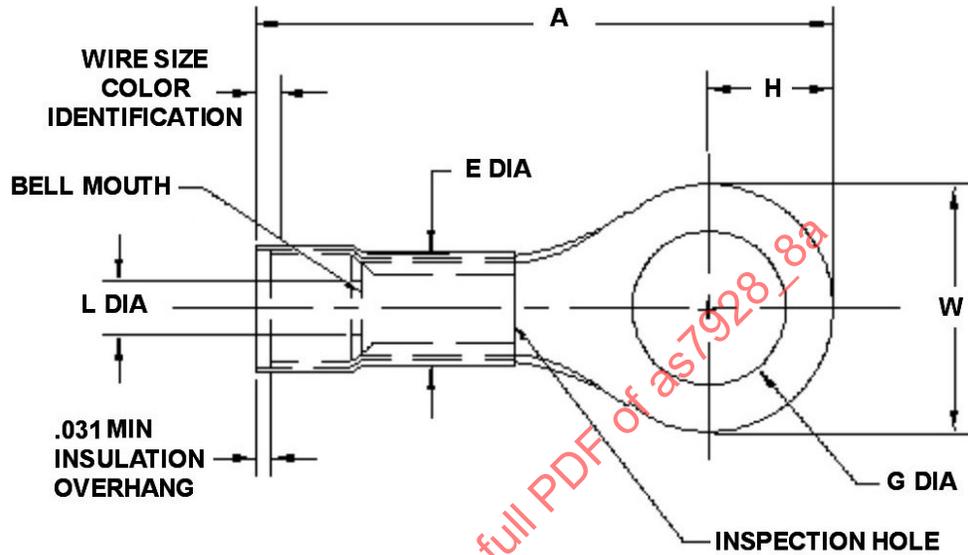
REVISION INCLUDES NEW CRIMP TOOLS AND EDITORIAL CHANGES AS NEEDED.

NOTICE

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

AS7928™/8

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MIN WIRE INSULATION SUPPORT  
.069 FOR SIZES 26-24  
.094 FOR SIZES 22-10

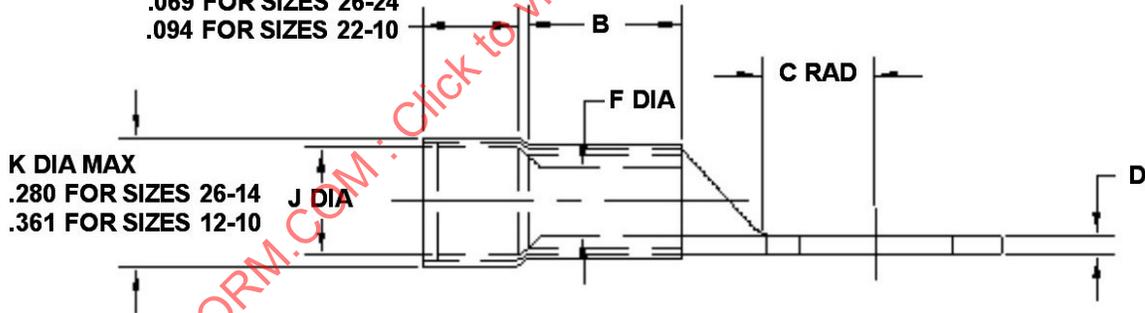
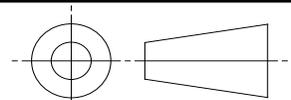


FIGURE 1 - TERMINAL CONSTRUCTION

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/AS7928/8A>

THIRD ANGLE PROJECTION



CUSTODIAN: AE-8/AE-8C2

PROCUREMENT SPECIFICATION: AS7928



AEROSPACE STANDARD

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

AS7928™/8  
SHEET 1 OF 5

REV.  
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**TABLE 1 - DIMENSIONS**

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

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**TABLE 1 - DIMENSIONS (CONTINUED)**

DASH NO.	TERM SIZE	STUD SIZE		A MAX.	B MIN.	C MIN. RAD.	D	E DIA.	F DIA.	G DIA.		J MIN. DIA.	L	W & H 1/		INSUL. SLEEVE COLOR	WIRE SIZE COLOR		
		STUD	DIA (IN)							MAX.	MIN.			MAX.	MIN.				
38	16	4	(.112)	.820	.156	.125				.122	.114	.110	.063 .054	.260	.240	BLUE	BLUE		
39		6	(.138)							.152	.142							.317	.302
40		6	(.138)							.178	.168								
41		8	(.164)	.203		.193				.473	.450								
42		10	(.190)	.234		.229								.540	.520				
43		1/4	(.250)	.265		.260												.720	.705
44		5/16	(.312)	.296		.323													
45		3/8	(.375)	.328		.385													
46		1/2	(.500)	1.271		.453				.525	.510								
47	14	4	(.112)	.820	.156	.125				.122	.114	.130	.078 .074	.260	.240	BLUE	GREEN		
48		6	(.138)							.152	.142							.317	.302
49		6	(.138)							.178	.168								
50		8	(.164)	.203		.193				.473	.450								
51		10	(.190)	.234		.229								.540	.520				
52		1/4	(.250)	.265		.260												.720	.705
53		5/16	(.312)	.296		.323													
54		3/8	(.375)	.328		.385													
55		1/2	(.500)	1.366		.453				.525	.510								
56	12	6	(.138)	1.198	.234	.202				.152	.142	.150	.095 .091	.380	.365	YELLOW	YELLOW		
57		8	(.164)							.178	.168							.536	.516
58		10	(.190)							.203	.193								
59		1/4	(.250)	.265		.260				.720	.705								
60		5/16	(.312)	.296		.323													
61		3/8	(.375)	.328		.385													
62		1/2	(.500)	1.492		.453				.525	.510								
63	10	6	(.138)	1.198	.234	.202				.152	.142	.180	.118 .115	.380	.365	YELLOW	BROWN		
64		8	(.164)							.178	.168							.536	.516
65		10	(.190)							.203	.193								
66		1/4	(.250)	.265		.260				.720	.705								
67		5/16	(.312)	.296		.323													
68		3/8	(.375)	.328		.385													
69		1/2	(.500)	1.492		.453				.525	.510								

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 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 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.

REMOVE ALL BURRS AND SHARP EDGES.

2. MATERIAL: MATERIAL SHALL BE IN ACCORDANCE WITH AS7928.

TIN PLATED WHISKER RESISTANT FINISH PER ASTM B545 ALLOYED WITH 3% BY WEIGHT MINIMUM LEAD. PLATING THICKNESS SHALL BE .0002 INCHES MINIMUM (SEE AS7928 AND GEIA-STD-0005-02 FOR MORE DETAILS).

3. WIRE SIZE COLOR IDENTIFICATION: 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. CRIMPING TOOLS: CRIMPING TOOLS SHALL BE AS SPECIFIED TABLE 2.

**TABLE 2 - TERMINAL CRIMPING TOOLS**

TERMINAL SIZE (SEE TABLE 1)	CRIMP TOOL	CRIMP DIE
12-10	M22520/5-01	M22520/5-100 DIE - YELLOW
	M22520/10-01	M22520/10-100 DIE - YELLOW
	M22520/41-01 DIE- NO COLOR <u>1/</u>	N/A
	M22520/5-01	M22520/5-108 DIE - YELLOW <u>1/</u>
16-14	M22520/10-01	M22520/10-100
	M22520/40-01 DIE - BLUE <u>1/</u>	N/A
22-18	M22520/5-01	M22520/5-107 DIE - BLUE <u>1/</u>
	M22520/40-01 DIE - RED <u>1/</u>	N/A
26-14	M22520/5-01	M22520/5-106 DIE - RED <u>1/</u>
	M22520/10-01	M22520/5-100 DIE - WHITE
	M22520/10-01	M22520/10-101 DIE - WHITE

1/ TOOL OR DIE WITH WIRE INSULATION SUPPORT CUP CRIMPS.