

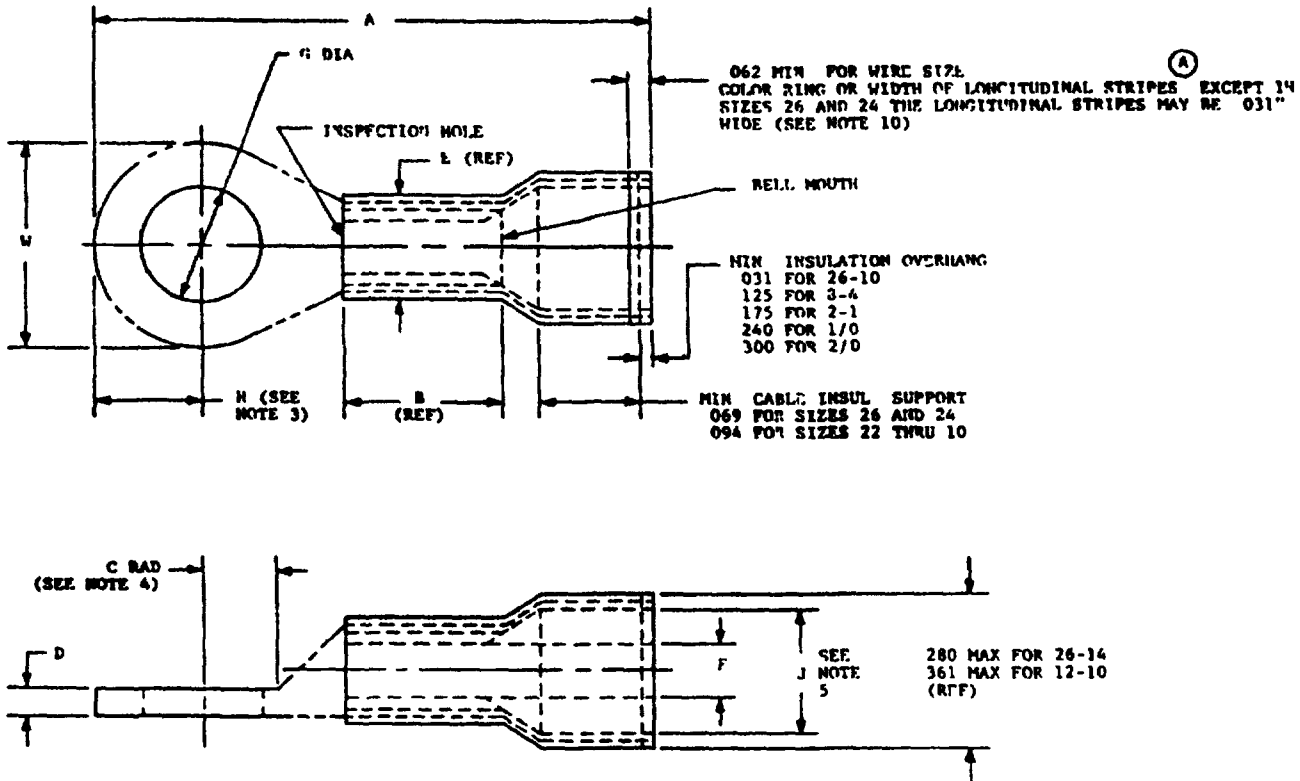
MIL-T-7928/AA
 8 JUNE 1961
 SUPERSEDING
 MIL-T-7928/4
 25 AUGUST 1976

MILITARY SPECIFICATION SHEET

- (A) TERMINALS, LUG AND SPLICES, CONDUCTOR, CRIMP STYLE, COPPER
 TERMINAL, LUG, INSULATED, RING TONGUE, BELL-MOUTHED, TYPE II, CLASS 1
 (FOR 150°C TOTAL CONDUCTOR TEMPERATURE)

This specification is approved for use by all Departments and Agencies of the Department of Defense

The complete requirements for acquiring the terminal described herein shall consist of this document and the latest issue of Specification MIL-T-7928



REQUIREMENTS

- 1 INSULATION MATERIAL SEE MIL-T-7928
- 2 FINISH:
 TIN-PLATED IN ACCORDANCE WITH MIL-T-10727 OR NICKEL-PLATED IN ACCORDANCE WITH QQ-N-290, CLASS 1 WITH A THICKNESS OR GRADE SUFFICIENT TO MEET THE PERFORMANCE REQUIREMENTS OF THE ACQUISITION SPECIFICATION.
 VALIDATION OF CORROSION PROTECTION REQUIREMENTS SHALL BE MADE FOR EACH LOT AS SPECIFIED IN THE ABOVE COATING SPECIFICATIONS.
3. QUALIFICATION. FOR QUALIFICATION, TERMINALS SHALL BE TESTED WITH ANY ONE OF THE FOLLOWING. MIL-W-81044/6, /7, /8, /9, /10, /12, /13, OR MIL-W-22759/16, /17, /18, /19 WIRE AND TOOLING AS FOLLOWS
 - (A) MIL-C-22520/5-01 TOOLING WITH MIL-C-22520/5-100 DIES INSTALLED FOR SIZES 22 THROUGH 10 TERMINALS, OR MIL-C-22520/10-01 TOOLING WITH MIL-C-22520/10-101 DIES INSTALLED FOR SIZES 26 THRU 14 TERMINALS AND MIL-C-22520/10-100 DIES INSTALLED FOR SIZES 12 THRU 10 TERMINALS MS23002 CRIMPING DIES TO BE USED WITH MS25441 TOOL FOR SIZES 8 THRU 2/0 EXISTING MS90413 AND MS3316 TOOLS IN THE FIELD MAY BE USED UNTIL WORN OUT
- 4 COLORS INSULATING SLEEVE COLOR SHALL BE CLEAR, UNCOLORED COLOR OF CIRCULAR RING OR LONGITUDINAL STRIPES SHALL BE AS SPECIFIED IN TABLE 1 AND SHALL BE IN ACCORDANCE WITH EIA STANDARD RS359
- 5 PART NUMBER THE PART NUMBER SHALL CONSIST OF THE LETTER "M", SPECIFICATION SHEET NUMBER AND DASH NUMBER EXAMPLE OF PART NUMBER M7928/4-103 TERMINAL FOR SIZE 22-18 WIRE WITH A .190 STUD HOLE

(A) DENOTES CHANGES

FSC 5940

NIL-T-7928/4A

(A) TABLE I Dash numbers and characteristics

Dash no	Terminal size	Stud size	A Max	B Rcf	C Min Rad	D		E dia	F dia	G dia		J min dia	W		Color of circular ring or longitudinal stripes										
						Max	Min			Max	Min		Max	Min											
143	26-24	2 (.086)	.740	126	.133	.028	.022	$\frac{.215}{.190}$.033	.027	.098	.090	.084	.210	.133	Yellow									
144		4 (.112)	.755		.171						.122	.114		.260	.193										
145		6 (.138)	.855		.202						.152	.163		.330	.245										
146		8 (.164)			.227						.203	.193													
147		10 (.190)			.865						.227	.203			.193										
159	22-18	2 (.086)	.755	156	.115	.035	.027	$\frac{.215}{.190}$.073	.052	.098	.090	.120	.230	.198	Red									
168		4 (.112)			.125						.152	.142		.260	.245										
101		6 (.138)			.865						.202	.178		.168	.320		.305								
102		8 (.164)			.910						.234	.203		.193											
149		10 (.190)			1.090						.265	.275		.260			.473	.450							
103		1/4 (.250)	.796		.296						.338	.323													
190		5/16 (.312)	1.120		.328						.400	.385		.540	.520										
104		3/8 (.375)	1.320		.453						.525	.510		.720	.705										
105		1/2 (.500)	.774		156						.125	.035		.029	$\frac{.260}{.210}$.095	.081	.153	.122	.114	.153	.260	.240	Blue
152		4 (.112)									.202									.152	.147		.317	.302	
106		6 (.138)									.910									.178	.168				
107	8 (.164)	.915		.203		.193	.473	.450																	
153	10 (.190)	1.085		.275		.260																			
108	1/4 (.250)	1.085	.296	.338		.323			.540	.520															
154	5/16 (.312)	1.225	.328	.400		.385																			
109	3/8 (.375)	1.320	.453	.525		.510	.720	.705																	
110	1/2 (.500)	1.120	234	.202		.043	.037	$\frac{.300}{.275}$.130	.129	.210		.152			.142				.210	.380		.365	Yellow	
111	6 (.138)			.234									.178			.168					.536		.516		
156	8 (.164)			.265									.203			.193									
112	10 (.190)			.296	.275							.260	.598	.573											
157	1/4 (.250)			1.322	.338							.323													
113	5/16 (.312)	1.414		.400	.385							.720			.705										
114	3/8 (.375)	1.414		.453	.525											.510									
158	1/2 (.500)	1.402		.234	.203								.193	.429		.386									
115	10 (.190)	1.402		.265	.275							.260	.478	.455											
116	1/4 (.250)	1.446		.296	.338							.323													
117	5/16 (.312)	1.544		.328	.400							.385			.590	.567									
118	3/8 (.375)	1.599	375	.234	.087	.043	$\frac{.410}{.360}$.232	.227	.300	.203	.193	.300	.503	.460	Blue									
119	10 (.190)			.265							.275	.260		.623	.580										
120	1/4 (.250)			.305							.338	.323													
121	5/16 (.312)			1.762							.400	.385					.570	.480							
122	3/8 (.375)			1.817							.453	.525		.510											
123	1/4 (.250)	1.817		.276							.275	.260		.648	.605										
124	5/16 (.312)	1.879		.308							.338	.323													
125	3/8 (.375)	1.879		.328							.400	.385					.711	.668							
126	1/4 (.250)	2.069		.453							.525	.510		.804	.740										
127	3/8 (.375)	2.269		.275							.260	.590					.793	.740							
128	1/2 (.500)	2.269		.275							.260														
129	1/4 (.250)	2.150	.400	.385	.987	.940																			
130	3/8 (.375)	2.370	.453	.525			.510																		
131	1/2 (.500)	2.370	.275	.260			.853	.810																	
132	1/4 (.250)	2.401	.410	.400	.395																				
133	3/8 (.375)	2.401	.453	.525	.510	.903			.860																
134	1/2 (.500)	2.325	.630	.125	.070	$\frac{.685}{.625}$.458	.438	.350	.350	.275	.260	.610	.956	.913	Yellow									
135	5/16 (.312)	2.750									.410	.400					.385								
136	3/8 (.375)	2.750									.453	.525					.510								
137	1/2 (.500)	2.750									.473	.460					.450	.538	.523						

MIL-T-7928/4A

METRIC TABLE

INCH	MM	INCH	MM	INCH	MM	INCH	MM
.022	0.56	.176	4.47	.375	9.53	.648	16.46
.027	0.69	.178	4.52	.380	9.65	.668	16.97
.028	0.71	.186	4.72	.383	9.73	.685	17.40
.029	0.74	.190	4.83	.385	9.78	.690	17.53
.031	0.79	.193	4.90	.386	9.80	.700	17.78
.033	0.84	.202	5.13	.388	9.86	.705	17.91
.035	0.89	.203	5.16	.398	10.11	.711	18.06
.037	0.94	.210	5.33	.400	10.16	.720	18.29
.038	0.97	.215	5.46	.410	10.41	.740	18.80
.043	1.09	.222	5.64	.418	10.62	.755	19.18
.047	1.19	.227	5.77	.425	10.80	.774	19.66
.052	1.32	.230	5.84	.429	10.90	.783	19.89
.054	1.37	.232	5.89	.435	11.05	.804	20.42
.062	1.57	.234	5.94	.437	11.10	.810	20.57
.069	1.75	.238	6.05	.438	11.13	.853	21.67
.070	1.78	.240	6.10	.453	11.51	.855	21.72
.073	1.85	.245	6.22	.458	11.63	.860	21.84
.075	1.91	.250	6.35	.460	11.68	.865	21.97
.081	2.06	.257	6.53	.473	12.01	.857	22.53
.084	2.13	.260	6.60	.478	12.14	.903	22.94
.086	2.18	.265	6.73	.480	12.19	.910	23.11
.090	2.29	.275	6.99	.500	12.70	.913	23.19
.094	2.39	.276	7.01	.503	12.78	.915	23.24
.095	2.41	.280	7.11	.505	12.83	.956	24.28
.096	2.44	.290	7.37	.510	12.95	1.085	27.56
.098	2.49	.294	7.52	.516	13.11	1.090	27.69
.109	2.77	.300	7.62	.520	13.21	1.120	28.45
.112	2.84	.302	7.67	.525	13.34	1.225	31.12
.114	2.90	.305	7.75	.536	13.61	1.320	33.53
.120	3.05	.308	7.82	.540	13.72	1.322	33.58
.122	3.10	.312	7.92	.547	13.89	1.402	35.61
.125	3.18	.315	8.00	.550	13.97	1.414	35.92
.126	3.20	.317	8.05	.560	14.22	1.466	37.24
.129	3.28	.320	8.13	.565	14.35	1.544	39.22
.133	3.38	.323	8.20	.570	14.48	1.599	40.61
.138	3.51	.328	8.33	.573	14.55	1.762	44.75
.139	3.53	.330	8.38	.580	14.73	1.812	46.02
.142	3.61	.338	8.59	.590	14.99	1.879	47.73
.152	3.86	.343	8.71	.598	15.19	2.069	52.55
.153	3.89	.350	8.89	.605	15.37	2.150	54.61
.156	3.96	.355	9.02	.610	15.49	2.269	57.63
.164	4.17	.360	9.14	.620	15.75	2.370	60.20
.168	4.27	.361	9.17	.623	15.82	2.401	60.99
.171	4.34	.365	9.27	.625	15.88	2.525	64.14
.175	4.45	.370	9.40	.630	16.00	2.750	69.85

NOTES

1. DIMENSIONS ARE IN INCHES
 2. METRIC EQUIVALENTS (TO THE NEAREST .01 MM) ARE GIVEN FOR GENERAL INFORMATION ONLY AND ARE BASED UPON 1 INCH = 25.4 MM
 3. "M" MAX AND MIN DIMENSIONS SHALL BE ONE HALF OF "W" MAX AND MIN DIMENSIONS, RESPECTIVELY
 4. "C" MIN DIMENSIONS IS MIN WASHER CLEARANCE RADIUS.
 5. DIMENSIONS "J" REPRESENTS THE MIN ID OPENING THAT WILL ACCEPT THE FINISHED WIRE
 6. MAX AND MIN DIMENSIONS DUE TO OVALIZATION, MUST BE WITHIN 3% OF SPECIFICATION REQUIREMENTS
 7. CONTOUR INDICATED BY PHANTOM LINES MAY VARY FROM THAT SHOWN TO SUIT INDIVIDUAL MANUFACTURER'S DESIGN
 8. INSULATION SUPPORT AND TERMINAL BARREL MAY BE MULTIPLE PIECE CONSTRUCTION.
 9. WIRE INSERTION SHALL BE FACILITATED BY BELL MOUTH
 10. THE COLOR RING MUST COVER A MINIMUM OF 315° OF THE CIRCUMFERENCE, IN LIEU OF THE WIRE SIZE COLOR RING, 3 OR MORE LONGITUDINAL STRIPES EQUALLY SPACED ON THE INSULATION PORTION OF THE TERMINAL MAY BE USED THE STRIPES MUST EXTEND TO WITHIN 1/16" OF THE ENDS OF THE INSULATION AND MUST NOT OBLITERATE THE BASIC SLAVEE COLOR
- (A) TERMINAL LUGS MANUFACTURED PRIOR TO 8 JUNE 1981, AND MARKED WITH 2 LONGITUDINAL STRIPES MAY BE USED UNTIL THE SUPPLY IS EXHAUSTED

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