

REV.
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AS7928™/8

FEDERAL SUPPLY CLASS
5940

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.

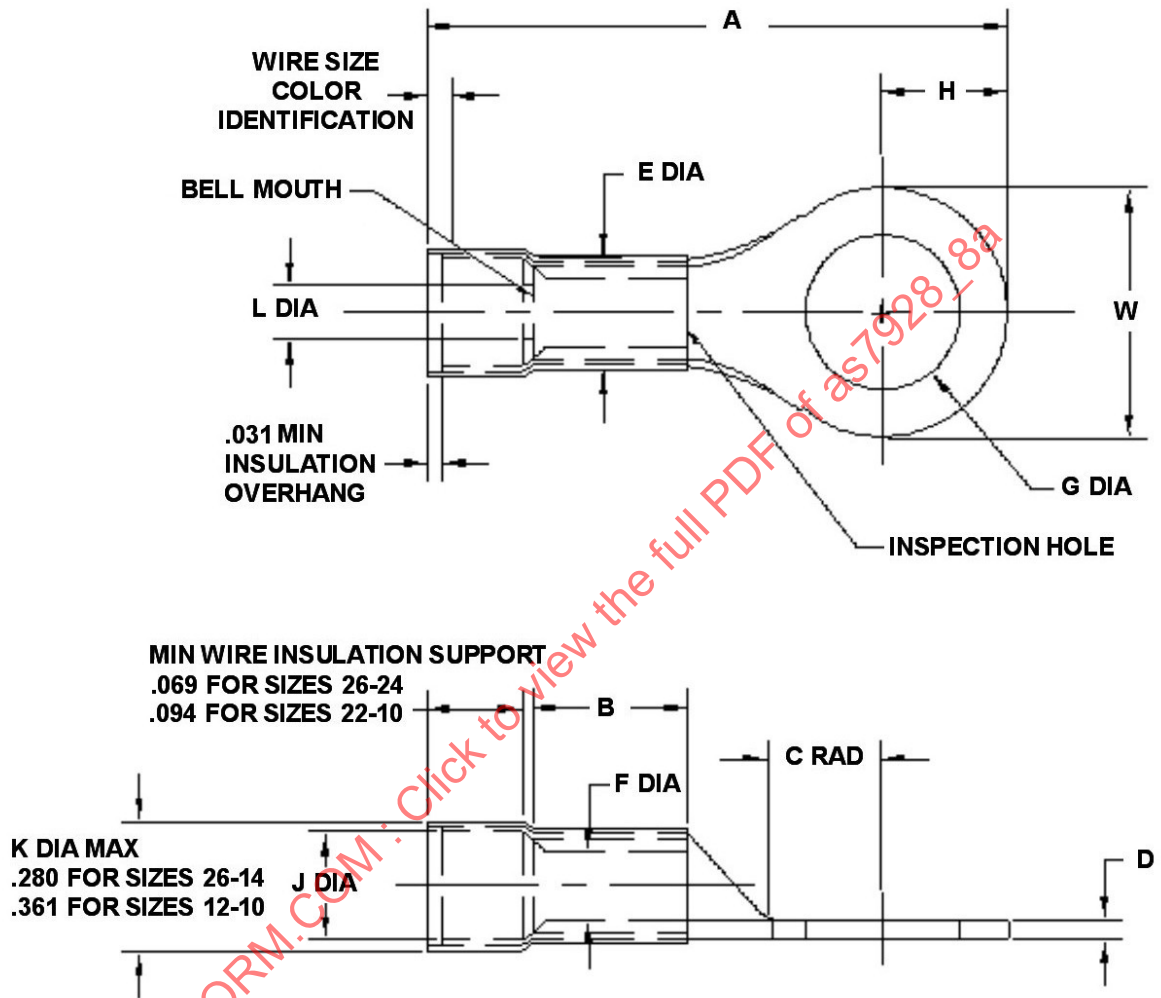
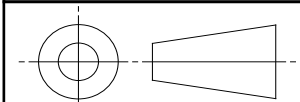


FIGURE 1 - TERMINAL CONSTRUCTION

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

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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.		
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			.330	.245		
4		8	(.164)			.178				.168							
5		10	(.190)			.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			.330	.245		
9		8	(.164)			.178				.168							
10		10	(.190)			.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)	.911		.202				.152	.142			.260	.245		
13		6	(.138)							.178	.168						
14		8	(.164)			.234				.203	.193						
15		10	(.190)	.956		.265				.275	.260			.473	.450		
16		1/4	(.250)	1.136		.296				.338	.323			.540	.520		
17		5/16	(.312)			.328				.400	.385			.720	.705		
18		3/8	(.375)	1.366		.453				.525	.510						
19		1/2	(.500)														
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)	.911		.202				.152	.142			.260	.245		
22		6	(.138)							.178	.168						
23		8	(.164)			.234				.203	.193						
24		10	(.190)	.956		.265				.275	.260			.473	.450		
25		1/4	(.250)	1.136		.296				.338	.323			.540	.520		
26		5/16	(.312)			.328				.400	.385			.720	.705		
27		3/8	(.375)	1.366		.453				.525	.510						
28		1/2	(.500)														
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)	.911		.202				.152	.142			.260	.245		
31		6	(.138)							.178	.168						
32		8	(.164)			.234				.203	.193						
33		10	(.190)	.956		.265				.275	.260			.473	.450		
34		1/4	(.250)	1.136		.296				.338	.323			.540	.520		
35		5/16	(.312)			.328				.400	.385			.720	.705		
36		3/8	(.375)	1.366		.453				.525	.510						
37		1/2	(.500)														



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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	.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				.178	.168						
41		8	(.164)			.203				.193							
42		10	(.190)	.961		.234				.275	.260						
43		1/4	(.250)	1.131		.265				.338	.323						
44		5/16	(.312)			.296				.400	.385						
45		3/8	(.375)	1.271		.328				.525	.510						
46		1/2	(.500)	1.366		.453											
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				.178	.168						
50		8	(.164)			.203				.193							
51		10	(.190)	.961		.234				.275	.260						
52		1/4	(.250)	1.131		.265				.338	.323						
53		5/16	(.312)			.296				.400	.385						
54		3/8	(.375)	1.271		.328				.525	.510						
55		1/2	(.500)	1.366		.453											
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						
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						
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.



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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>
	M22520/10-01	M22520/10-100
16-14	M22520/40-01 DIE - BLUE <u>1/</u>	N/A
	M22520/5-01	M22520/5-107 DIE - BLUE <u>1/</u>
22-18	M22520/40-01 DIE - RED <u>1/</u>	N/A
	M22520/5-01	M22520/5-106 DIE - RED <u>1/</u>
26-14	M22520/5-01	M22520/5-100 DIE - WHITE
	M22520/10-01	M22520/10-101 DIE - WHITE

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