

REV.  
B

AS7928™/8

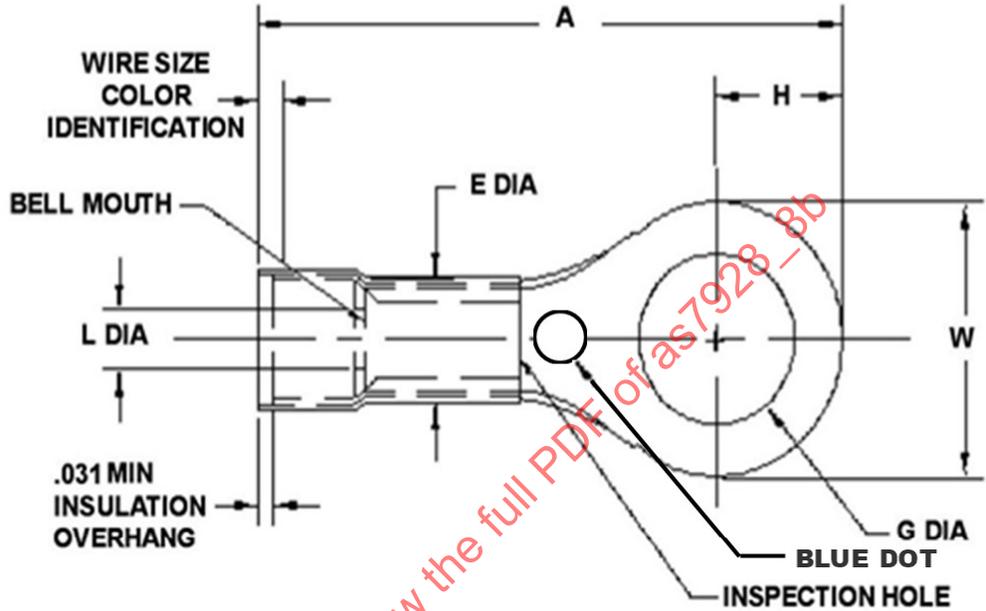
RATIONALE

REVISION REQUIRED TO ADD BLUE COLOR DESIGNATION FOR IDENTIFICATION OF TIN WHISKER RESISTANT FINISH, EDITING, AND MINOR 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.

SAE Executive Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user." SAE reviews each technical report at least every five years at which time it may be revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.



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

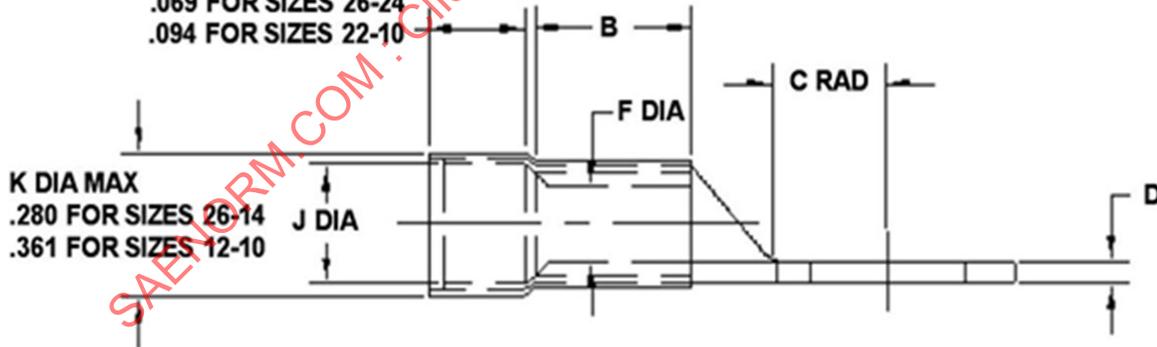
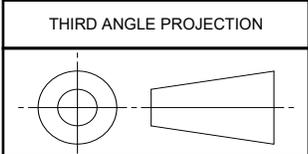


FIGURE 1 - TERMINAL CONSTRUCTION

For more information on this standard, visit  
<https://www.sae.org/standards/content/AS7928/8B>



CUSTODIAN: 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 6

REV.  
B

ISSUED 2007-07 REAFFIRMED 2013-07 REVISED 2021-05

**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	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)	.886		.227				.178	.168								
5		10	(.190)	.886		.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			.330	.245				
9		8	(.164)	.886		.227				.178	.168								
10		10	(.190)	.886		.227				.203	.193								
70	22	2	(.086)	.790	.156	.115	.037 .029	.215 .190	.070 .034	.098	.090	.080	.039 .034	.198	.230	.210	RED	GREEN	
11		4	(.112)	.801		.125				.122	.114			.260					.245
12		6	(.138)	.911		.202				.152	.142			.320					.305
13		6	(.138)	.911		.202				.152	.142			.320					.305
14		8	(.164)	.956		.234				.178	.168			.473					.450
15		10	(.190)	.956		.234				.203	.193			.540					.520
16		1/4	(.250)	1.136		.265				.275	.260			.720					.705
17		5/16	(.312)	1.366		.296				.338	.323								
18		3/8	(.375)	1.366		.328				.400	.385								
19	1/2	(.500)	1.366	.453	.525	.510													
71	20	2	(.086)	.790	.156	.115	.037 .029	.215 .190	.070 .042	.098	.090	.090	.048 .042	.198	.230	.210	RED	RED	
20		4	(.112)	.801		.125				.122	.114			.260					.245
21		6	(.138)	.911		.202				.152	.142			.320					.305
22		6	(.138)	.911		.202				.152	.142			.320					.305
23		8	(.164)	.956		.234				.178	.168			.473					.450
24		10	(.190)	.956		.234				.203	.193			.540					.520
25		1/4	(.250)	1.136		.265				.275	.260			.720					.705
26		5/16	(.312)	1.366		.296				.338	.323								
27		3/8	(.375)	1.366		.328				.400	.385								
28	1/2	(.500)	1.366	.453	.525	.510													
72	18	2	(.086)	.790	.156	.115	.037 .029	.215 .190	.070 .052	.098	.090	.100	.056 .052	.198	.230	.210	RED	WHITE	
29		4	(.112)	.801		.125				.122	.114			.260					.245
30		6	(.138)	.911		.202				.152	.142			.320					.305
31		6	(.138)	.911		.202				.152	.142			.320					.305
32		8	(.164)	.956		.234				.178	.168			.473					.450
33		10	(.190)	.956		.234				.203	.193			.540					.520
34		1/4	(.250)	1.136		.265				.275	.260			.720					.705
35		5/16	(.312)	1.366		.296				.338	.323								
36		3/8	(.375)	1.366		.328				.400	.385								
37	1/2	(.500)	1.366	.453	.525	.510													

SAENONLINE.COM Disk to view the full PDF 05-25-2028-8b

**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	L	W & H 1/		INSUL. SLEEVE COLOR	WIRE SIZE COLOR				
		STUD	DIA (IN)							MAX	MIN			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										
40		6	(.138)							.178	.168										
41		8	(.164)	.956		.202				.234	.037 .029			.240 .210	.090 .059			.203	.193	.317	.302
42		10	(.190)	.961		.265				.296	.328			.453	.400			.385	.540	.520	
43		1/4	(.250)	1.131		.296				.328	.400			.385	.540			.520			
44		5/16	(.312)			.296				.328	.400			.385	.540			.520			
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				.122	.114	.130	.078 .074	.260	.240	BLUE	GREEN				
48		6	(.138)							.152	.142										
49		6	(.138)							.178	.168										
50		8	(.164)	.956		.202				.234	.037 .029			.240 .210	.090 .074			.203	.193	.317	.302
51		10	(.190)	.961		.265				.296	.328			.453	.400			.385	.540	.520	
52		1/4	(.250)	1.131		.296				.328	.400			.385	.540			.520			
53		5/16	(.312)			.296				.328	.400			.385	.540			.520			
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				.152	.142	.150	.095 .091	.380	.365	YELLOW	YELLOW				
57		8	(.164)							.178	.168										
58		10	(.190)							.203	.193										
59		1/4	(.250)	1.400		.265				.043 .037	.300 .275			.139 .091	.275			.260	.536	.516	
60		5/16	(.312)	1.492		.296				.328	.400			.385	.598			.573			
61		3/8	(.375)			.296				.328	.400			.385	.598			.573			
62		1/2	(.500)			.453				.525	.510			.720	.705						
63	10	6	(.138)	1.198	.234	.202				.152	.142	.180	.118 .115	.380	.365	YELLOW	BROWN				
64		8	(.164)							.178	.168										
65		10	(.190)							.203	.193										
66		1/4	(.250)	1.400		.265				.043 .037	.300 .275			.139 .115	.275			.260	.536	.516	
67		5/16	(.312)	1.492		.296				.328	.400			.385	.598			.573			
68		3/8	(.375)			.296				.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.

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. MATERIALS:

MATERIALS SHALL BE IN ACCORDANCE WITH AS7928.

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

3. IDENTIFICATION OF PRODUCT MARKING:

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

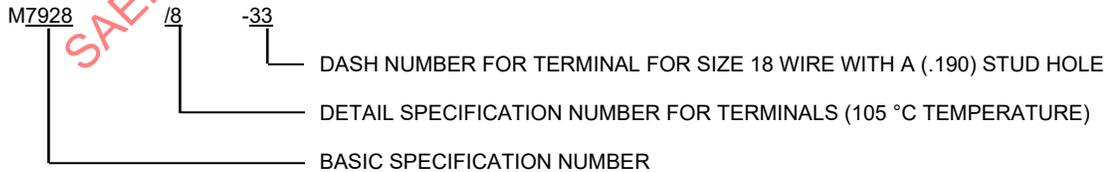
WIRE SIZE COLOR IDENTIFICATION SHALL BE IN ACCORDANCE WITH FIGURE 1 AND TABLE 1.

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:



	<b>AEROSPACE STANDARD</b>	<b>AS7928™/8</b> SHEET 4 OF 6	<b>REV.</b> <b>B</b>
	(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		