




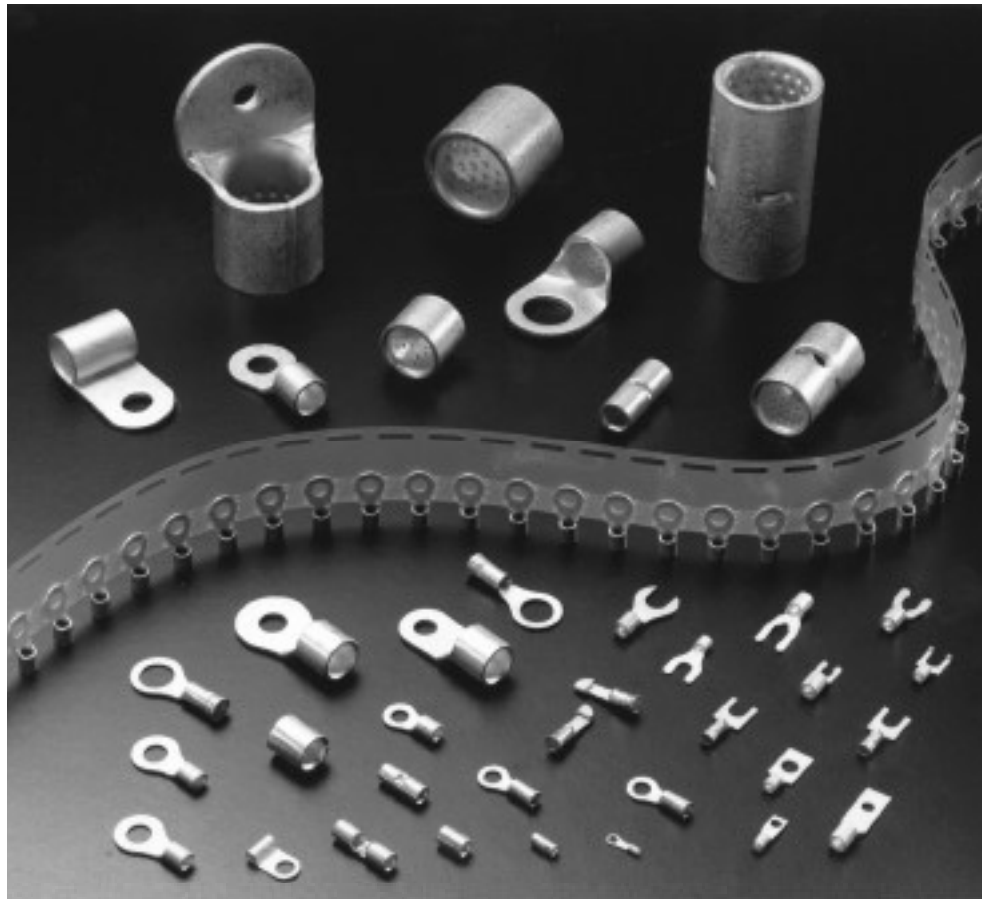


**Product Facts**

- **SOLISTRAND**  
Terminals and Splices
- Utilize a brazed seam
- Applied with “W” crimp tooling
- Available in wire sizes  
26 AWG – 600 MCM  
[0.1–304 mm<sup>2</sup>]
- For terminating solid  
& stranded wires
- U.L. Listed  
CSA Certified  
Military Approved  
  
- **Budget**  
Terminals and Splices
- Utilize a butted seam
- Applied with “F” crimp tooling
- Available in wire sizes  
26 – 10 AWG  
[0.1–6.64 mm<sup>2</sup>]
- For terminating stranded  
wire only
- U.L. Listed 
  
- **DIAMOND GRIP**  
Terminals and Splices
- Utilize a butted seam
- Metal insulation support  
sleeve with “V” notches
- Applied with a “C” crimp
- Available in wire sizes  
26-10 AWG (0.1-6.64 mm<sup>2</sup>)
- For terminating stranded  
wire only
- U.L. Listed  
CSA Certified  



SOLISTRAND and Budget terminals and splices are specially designed to terminate solid and stranded wire, irregular shaped conductors, and combinations of these — retaining the superior performance characteristics of single-purpose terminals and splices.

Corrosion resistance, vibration resistance and tensile strength of these terminals and splices are well within the limits of commercial and military specifications.

The Budget terminal is primarily the same as the SOLISTRAND terminals without the brazed seam in the wire barrel. These

terminals and splices fulfill the need for an economical and electrically superior termination where extreme vibration and tension on the wires are not present.

DIAMOND GRIP utilizes a tin plated copper insulation support sleeve with “V” notches. The sleeve eliminates fraying of the insulation or breaking of the conductor. The “V” notches lock the wire insulation against vibration and pullout.

**Need more information?**

Call the AMP Technical Support Center:  
 1-800-522-6752

The Technical Support Center is staffed with specialists well versed in all AMP Products. The Center can provide you with:

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- Catalogs
- Technical Documents
- Product Samples
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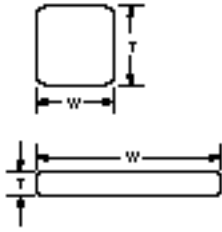
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## How to Compute Circular Mil Area of Various Wire Shapes

### Square or Rectangular Wire



#### U.S. Customary Dimensions

Multiply the width of the wire cross section in mils by the thickness of the wire cross section in mils by 1.2732 and subtract the radius factor shown below.

$$CMA = W \times T \times 1.2732 - \text{radius factor}$$

#### Metric Dimensions

Multiply the width of the wire cross section in millimetres by the thickness of the wire cross section in millimetres by 1973.525 and subtract the radius factor shown below.

$$CMA = W \times T \times 1973.525 - \text{radius factor}$$

### Round Solid Wire AWG



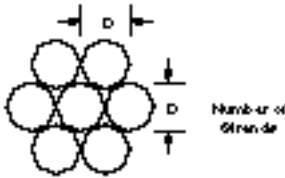
Multiply the diameter in mils by itself.

$$CMA = D^2$$

Multiply the diameter in millimetres by itself by 1550.003

$$CMA = D^2 \times 1550.003$$

### Stranded Wire AWG



Multiply the diameter of one strand (in mils) by itself, and then multiply the result by the total number of strands.

$$CMA = D^2 \times N$$

Multiply the diameter of one strand in millimetres by itself by the number of strands by 1550.003.

$$CMA = D^2 \times N \times 1550.003$$

### Conversion Table

To Convert From	To	Multiply By
CMA	mm <sup>2</sup>	.0005067075
CMA	in <sup>2</sup>	.0000007854
mm <sup>2</sup>	in <sup>2</sup>	.001550003
mm <sup>2</sup>	CMA	1973.525

**Note:** Refer to table listing for circular mil area for common wire sizes.

### Radius Factor, U.S. Customary

Radius (in.)	Radius Factor To Subtract (CMA)
.010	110
.012	158
.016	280
.020	438
.026	740
.032	1121
.040	1752
.063	4346
.094	9675

Radius must be measured.

### Radius Factor, Metric

Radius (mm)	Radius Factor To Subtract (CMA)
0.25	106
0.3	153
0.35	208
0.4	272
0.5	424
0.6	611
0.8	1086
1.2	2444

Radius must be measured.

## Table of SOLISTRAND and Budget Standard Wire Ranges

Use to select the proper size terminals or splices.

Terminal Connector Size	CMA Range
26-22	202-810
24-20	320-1,290
22-16	509-3,260
16-14 & 16-14 HD	2,050-5,180
14-12	3,260-8,230
12-10	5,180-13,100
8 & 8 HD	13,100-20,800
6 & 6 HD	20,800-33,100
4 & 4 HD	33,100-52,600

HD-Denotes Heavy Duty Terminal.

Terminal Connector Size	CMA Range
2 & 2 HD	52,600-83,700
1/0 & 1/0 HD	83,700-119,500
2/0	119,500-150,500
3/0	150,500-190,000
4/0	190,000-231,000
250-300 MCM	231,000-300,000
300-350 MCM	300,000-380,000
400 MCM	350,000-478,000
500-600 MCM	478,000-600,000

**Table listing: Circular Mil Area for common wire sizes**

**Wire Sizes in AWG and mm<sup>2</sup> to CMA**

**Note:** The following tables are applicable to single and multiple strand, round, conductors only.

**Computing Circular Mil Area**

For best results, the proper AMP terminal or splice must be selected not by the "fit" of wire or wires in the terminal barrel, but by the total circular mil area in cross section of the wires used. For this purpose AMP has prepared convenient tables to assist in the calculation of circular mil areas. When the totals are known, the proper AMP terminal or splice can be determined quickly.

Unusual combinations or special applications should be submitted to AMP engineering department for size recommendation. In any application, the careful selection of terminals by the circular mil area method will insure the highest possible performance, both electrically and mechanically, in your AMP terminations.

**Example of multiple wire configurations used in one termination**

ALWAYS SELECT TERMINALS BY THE CIRCULAR MIL AREA METHOD. For example, a No. 18 AWG 16-strand conductor (1600 CMA) and a No. 16 AWG 19-strand conductor (2426 CMA) will have a combined total of 4026 CMA. This total CMA is equivalent to a No. 14 AWG conductor.

CMA	Nominal Wire Size		No.	Strands Diameter		Approximate Conductor Diameter	
	AWG	mm <sup>2</sup>		Diameter		Inch	mm
				Inch	mm		
3.8	44	0.002	1	0.00195	0.050	0.002	0.051
4.0	44	0.002	1	0.002	0.051	0.002	0.051
4.8	43	0.002	1	0.0022	0.056	0.0022	0.056
6.3	42	0.003	1	0.0025	0.064	0.0025	0.064
7.8	41	0.004	1	0.0028	0.071	0.0028	0.071
9.6	40	0.005	1	0.0031	0.079	0.0031	0.079
12.3	39	0.006	1	0.0035	0.089	0.0035	0.089
15.2	38	0.008	1	0.0039	0.099	0.0039	0.099
16.0	38	0.008	1	0.004	0.102	0.004	0.102
20.2	37	0.010	1	0.0045	0.114	0.0045	0.114
25.0	36	0.013	1	0.005	0.127	0.005	0.127
31.4	35	0.016	1	0.0056	0.142	0.0056	0.142
39.7	34	0.020	1	0.0063	0.160	0.0063	0.160
50.0	33	0.025	1	0.00707	0.180	0.0071	0.180
50.4	33	0.026	1	0.0071	0.180	0.0071	0.180
64.0	32	0.032	1	0.008	0.203	0.008	0.203
79.2	31	0.040	1	0.0089	0.226	0.0089	0.226
100.0	30	0.051	1	0.01	0.254	0.01	0.254
104.0	30	0.053	26	0.002	0.051	0.012	0.305
127.7	29	0.064	1	0.0113	0.287	0.011	0.279
152.1	29	0.077	10	0.0039	0.099	0.013	0.330
158.8	29	0.080	1	0.0126	0.320	0.013	0.330
175.0	28	0.089	7	0.005	0.127	0.015	0.381
182.6	28	0.093	19	0.0031	0.079	0.016	0.406
202	27	0.102	1	0.0142	0.361	0.014	0.356
204	27	0.103	51	0.002	0.051	0.016	0.406
238	26	0.121	6	0.0063	0.160	0.018	0.457
250	26	0.127	26	0.0031	0.079	0.018	0.457
250	26	0.127	10	0.005	0.127	0.018	0.457
251	26	0.127	8	0.0056	0.142	0.018	0.457
253	26	0.128	1	0.0159	0.404	0.016	0.406
256	26	0.130	16	0.004	0.102	0.018	0.457
274	26	0.139	18	0.0039	0.099	0.022	0.558
278	26	0.141	7	0.0063	0.160	0.019	0.483
288	26	0.146	72	0.002	0.051	0.022	0.559
300	26	0.152	3	0.01	0.254	0.02	0.508
304	26	0.154	19	0.004	0.102	0.02	0.508
313	25	0.159	1	0.0177	0.450	0.018	0.457
314	25	0.159	10	0.0056	0.142	0.02	0.508
318	25	0.161	8	0.0063	0.160	0.021	0.533
320	25	0.162	1	0.0179	0.455	0.018	0.457
388	24	0.197	1	0.0197	0.500	0.02	0.508
397	24	0.201	10	0.0063	0.160	0.023	0.584
400	24	0.203	16	0.005	0.127	0.023	0.584
400	24	0.203	4	0.01	0.254	0.023	0.584
403	24	0.204	8	0.0071	0.180	0.023	0.584
404	24	0.205	1	0.0201	0.511	0.02	0.508
408	24	0.207	13	0.0056	0.142	0.023	0.584
408	24	0.207	102	0.002	0.051	0.02	0.508
475	24	0.241	19	0.005	0.127	0.023	0.584
634	22	0.321	8	0.0089	0.226	0.029	0.737
635	22	0.322	16	0.0063	0.160	0.029	0.737
640	22	0.324	10	0.008	0.203	0.029	0.737
640	22	0.324	1	0.0253	0.643	0.025	0.635
650	22	0.329	26	0.005	0.127	0.033	0.838
700	22	0.355	7	0.01	0.254	0.03	0.762
754	22	0.382	19	0.0063	0.160	0.033	0.838
812	21	0.411	1	0.0285	0.724	0.029	0.737
992	20	0.503	1	0.0315	0.800	0.032	0.813
1000	20	0.507	10	0.01	0.254	0.038	0.965
1008	20	0.511	20	0.0071	0.180	0.039	0.991
1024	20	0.519	16	0.008	0.203	0.039	0.991
1024	20	0.519	1	0.032	0.813	0.032	0.813
1024	20	0.519	256	0.002	0.051	0.039	0.991
1025	20	0.519	41	0.005	0.127	0.038	0.965
1032	20	0.523	26	0.0063	0.160	0.039	0.991
1111	20	0.563	7	0.0126	0.320	0.039	0.991
1186	20	0.601	19	0.0079	0.201	0.041	1.041
1289	19	0.653	1	0.0359	0.912	0.036	0.914
1492	18.5	0.756	7	0.0146	0.371	0.047	1.194
1512	18.5	0.766	30	0.0071	0.180	0.047	1.194
1536	18.5	0.778	384	0.002	0.051	0.047	1.194
1536	18.5	0.778	24	0.008	0.203	0.047	1.194
1600	18	0.811	16	0.01	0.254	0.049	1.245
1608	18	0.815	19	0.0092	0.234	0.049	1.245

**Table listing: Circular Mil Area for common wire sizes** (Continued)

**Wire Sizes in AWG and mm<sup>2</sup> to CMA**

Note: The following tables are applicable to single and multiple strand, round, conductors only.

CMA	Nominal Wire Size		No.	Strands Diameter		Approximate Conductor Diameter	
	AWG	mm <sup>2</sup>		Diameter		Inch	mm
				Inch	mm		
1617	18	0.819	7	0.0152	0.386	0.042	1.067
1624	18	0.823	1	0.0403	1.024	0.04	1.016
1625	18	0.823	65	0.005	0.127	0.04	1.016
1627	18	0.824	41	0.0063	.0160	0.049	1.245
1639	18	0.830	7	0.0153	0.389	0.042	1.067
1770	18	0.897	7	0.0159	0.404	0.048	1.219
1900	18	0.963	19	0.01	0.254	0.052	1.321
1980	17	1.003	1	0.0445	1.130	0.045	1.143
1999	17	1.013	7	0.0169	0.429	0.047	1.194
2048	17	1.038	32	0.008	0.203	0.047	1.194
2048	17	1.038	512	0.002	0.051	0.049	1.245
2052	17	1.040	1	0.0453	1.151	0.045	1.143
2426	16	1.229	19	0.0113	0.287	0.061	1.549
2521	16	1.277	50	0.0071	0.180	0.059	1.499
2540	16	1.287	16	0.0126	0.320	0.059	1.499
2580	16	1.307	65	0.0063	0.160	0.059	1.499
2581	16	1.308	1	0.0508	1.290	0.051	1.295
2600	16	1.317	26	0.01	0.254	0.061	1.549
2625	16	1.330	105	0.005	0.127	0.059	1.499
2800	16	1.419	7	0.02	0.508	0.061	1.549
2942	15.5	1.491	7	0.0205	0.521	0.059	1.499
2948	15.5	1.494	1	0.0543	1.379	0.054	1.372
3000	15.5	1.520	30	0.01	0.254	0.059	1.499
3073	15.5	1.557	392	0.0028	0.071	0.061	1.549
3260	15	1.652	1	0.0571	1.450	0.057	1.448
3831	14	1.941	19	0.0142	0.361	0.076	1.930
3899	14	1.976	7	0.0236	0.599	0.071	1.803
4079	14	2.067	37	0.0105	0.267	0.073	1.854
4099	14	2.077	7	0.0242	0.615	0.076	1.930
4100	14	2.077	41	0.01	0.254	0.077	1.956
4106	14	2.081	19	0.0147	0.373	0.076	1.930
4109	14	2.082	1	0.0641	1.628	0.064	1.626
4128	14	2.092	26	0.0126	0.320	0.075	1.905
4167	14	2.111	105	0.0063	0.160	0.073	1.854
4234	14	2.145	84	0.0071	0.180	0.074	1.880
4802	13.5	2.433	50	0.0098	0.249	0.087	2.210
4842	13.5	2.453	7	0.0263	0.668	0.079	2.007
4914	13.5	2.490	1	0.0701	1.781	0.07	1.778
5184	13	2.627	1	0.072	1.829	0.072	1.829
6088	12	3.085	19	0.0179	0.455	0.096	2.438
6343	12	3.214	165	0.0062	0.157	0.095	2.413
6475	12	3.281	259	0.005	0.127	0.105	2.667
6500	12	3.294	65	0.01	0.254	0.096	2.438
6503	12	3.295	19	0.0185	0.470	0.092	2.337
6509	12	3.298	41	0.0126	0.320	0.094	2.388
6512	12	3.300	7	0.0305	0.775	0.086	2.184
6529	12	3.308	1	0.0808	2.052	0.081	2.057
6545	12	3.316	37	0.0133	0.338	0.093	2.362
6654	12	3.372	84	0.0089	0.226	0.094	2.388
6946	11.5	3.520	7	0.0315	0.800	0.094	2.388
7856	11.5	3.981	7	0.0335	0.851	0.1	2.540
7985	11.5	4.046	19	0.0205	0.521	0.101	2.565
8064	11.5	4.086	56	0.012	0.305	0.102	2.591
8226	11	4.168	1	0.0907	2.304	0.091	2.311
9072	10	4.597	7	0.036	0.914	0.096	2.438
9472	10	4.799	37	0.016	0.406	0.109	2.769
10080	10	5.108	1	0.1004	2.550	0.1	2.540
10319	10	5.229	37	0.0167	0.424	0.109	2.769
10319	10	5.229	65	0.0126	0.320	0.118	2.997
10365	10	5.252	41	0.0159	0.404	0.122	3.099
10376	10	5.258	7	0.0385	0.978	0.096	2.438
10384	10	5.262	1	0.1019	2.588	0.102	2.591
10404	10	5.272	19	0.0234	0.594	0.117	2.972
10500	10	5.320	105	0.01	0.254	0.116	2.946
10867	10	5.506	7	0.0394	1.001	0.118	2.997
11696	10	5.926	84	0.0118	0.300	0.13	3.302
11710	10	5.933	7	0.0409	1.039	0.128	3.251
11816	10	5.987	1	0.1087	2.761	0.109	2.769
12066	10	6.114	19	0.0252	0.640	0.126	3.200
13087	9	6.5	1	0.1144	2.91	0.114	2.90
13125	9	7	525	.0050	0.13	0.140	3.56
14175	8	7	7	.0450	1.14	0.146	3.71
14368	8	7.5	19	.0275	0.70	0.145	3.68
15595	8	8	7	.0472	1.20	0.142	3.60
15665	8	8	50	.0177	0.45	0.146	3.70

**Table listing: Circular Mil Area for common wire sizes** (Continued)

**Wire Sizes in AWG and mm<sup>2</sup> to CMA**

**Note:** The following tables are applicable to single and multiple strand, round, conductors only.

CMA	Nominal Wire Size		No.	Strands Diameter		Approximate Conductor Diameter	
	AWG	mm <sup>2</sup>		Diameter		Inch	mm
				Inch	mm		
16387	8	8	133	.0111	0.28	0.167	4.24
16473	8	8	37	.0211	0.54	0.150	3.81
16512	8	8	1	.1285	3.26	0.129	3.26
16533	8	8	7	.0486	1.23	0.146	3.71
16535	8	8	19	.0295	0.75	0.148	3.76
16589	8	8	49	.0184	0.47	0.150	3.81
16983	8	8.5	133	.0113	0.29	0.167	4.24
18853	7	10	19	.0315	0.80	0.161	4.10
19719	7	10	80	.0157	0.40	0.165	4.20
19737	7	10	7	.0531	1.35	0.159	4.05
19768	7	10	1	.1406	3.57	0.141	3.57
19796	7	10	49	.0201	0.51	0.161	4.10
26179	6	13	37	.0266	0.68	0.174	4.42
26218	6	13	7	.0612	1.55	0.184	4.67
26244	6	13	1	.1620	4.11	0.162	4.11
26292	6	15	19	.0372	0.94	0.202	5.13
26818	6	14	133	.0142	0.36	0.210	5.33
27783	6	14	7	.0630	1.60	0.189	4.80
31057	5.5	16	126	.0157	0.400	0.209	5.30
31329	5.5	16	7	.0669	1.700	0.197	5.00
31400	5.5	16	1	.1772	4.500	0.177	4.50
32199	5	16	37	.0295	0.750	0.197	5.00
33088	5	15.5	1	.1819	4.620	0.182	4.62
40682	4.5	20	41	.0315	0.800	0.236	6.00
41616	4	21	1	.2040	5.182	0.204	5.18
41718	4	21	7	.0772	1.961	0.232	5.89
41771	4	21	37	.0336	0.853	0.240	6.10
41792	4	21	19	.0469	1.191	0.226	5.74
42615	4	21	133	.0179	0.455	0.272	6.90
43356	3.5	22	7	.0787	2.000	0.236	6.00
48312	3	25	196	.0157	0.400	0.260	6.60
48867	3	25	783	.0079	0.200	0.280	7.10
49745	3	25	7	.0843	2.140	0.253	6.42
50010	3	25	84	.0244	0.620	0.260	6.60
57205	2.5	34	7	.0904	2.296	0.292	7.42
57459	2.5	30	7	.0906	2.300	0.272	6.90
66049	2	34	1	.2570	6.528	0.257	6.53
66139	2	34	19	.0590	1.499	0.332	8.43
66500	2	35	665	.0100	0.254	0.345	8.76
66517	2	34	37	.0424	1.077	0.300	7.62
68031	2	35	276	.0157	0.400	0.307	7.80
68857	2	35	19	.0602	1.530	0.301	7.65
69088	2	35	1107	.0079	0.200	0.335	8.50
73400	1.5	38	7	.1024	2.600	0.307	7.80
81700	1	41	817	.0100	0.254	0.382	9.70
83600	1	42	836	.0100	0.254	0.386	9.80
84341	1	40	85	.0315	0.800	0.339	8.60
95509	0	50	19	.0709	1.800	0.354	9.00
97610	0	50	396	.0157	0.400	0.406	10.30
98409	0	50	702	.0118	0.300	0.370	9.40
104500	0	53	1045	.0100	0.254	0.431	10.95
106400	0	54	1064	.0100	0.254	0.435	11.05
117680	0	60	19	.0787	2.000	0.394	10.00
133000	00	67	1330	.0100	0.254	0.486	12.34
135023	00	70	19	.0843	2.140	0.421	10.70
139101	00	70	999	.0118	0.300	0.488	12.40
139712	00	70	360	.0197	0.500	0.488	12.40
155959	000	80	19	.0906	2.300	0.453	11.50
167200	000	85	1672	.0100	0.254	0.545	13.84
184343	000	95	475	.0197	0.500	0.571	14.50
185468	000	95	1332	.0118	0.300	0.571	14.50
186972	000	95	19	.0992	2.520	0.496	12.60
199229	0000	100	19	.1024	2.600	0.512	13.00
210900	0000	105	2109	.0100	0.254	0.635	16.13
235959	0000	120	608	.0197	0.500	0.630	16.00
236208	0000	120	37	.0799	2.030	0.571	14.50
247791	0000	125	19	.1142	2.900	0.571	14.50
249856	250	127	61	.0640	1.623	0.576	14.63
249864	250	127	91	.0524	1.331	0.576	14.63
249870	250	127	12	.1443	3.665	0.600	15.24
249966	250	127	19	.1147	2.913	0.574	14.58
250003	250	127	37	.0822	2.088	0.575	14.61
299700	300	152	37	.0900	2.29	0.630	16.0
299755	300	152	61	.0701	1.781	0.631	16.03
299823	300	152	91	.0574	1.458	0.631	16.03

**Table listing: Circular Mil Area for common wire sizes** (Continued)

**Wire Sizes in AWG and mm<sup>2</sup> to CMA**

**Note:** The following tables are applicable to single and multiple strand, round, conductors only.

CMA	Nominal Wire Size		No.	Strands		Approximate Conductor Diameter	
	AWG	mm <sup>2</sup>		Diameter		Inch	mm
				Inch	mm		
299947	300	152	12	.1581	4.016	0.657	14.66
300209	300	152	19	.1257	3.193	0.629	15.98
349560	350	177	61	.0757	1.923	0.681	17.3
349804	350	177	91	.0620	1.575	0.682	17.32
349875	350	177	19	.1357	3.447	0.679	17.25
350072	350	177	12	.1708	4.338	0.710	18.03
350290	350	177	37	.0973	2.471	0.681	17.3
400026	400	203	19	.1451	3.686	0.726	18.44
400192	400	203	37	.1040	2.642	0.728	18.49
400221	400	203	61	.0810	2.057	0.729	18.49
400008	400	203	91	.0663	1.684	0.729	18.49
499868	500	253	19	.1622	4.12	0.811	20.6
499590	500	253	37	.1162	2.951	0.813	20.65
499605	500	253	61	.0905	2.299	0.815	20.7
499664	500	253	91	.0741	1.882	0.815	20.7
599401	600	304	127	.0687	1.745	0.893	22.68
599596	600	304	37	.1273	3.233	0.891	22.63
600003	600	304	91	.0812	2.062	0.893	22.68
600279	600	304	61	.0992	2.52	0.893	22.68
699216	700	355	127	.0742	1.885	0.965	24.51
699531	700	355	37	.1375	3.493	0.963	24.46
699695	700	355	61	.1071	2.72	0.964	24.49
699907	700	355	91	.0877	2.228	0.965	24.51
750227	750	405	61	.1109	2.817	0.998	25.35
750262	750	405	91	.0908	2.306	0.999	25.37
750277	750	405	37	.1424	3.617	0.997	25.32
749096	750	405	127	.0768	1.951	0.998	25.35
799533	800	456	37	.1470	3.734	1.029	26.14
799725	800	456	61	.1145	2.908	1.031	26.19
800654	800	456	127	.0794	2.017	1.032	26.21
800658	800	456	91	.0938	2.383	1.032	26.21
999197	1000	507	127	.0887	2.253	1.153	29.29
999424	1000	507	61	.1280	3.251	1.152	29.26
999457	1000	507	91	.1048	2.662	1.153	29.29
1000012	1000	507	37	.1644	4.176	1.151	29.24

**Chart 2 (Solid Wire)  
U.S. Customary Dimensions**

Use to convert wire size to inches of diameter and CMA. To read mils direct, move decimal point three places to the right.

AWG	Dia. inches	CMA*
4/0	.460	212,000
3/0	.410	168,000
2/0	.365	133,000
1/0	.325	106,000
1	.289	83,700
2	.258	66,400
3	.229	52,600
4	.204	41,700
5	.182	33,100
6	.162	26,300
7	.144	20,800
8	.128	16,500
9	.114	13,100
10	.102	10,400
11	.091	8,230
12	.081	6,530
13	.072	5,180
14	.064	4,110
15	.057	3,260
16	.051	2,580
17	.045	2,050
18	.040	1,620

AWG	Dia. inches	CMA*
19	.036	1,290
20	.032	1,020
21	.0285	810
22	.0253	642
23	.0226	509
24	.0201	404
25	.0179	320
26	.0159	254
27	.0142	202
28	.0126	160
29	.0113	127
30	.0100	101
31	.0089	79.7
32	.0080	63.2
33	.0071	50.1
34	.0063	39.8
35	.0056	31.5
36	.0050	25.0
37	.0045	19.8
38	.0040	15.7
39	.0035	12.5
40	.0031	9.9

**Metric Dimensions**

Use to convert wire size to millimeters of diameter and CMA.

mm <sup>2</sup>	Dia. mm	CMA*
113.1	12	223,000
78.54	10	155,000
63.62	9	125,000
50.27	8	99,200
38.48	7	75,900
33.18	6.5	65,500
28.27	6	55,800
23.76	5.5	46,900
19.64	5	38,800
15.90	4.5	31,400
12.57	4	24,800
9.621	3.5	19,000
8.042	3.2	15,900
6.605	2.9	13,000
5.309	2.6	10,500
4.155	2.3	8,200
3.142	2	6,200
2.545	1.8	5,020
2.011	1.6	3,970
1.539	1.4	3,040
1.131	1.2	2,230
0.7854	1	1,550

mm <sup>2</sup>	Dia. mm	CMA*
0.6362	0.9	1,260
0.5027	0.8	992
0.3848	0.7	759
0.3318	0.65	655
0.2827	0.6	558
0.2376	0.55	469
0.1964	0.5	338
0.159	0.45	314
0.1257	0.4	248
0.09621	0.35	190
0.08042	0.32	159
0.06605	0.29	130
0.05309	0.26	105
0.04155	0.23	82
0.03142	0.2	62
0.02545	0.18	50.2
0.02011	0.16	39.7
0.01539	0.14	30.4
0.01131	0.12	22.3
0.00785	0.1	15.5

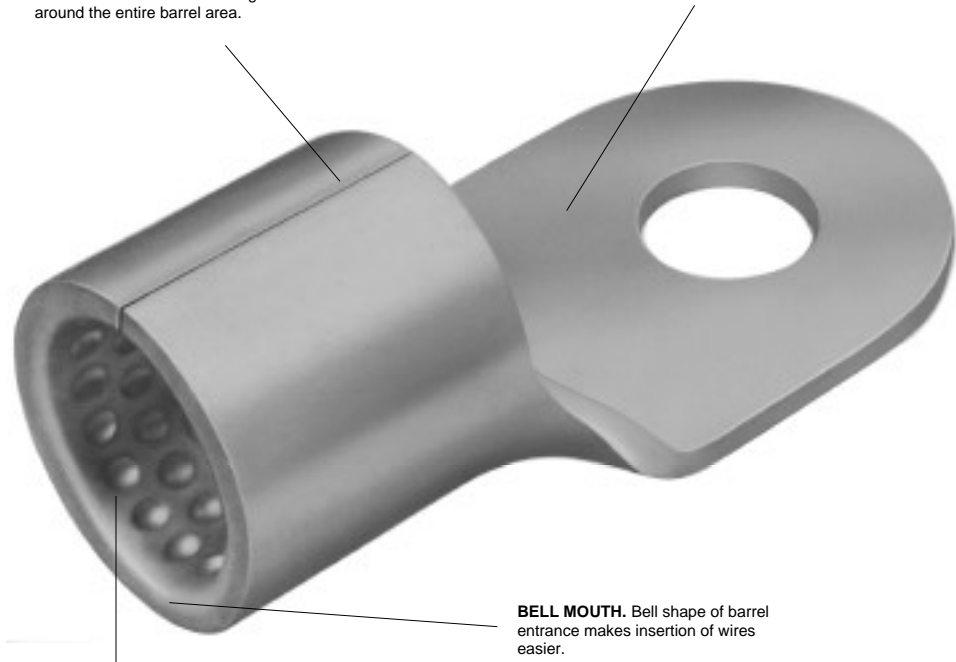
\*Nominal CMA has been "rounded off" for ease of calculation when using multiple wires in one termination.

**The SOLISTRAND Terminal**

SOLISTRAND terminals and splices are specially designed to terminate solid and stranded wire, irregular shaped conductors, and combinations of these — still retaining the superior performance characteristics of single-purpose terminals and splices. Because AMP matches the terminal to the tool each termination is uniformly perfect, making quality control easy and performance consistent. Corrosion resistance, vibration resistance and tensile strength of these terminals and splices are well within the limits of commercial and military specifications. The SOLISTRAND line includes parallel and butt splices, and flag, ring, spade, hooked, and flanged tongue terminals in sizes from 26 AWG [0.1 mm<sup>2</sup>] through 600 MCM [304 mm<sup>2</sup>].

**BRAZED SEAM.** The barrel is completely closed and seam is brazed for uniform metal strength around the entire barrel area.

**BASIC TERMINAL MATERIAL.** The basic terminal is constructed of fine grade high conductivity copper per ASTM B-152 and tin-plated per MIL-T-10727. Basic material for Spring Spade Tongue Terminals is phosphor bronze per ASTM B-103 and tin-plated per MIL-T-10727. AMP's special plating process creates durable corrosion resistance to salt spray and most chemical fumes.



**BELL MOUTH.** Bell shape of barrel entrance makes insertion of wires easier.

**DIMPLES OR SERRATIONS.** Inner surface either dimpled or serrated for optimum tensile strength and maximum electrical contact area after crimping.

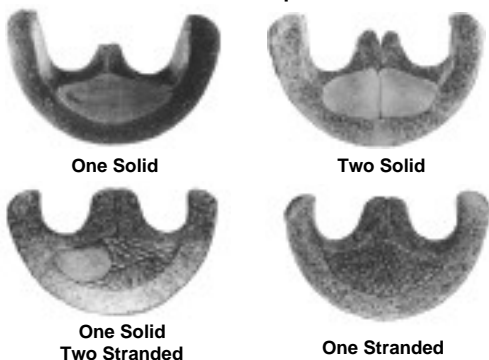
**SOLISTRAND Terminals meet or exceed the requirements of MIL-T-7928, Type I, Class 1 and 2.**

**The Crimp**

The "W" Crimp is one of several time-proven crimp types developed by AMP. It is not just a "kink" in a metal barrel; not something pinched over electrical wire ends. The "W" Crimp is actually two longitudinal crimps applied with precisely controlled pressure so that the conductor within the barrel flows together into the dimples or serrations of the terminal barrel creating one homogeneous mass of metal. The two indents also help to center conductors within the barrel for uniform crimping of the barrel around the wire. Furthermore, the "W" Crimp permits the use of a shorter terminal barrel, an excellent feature for confined area termination.

The "W" Crimp creates terminations of optimum electrical properties and is completely reliable, giving long service in punishing environments.

**"W" Crimp**



**Temperature Rating: 170°C Max.**

**AMP SOLISTRAND Terminals and Splices (Use SOLISTRAND Tooling)**

AMP Inc. Wire Size	Listed File No. E13288	LR 7189 Certified
22-16 Solid or Stranded	22-16 Solid or Stranded	22-16 Solid or Stranded
16-14 Solid or Stranded	16-14 Solid or Stranded	16-14 Solid or Stranded
16-14 Heavy Duty Solid or Stranded	16-14 Heavy Duty Stranded	16-14 Heavy Duty Solid or Stranded
14-12 Solid or Stranded	14-12 Stranded	14-12 Solid or Stranded
12-10 Solid or Stranded	12-10 Stranded	12-10 Solid or Stranded
8 thru 600 MCM Solid or Stranded	8 thru 600 MCM Stranded	8 thru 600 MCM Solid or Stranded

**Note:** 22-16 terminals and splices are stamped 22-18 in accordance with MIL-T-7928. Commercial wire range is 22-16.

**DANGER: Not to be used on aluminum wire** — may cause equipment failure leading to serious injury or death.



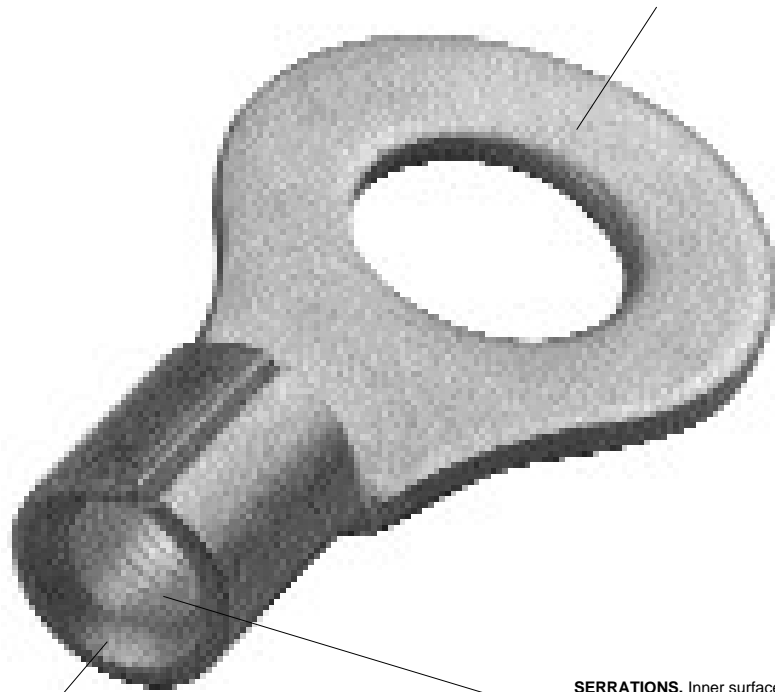
## The Budget Terminal

Budget Terminals and splices are primarily the same as SOLISTRAND products except for the absence of the brazed seam in the wire barrel. This terminal is ideal for applications where extreme vibration and tension on the wire are not present. These terminals and splices fulfill the need for an economical and electrically superior termination through the use of high grade materials, long plating experience and a proven crimp.

One of the most desirable features of this terminal and splice is the "F" Crimp. This proven crimp configuration rolls the open seam barrel into the conductor presenting a large surface to the inside of the terminal barrel assuring optimum electrical performance.

The Budget line includes butt splices, ring, rectangular, flanged spade, hooked, and spring spade tongue terminals in sizes from 26 AWG [0.1 mm<sup>2</sup>] through 10 AWG [6.64 mm<sup>2</sup>].

**BASIC TERMINAL MATERIAL.** The basic terminal is constructed of fine grade high conductivity copper per ASTM B-152 and tin-plated per MIL-T-10727. Basic material for Spring Spade Tongue Terminals is phosphor bronze per ASTM B-103 and tin-plated per MIL-T-10727. AMP's special plating process creates durable corrosion resistance to salt spray and most chemical fumes.




**BELL MOUTH.** Bell shape of barrel entrance makes insertion of wires easier.

**SERRATIONS.** Inner surface serrated for optimum tensile strength and maximum electrical contact area after crimping.

**Temperature Rating: 170°C Max.**

### AMP Budget Terminals and Splices (Use Budget Tooling)

Wire Size	 Listed File No. E13288
22-16 Stranded	22-16 Stranded
16-14 Stranded	16-14 Stranded
12-10 Stranded	12-10 Stranded

**Note:** 22-16 terminals and splices are stamped 22-18 in accordance with MIL-T-7928. Commercial wire range is 22-16.

**DIAMOND GRIP Terminal**

The DIAMOND GRIP product line of terminals and splices is designed for completely uniform reliability under the most critical conditions of vibration, thermal shock, corrosion, tension and current overload. AMP's mated tool/terminal concept represents a total approach to wire termination and takes into account all the factors of circuit termination.

The uniformity of appearance of AMP terminations is repeated by their uniformity in performance—made possible by designing the terminal and the tooling to match precisely. This promotes fast and easy crimping and assures precise crimping pressure for every wire size, regardless of the skill of the operator. The result is the best circuit termination at the lowest applied cost. And this is true for all terminations from first to last, week after week, month after month.

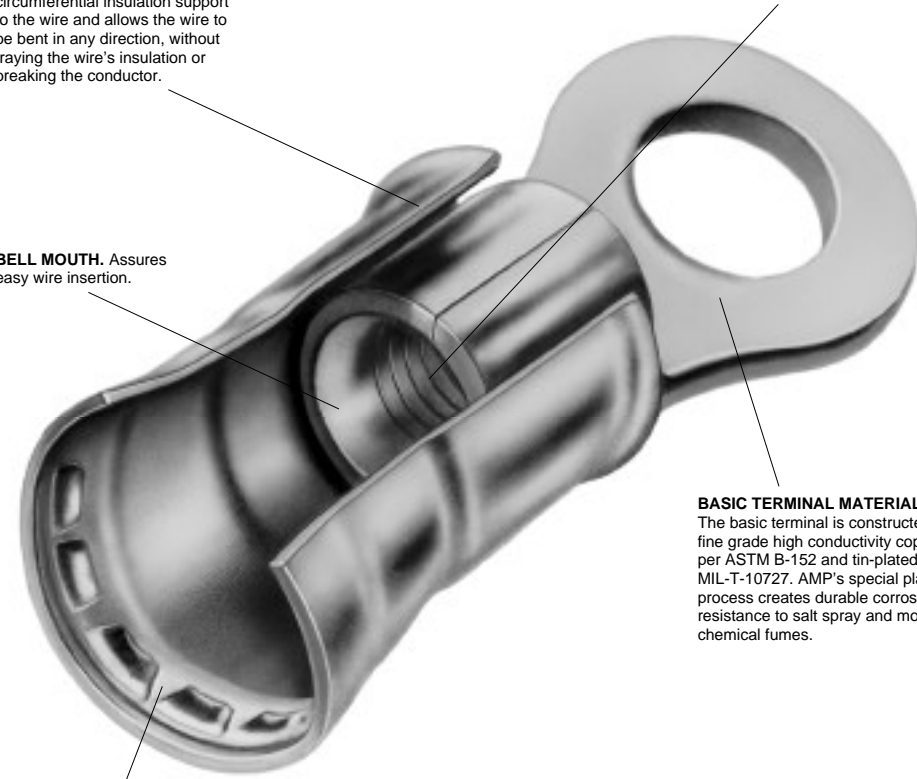
**The Crimp**

After the wire is inserted into the barrel, the matching dies in the AMP tool close over the barrel, exerting great pressure. This causes the wire strands to flow into the serrations of the terminal barrel as it is compressed around them, forming a homogenous mass of the strands and terminal barrel. This maximum contact assures optimum conductivity of the termination.

**COPPER SLEEVE.** The specially designed copper sleeve, fitted over the terminal barrel, provides circumferential insulation support to the wire and allows the wire to be bent in any direction, without fraying the wire's insulation or breaking the conductor.

**SERRATIONS.** Serrations inside the barrel provide maximum contact and tensile strength after crimping.

**BELL MOUTH.** Assures easy wire insertion.



**BASIC TERMINAL MATERIAL.** The basic terminal is constructed of fine grade high conductivity copper per ASTM B-152 and tin-plated per MIL-T-10727. AMP's special plating process creates durable corrosion resistance to salt spray and most chemical fumes.

**"V" NOTCHES.** These lock the wire insulation against vibration and pullout.

**Temperature Rating: 170°C Max.**

**DIAMOND GRIP Terminals and Splices  
(Use DIAMOND GRIP Tooling)**

AMP Wire Range	UL Listed	LR 7189 Certified
22-16	22-16 Stranded	22-16 Stranded
16-14	16-14 Stranded	16-14 Stranded
16-14 HD	16-14 HD Stranded	—
12-10	12-10 Stranded	12-10 Stranded

## Terminal Stud Hole Size

### Use to Select Proper Size Terminal

The chart shows sizes and dimensions of various studs and the corresponding terminal stud hole sizes used with AMP devices. For example, with stud #5 (.125 [3.18] Diameter), use AMP device listed for #5 stud (.132 [3.35] Hole Diameter). Terminal stud hole sizes may easily be checked by fitting sample terminal to black circle.

Stud Size		Stud Dia.	Typical Terminal Stud Hole Diameter
U.S. Cust.	Metric		
#0	—	.060 1.52	● .067 ± .003 1.70 ± 0.08
#1	—	.073 1.85	● .080 ± .003 2.03 ± 0.08
#2	M2	.086 2.18	● .093 ± .003 2.36 ± 0.08
#3	—	.099 2.51	● Not Available
#4	—	.112 2.84	● .119 ± .003 3.02 ± 0.08
#5	M3	.125 3.18	● .132 ± .003 3.35 ± 0.08
#6	M3.5	.138 3.51	● .145 ± .003 3.68 ± 0.08
#8	M4	.164 4.17	● .171 ± .003 4.34 ± 0.08
#10	—	.190 4.83	● .197 ± .003 5.00 ± 0.08
#12	—	.216 5.49	● .223 ± .003 5.66 ± 0.08
#14	—	.242 6.15	● .250 ± .003 6.35 ± 0.08
1/4"	M6	.250 6.35	● .265 ± .005 6.73 ± 0.13
5/16"	M8	.312 7.92	● .328 ± .005 8.33 ± 0.13
3/8"	—	.375 9.53	● .390 ± .005 9.91 ± 0.13

Stud Size		Stud Dia.	Typical Terminal Stud Hole Diameter
U.S. Cust.	Metric		
7/16"	—	.437 11.10	● .453 ± .005 11.51 ± 0.13
1/2"	M12	.500 12.70	● .515 ± .005 13.08 ± 0.13
5/8"	M16	.625 15.88	● .656 ± .005 16.66 ± 0.13
3/4"	—	.750 19.05	● .781 ± .005 19.84 ± 0.13
7/8"	M22	.875 22.23	● .906 ± .005 23.01 ± 0.13
1"	—	1.000 25.40	● 1.031 ± .005 26.19 ± 0.13

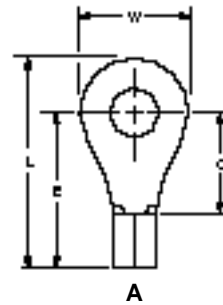
## Ring Tongue Terminals

**Wire Size Range**  
AWG 26 to 16,  
CMA 202 to 3,260  
[0.1 to 1.65 mm<sup>2</sup>]

**Material**

**Terminal Body** — Copper per  
ASTM B-152

**Plating** — Tin per MIL-T-10727



Wire Size Circular Mils [mm <sup>2</sup> ]	Stud Size	Style	Dimensions				Material Thickness Max.	Wire Barrel I.D. Min.		Part Numbers	
			L Max.	E Max.	C Min.	W		Solistrand	Budget	Solistrand	Budget
26-22 202-810 [0.1-0.41]	0	A	.329 8.36	.256 6.50	.121 3.07	.140 3.56	.020 0.51	—	.035 0.89	—	31423
		A	.329 8.36	.256 6.50	.121 3.07	.140 3.56	.020 0.51	—	.035 0.89	—	31425 2-31425-2
	2 M2	A	.450 11.43	.346 8.79	.211 5.36	.203 5.16	.020 0.51	—	.035 0.89	—	33695
		A	.419 10.64	.346 8.79	.211 5.36	.140 3.56	.020 0.51	.031 0.79	.035 0.89	50334*	322771
	4	A	.450 11.43	.346 8.79	.211 5.36	.203 5.16	.020 0.51	—	.035 0.89	—	31428
		A	.450 11.43	.346 8.79	.211 5.36	.203 5.16	.020 0.51	—	.035 0.89	—	31430
	6 M3.5	A	.544 13.82	.416 10.57	.281 7.14	.250 6.35	.020 0.51	.031 0.79	.035 0.89	331401 1-331401-1	32858
		A	.544 13.82	.416 10.57	.281 7.14	.250 6.35	.020 0.51	—	.035 0.89	—	32859
	10	A	.544 13.82	.416 10.57	.281 7.14	.250 6.35	.020 0.51	—	.035 0.89	—	32860
		A	.449 11.40	.337 8.56	.156 3.96	.218 5.54	.033 0.84	—	.065 1.65	—	31087
22-16 509-3,260 [0.26-1.65]	1	A	.449 11.40	.337 8.56	.156 3.96	.218 5.54	.033 0.84	—	.065 1.65	—	31087
		A	.449 11.40	.337 8.56	.156 3.96	.218 5.54	.033 0.84	.061 1.55	.065 1.65	34103 2-34103-1	31088
	2 M2	A	.446 11.33	.353 8.97	.172 4.37	.182 4.62	.033 0.84	.061 1.55	.065 1.65	322927	320677
		A	.449 11.40	.337 8.56	.156 3.96	.218 5.54	.033 0.84	.061 1.55	.065 1.65	34104* 2-34104-6	31089 3-31089-6
	4	A	.446 11.33	.353 8.97	.172 4.37	.182 4.62	.033 0.84	.061 1.55	.065 1.65	36467*	36189 2-326850-1
		A	.621 15.77	.493 12.52	.312 7.92	.250 6.35	.033 0.84	.061 1.55	.065 1.65	323096 2-323096-2	322418
	5 M3	A	.449 11.40	.337 8.56	.156 3.96	.218 5.54	.033 0.84	—	.065 1.65	—	31090 2-31090-1
		A	.449 11.40	.337 8.56	.156 3.96	.218 5.54	.033 0.84	.061 1.55	.065 1.65	34105* 2-34105-2	31091
	6 M3.5	A	.528 13.41	.416 10.57	.256 6.50	.218 5.54	.033 0.84	.061 1.55	.065 1.65	34194	31101
		A	.574 14.58	.436 11.07	.250 6.35	.281 7.14	.033 0.84	.061 1.55	.065 1.65	34107* 2-34107-2	31264
8 M4	A	.621 15.77	.462 11.73	.281 7.14	.312 7.92	.033 0.84	.061 1.55	.065 1.65	34110* 2-34110-3	30691* 1-30691-1	
	A	.653 16.59	.478 12.14	.297 7.54	.344 8.74	.033 0.84	—	.065 1.65	—	32822	
8 M4	A	.621 15.77	.462 11.73	.281 7.14	.312 7.92	.033 0.84	.061 1.55	.065 1.65	34111* 2-34111-3	30692	
	A	.574 14.58	.436 11.07	.250 6.35	.281 7.14	.033 0.84	.061 1.55	.065 1.65	34108* 2-34108-2	31265*	
8 M4	A	.653 16.59	.478 12.14	.297 7.54	.344 8.74	.033 0.84	.061 1.55	.065 1.65	323086	32823	

**Note:** Part numbers are shown as loose piece over tape mounted product.  
\*Part numbers are available in small quantity packages.

**Ring Tongue Terminals** (Continued)

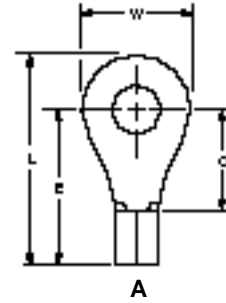
**Wire Size Range**

**AWG 22 to 14,  
CMA 509 to 5,180  
[0.26 to 2.62 mm<sup>2</sup>]**

**Material**

**Terminal Body** — Copper per  
ASTM B-152

**Plating** — Tin per MIL-T-10727



Wire Size Circular Mils [mm <sup>2</sup> ]	Stud Size	Style	Dimensions				Material Thickness Max.	Wire Barrel I.D. Min.		Part Numbers	
			L Max.	E Max.	C Min.	W		Solistrand	Budget	Solistrand	Budget
22-16 509-3,260 [0.26-1.65]	10	A	.621 15.77	.462 11.73	.281 7.14	.312 7.92	.033 0.84	.061 1.55	.065 1.65	34112* 2-34112-2	30693* 3-30693-7
		A	.574 14.58	.436 11.07	.250 6.35	.281 7.14	.033 0.84	.061 1.55	.065 1.65	34109* 2-34109-2	31266
		A	.653 16.59	.478 12.14	.297 7.54	.344 8.74	.033 0.84	.061 1.55	.065 1.65	323087*	32824
	12	A	.621 15.77	.462 11.73	.281 7.14	.312 7.92	.033 0.84	—	.065 1.65	—	30694 2-30694-1
		1/4 M6	A	.856 21.74	.618 15.70	.437 11.10	.469 11.91	.033 0.84	.061 1.55	.065 1.65	34113* 2-34113-2
	5/16 M8	A	.856 21.74	.618 15.70	.437 11.10	.469 11.91	.033 0.84	.061 1.55	.065 1.65	34114* 2-34114-2	31173 3-31173-3
		A	.995 25.27	.727 18.47	.546 13.87	.531 13.49	.033 0.84	—	.065 1.65	—	324124
	3/8	A	.995 25.27	.727 18.47	.546 13.87	.531 13.49	.033 0.84	.061 1.55	.065 1.65	34115* 2-34115-2	31498
		1/2 M12	A	1.070 27.18	.711 18.06	.530 13.46	.713 18.11	.033 0.84	.061 1.55	.065 1.65	329966*
	16-14 2,050-5,180 [1.04-2.62]	2 M2	A	.480 12.19	.352 8.94	.171 4.34	.250 6.35	.033 0.84	—	.089 2.26	—
A			.445 11.30	.352 8.94	.171 4.34	.180 4.57	.033 0.84	.085 2.16	.089 2.26	328377	326854
4		A	.480 12.19	.352 8.94	.171 4.34	.250 6.35	.033 0.84	.085 2.16	.089 2.26	34119* 2-34119-1	32185
		A	.636 16.15	.462 11.73	.281 7.14	.343 8.71	.033 0.84	.085 2.16	.089 2.26	34121* 2-34121-1	30695
6 M3.5		A	.480 12.19	.352 8.94	.171 4.34	.250 6.35	.033 0.84	.085 2.16	.089 2.26	34120* 2-34120-1	32186*
		A	.590 14.99	.431 10.95	.250 6.35	.312 7.92	.033 0.84	.085 2.16	.089 2.26	321684* 2-321684-1	321683
8 M4		A	.636 16.15	.462 11.73	.281 7.14	.343 8.71	.033 0.84	.085 2.16	.089 2.26	34122* 2-34122-1	30696*
		A	.590 14.99	.431 10.95	.250 6.35	.312 7.92	.033 0.84	.085 2.16	.089 2.26	324955* 2-324955-1	322235 1-322235-1
10		A	.621 15.77	.462 11.73	.281 7.14	.312 7.92	.033 0.84	—	.089 2.26	—	51872-5
		A	.636 16.15	.462 11.73	.281 7.14	.343 8.71	.033 0.84	.085 2.16	.089 2.26	34123* 2-34123-1	30697*
12	A	.669 16.99	.510 12.95	.250 6.35	.312 7.92	.033 0.84	.085 2.16	.089 2.26	320093 2-320093-1	31049	
	A	.855 21.72	.618 15.70	.437 11.10	.469 11.91	.033 0.84	—	.089 2.26	—	31163	
14	A	.730 18.54	.493 12.52	.312 7.92	.468 11.89	.033 0.84	—	.089 2.26	—	34896	

**Note:** Part numbers are shown as loose piece over tape mounted product.  
\*Part numbers are available in small quantity packages.

**Ring Tongue Terminals** (Continued)

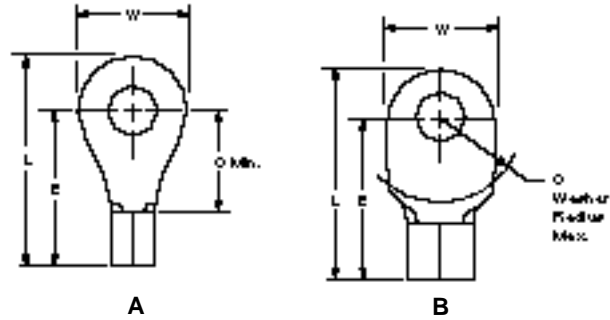
**Wire Size Range**

**AWG 16 to 10,  
CMA 2,050 to 13,100  
[1.04 to 6.64 mm<sup>2</sup>]**

**Material**

**Terminal Body**—Copper per  
ASTM B-152

**Plating**—Tin per MIL-T-10727



Wire Size Circular Mils [mm <sup>2</sup> ]	Stud Size	Style	Dimensions				Material Thickness Max.	Wire Barrel I.D. Min.		Part Numbers	
			L Max.	E Max.	C	W		Solistrand	Budget	Solistrand	Budget
16-14 2,050-5,180 [1.04-2.62]	1/4 M6	A	.855 21.72	.618 15.70	.437 11.10	.469 11.91	.033 0.84	.085 2.16	.089 2.26	34124* 2-34124-1	31164
	5/16 M8	A	.855 21.72	.618 15.70	.437 11.10	.469 11.91	.033 0.84	.085 2.16	.089 2.26	34125* 2-34125-6	31165
	3/8	A	.995 25.27	.727 18.47	.546 13.87	.531 13.49	.033 0.84	.085 2.16	.089 2.26	34126* 2-34126-2	31499
	1/2 M12	A	1.070 27.18	.711 18.06	.530 13.46	.713 18.11	.033 0.84	—	.089 2.26	—	328971
		A	1.184 30.07	.806 20.47	.625 15.88	.750 19.05	.033 0.84	.085 2.16	.089 2.26	50981	50982
	14-12 3,260-8,230 [1.65-4.17]	8 M4	B	.685 17.40	.526 13.36	.250 6.35	.312 7.92	.042 1.07	.098 2.49	—	321827
		B	.739 18.77	.526 13.36	.250 6.35	.421 10.69	.042 1.07	.098 2.49	—	34484 1-34484-0	—
10		B	.685 17.40	.526 13.36	.250 6.35	.312 7.92	.042 1.07	.098 2.49	—	321828 1-321828-0	—
1/4 M6		B	.739 18.77	.526 13.36	.250 6.35	.421 10.69	.042 1.07	.098 2.49	—	34487	—
3/8		B	1.120 28.45	.774 19.66	.437 11.10	.687 17.45	.042 1.07	.098 2.49	—	34486	—
12-10 5,180-13,100 [2.62-6.64]	4	A	.630 16.00	.487 12.37	.219 5.56	.281 7.14	.042 1.07	.129 3.28	.134 3.40	322447	34891
		A	.630 16.00	.487 12.37	.219 5.56	.281 7.14	.042 1.07	.129 3.28	.134 3.40	35476* 2-35476-1	34892
	6 M3.5	A	.729 18.52	.570 14.48	.302 7.67	.312 7.92	.042 1.07	.129 3.28	.134 3.40	324911	324910
		A	.765 19.43	.575 14.61	.302 7.67	.375 9.53	.042 1.07	.129 3.28	.134 3.40	33456 2-33456-1	31112
	8 M4	A	.708 17.98	.549 13.94	.281 7.14	.312 7.92	.042 1.07	.129 3.28	.134 3.40	322454*	34404*
		A	.765 19.43	.575 14.61	.302 7.67	.375 9.53	.042 1.07	.129 3.28	.134 3.40	32994* 2-32994-1	31113
		A	.723 18.36	.549 13.94	.281 7.14	.343 8.71	.042 1.07	.129 3.28	.134 3.40	322455 2-322455-1	32882
		A	.765 19.43	.575 14.61	.302 7.67	.375 9.53	.042 1.07	.129 3.28	.134 3.40	33457* 2-33457-2	31114*
	10	A	.808 20.52	.618 15.70	.343 8.71	.375 9.53	.042 1.07	.129 3.28	.134 3.40	31805	321829
		A	.865 21.97	.612 15.54	.344 8.74	.500 12.70	.042 1.07	.129 3.28	.134 3.40	35771* 2-35771-1	34964
		A	1.004 25.50	.736 18.69	.468 11.89	.531 13.49	.042 1.07	.129 3.28	.134 3.40	36451	31120
	1/4 M6	A	.865 21.97	.612 15.54	.344 8.74	.500 12.70	.042 1.07	.129 3.28	.134 3.40	35772* 2-35772-1	34965
	A	1.004 25.50	.736 18.69	.468 11.89	.531 13.49	.042 1.07	.129 3.28	.134 3.40	33458* 2-33458-3	31122*	
5/16 M8	A	.865 21.97	.612 15.54	.344 8.74	.500 12.70	.042 1.07	—	.134 3.40	—	34966	
	A	1.004 25.50	.736 18.69	.468 11.89	.531 13.49	.042 1.07	.129 3.28	.134 3.40	33459* 2-33459-6	31123	

**Note:** Part numbers are shown as loose piece over tape mounted product.

\*Part numbers are available in small quantity packages.

**Ring Tongue Terminals** (Continued)

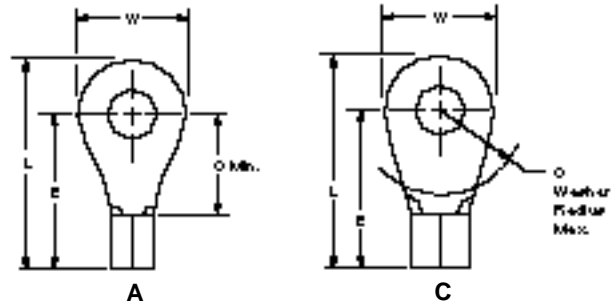
**Wire Size Range**

**AWG 12 to 8,  
CMA 5,180 to 20,800  
[2.62 to 10.5 mm<sup>2</sup>]**

**Material**

**Terminal Body** — Copper per  
ASTM B-152

**Plating** — Tin per MIL-T-10727



Wire Size Circular Mils [mm <sup>2</sup> ]	Stud Size	Style	Dimensions				Material Thickness Max.	Wire Barrel I.D. Min.		Part Numbers	
			L Max.	E Max.	C	W		Solistrand	Budget	Solistrand	Budget
12-10 5,180-13,100 [2.62-6.64]	3/8	A	1.098 27.89	.799 20.29	.531 13.49	.593 15.06	.042 1.07	.129 3.28	.134 3.40	33220* 1-33220-2 <sup>3</sup>	30972
		A	1.271 32.28	.893 22.68	.625 15.88	.750 19.05	.042 1.07	.129 3.28	.134 3.40	322242	34833
	1/2 M12	A	1.102 27.99	.742 18.85	.474 12.04	.715 18.16	.042 1.07	—	.134 3.40	—	52269-1
		A	1.271 32.28	.893 22.68	.625 15.88	.750 19.05	.042 1.07	.129 3.28	.134 3.40	35135 2-35135-2 <sup>3</sup>	34834
	5/8 M16	A	1.896 48.16	1.268 32.21	1.000 25.40	1.250 31.75	.042 1.07	.129 3.28	.134 3.40	320763	320760
		A	1.896 48.16	1.268 32.21	1.000 25.40	1.250 31.75	.042 1.07	.129 3.28	.134 3.40	320764	320761
	3/4	A	1.896 48.16	1.268 32.21	1.000 25.40	1.250 31.75	.042 1.07	.129 3.28	.134 3.40	320765	320762
		A	1.896 48.16	1.268 32.21	1.000 25.40	1.250 31.75	.042 1.07	.129 3.28	—	1-320765-1	—
	7/8 M22	A	1.896 48.16	1.268 32.21	1.000 25.40	1.250 31.75	.042 1.07	.129 3.28	—	1-320765-0	—
		A	1.896 48.16	1.268 32.21	1.000 25.40	1.250 31.75	.042 1.07	.129 3.28	—	1-320765-0	—
8 13,100-20,800 [6.64-10.5]	8 M4	C	.949 24.10	.743 18.87	.359 9.12	.406 10.31	.051 1.30	.172 4.37	—	324061*	—
		C	.933 23.70	.696 17.68	.359 9.12	.469 11.91	.051 1.30	.172 4.37	—	32996*	—
	10	C	.933 23.70	.696 17.68	.359 9.12	.469 11.91	.051 1.30	.172 4.37	—	33460* 2-33460-2* <sup>1</sup> 2-33460-3* <sup>2</sup>	—
		C	.949 24.10	.743 18.87	.359 9.12	.406 10.31	.051 1.30	.172 4.37	—	31807 2-31807-2* <sup>2</sup>	—
	1/4 M6	C	.933 23.70	.696 17.68	.359 9.12	.469 11.91	.051 1.30	.172 4.37	—	33461* 2-33461-2* <sup>1</sup> 2-33461-3* <sup>2</sup>	—
		A	1.168 29.67	.868 22.05	.531 13.49	.594 15.09	.051 1.30	.172 4.37	—	35247*	—
	5/16 M8	A	1.168 29.67	.868 22.05	.531 13.49	.594 15.09	.051 1.30	.172 4.37	—	33462* 2-33462-1 <sup>2</sup>	—
		A	1.074 27.28	.790 20.07	.406 10.31	.562 14.27	.051 1.30	.172 4.37	—	31808*	—
	3/8	C	.933 23.70	.696 17.68	.359 9.12	.469 11.91	.051 1.30	.172 4.37	—	55991-1 55991-2	—
		A	1.168 29.67	.868 22.05	.531 13.49	.594 15.09	.051 1.30	.172 4.37	—	33463*	—
1/2 M12	A	1.965 49.91	1.337 33.96	1.000 25.40	1.250 31.75	.051 1.30	.172 4.37	—	36499	—	
	A	1.965 49.91	1.337 33.96	1.000 25.40	1.250 31.75	.051 1.30	.172 4.37	—	35664*	—	
5/8 M16	A	1.965 49.91	1.337 33.96	1.000 25.40	1.250 31.75	.051 1.30	.172 4.37	—	35665	—	
	A	1.965 49.91	1.337 33.96	1.000 25.40	1.250 31.75	.051 1.30	.172 4.37	—	35666	—	

**Note:** Part numbers are shown as loose piece over tape mounted product.

\*Part numbers are available in small quantity packages.

<sup>1</sup>Requires a 69875 standard TAPETRONIC machine for application.

<sup>2</sup>Requires a 68250-1 Heavy Duty TAPETRONIC machine for application.

<sup>3</sup>Requires a 68250-1 Heavy Duty TAPETRONIC and 68242-2 die set for application.

**Ring Tongue Terminals** (Continued)

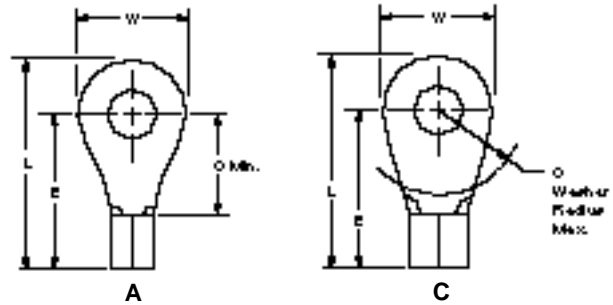
**Wire Size Range**

**AWG 6 to 4,**  
**CMA 20,800 to 52,600**  
**[10.5 to 26.7 mm<sup>2</sup>]**

**Material**

**Terminal Body** — Copper per  
ASTM B-152

**Plating** — Tin per MIL-T-10727



Wire Size Circular Mils [mm <sup>2</sup> ]	Stud Size	Style	Dimensions				Material Thickness Max.	Wire Barrel I.D. Min. Solistrand	Part Numbers Solistrand
			L Max.	E Max.	C	W			
6 20,800–33,100 [10.5–16.8]	10	C	1.181 30.00	.931 23.65	.531 13.49	.406 10.31	.060 1.52	.232 5.89	52197* 52197-1
		C	1.181 30.00	.984 24.99	.584 14.83	.406 10.31	.060 1.52	.232 5.89	53106-1
		C	1.246 31.65	.931 23.65	.531 13.49	.625 15.88	.060 1.52	.232 5.89	33464*
		C	1.168 29.67	.931 23.65	.531 13.49	.468 11.89	.060 1.52	.232 5.89	321298* 2-321298-6
	1/4 M6	C	1.246 31.65	.931 23.65	.531 13.49	.625 15.88	.060 1.52	.232 5.89	33465* 2-33465-1
		C	1.168 29.67	.931 23.65	.531 13.49	.468 11.89	.060 1.52	.232 5.89	321598* 2-321598-3
	5/16 M8	C	1.246 31.65	.931 23.65	.531 13.49	.625 15.88	.060 1.52	.232 5.89	33466* 2-33466-3
		C	1.246 31.65	.931 23.65	.531 13.49	.625 15.88	.060 1.52	.232 5.89	33467* 2-33467-3
	3/8	A	2.033 51.64	1.400 35.56	1.000 25.40	1.250 31.75	.060 1.52	.232 5.89	36807
		C	1.246 31.65	.931 23.65	.531 13.49	.625 15.88	.060 1.52	.232 5.89	320745
	1/2 M12	C	1.840 46.74	1.400 35.56	1.000 25.40	.875 22.23	.060 1.52	.232 5.89	320344*
		A	2.033 51.64	1.400 35.56	1.000 25.40	1.250 31.75	.060 1.52	.232 5.89	36808
5/8	A	2.033 51.64	1.400 35.56	1.000 25.40	1.250 31.75	.060 1.52	.232 5.89	36809	
	A	2.033 51.64	1.400 35.56	1.000 25.40	1.250 31.75	.060 1.52	.232 5.89	36810	
4 33,100–52,600 [16.8–26.7]	10	A	1.314 33.38	.978 24.84	.516 13.11	.656 16.66	.073 1.85	.296 7.52	33468*
		C	1.199 30.45	.946 24.03	.437 11.10	.500 12.70	.073 1.85	.280 7.11	33114
	1/4 M6	A	1.314 33.38	.978 24.84	.516 13.11	.656 16.66	.073 1.85	.296 7.52	33469*
		C	1.199 30.45	.946 24.03	.437 11.10	.500 12.70	.073 1.85	.280 7.11	2-31811-4
	5/16 M8	A	1.314 33.38	.978 24.84	.516 13.11	.656 16.66	.073 1.85	.296 7.52	33470*
		C	1.324 33.63	1.009 25.63	.500 12.70	.625 15.88	.073 1.85	.280 7.11	33115
	3/8	A	1.314 33.38	.978 24.84	.516 13.11	.656 16.66	.073 1.85	.296 7.52	33471*
		A	2.090 53.09	1.462 37.13	1.000 25.40	1.250 31.75	.073 1.85	.296 7.52	36815
		C	1.902 48.31	1.462 37.13	1.000 25.40	.875 22.23	.073 1.85	.296 7.52	322704
		C	1.324 33.63	1.009 25.63	.500 12.70	.625 15.88	.073 1.85	.280 7.11	31812

**Note:** Part numbers are shown as loose piece over tape mounted product.

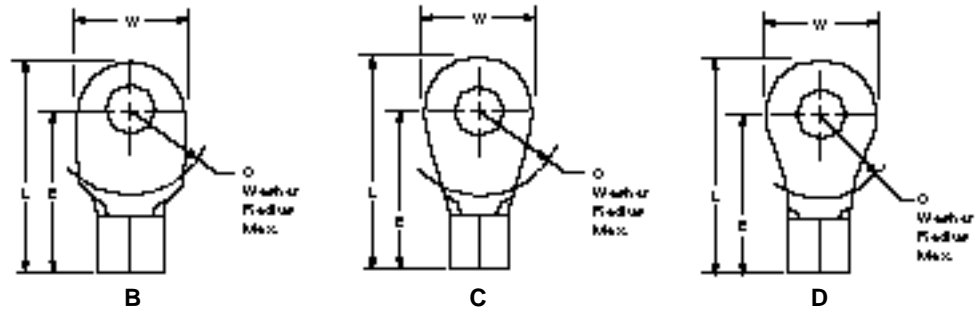
\*Part numbers are available in small quantity packages.  
semi-automatic pneumatic crimping system.



**Ring Tongue Terminals** (Continued)

**Wire Size Range**  
**AWG 4 to 1/0,**  
**CMA 33,100 to 119,500**  
**[16.8 to 60.6 mm<sup>2</sup>]**

**Material**  
**Terminal Body** — Copper per  
ASTM B-152  
**Plating** — Tin per MIL-T-10727



Wire Size Circular Mils [mm <sup>2</sup> ]	Stud Size	Style	Dimensions				Material Thickness Max.	Wire Barrel I.D. Min. Solistrand	Part Numbers Solistrand
			L Max.	E Max.	C	W			
4 33,100–52,600 [16.8–26.7]	7/16	A**	1.314 33.38	.978 24.84	.516 13.11	.656 16.66	.073 1.85	.296 7.52	320743
	1/2 M12	A**	2.090 53.09	1.462 37.13	1.000 25.40	1.250 31.75	.073 1.85	.296 7.52	35668*
		B	1.902 48.31	1.462 37.13	1.000 25.40	.875 22.23	.073 1.85	.296 7.52	327175*
	5/8 M16	A**	2.090 53.09	1.462 37.13	1.000 25.40	1.250 31.75	.073 1.85	.296 7.52	35669
	3/4	A**	2.090 53.09	1.462 37.13	1.000 25.40	1.250 31.75	.073 1.85	.296 7.52	35670
2 52,600–83,700 [26.7–42.4]	10	B	1.527 38.79	1.212 30.78	.531 13.49	.625 15.88	.073 1.85	.370 9.40	330301
	1/4 M6	B	1.527 38.79	1.212 30.78	.531 13.49	.625 15.88	.073 1.85	.370 9.40	320383*
		D	1.657 42.09	1.212 30.78	.531 13.49	.890 22.61	.073 1.85	.370 9.40	320138
	5/16 M8	D	1.657 42.09	1.212 30.78	.531 13.49	.890 22.61	.073 1.85	.370 9.40	35183
		B	1.527 38.79	1.212 30.78	.531 13.49	.625 15.88	.073 1.85	.370 9.40	322870*
	3/8	B	1.527 38.79	1.212 30.78	.531 13.49	.625 15.88	.073 1.85	.370 9.40	321600*
		D	1.657 42.09	1.212 30.78	.531 13.49	.890 22.61	.073 1.85	.370 9.40	35184
	7/16	D	1.657 42.09	1.212 30.78	.531 13.49	.890 22.61	.073 1.85	.370 9.40	320741
	1/2 M12	D	1.657 42.09	1.212 30.78	.531 13.49	.890 22.61	.073 1.85	.370 9.40	35185*
		D	2.516 63.91	1.888 47.96	1.125 28.58	1.250 31.75	.073 1.85	.370 9.40	323291
5/8 M16	D	2.516 63.91	1.888 47.96	1.125 28.58	1.250 31.75	.073 1.85	.370 9.40	320754	
3/4	D	2.516 63.91	1.888 47.96	1.125 28.58	1.250 31.75	.073 1.85	.370 9.40	320755	
1/0 83,700–119,500 [42.4–60.6]	1/4 M6	C	1.956 49.68	1.529 38.84	.625 15.88	.875 22.23	.073 1.85	.444 11.28	36915
		C	1.925 48.90	1.532 38.91	.625 15.88	.807 20.50	.073 1.85	.444 11.28	321866
	5/16 M8	C	1.956 49.68	1.529 38.84	.625 15.88	.875 22.23	.073 1.85	.444 11.28	36916*
		C	1.925 48.90	1.532 38.91	.625 15.88	.807 20.50	.073 1.85	.444 11.28	321867*
	3/8	C	1.956 49.68	1.529 38.84	.625 15.88	.875 22.23	.073 1.85	.444 11.28	36917*
		C	1.925 48.90	1.532 38.91	.625 15.88	.807 20.50	.073 1.85	.444 11.28	321868
	7/16	C	1.956 49.68	1.529 38.84	.625 15.88	.875 22.23	.073 1.85	.444 11.28	36918

\*Part numbers are available in small quantity packages.  
\*\* See style A art on preceding page.

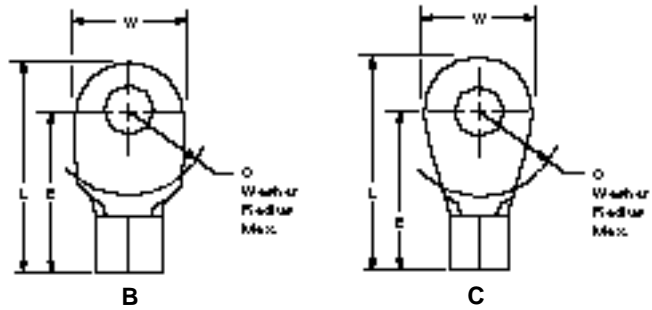
**Ring Tongue Terminals** (Continued)

**Wire Size Range**  
AWG 1/0 to 3/0,  
CMA 83,700 to 190,000  
[42.4 to 96.3 mm<sup>2</sup>]

**Material**

**Terminal Body** — Copper per  
ASTM B-152

**Plating** — Tin per MIL-T-10727



Wire Size Circular Mils [mm <sup>2</sup> ]	Stud Size	Style	Dimensions				Material Thickness Max.	Wire Barrel I.D. Min. Solistrand	Part Numbers Solistrand
			L Max.	E Max.	C	W			
1/0 83,700–119,500 [42.4–60.6]	1/2 M12	C	1.956 49.68	1.529 38.84	.625 15.88	.875 22.23	.073 1.85	.444 11.28	36919*
		C	2.678 68.02	2.063 52.40	1.125 28.58	1.265 32.13	.073 1.85	.444 11.28	322291
	3/4	C	2.678 68.02	2.063 52.40	1.125 28.58	1.265 32.13	.073 1.85	.444 11.28	320744
		C	2.678 68.02	2.063 52.40	1.125 28.58	1.265 32.13	.073 1.85	.444 11.28	320748
2/0 119,500–150,500 [60.6–76.3]	1/4 M6	C	1.930 49.02	1.550 39.37	.625 15.88	.926 23.52	.083 2.11	.504 12.80	321869
		C	2.000 50.80	1.545 39.24	.625 15.88	.946 24.03	.083 2.11	.504 12.80	36921
	5/16 M8	C	1.930 49.02	1.550 39.37	.625 15.88	.926 23.52	.083 2.11	.504 12.80	321870*
		C	2.000 50.80	1.545 39.24	.625 15.88	.946 24.03	.083 2.11	.504 12.80	36922
	3/8	C	1.930 49.02	1.550 39.37	.625 15.88	.926 23.52	.083 2.11	.504 12.80	321871*
		C	2.000 50.80	1.545 39.24	.625 15.88	.946 24.03	.083 2.11	.504 12.80	36923*
	7/16	C	1.930 49.02	1.550 39.37	.625 15.88	.926 23.52	.083 2.11	.504 12.80	321872
		C	1.930 49.02	1.550 39.37	.625 15.88	.926 23.52	.083 2.11	.504 12.80	321873*
	1/2 M12	C	2.000 50.80	1.545 39.24	.625 15.88	.946 24.03	.083 2.11	.504 12.80	36925*
		C	2.671 67.84	2.056 52.22	1.125 28.58	1.270 32.26	.083 2.11	.504 12.80	322391
	5/8 M16	C	2.671 67.84	2.056 52.22	1.125 28.58	1.270 32.26	.083 2.11	.504 12.80	322224
		C	2.671 67.84	2.056 52.22	1.125 28.58	1.270 32.26	.083 2.11	.504 12.80	322225
3/0 150,500–190,000 [76.3–96.3]	1/4	B	2.112 53.64	1.622 41.20	.625 15.88	1.020 25.91	.094 2.39	.565 14.35	323868
		B	2.112 53.64	1.622 41.20	.625 15.88	1.020 25.91	.094 2.39	.565 14.35	321874
	5/16 M8	B	2.143 54.43	1.643 41.73	.625 15.88	1.082 27.48	.094 2.39	.565 14.35	320266
		B	2.112 53.64	1.622 41.20	.625 15.88	1.020 25.91	.094 2.39	.565 14.35	321875*
	3/8	B	2.143 54.43	1.643 41.73	.625 15.88	1.082 27.48	.094 2.39	.565 14.35	36927*
		B	2.112 53.64	1.622 41.20	.625 15.88	1.020 25.91	.094 2.39	.565 14.35	321876

\*Part numbers are available in small quantity packages.

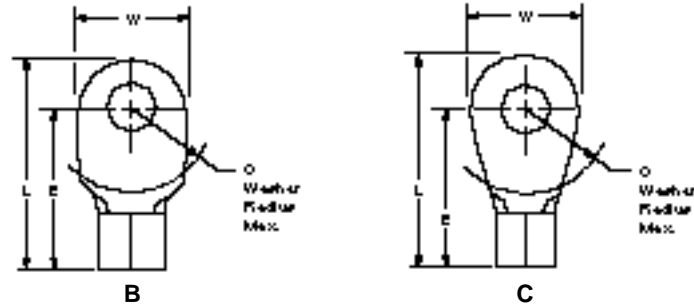
**Ring Tongue Terminals** (Continued)

**Wire Size Range**  
**AWG 3/0 to 300 MCM,**  
**CMA 150,500 to 300,000**  
**[76.3 to 152 mm<sup>2</sup>]**

**Material**

**Terminal Body** — Copper per  
ASTM B-152

**Plating** — Tin per MIL-T-10727



Wire Size Circular Mils [mm <sup>2</sup> ]	Stud Size	Style	Dimensions				Material Thickness Max.	Wire Barrel I.D. Min. Solistrand	Part Numbers Solistrand
			L Max.	E Max.	C	W			
3/0 150,500–190,000 [76.3–96.3]	1/2 M12	B	2.143 54.43	1.643 41.73	.625 15.88	1.082 27.48	.094 2.39	.565 14.35	36929*
		B	2.112 53.64	1.622 41.20	.625 15.88	1.020 25.91	.094 2.39	.565 14.35	321877*
	5/8 M16	C	2.699 68.55	2.084 52.93	1.125 28.58	1.270 32.26	.094 2.39	.565 14.35	322222
		B	2.143 54.43	1.643 41.73	.625 15.88	1.082 27.48	.094 2.39	.565 14.35	36930
	3/4	C	2.699 68.55	2.084 52.93	1.125 28.58	1.270 32.26	.094 2.39	.565 14.35	322223
4/0 190,000–231,000 [96.3–117]	1/4 M6	B	2.206 56.03	1.644 41.76	.625 15.88	1.150 29.21	.105 2.67	.635 16.13	2-36932-2
	5/16 M8	B	2.537 64.44	1.985 50.42	1.078 27.38	1.150 29.21	.105 2.67	.635 16.13	321271
		B	2.206 56.03	1.644 41.76	.625 15.88	1.150 29.21	.105 2.67	.635 16.13	36932
	3/8	B	2.178 55.32	1.657 42.09	.625 15.88	1.087 27.61	.105 2.67	.635 16.13	321878*
		B	2.178 55.32	1.657 42.09	.625 15.88	1.087 27.61	.105 2.67	.635 16.13	321879
	7/16	B	2.178 55.32	1.657 42.09	.625 15.88	1.087 27.61	.105 2.67	.635 16.13	321880*
		B	2.206 56.03	1.644 41.76	.625 15.88	1.150 29.21	.105 2.67	.635 16.13	36934*
	1/2 M12	B	2.537 64.44	1.985 50.42	1.078 27.38	1.150 29.21	.105 2.67	.635 16.13	321163
		B	2.206 56.03	1.644 41.76	.625 15.88	1.150 29.21	.105 2.67	.635 16.13	36935
	5/8 M16	C	2.732 69.39	2.117 53.77	1.078 27.38	1.275 32.39	.105 2.67	.635 16.13	322227
C		2.732 69.39	2.117 53.77	1.078 27.38	1.275 32.39	.105 2.67	.635 16.13	322228	
7/8 M22	C	2.732 69.39	2.117 53.77	1.078 27.38	1.275 32.39	.105 2.67	.635 16.13	321625	
250–300 MCM 231,000–300,000 [117–152]	3/8	B	2.602 66.09	1.987 50.47	.625 15.88	1.435 36.45	.130 3.30	.753 19.13	322252
		B	2.602 66.09	1.987 50.47	.625 15.88	1.435 36.45	.130 3.30	.753 19.13	322253
	1/2 M12	B	2.602 66.09	1.987 50.47	.625 15.88	1.435 36.45	.130 3.30	.753 19.13	322254
		B	2.602 66.09	1.987 50.47	.625 15.88	1.435 36.45	.130 3.30	.753 19.13	323050
	5/8 M16	B	3.259 82.78	2.566 65.18	1.203 30.56	1.435 36.45	.130 3.30	.753 19.13	323140
		B	3.259 82.78	2.566 65.18	1.203 30.56	1.435 36.45	.130 3.30	.753 19.13	323034

\*Part numbers are available in small quantity packages.

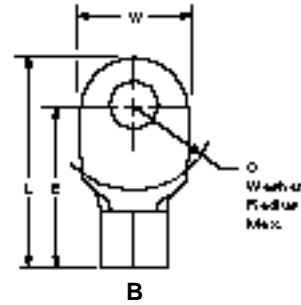
**Ring Tongue Terminals** (Continued)

**Wire Size Range**  
**300 to 600 MCM,**  
**CMA 300,000 — 600,000**  
**[152 to 304 mm<sup>2</sup>]**

**Material**

**Terminal Body** — Copper per  
ASTM B-152

**Plating** — Tin per MIL-T-10727



Wire Size Circular Mils [mm <sup>2</sup> ]	Stud Size	Style	Dimensions				Material Thickness Max.	Wire Barrel I.D. Min. Solistrand	Part Numbers Solistrand	
			L Max.	E Max.	C	W				
300–350 MCM 300,000–380,000 [152–193]	3/8	B	2.671 67.84	2.056 52.22	.625 15.88	1.545 39.24	.140 3.56	.819 20.80	322257	
		B	3.422 86.92	2.675 67.95	1.250 31.75	1.545 39.24	.140 3.56	.819 20.80	322763	
	7/16	B	2.671 67.84	2.056 52.22	.625 15.88	1.545 39.24	.140 3.56	.819 20.80	322258	
		B	2.671 67.84	2.056 52.22	.625 15.88	1.545 39.24	.140 3.56	.819 20.80	322259	
	1/2 M12	B	3.422 86.92	2.675 67.95	1.250 31.75	1.545 39.24	.140 3.56	.819 20.80	322764	
		B	2.671 67.84	2.065 52.22	.625 15.88	1.545 39.24	.140 3.56	.819 20.80	324105	
	400 MCM 380,000–478,000 [193–242]	3/4	B	3.422 86.92	2.675 67.95	1.250 31.75	1.545 39.24	.140 3.56	.819 20.80	322428
			B	2.790 70.87	2.175 55.25	.625 15.88	1.749 44.42	.158 4.01	.930 23.62	322262
7/16		B	2.790 70.87	2.175 55.25	.625 15.88	1.749 44.42	.158 4.01	.930 23.62	322263	
		B	2.790 70.87	2.175 55.25	.625 15.88	1.749 44.42	.158 4.01	.930 23.62	322264	
1/2 M12		B	3.644 92.56	2.795 70.99	1.250 31.75	1.749 44.42	.158 4.01	.930 23.62	327882	
		B	2.790 70.87	2.175 55.25	.625 15.88	1.749 44.42	.158 4.01	.930 23.62	324202	
5/8 M16		B	3.644 92.56	2.795 70.99	1.250 31.75	1.749 44.42	.158 4.01	.930 23.62	323222	
		B	3.644 92.56	2.795 70.99	1.250 31.75	1.749 44.42	.158 4.01	.930 23.62	322939	
500–600 MCM 478,000–600,000 [242–304]	1	B	3.187 80.95	2.447 62.15	.750 19.05	2.015 51.18	.182 4.62	1.075 27.31	322267	
		B	4.176 106.07	3.194 81.13	1.500 38.10	2.015 51.18	.182 4.62	1.075 27.31	322772	
	3/8	B	3.187 80.95	2.447 62.15	.750 19.05	2.015 51.18	.182 4.62	1.075 27.31	322269	
		B	4.176 106.07	3.194 81.13	1.500 38.10	2.015 51.18	.182 4.62	1.075 27.31	322773	
	1/2 M12	B	3.187 80.95	2.447 62.15	.750 19.05	2.015 51.18	.182 4.62	1.075 27.31	322270	
		B	4.176 106.07	3.194 81.13	1.500 38.10	2.015 51.18	.182 4.62	1.075 27.31	322271	
	5/8 M16	B	4.176 106.07	3.194 81.13	1.500 38.10	2.015 51.18	.182 4.62	1.075 27.31	322271	
		B	4.176 106.07	3.194 81.13	1.500 38.10	2.015 51.18	.182 4.62	1.075 27.31	322273	

## Right Angle Ring Tongue Terminals

### Wire Size Range

**AWG 22 to 300 MCM,  
CMA 509 — 300,000  
[0.26 to 152 mm<sup>2</sup>]**

### Material

**Terminal Body** — Copper per  
ASTM B-152

**Plating** — Tin per MIL-T-10727



Wire Size Circular Mils [mm <sup>2</sup> ]	Stud Size	Dimensions		Material Thickness Max.	Wire Barrel ID Min	Part Numbers
		C Min.	W			
22-16 509-3,260 [0.26-1.65]	6	.171 4.34	.281 7.14	.033 .838	.061 1.55	321262
	10	.187 4.75	.312 7.92	.033 .838	.061 1.55	322768
16-14 2,050-5,180 [1.04-2.62]	8	.185 4.70	.343 8.71	.050 1.27	.105 2.67	184269
	10	.192 4.88	.343 8.71	.033 .838	.085 2.16	322821
8 13,100-20,800 [6.64-10.5]	1/4	.432 10.97	.594 15.09	.051 1.30	.172 4.37	35277
6 20,800-33,100 [10.5-16.8]	1/4	.390 9.91	.625 15.88	.060 1.52	.232 5.89	35678
	5/16	.390 9.91	.625 15.88	.060 1.52	.232 5.89	33466-1
4 33,100-52,600 [16.8-26.7]	1/4	.375 9.53	.656 16.66	.073 1.85	.296 7.52	35625
	5/16	.348 8.84	.625 15.88	.073 1.85	.280 7.11	33115-1
	3/8	.348 8.84	.625 15.88	.073 1.85	.280 7.11	31812-1
2 52,600-83,700 [26.7-42.4]	5/16	.422 10.72	.625 15.88	.073 1.85	.370 9.40	322870-1
1/0 83,700-119,500 [42.4-60.6]	1/4	.437 11.10	.807 20.50	.073 1.85	.444 11.28	322905
	5/16	.531 13.49	.807 20.50	.073 1.85	.444 11.28	321867-1
	3/8	.531 13.49	.807 20.50	.073 1.85	.444 11.28	322906
	1/2	.531 13.49	.875 22.23	.073 1.85	.444 11.28	322909
2/0 119,500-150,500 [60.6-76.3]	5/16	.500 12.70	.946 24.03	.083 2.11	.504 12.80	36922-1
	3/8	.531 13.49	.926 23.52	.083 2.11	.504 12.80	322912
3/0 150,500-190,000 [76.3-96.3]	5/16	.531 13.49	1.020 25.91	.094 2.39	.565 14.35	321874-1
	3/8	.468 11.89	1.082 27.48	.094 2.39	.565 14.35	324035
	1/2	.468 11.89	1.062 26.97	.094 2.39	.565 14.35	36929-1
4/0 190,000-231,000 [96.3-117]	5/16	.750 19.05	1.150 29.21	.105 2.67	.635 16.13	321272
	3/8	.484 12.29	1.140 28.96	.105 2.67	.635 16.13	321265
250-300 MCM 231,000-300,000 [117-152]	1/2	.863 21.92	1.435 36.45	.129 3.28	.753 19.13	324023

## Heavy Duty Ring Tongue Terminals

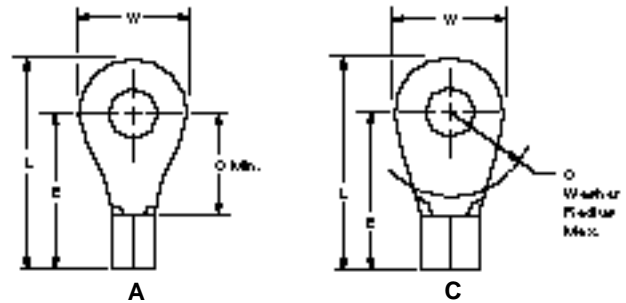
### Wire Size Range

**AWG 16 to 8,**  
**CMA 2,050 to 20,800**  
**[1.04 to 10.5 mm<sup>2</sup>]**

### Material

**Terminal Body** — Copper per  
 ASTM B-152

**Plating** — Tin per MIL-T-10727



Wire Size Circular Mils [mm <sup>2</sup> ]	Stud Size	Style	Dimensions				Material Thickness Max.	Wire Barrel I.D. Min.		Part Numbers	
			L Max.	E Max.	C	W		Solistrand	Budget	Solistrand	Budget
16-14 2,050-5,180 [1.04-2.62]	4	A	.630	.487	.219	.281	.050	—	.110	—	33728
			16.00	12.37	5.56	7.14	1.27	—	2.79	—	33729
	6 M3.5	A	.630	.487	.219	.281	.050	—	.110	—	33729
			16.00	12.37	5.56	7.14	1.27	—	2.79	—	33716
	8 M4	A	.723	.549	.281	.343	.050	.105	.110	322833	33716
			18.36	13.94	7.14	8.71	1.27	2.67	2.79	—	33717
	10	A	.723	.549	.281	.343	.050	.105	.110	34567*	33718
			18.36	13.94	7.14	8.71	1.27	2.67	2.79	2-34567-1	33718
			.865	.612	.344	.500	.050	—	.110	—	34967
	1/4 M6	A	.973	.705	.437	.531	.050	—	.110	—	33646
			24.71	17.91	11.10	13.49	1.27	—	2.79	—	33646
			.865	.612	.344	.500	.050	.105	.110	35775*	34968
	5/16 M8	A	.973	.705	.437	.531	.050	—	.110	2-35775-1	34968
			24.71	17.91	11.10	13.49	1.27	—	2.79	—	33195
	3/8	A	.865	.612	.344	.500	.050	.105	.110	35776	34969
			21.97	15.54	8.74	12.70	1.27	2.67	2.79	—	33647
1/2 M12	A	.973	.705	.437	.531	.050	—	.110	—	33647	
		24.71	17.91	11.10	13.49	1.27	—	2.79	—	33648	
5/8 M16	A	.973	.705	.437	.531	.050	.105	.110	322832	33648	
		24.71	17.91	11.10	13.49	1.27	2.67	2.79	—	34829	
3/4	A	1.271	.893	.625	.750	.050	.105	.110	327732	34829	
		32.28	22.68	15.88	19.05	1.27	2.67	2.79	—	34830	
8 13,100-20,800 [6.64-10.5]	1/4 M6	C	1.271	.893	.625	.750	.050	.105	.110	321165*	34830
			32.28	22.68	15.88	19.05	1.27	2.67	2.79	—	36199
5/8 M16	A	A	1.896	1.268	1.000	1.250	.050	—	.110	—	36199
			48.16	32.21	25.40	31.75	1.27	—	2.79	—	36200
3/4	A	A	1.896	1.268	1.000	1.250	.050	.105	.110	320758	36200
			48.16	32.21	25.40	31.75	1.27	2.67	2.79	320759	36201
8 13,100-20,800 [6.64-10.5]	1/4 M6	C	1.273	.977	.443	.587	.095	.177	—	331414	—
			32.33	24.82	11.25	14.91	2.41	4.50	—	—	—
			.949	.696	.240	.500	.095	.177	—	330968	—
5/16 M8	C	C	24.10	17.68	6.10	12.70	2.41	4.50	—	332042	—
			.933	.696	.250	.468	.095	.177	—	332042	—
5/16 M8	C	C	23.70	17.68	6.35	11.89	2.41	4.50	—	—	—
			1.273	.977	.443	.587	.095	.177	—	1-331414-1	—
5/16 M8	C	C	32.33	24.82	11.25	14.91	2.41	4.50	—	—	—
			32.33	24.82	11.25	14.91	2.41	4.50	—	—	—

**Note:** Part numbers are shown as loose piece over tape mounted product.

\*Part numbers are available in small quantity packages.

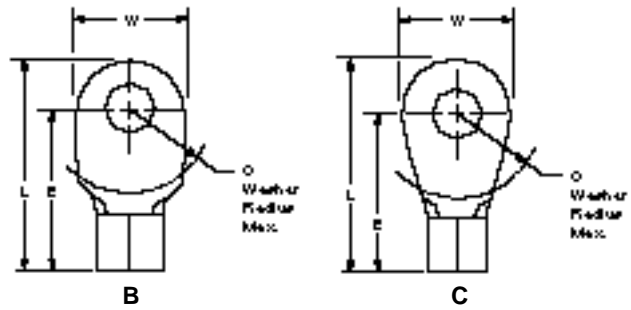
### Heavy Duty Ring Tongue Terminals (Continued)

**Wire Size Range**  
AWG 6 to 1/0,  
CMA 20,800 to 119,500  
[10.5 to 60.6 mm<sup>2</sup>]

**Material**

**Terminal Body** — Copper per  
ASTM B-152

**Plating** — Tin per MIL-T-10727



Wire Size Circular Mils [mm <sup>2</sup> ]	Stud Size	Style	Dimensions				Material Thickness Max.	Wire Barrel I.D. Min. Solistrand	Part Numbers Solistrand
			L Max.	E Max.	C	W			
6 20,800–33,100 [10.5–16.8]	10	B	1.184 30.07	.931 23.65	.370 9.40	.500 12.70	.095 2.41	.232 5.89	2-330969-1
	1/4 M6	B	1.184 30.07	.931 23.65	.370 9.40	.500 12.70	.095 2.41	.232 5.89	330969
		C	1.415 35.94	1.100 27.94	.454 11.53	.625 15.88	.095 2.41	.232 5.89	331417
	3/8	C	1.415 35.94	1.100 27.94	.454 11.53	.625 15.88	.095 2.41	.232 5.89	1-331417-1
4 33,100–52,600 [16.8–26.7]	1/4 M6	B	1.230 31.24	.977 24.82	.390 9.91	.500 12.70	.095 2.41	.296 7.52	330970
		C	1.535 38.99	1.193 30.30	.456 11.58	.679 17.25	.095 2.41	.296 7.52	331420
	5/16 M8	C	1.535 38.99	1.193 30.30	.456 11.58	.679 17.25	.095 2.41	.296 7.52	1-331420-0
		3/8	C	1.535 38.99	1.193 30.30	.456 11.58	.679 17.25	.095 2.41	.296 7.52
2 52,600–83,700 [26.7–42.4]	3/8	C	1.745 44.32	1.315 33.40	.639 16.23	.855 21.72	.095 2.41	.375 9.53	1-331423-0
	1/2 M12	C	1.745 44.32	1.315 33.40	.639 16.23	.855 21.72	.095 2.41	.375 9.53	1-331423-1
1/0 83,700–119,500 [42.4–60.6]	3/8	B	1.928 48.97	1.519 38.58	.691 17.55	.822 20.88	.095 2.41	.439 11.15	1-331880-0
	1/2 M12	B	1.928 48.97	1.519 38.58	.691 17.55	.822 20.88	.095 2.41	.439 11.15	1-331880-1

## Rectangular Tongue Terminals

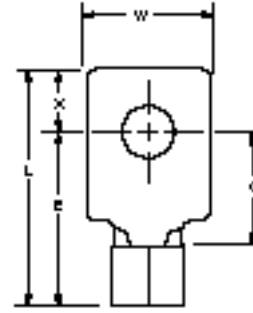
### Wire Size Range

**AWG 22 to 14,  
CMA 509 to 5,180  
[0.26 to 2.62 mm<sup>2</sup>]**

### Material

**Terminal Body** — Copper per  
ASTM B-152

**Plating** — Tin per MIL-T-10727



Wire Size Circular Mils [mm <sup>2</sup> ]	Stud Size	Dimensions					Material Thickness Max.	Wire Barrel I.D. Min.		Part Numbers		
		L Max.	E Max.	C Min.	W	X		Solistrand	Budget	Solistrand	Budget	
22-16 509-3,260 [0.26-1.65]	2 M2	.551	.431	.250	.182	.115	.033	—	.065	—	320870	
		14.00	10.95	6.35	4.62	2.92	0.84	—	1.65	—	320870	
	4	.529	.384	.203	.213	.140	.033	—	.065	—	32579	
		13.44	9.75	5.16	5.41	3.56	0.84	—	1.65	—	32579	
	6	.670	.517	.237	.237	.143	.033	.061	.065	328363	328349	
		17.02	13.13	6.02	6.02	3.63	0.84	1.55	1.65	328363	328349	
	8	.551	.431	.250	.182	.115	.033	.061	.065	323119	322408	
		14.00	10.95	6.35	4.62	2.92	0.84	1.55	1.65	323119	322408	
	10	.811	.606	.404	.237	.195	.033	—	.065	—	327955	
		20.60	15.39	10.26	6.02	4.95	0.84	—	1.65	—	327955	
	16-14 2,050-5,180 [1.04-2.62]	6 M3.5	.982	.745	.465	.302	.227	.033	.061	.065	328353	328339
			24.94	18.92	11.81	7.67	5.77	0.84	1.55	1.65	328353	328339
8 M4	.670	.462	.281	.312	.203	.033	.061	.065	323112	321691		
	17.02	11.73	7.14	7.92	5.16	0.84	1.55	1.65	323112	321691		
10	.982	.745	.465	.302	.227	.033	.061	.065	328355	328341		
	24.94	18.92	11.81	7.67	5.77	0.84	1.55	1.65	328355	328341		
12	.748	.540	.281	.312	.203	.033	.061	—	330539	—		
	19.00	13.72	7.14	7.92	5.16	0.84	1.55	—	330539	—		
16-14 2,050-5,180 [1.04-2.62]	10	.670	.462	.281	.375	.203	.033	.061	.065	323106	34525	
		17.02	11.73	7.14	9.53	5.16	0.84	1.55	1.65	2-323106-1	34525	
4	.546	.399	.218	.344	.142	.033	.061	.065	34459	31821		
	13.87	10.13	5.54	8.74	3.61	0.84	1.55	1.65	34459	31821		
16-14 2,050-5,180 [1.04-2.62]	4 M3	.576	.462	.281	.215	.109	.033	—	.089	—	31691	
		14.63	11.73	7.14	5.46	2.77	0.84	—	2.26	—	31691	
5	.632	.479	.277	.277	.143	.033	—	.089	—	327951		
	16.05	12.17	7.04	7.04	3.63	0.84	—	2.26	—	327951		
6	.560	.368	.187	.250	.187	.033	.085	.089	320815	320814		
	14.22	9.35	4.75	6.35	4.75	0.84	2.16	2.26	320815	320814		
16-14 2,050-5,180 [1.04-2.62]	6 M3.5	.529	.384	.203	.296	.140	.033	.085	.089	34266	31813	
		13.44	9.75	5.16	7.52	3.56	0.84	2.16	2.26	2-34266-1	31813	
8 M4	.633	.493	.312	.244	.125	.033	—	.089	—	35278		
	16.08	12.52	7.92	6.20	3.18	0.84	—	2.26	—	35278		
10	.982	.745	.465	.302	.227	.033	.085	.089	328356	328342		
	24.94	18.92	11.81	7.67	5.77	0.84	2.16	2.26	328356	328342		
12	.717	.462	.281	.312	.250	.033	.085	.089	320819	320818		
	18.21	11.73	7.14	7.92	6.35	0.84	2.16	2.26	320819	320818		
16-14 2,050-5,180 [1.04-2.62]	12	.951	.618	.437	.375	.328	.033	—	.089	—	320820	
		24.16	15.70	11.10	9.53	8.33	0.84	—	2.26	—	320820	

**Note:** Part numbers are shown as loose piece over tape mounted product.



## Rectangular Tongue Terminals (Continued)

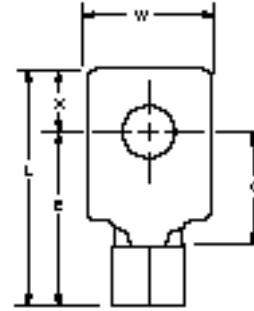
### Wire Size Range

**AWG 12 to 10,  
CMA 5,180 to 13,100  
[2.62 to 6.64 mm<sup>2</sup>]**

### Material

**Terminal Body** — Copper per  
ASTM B-152

**Plating** — Tin per MIL-T-10727



Wire Size Circular Mils [mm <sup>2</sup> ]	Stud Size	Dimensions					Material Thickness Max.	Wire Barrel I.D. Min.		Part Numbers		
		L Max.	E Max.	C Min.	W	X		Solistrand	Budget	Solistrand	Budget	
12-10 5,180-13,100 [2.62-6.64]	4	.679 17.25	.526 13.36	.237 6.02	.237 6.02	.143 3.63	.042 1.07	.129 3.28	.134 3.40	328050	327971	
	5 M3	.719 18.26	.566 14.38	.277 7.04	.277 7.04	.143 3.63	.042 1.07	—	.134 3.40	—	327953	
	6 M3.5		.631 16.03	.486 12.34	.218 5.54	.290 7.37	.140 3.56	.042 1.07	.129 3.28	.134 3.40	321499 2-321499-1	33426
			.898 22.81	.693 17.60	.404 10.26	.237 6.02	.195 4.95	.042 1.07	—	.134 3.40	—	327959
			1.006 25.55	.736 18.69	.468 11.89	.296 7.52	.265 6.73	.042 1.07	.129 3.28	.134 3.40	322946	322945
		8 M4	.924 23.47	.754 19.15	.465 11.81	.302 7.67	.160 4.06	.042 1.07	—	.134 3.40	—	331269
	10	.843 21.41	.588 14.94	.320 8.13	.312 7.92	.250 6.35	.042 1.07	.129 3.28	.134 3.40	321558	321557	
	1/4 M6	1.069 27.15	.736 18.69	.468 11.89	.469 11.91	.328 8.33	.042 1.07	.129 3.28	.134 3.40	320823	320822	

**Note:** Part numbers are shown as loose piece over tape mounted product.

## Spade Tongue Terminals

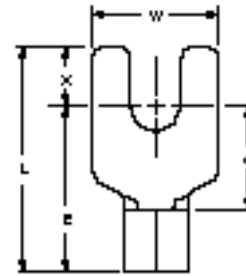
### Wire Size Range

**AWG 26 to 10,  
CMA 202 to 13,100  
[0.1 to 6.64 mm<sup>2</sup>]**

### Material

**Terminal Body** — Copper per  
ASTM B-152

**Plating** — Tin per MIL-T-10727



Wire Size Circular Mils [mm <sup>2</sup> ]	Stud Size	Dimensions					Material Thickness Max.	Wire Barrel I.D. Min.		Part Numbers		
		L Max.	E Max.	C Min.	W	X		Solistrand	Budget	Solistrand	Budget	
26-22 202-810 [0.1-0.41]	0	.280 7.11	.213 5.41	.078 1.98	.125 3.18	.062 1.57	.020 0.51	—	.035 0.89	—	32501	
	4	.431 10.95	.346 8.79	.211 5.36	.203 5.16	.076 1.93	.020 0.51	—	.035 0.89	—	34247	
22-16 509-3,260 [0.26-1.65]	2 M2	.504 12.80	.384 9.75	.203 5.16	.182 4.62	.115 2.92	.033 0.84	.061 1.55	.065 1.65	53555-1* 53555-2	328395	
		.451 11.46	.337 8.56	.156 3.96	.218 5.54	.109 2.77	.033 0.84	.061 1.55	.065 1.65	321463 2-321463-1	323834	
	6 M3.5	.685 17.40	.493 12.52	.312 7.92	.375 9.53	.187 4.75	.033 0.84	—	.065 1.65	—	31634	
		.530 13.46	.384 9.75	.203 5.16	.297 7.54	.141 3.58	.033 0.84	.061 1.55	.065 1.65	36195* 2-36195-3	33765	
	8 M4	.623 15.82	.493 12.52	.312 7.92	.250 6.35	.125 3.18	.033 0.84	.061 1.55	.065 1.65	323127*	34518*	
		.685 17.40	.493 12.52	.312 7.92	.375 9.53	.187 4.75	.033 0.84	.061 1.55	.065 1.65	34117* 2-34117-2	31635*	
	10	.653 16.59	.477 12.12	.296 7.52	.343 8.71	.171 4.34	.033 0.84	—	.065 1.65	—	323823	
		.733 18.62	.572 14.53	.312 7.92	.344 8.74	.156 3.96	.033 0.84	.061 1.55	—	34583	34582	
	16-14 2,050-5,180 [1.04-2.62]	6 M3.5	.685 17.40	.493 12.52	.312 7.92	.385 9.78	.187 4.75	.033 0.84	—	.089 2.26	—	31704
			.530 13.46	.384 9.75	.203 5.16	.297 7.54	.141 3.58	.033 0.84	.085 2.16	.089 2.26	322996* 2-322996-1	33202*
		8 M4	.623 15.82	.493 12.52	.312 7.92	.244 6.20	.125 3.18	.033 0.84	.085 2.16	.089 2.26	330827	33221
			.685 17.40	.493 12.52	.312 7.92	.385 9.78	.187 4.75	.033 0.84	.085 2.16	.089 2.26	34128* 2-36880-1	31705* 35116
10		.530 13.46	.384 9.75	.203 5.16	.297 7.54	.141 3.58	.033 0.84	.085 2.16	.089 2.26	36880 2-36880-1	35116	
		.764 19.41	.572 14.53	.312 7.92	.385 9.78	.187 4.75	.033 0.84	.085 2.16	.089 2.26	33219* 34129*	31442 31706	
10		.685 17.40	.493 12.52	.312 7.92	.385 9.78	.187 4.75	.033 0.84	.085 2.16	.089 2.26	34129*	31706	
		.733 18.62	.572 14.53	.312 7.92	.344 8.74	.156 3.96	.033 0.84	.085 2.16	—	324521	—	
12-10 5,180-13,100 [2.62-6.64]		6 M3.5	.772 19.61	.564 14.33	.296 7.52	.406 10.31	.203 5.16	.042 1.07	—	.134 3.40	—	31587
			.631 16.03	.486 12.34	.218 5.54	.282 7.16	.140 3.56	.042 1.07	.129 3.28	.134 3.40	322451*	34384
		8 M4	.772 19.61	.564 14.33	.296 7.52	.312 7.92	.203 5.16	.042 1.07	—	.134 3.40	—	35493
			.991 25.17	.757 19.23	.468 11.89	.312 7.92	.250 6.35	.042 1.07	.129 3.28	.134 3.40	325196	325195
	10	.772 19.61	.564 14.33	.296 7.52	.406 10.31	.203 5.16	.042 1.07	.129 3.28	.134 3.40	32995* 33479* 2-33479-1	31588* 31589	
		.772 19.61	.564 14.33	.296 7.52	.406 10.31	.203 5.16	.042 1.07	.129 3.28	.134 3.40	33479* 2-33479-1 35495* 2-35495-2	31589 35494*	

**Note:** Part numbers are shown as loose piece over tape mounted product.

\*Part numbers are available in small quantity packages.

## Short Spring Spade Tongue Terminals

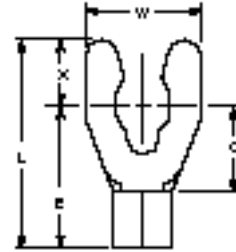
### Wire Size Range

AWG 26 to 16,  
CMA 202 to 3,260  
[0.1 to 1.65 mm<sup>2</sup>]

### Material

**Terminal Body** — Phosphor Bronze  
per ASTM B-103

**Plating** — Tin per MIL-T-10727



Wire Size Circular Mils [mm <sup>2</sup> ]	Stud Size	Dimensions					Material Thickness Max.	Wire Barrel I.D. Min.		Part Numbers	
		L Max.	E Max.	C Min.	W	X		Solistrand	Budget	Solistrand	Budget
26-22 202-810 [0.1-0.41]	2 M2	.455 11.56	.341 8.66	.206 5.23	.171 4.34	.109 2.77	.020 0.51	—	.034 0.86	—	53000-1
	4	.499 12.67	.354 8.99	.219 5.56	.203 5.16	.140 3.56	.020 0.51	—	.034 0.86	—	53001-1
	5 M3	.483 12.27	.338 8.59	.203 5.16	.250 6.35	.140 3.56	.020 0.51	—	.034 0.86	—	53002-1
	6 M3.5	.483 12.27	.338 8.59	.203 5.16	.250 6.35	.140 3.56	.020 0.51	—	.034 0.86	—	53003-1
	8 M4	.591 15.01	.416 10.57	.281 7.14	.375 9.53	.170 4.32	.020 0.51	—	.034 0.86	—	53004-1
	4	.576 14.63	.431 10.95	.250 6.35	.203 5.16	.140 3.56	.033 0.84	.061 1.55	.065 1.65	53175-1*	53150-2
22-16 509-3,260 [0.26-1.65]	5 M3	.576 14.63	.431 10.95	.250 6.35	.250 6.35	.140 3.56	.033 0.84	—	.065 1.65	—	53005-1
	6 M3.5	.576 14.63	.431 10.95	.250 6.35	.250 6.35	.140 3.56	.033 0.84	.061 1.55	.065 1.65	53120-1* 53120-2	53006-1
	6	.576 14.63	.431 10.95	.250 6.35	.234 5.94	.140 3.56	.033 0.84	.061 1.55	.065 1.65	53830-1 53830-2	53266-2
	8 M4	.637 16.18	.462 11.73	.281 7.14	.375 9.53	.170 4.32	.033 0.84	.061 1.55	.065 1.65	53121-1	53007-1
	8	.637 16.18	.462 11.73	.281 7.14	.244 6.20	.170 4.32	.033 0.84	.061 1.55	.065 1.65	53831-1* 53831-2	53267-2
	10	.685 17.40	.462 11.73	.281 7.14	.294 7.47	.218 5.54	.033 0.84	.061 1.55	.065 1.65	53832-1 53832-2	53268-2
1/4-28 UNF M6	.810 20.57	.524 13.31	.343 8.71	.625 15.88	.281 7.14	.033 0.84	—	.065 1.65	—	53235-2	

**Note:** Part numbers are shown as loose piece over tape mounted product.

\*Part numbers are available in small quantity packages.

### Short Spring Spade Tongue Terminals (Continued)

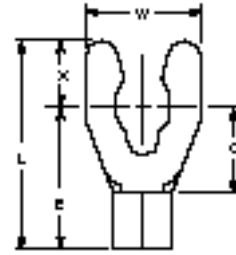
#### Wire Size Range

**AWG 16 to 10,**  
**CMA 2,050 to 13,100**  
**[1.04 to 6.64 mm<sup>2</sup>]**

#### Material

**Terminal Body** — Phosphor Bronze  
 per ASTM B-103

**Plating** — Tin per MIL-T-10727



Wire Size Circular Mils [mm <sup>2</sup> ]	Stud Size	Dimensions					Material Thickness Max.	Wire Barrel I.D. Min.		Part Numbers		
		L Max.	E Max.	C Min.	W	X		Solistrand	Budget	Solistrand	Budget	
16-14 2,050-5,180 [1.04-2.62]	5	.576	.431	.250	.250	.140	.033	.085	.089	53177-1	53009-1	
	M3	14.63	10.95	6.35	6.35	3.56	0.84	2.16	2.26			
	6	.576	.431	.250	.250	.140	.033	.085	.089	53123-1*	53010-1	
	M3.5	14.63	10.95	6.35	6.35	3.56	0.84	2.16	2.26	53123-2		
	8	.637	.462	.281	.375	.170	.033	.085	.089	53124-1*	53011-1	
	M4	16.18	11.73	7.14	9.53	4.32	0.84	2.16	2.26	53124-2		
	8	.637	.462	.281	.244	.170	.033	.085	.089	53833-1		
	M4	16.18	11.73	7.14	6.20	4.32	0.84	2.16	2.26	53833-2	53270-2	
	10	.685	.462	.281	.406	.218	.033	.085	.089	53125-1*	53012-1	
			17.40	11.73	7.14	10.31	5.54	0.84	2.16	2.26	53125-2	
			.685	.462	.281	.294	.218	.033	.085	.089	53834-1	53271-2
			17.40	11.73	7.14	7.47	5.54	0.84	2.16	2.26	53834-2	
	1/4-28 UNF	.810	.524	.343	.625	.281	.033	—	.089	—	53032-1	
	M6	20.57	13.31	8.71	15.88	7.14	0.84		2.26			
12-10 5,180-13,100 [2.62-6.64]	5	.636	.447	.169	.250	.184	.042	—	.134	—	53013-1	
	M3	16.15	11.35	4.29	6.35	4.67	1.07		3.40			
	6	.636	.452	.174	.250	.179	.042	.129	.134	53126-1*	53014-1	
	M3.5	16.15	11.48	4.42	6.35	4.55	1.07	3.28	3.40	53126-2		
	8	.729	.554	.276	.375	.170	.042	.129	.134	53127-1*	53015-1	
	M4	18.52	14.07	7.01	9.53	4.32	1.07	3.28	3.40	53127-2		
	8	.729	.554	.276	.312	.170	.042	.129	.134	53835-1		
	M4	18.52	14.07	7.01	7.92	4.32	1.07	3.28	3.40	53835-2	53273-2	
	10	.777	.554	.276	.406	.218	.042	.129	.134	53128-1*	53016-1	
			19.74	14.07	7.01	10.31	5.54	1.07	3.28	3.40	53128-2	
			.777	.554	.276	.312	.218	.042	.129	.134	53836-1	53274-2
			19.74	14.07	7.01	7.92	5.54	1.07	3.28	3.40	53836-2	
	1/4-28 UNF	.902	.616	.338	.375	.281	.042	—	.134	—	53226-2	
	M6	22.91	15.65	8.59	9.53	7.14	1.07		3.40			

**Note:** Part numbers are shown as loose piece over tape mounted product.

\*Part numbers are available in small quantity packages.

## Long Spring Spade Tongue Terminals

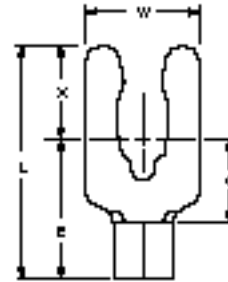
### Wire Size Range

**AWG 26 to 10,**  
**CMA 202 to 13,100**  
**[0.1 to 6.64 mm<sup>2</sup>]**

### Material

**Terminal Body** — Phosphor Bronze  
per ASTM B-103

**Plating** — Tin per MIL-T-10727



Wire Size Circular Mils [mm <sup>2</sup> ]	Stud Size	Dimensions					Material Thickness Max.	Wire Barrel I.D. Min.		Part Numbers	
		L Max.	E Max.	C Min.	W	X		Solistrand	Budget	Solistrand	Budget
26-22 202-810 [0.1-0.41]	4	.637 16.18	.341 8.66	.206 5.23	.203 5.16	.276 7.01	.020 0.51	—	.034 0.86	—	52733-1
	6 M3.5	.666 16.92	.370 9.40	.235 5.97	.250 6.35	.276 7.01	.020 0.51	—	.034 0.86	—	52734-1
	8 M4	.696 17.68	.400 10.16	.265 6.73	.281 7.14	.290 7.37	.020 0.51	—	.034 0.86	—	52735-1
22-16 509-3,260 [0.26-1.65]	4	.673 17.09	.392 9.96	.201 5.11	.203 5.16	.276 7.01	.033 0.84	—	.065 1.65	—	53047
	6 M3.5	.709 18.01	.429 10.90	.238 6.05	.250 6.35	.276 7.01	.033 0.84	.061 1.55	.065 1.65	52709-1	52700-1
	8 M4	.756 19.20	.461 11.71	.270 6.86	.281 7.14	.290 7.37	.033 0.84	.061 1.55	.065 1.65	52710-1*	52701-1
	10	.782 19.86	.474 12.04	.283 7.19	.343 8.71	.303 7.70	.033 0.84	—	.065 1.65	—	52702-1
	1/4-28 UNF M6	.879 22.33	.536 13.61	.340 8.64	.437 11.10	.333 8.46	.033 0.84	—	.065 1.65	—	53111-2
16-14 2,050-5,180 [1.04-2.62]	6 M3.5	.709 18.01	.429 10.90	.238 6.05	.250 6.35	.276 7.01	.033 0.84	.085 2.16	.089 2.26	52712-1*	52703-1
	8 M4	.756 19.20	.461 11.71	.270 6.86	.281 7.14	.290 7.37	.033 0.84	.085 2.16	.089 2.26	52713-1*	52704-1 52704-3
	10	.782 19.86	.474 12.04	.283 7.19	.343 8.71	.303 7.70	.033 0.84	.085 2.16	.089 2.26	52714-1*	52705-1
	1/4-28 UNF M6	.879 22.33	.536 13.61	.345 8.76	.437 11.10	.338 8.59	.033 0.84	—	.089 2.26	—	53033-1
	6 M3.5	.808 20.52	.520 13.21	.242 6.15	.312 7.92	.283 7.19	.042 1.07	.129 3.28	.134 3.40	52715-1	52706-1
12-10 5,180-13,100 [2.62-6.64]	8 M4	.851 21.62	.551 14.00	.273 6.93	.375 9.53	.295 7.49	.042 1.07	.129 3.28	.134 3.40	52716-1 52716-2	52707-1 52707-3
	10	.896 22.76	.583 14.81	.305 7.75	.375 9.53	.308 7.82	.042 1.07	.129 3.28	.134 3.40	52717-1 52717-2	52708-1
	1/4-28 UNF M6	.966 24.54	.623 15.82	.345 8.76	.437 11.10	.338 8.59	.042 1.07	—	.134 3.40	—	52772-1

**Note:** Part numbers are shown as loose piece over tape mounted product.

\*Part numbers are available in small quantity packages.

## Flanged Spade Tongue Terminals

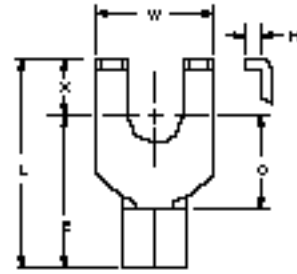
### Wire Size Range

**AWG 26 to 10,  
CMA 202 to 13,100  
[0.1 to 6.64 mm<sup>2</sup>]**

### Material

**Terminal Body** — Copper per  
ASTM B-152

**Plating** — Tin per MIL-T-10727



Wire Size Circular Mils [mm <sup>2</sup> ]	Stud Size	Dimensions						Material Thickness Max.	Wire Barrel I.D. Min.		Part Numbers	
		L Max.	E Max.	C Min.	W	X	H Min.		Solistrand	Budget	Solistrand	Budget
26-22 202-810 [0.1-0.41]	2 M2	.453 11.51	.338 8.59	.203 5.16	.182 4.62	.110 2.79	.026 0.66	.020 0.51	—	.035 0.89	—	324599
	4	.453 11.51	.338 8.59	.203 5.16	.193 4.90	.110 2.79	.026 0.66	.020 0.51	—	.035 0.89	—	52512-1
	6 M3.5	.453 11.51	.338 8.59	.203 5.16	.250 6.35	.110 2.79	.026 0.66	.020 0.51	—	.035 0.89	—	51875-1
22-16 509-3,260 [0.26-1.65]	2 M2	.504 12.80	.384 9.75	.203 5.16	.182 4.62	.115 2.92	.041 1.04	.033 0.84	.061 1.55	.065 1.65	324605*	324604
	6 M3.5	.514 13.06	.384 9.75	.203 5.16	.296 7.52	.125 3.18	.045 1.14	.033 0.84	.061 1.55	.065 1.65	320749*	32418
		.514 13.06	.384 9.75	.203 5.16	.250 6.35	.125 3.18	.045 1.14	.033 0.84	.061 1.55	.065 1.65	323136*	322776
	8 M4	.607 15.42	.431 10.95	.250 6.35	.416 10.57	.171 4.34	.062 1.57	.033 0.84	.061 1.55	.065 1.65	323124*	32494
		.514 13.06	.384 9.75	.203 5.16	.296 7.52	.125 3.18	.045 1.14	.033 0.84	.061 1.55	.065 1.65	52730*	1-32418-2 1-32418-4
	10	.514 13.06	.384 9.75	.203 5.16	.296 7.52	.125 3.18	.045 1.14	.033 0.84	—	.065 1.65	—	328522
16-14 2,050-5,180 [1.04-2.62]	6 M3.5	.514 13.06	.384 9.75	.203 5.16	.294 7.47	.125 3.18	.047 1.19	.033 0.84	.085 2.16	.089 2.26	320855*	320852
	8 M4	.514 13.06	.384 9.75	.203 5.16	.294 7.47	.125 3.18	.047 1.19	.033 0.84	.085 2.16	.089 2.26	320856*	320853
	10	.514 13.06	.384 9.75	.203 5.16	.294 7.47	.125 3.18	.047 1.19	.033 0.84	.085 2.16	.089 2.26	320857*	320854
12-10 5,180-13,100 [2.62-6.64]	6 M3.5	.694 17.63	.518 13.16	.250 6.35	.296 7.52	.171 4.34	.052 1.32	.042 1.07	.129 3.28	.134 3.40	324578 1-324578-0	324579
	8 M4	.694 17.63	.518 13.16	.250 6.35	.416 10.57	.171 4.34	.052 1.32	.042 1.07	.129 3.28	.134 3.40	323143	32416
	10	.694 17.63	.518 13.16	.250 6.35	.416 10.57	.171 4.34	.052 1.32	.042 1.07	.129 3.28	.134 3.40	323144 2-323144-1	322725

**Note:** Part numbers are shown as loose piece over tape mounted product.  
\*Part numbers are available in small quantity packages.

## Slotted Ring Tongue Terminals

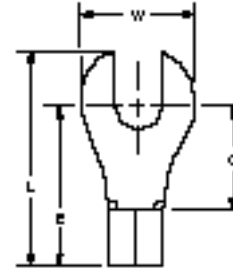
### Wire Size Range

**AWG 26 to 10,**  
**CMA 202 to 13,100**  
**[0.1 to 6.64 mm<sup>2</sup>]**

### Material

**Terminal Body** — Copper per  
ASTM B-152

**Plating** — Tin per MIL-T-10727



Wire Size Circular Mils [mm <sup>2</sup> ]	Stud Size	Dimensions				Material Thickness Max.	Wire Barrel I.D. Min.		Part Numbers	
		L Max.	E Max.	C Min.	W		Solistrand	Budget	Solistrand	Budget
26-22 202-810 [0.1-0.41]	6	.523	.416	.281	.250	.020	—	.035	—	322211
	M3.5	13.28	10.57	7.14	6.35	0.51	—	0.89	—	—
22-16 509-3,260 [0.26-1.65]	4	.425	.353	.172	.182	.033	.061	.065	321288*	323838
	6	.423	.337	.156	.218	.033	.061	.065	321289	323835
	M3.5	10.74	8.56	3.96	5.54	0.84	1.55	1.65	2-321289-1	—
	8	.547	.431	.250	.281	.033	.061	.065	323129	36953
	M6	13.89	10.95	6.35	7.14	0.84	1.55	1.65	—	—
16-14 2,050-5,180 [1.04-2.62]	10	.588	.462	.281	.312	.033	—	.065	—	323832
	1/4	.816	.618	.437	.469	.033	.061	.065	321809	323837
	M3.5	20.73	15.70	11.10	11.91	0.84	1.55	1.65	2-321809-1	—
	6	.459	.352	.171	.250	.033	.085	.089	322514	35555
	M4	11.66	8.94	4.34	6.35	0.84	2.16	2.26	—	—
12-10 5,180-13,100 [2.62-6.64]	8	.616	.462	.281	.344	.033	—	.089	—	34520
	10	.604	.462	.281	.343	.033	—	.089	—	328872
	M6	15.34	11.73	7.14	8.71	0.84	—	2.26	—	—
12-10 5,180-13,100 [2.62-6.64]	1/4	.816	.618	.437	.469	.033	—	.089	—	36216
	M6	20.73	15.70	11.10	11.91	0.84	—	2.26	—	—
12-10 5,180-13,100 [2.62-6.64]	1/4	.952	.736	.468	.531	.042	.129	.134	35680*	55812-2
	M6	24.18	18.69	11.89	13.49	1.07	3.28	3.40	—	—

**Note:** Part numbers are shown as loose piece over tape mounted product.

\*Part numbers are available in small quantity packages.

## Hook Tongue Terminals

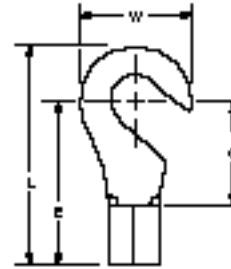
### Wire Size Range

**AWG 22 to 10,  
CMA 509 to 13,100  
[0.26 to 6.64 mm<sup>2</sup>]**

### Material

**Terminal Body**—Copper per  
ASTM B-152

**Plating**—Tin per MIL-T-10727



Wire Size Circular Mills [mm <sup>2</sup> ]	Stud Size	Dimensions				Material Thickness Max.	Wire Barrel I.D. Min.		Part Numbers	
		L Max.	E Max.	C Min.	W		Solistrand	Budget	Solistrand	Budget
22-16 509-3,260 [0.26-1.65]	6	.530	.384	.203	.281	.033	—	.065	—	34261
	M3.5	13.46	9.75	5.16	7.14	0.84	—	1.65	—	—
	8	.656	.482	.296	.343	.033	—	.065	—	31628
	M4	16.66	12.24	7.52	8.71	0.84	—	1.65	—	—
16-14 2,050-5,180 [1.04-2.62]	6	.636	.462	.281	.343	.033	—	.089	—	35212
	M3.5	16.15	11.73	7.14	8.71	0.84	—	2.26	—	—
	8	.636	.462	.281	.343	.033	—	.089	—	32503
	M4	16.15	11.73	7.14	8.71	0.84	—	2.26	—	—
12-10 5,180-13,100 [2.62-6.64]	10	.636	.462	.281	.343	.033	—	.089	—	33437
	M6	16.15	11.73	7.14	8.71	0.84	—	2.26	—	—
	10	.760	.570	.302	.375	.042	.129	.134	324209	327902
	M6	19.30	14.48	7.67	9.53	1.07	3.28	3.40	2-324209-1	—
	1/4	1.004	.736	.468	.531	.042	.129	.134	321632	327905
	M6	25.50	18.69	11.89	13.49	1.07	3.28	3.40	2-321632-1	—

Note: Part numbers are shown as loose piece over tape mounted product.

## Tab Tongue Terminals

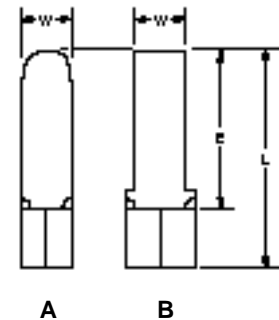
### Wire Size Range

**AWG 22 to 8,  
CMA 509 to 20,800  
[0.26 to 10.5 mm<sup>2</sup>]**

### Material

**Terminal Body**—Copper per  
ASTM B-152

**Plating**—Tin per MIL-T-10727



Wire Size Circular Mills [mm <sup>2</sup> ]	Style	Dimensions			Material Thickness Max.	Wire Barrel I.D. Min. Solistrand	Part Numbers Solistrand
		L Max.	E Max.	W			
22-16 509-3,260 [0.26-1.65]	A	.681	.500	.125	.033	.061	323135
		17.30	12.70	3.18	0.84	1.55	—
16-14 HD <sup>1</sup> 2,050-5,180 [1.04-2.62]	B	.863	.615	.125	.050	.105	322441
		21.92	15.62	3.18	1.27	2.67	—
12-10 5,180-13,100 [2.62-6.64]	B	.863	.613	.125	.042	.129	322443
		21.92	15.57	3.18	1.07	3.28	—
8 13,100-20,800 [6.64-10.5]	B	.937	.625	.221	.051	.177	322445
		23.80	15.88	5.61	1.30	4.50	—

<sup>1</sup>Heavy Duty for extra mechanical strength.



## Flag Ring Tongue Terminals

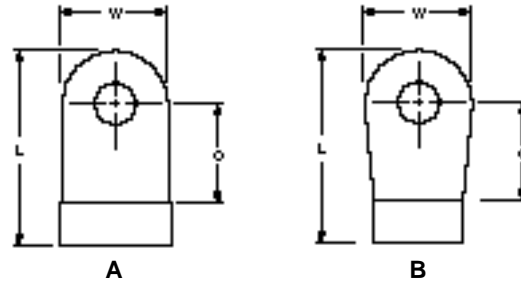
### Wire Size Range

**AWG 16 to 2,**  
**CMA 2,050 to 83,700**  
**[1.04 to 42.4 mm<sup>2</sup>]**

### Material

**Terminal Body** — Copper per  
ASTM B-152

**Plating** — Tin per MIL-T-10727



Wire Size Circular Mils [mm <sup>2</sup> ]	Stud Size	Style	Dimensions			Material Thickness Max.	Wire Barrel I.D. Min. Solistrand	Part Numbers Solistrand
			L Max.	C Min.	W			
16-14 2,050-5,180 [1.04-2.62]	8 M4	A	.579 14.71	.250 6.35	.312 7.92	.033 0.84	.085 2.16	325069
	10	A	.579 14.71	.250 6.35	.312 7.92	.033 .084	.085 2.16	322819
12-10 5,180-13,100 [2.62-6.64]	6 M3.5	A	.702 17.83	.281 7.14	.375 9.53	.042 1.07	.129 3.28	36269
	8 M4	A	.702 17.83	.281 7.14	.375 9.53	.042 1.07	.129 3.28	36270
	10	A	.702 17.83	.281 7.14	.375 9.53	.042 1.07	.129 3.28	36271*
	1/4 M6	A	.702 17.83	.281 7.14	.375 9.53	.042 1.07	.129 3.28	36272
8 13,100-20,800 [6.64-10.5]	10	B	.791 20.09	.250 6.35	.500 12.70	.043 1.09	.180 4.57	321051
		B	.918 23.32	.378 9.60	.500 12.70	.043 1.09	.180 4.57	321441
	1/4 M6	B	1.130 28.70	.525 13.34	.609 15.47	.043 1.09	.180 4.57	322727
6 20,800-33,100 [10.5-16.8]	10	A	.841 21.36	.250 6.35	.500 12.70	.048 1.22	.224 5.69	323196
	1/4 M6	A	.960 24.38	.371 9.42	.500 12.70	.048 1.22	.224 5.69	321576
	5/16 M8	B	1.200 30.48	.528 13.41	.625 15.88	.048 1.22	.224 5.69	321056
	3/8	B	1.200 30.48	.528 13.41	.625 15.88	.048 1.22	.224 5.69	322204
4 33,100-52,600 [16.8-26.7]	10	A	1.048 26.62	.368 9.35	.546 13.87	.051 1.30	.280 7.11	321059
	1/4 M6	A	1.048 26.62	.368 9.35	.546 13.87	.051 1.30	.280 7.11	321275
	5/16 M8	B	1.278 32.46	.530 13.46	.682 17.32	.051 1.30	.280 7.11	321060
	3/8	B	1.278 32.46	.530 13.46	.682 17.32	.051 1.30	.280 7.11	321121
2 52,600-83,700 [26.7-42.4]	10	B	1.437 36.50	.534 13.56	.713 18.11	.060 1.52	.357 9.07	321063
	1/4 M6	B	1.437 36.50	.534 13.56	.713 18.11	.060 1.52	.357 9.07	321201
	5/16 M8	B	1.437 36.50	.534 13.56	.713 18.11	.060 1.52	.357 9.07	321064
	3/8	B	1.437 36.50	.534 13.56	.713 18.11	.060 1.52	.357 9.07	321253
	10 mm	B	1.437 36.50	.534 13.56	.713 18.11	.060 1.52	.357 9.07	184147-1

\*Part numbers are available in small quantity packages.

**Flag Ring Tongue Terminals** (Continued)

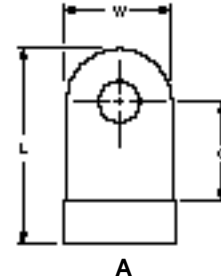
**Wire Size Range**

**AWG 1/0 to 4/0,**  
**CMA 83,700 to 231,000**  
**[42.4 to 117 mm<sup>2</sup>]**

**Material**

**Terminal Body** — Copper per  
ASTM B-152

**Plating** — Tin per MIL-T-10727



Wire Size Circular Mills [mm <sup>2</sup> ]	Stud Size	Style	Dimensions			Material Thickness Max.	Wire Barrel I.D. Min. Solistrand	Part Numbers Solistrand
			L Max.	C Min.	W			
1/0 83,700–119,500 [42.4–60.6]	1/4 M6	A	<b>1.733</b> 44.02	<b>.666</b> 16.92	<b>.875</b> 22.23	<b>.073</b> 1.85	<b>.444</b> 11.28	322215
	5/16 M8	A	<b>1.733</b> 44.02	<b>.666</b> 16.92	<b>.875</b> 22.23	<b>.073</b> 1.85	<b>.444</b> 11.28	321580
	3/8	A	<b>1.733</b> 44.02	<b>.666</b> 16.92	<b>.875</b> 22.23	<b>.073</b> 1.85	<b>.444</b> 11.28	321066
	1/2 M12	A	<b>1.733</b> 44.02	<b>.666</b> 16.92	<b>.875</b> 22.23	<b>.073</b> 1.85	<b>.444</b> 11.28	321123
2/0 119,500–150,500 [60.6–76.3]	5/16 M8	A	<b>1.848</b> 46.94	<b>.671</b> 17.04	<b>.920</b> 23.37	<b>.083</b> 2.11	<b>.504</b> 12.80	321582
	3/8	A	<b>1.848</b> 46.94	<b>.671</b> 17.04	<b>.920</b> 23.37	<b>.083</b> 2.11	<b>.504</b> 12.80	321584
3/0 150,500–190,000 [76.3–96.3]	3/8	A	<b>2.001</b> 50.83	<b>.676</b> 17.17	<b>1.056</b> 26.82	<b>.094</b> 2.39	<b>.565</b> 14.35	327887
4/0 190,000–231,000 [96.3–117]	5/16 M8	A	<b>2.131</b> 54.13	<b>.681</b> 17.30	<b>1.115</b> 28.32	<b>.105</b> 2.67	<b>.635</b> 16.13	321277
	3/8	A	<b>2.131</b> 54.13	<b>.681</b> 17.30	<b>1.115</b> 28.32	<b>.105</b> 2.67	<b>.635</b> 16.13	321277-1
	1/2 M12	A	<b>2.131</b> 54.13	<b>.681</b> 17.30	<b>1.115</b> 28.32	<b>.105</b> 2.67	<b>.635</b> 16.13	321259

## Parallel Splices

**Wire Size Range**  
**AWG 22 to 600 MCM,**  
**CMA 509 to 600,000**  
**[0.26 to 304 mm<sup>2</sup>]**

**Material**

**Splice Body** — Copper per  
ASTM B-152

**Plating** — Tin per MIL-T-10727



Wire Size Circular Mils <sup>†</sup> [mm <sup>2</sup> ]	Dimensions			Material Thickness Max.	Part Numbers Solistrand
	L Max.	I.D. Min.	O.D. Max.		
22-16 509-3,260 [0.26-1.65]	.301 7.65	.061 1.55	.141 3.58	.033 0.84	34130*
16-14 2,050-5,180 [1.04-2.62]	.301 7.65	.085 2.16	.165 4.19	.033 0.84	34137*
12-10 5,180-13,100 [2.62-6.64]	.343 8.71	.129 3.28	.226 5.74	.042 1.07	34138*
8 13,100-20,800 [6.64-10.5]	.375 9.53	.172 4.37	.296 7.52	.051 1.30	34318*
6 20,800-33,100 [10.5-16.8]	.437 11.10	.232 5.89	.369 9.37	.060 1.52	34319*
4 33,100-52,600 [16.8-26.7]	.531 13.49	.296 7.52	.463 11.76	.073 1.85	34320*
2 52,600-83,700 [26.7-42.4]	.640 16.26	.370 9.40	.539 13.69	.073 1.85	35187*
1/0 83,700-119,500 [42.4-60.6]	.734 18.64	.444 11.28	.613 15.57	.073 1.85	36946*
2/0 119,500-150,500 [60.6-76.3]	.734 18.64	.504 12.80	.703 17.86	.083 2.11	36948*
3/0 150,500-190,000 [76.3-96.3]	.749 19.02	.565 14.35	.775 19.69	.094 2.39	36909
4/0 190,000-231,000 [96.3-117]	.765 19.43	.635 16.13	.869 22.07	.105 2.67	36951*
250-300 MCM 231,000-300,000 [117-152]	1.062 26.97	.753 19.13	1.054 26.77	.130 3.30	322275
300-350 MCM 300,000-380,000 [152-193]	1.124 28.55	.819 20.80	1.137 28.88	.140 3.56	322276
400 MCM 380,000-478,000 [193-242]	1.249 31.72	.925 23.50	1.287 32.69	.158 4.01	322277
500-600 MCM 478,000-600,000 [242-304]	1.421 36.09	1.070 27.18	1.483 37.67	.182 4.62	322278

\*Part numbers are available in small quantity packages.

†When terminating two or more wires in a parallel splice, the combined cross sectional area must be within the listed circular mil area range (CMA).

## Butt Splices

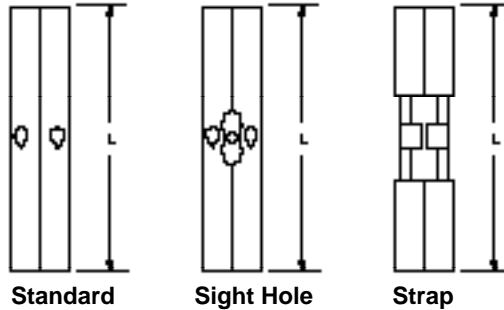
### Wire Size Range

**AWG 26 to 2,  
CMA 202 to 83,700  
[0.1 to 42.4 mm<sup>2</sup>]**

### Material

**Splice Body**—Copper per  
ASTM B-152

**Plating**—Tin per MIL-T-10727



Wire Size Circular Mils' [mm <sup>2</sup> ]	Style	Solistrand Dimensions			Budget Dimensions			Material Thickness Max.	Part Numbers	
		L Max.	I.D. Min.	O.D. Max.	L Max.	I.D. Min.	O.D. Max.		Solistrand	Budget
26-22 202-810 [0.1-0.41]	Strap	.385 9.78	.031 0.79	.082 2.08	.385 9.78	.034 0.86	.077 1.96	.020 0.51	321198*	321024
24-20 320-1,290 [0.16-0.65]	Strap	.490 12.45	.043 1.09	.105 2.67	—	—	—	.025 0.64	324001*	—
22-16 509-3,260 [0.26-1.65]	Strap	.591 15.01	.061 1.55	.141 3.58	.591 15.01	.065 1.65	.136 3.45	.033 0.84	2-321801-3 2-321801-4	32463
	Standard	.578 14.68	.061 1.55	.141 3.58	.578 14.68	.065 1.65	.136 3.45	.033 0.84	31818* 2-31818-1	34226*
	Sight Hole	.578 14.68	.061 1.55	.141 3.58	—	—	—	.033 0.84	330367*	—
16-14 2,050-5,180 [1.04-2.62]	Strap	.591 15.01	.085 2.16	.165 4.19	.591 15.01	.089 2.26	.160 4.06	.033 0.84	322459	32464
	Standard	.567 14.40	.085 2.16	.165 4.19	.567 14.40	.089 2.26	.160 4.06	.033 0.84	31819* 2-31819-1	34227*
	Strap	.591 15.01	.085 2.16	.165 4.19	—	—	—	.033 0.84	327025* (No Wire Stop)	—
	Sight Hole	.567 14.40	.085 2.16	.165 4.19	—	—	—	.033 0.84	330368*	—
14-12 3,260-8,230 [1.65-4.17]	Sight Hole	.690 17.53	.098 2.49	.178 4.52	—	—	—	.033 0.84	321280	—
12-10 5,180-13,100 [2.62-6.64]	Strap	—	—	—	.703 17.86	.134 3.40	.221 5.61	.042 1.07	—	30953
	Sight Hole	.567 14.40	.129 3.28	.226 5.74	—	—	—	.042 1.07	330369*	—
	Standard	.565 14.35	.129 3.28	.226 5.74	.565 14.35	.134 3.40	.221 5.61	.042 1.07	32151*	34228*
	Strap	.765 19.43	.129 3.28	.226 5.74	.765 19.43	.134 3.40	.221 5.61	.042 1.07	324893	1-324898-0
8 13,100-20,800 [6.64-10.5]	Standard	.827 21.01	.172 4.37	.296 7.52	—	—	—	.051 1.30	34321*	—
6 20,800-33,100 [10.5-16.8]	Sight Hole	.827 21.01	.172 4.37	.296 7.52	—	—	—	.051 1.30	36906*	—
	Standard	1.015 25.78	.232 5.89	.369 9.37	—	—	—	.060 1.52	34322*	—
4 33,100-52,600 [16.8-26.7]	Sight Hole	1.015 25.78	.232 5.89	.369 9.37	—	—	—	.060 1.52	36886*	—
	Standard	1.140 28.96	.296 7.52	.463 11.76	—	—	—	.073 1.85	34323*	—
2 52,600-83,700 [26.7-42.4]	Sight Hole	1.140 28.96	.296 7.52	.463 11.76	—	—	—	.073 1.85	320238	—
	Standard	1.265 32.13	.370 9.40	.539 13.69	—	—	—	.073 1.85	35189*	—
2 52,600-83,700 [26.7-42.4]	Sight Hole	1.265 32.13	.370 9.40	.539 13.69	—	—	—	.073 1.85	322246	—

**Note:** Part numbers are shown as loose piece over tape mounted product.

\*Part numbers are available in small quantity packages.

<sup>†</sup>When terminating two or more wires in either end of a butt splice, the combined cross sectional area must be within the listed circular mil area range (CMA).

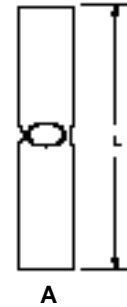
**Butt Splices** (Continued)

**Wire Size Range**  
**AWG 1/0 to 600 MCM,**  
**CMA 83,700 to 600,000**  
**[42.4 to 304 mm<sup>2</sup>]**

**Material**

**Splice Body** — Copper per  
ASTM B-152

**Plating** — Tin per MIL-T-10727



Wire Circular Mils <sup>1</sup> [mm <sup>2</sup> ]	Style	Solistrand Dimensions			Material Thickness Max.	Part Numbers Solistrand
		L Max.	I.D. Min.	O.D. Max.		
1/0 83,700–119,500 [42.4–60.6]	A	<b>1.412</b> 35.86	<b>.444</b> 11.28	<b>.613</b> 15.57	<b>.073</b> 1.85	36957*
2/0 119,500–150,500 [60.6–76.3]	A	<b>1.437</b> 36.50	<b>.504</b> 12.80	<b>.693</b> 17.60	<b>.083</b> 2.11	36958*
3/0 150,500–190,000 [76.3–96.3]	A	<b>1.480</b> 37.60	<b>.565</b> 14.35	<b>.775</b> 19.69	<b>.094</b> 2.39	36959*
4/0 190,000–231,000 [96.3–117]	A	<b>1.484</b> 37.69	<b>.635</b> 16.13	<b>.869</b> 22.07	<b>.105</b> 2.67	36960*
250–300 MCM 231,000–300,000 [117–152]	A	<b>2.093</b> 53.16	<b>.753</b> 19.13	<b>1.054</b> 26.77	<b>.130</b> 3.30	322279
300–350 MCM 300,000–380,000 [152–193]	A	<b>2.217</b> 56.31	<b>.819</b> 20.80	<b>1.137</b> 28.88	<b>.140</b> 3.56	322280
400 MCM 380,000–478,000 [193–242]	A	<b>2.467</b> 62.66	<b>.925</b> 23.50	<b>1.287</b> 32.69	<b>.158</b> 4.01	322281
500–600 MCM 478,000–600,000 [242–304]	A	<b>2.811</b> 71.40	<b>1.070</b> 27.18	<b>1.483</b> 37.67	<b>.182</b> 4.62	322282

\*Part numbers are available in small quantity packages.

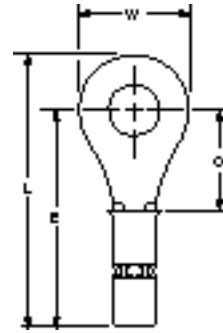
<sup>1</sup>When terminating two or more wires in either end of a butt splice, the combined cross sectional area must be within the listed circular mil area range (CMA).

## Ring Tongue Terminals

**Wire Size Range**  
AWG 26 to 16,  
CMA 202 to 3,260  
[0.1 to 1.65 mm<sup>2</sup>]

**Material**

**Terminal Body and Sleeve** —  
Copper per ASTM B-152  
**Plating** — Tin per MIL-T-10727



DIAMOND GRIP  
Terminals and Splices

Wire Size Circular Mils [mm <sup>2</sup> ]	Stud Size	Dimensions				Material Thickness Max.	Wire Insulation Dia. Max.	Part Numbers		
		L Max.	E Max.	C Min.	W			Loose Piece	Tape Mounted	
26-22 202-810 [0.1-0.41]	0	.464 11.79	.391 9.93	.121 3.07	.140 3.56	.020 0.51	.082 2.08	31516	—	
	2 M2	.464 11.79	.391 9.93	.121 3.07	.140 3.56	.020 0.51	.082 2.08	31518	2-31518-1	
		.564 14.33	.481 12.22	.211 5.36	.165 4.19	.020 0.51	.082 2.08	321621 <sup>1</sup>	1-321621-0 <sup>1</sup>	
	4 M3.5	.585 14.86	.481 12.22	.211 5.36	.203 5.16	.020 0.51	.082 2.08	31679	2-31679-1	
		.585 14.86	.481 12.22	.211 5.36	.203 5.16	.020 0.51	.082 2.08	31681	2-31681-2	
	6 M4	.679 17.25	.551 14.00	.281 7.14	.250 6.35	.020 0.51	.082 2.08	32861	2-32861-2	
		.679 17.25	.551 14.00	.281 7.14	.250 6.35	.020 0.51	.082 2.08	32862	2-32862-1	
	22-16 509-3,260 [0.26-1.65]	2 M2	.600 15.24	.507 12.88	.172 4.37	.182 4.62	.033 0.84	.125 3.18	320678	—
		4 M3.5	.603 15.32	.491 12.47	.156 3.96	.218 5.54	.033 0.84	.125 3.18	31094	—
			.775 19.69	.616 15.65	.281 7.14	.312 7.92	.033 0.84	.125 3.18	30995	—
6 M3.5		.603 15.32	.491 12.47	.156 3.96	.218 5.54	.033 0.84	.125 3.18	31096	2-31096-1	
		.775 19.69	.616 15.65	.281 7.14	.312 7.92	.033 0.84	.140 3.56	31159	2-31159-1	
8 M4		.728 18.49	.585 14.86	.250 6.35	.281 7.14	.033 0.84	.125 3.18	31269	2-31269-1	
		.603 15.32	.491 12.47	.156 3.96	.218 5.54	.033 0.84	.140 3.56	31393	—	
10		.728 18.49	.585 14.86	.250 6.35	.281 7.14	.033 0.84	.140 3.56	31396	2-31396-2	
		.775 19.69	.616 15.65	.281 7.14	.312 7.92	.033 0.84	.125 3.18	30996	2-30996-1	
1/4 M6		.775 19.69	.616 15.65	.281 7.14	.312 7.92	.033 0.84	.140 3.56	31160	2-31160-1	
	.728 18.49	.585 14.86	.250 6.35	.281 7.14	.033 0.84	.125 3.18	31270	2-31270-1		
1/4 M6	.728 18.49	.585 14.86	.250 6.35	.281 7.14	.033 0.84	.140 3.56	31397	2-31397-1		
	.775 19.69	.616 15.65	.281 7.14	.312 7.92	.033 0.84	.125 3.18	30997	2-30997-1		
1/4 M6	.775 19.69	.616 15.65	.281 7.14	.312 7.92	.033 0.84	.140 3.56	31161	2-31161-1		
	.728 18.49	.585 14.86	.250 6.35	.281 7.14	.033 0.84	.140 3.56	31398	2-31398-1		
1/4 M6	1.009 25.63	.772 19.61	.437 11.10	.469 11.91	.033 0.84	.140 3.56	31176	2-31176-1		
	1.009 25.63	.772 19.61	.437 11.10	.469 11.91	.033 0.84	.125 3.18	31251	2-31251-1		

**Note:** "C" dimension applies from edge of metal wire barrel to center of stud hole.  
<sup>1</sup>Slightly unusual tongue shape.

**Ring Tongue Terminals** (Continued)

**Wire Size Range**

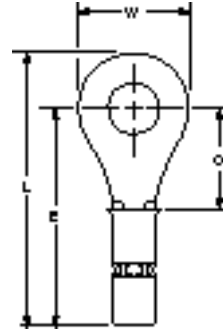
**AWG 16 to 10,  
CMA 2,050 to 13,100  
[1.04 to 6.64 mm<sup>2</sup>]**

**Material**

**Terminal Body and Sleeve** —

Copper per ASTM B-152

**Plating** — Tin per MIL-T-10727



Wire Size Circular Mills [mm <sup>2</sup> ]	Stud Size	Dimensions				Material Thickness Max.	Wire Insulation Dia. Max.	Part Numbers		
		L Max.	E Max.	C Min.	W			Loose Piece	Tape Mounted	
16-14 2,050-5,180 [1.04-2.62]	4	.634 16.10	.506 12.85	.171 4.34	.250 6.35	.033 0.84	.150 3.81	32187	—	
		.634 16.10	.506 12.85	.171 4.34	.250 6.35	.033 0.84	.170 4.32	32189	—	
	6 M3.5	.790 20.07	.616 15.65	.281 7.14	.343 8.71	.033 0.84	.170 4.32	30926	—	
		.634 16.10	.506 12.85	.171 4.34	.250 6.35	.033 0.84	.150 3.81	32188	—	
	8 M4	.634 16.10	.506 12.85	.171 4.34	.250 6.35	.033 0.84	.170 4.32	32190	2-32190-1	
		.790 20.07	.616 15.65	.281 7.14	.343 8.71	.033 0.84	.170 4.32	30927	2-30927-1	
	10	.790 20.07	.616 15.65	.281 7.14	.343 8.71	.033 0.84	.170 4.32	30928	2-30928-1	
		.790 20.07	.616 15.65	.281 7.14	.343 8.71	.033 0.84	.150 3.81	30993	2-30993-1	
	1/4 M6	1.009 25.63	.772 19.61	.437 11.10	.469 11.91	.033 0.84	.150 3.81	31256	—	
		5/16 M8	1.009 25.63	.772 19.61	.437 11.10	.469 11.91	.033 0.84	.170 4.32	31169	2-31169-1
	16-14HD <sup>1</sup> 2,050-5,180 [1.04-2.62]	10	.970 24.64	.796 20.22	.281 7.14	.343 8.71	.050 1.27	.230 5.84	33722	2-33722-1
		1/4 M6	1.220 30.99	.952 24.18	.437 11.10	.531 13.49	.050 1.27	.230 5.84	33639	—
1.282 32.56			1.014 25.76	.437 11.10	.531 13.49	.050 1.27	.300 7.62	322296	—	
12-10 5,180-13,100 [2.62-6.64]	6 M3.5	1.007 25.58	.817 20.75	.302 7.67	.375 9.53	.042 1.07	.230 5.84	31825	—	
		.877 22.28	.734 18.64	.219 5.56	.281 7.14	.042 1.07	.230 5.84	321501	2-321501-1	
	8 M4	.976 24.79	.817 20.75	.302 7.67	.312 7.92	.042 1.07	.230 5.84	326889	—	
		.955 24.26	.796 20.22	.281 7.14	.312 7.92	.042 1.07	.230 5.84	324523	—	
	10	1.007 25.58	.817 20.75	.302 7.67	.375 9.53	.042 1.07	.230 5.84	31771	2-31771-1	
	1/4 M6	1.251 31.78	.983 24.97	.468 11.89	.531 13.49	.042 1.07	.230 5.84	31772	2-31772-1	
3/8	1.345 34.16	1.046 26.57	.531 13.49	.593 15.06	.042 1.07	.230 5.84	31828	—		

**Note:** "C" dimension applies from edge of metal wire barrel to center of stud hole.

<sup>1</sup>Heavy Duty for extra mechanical strength.

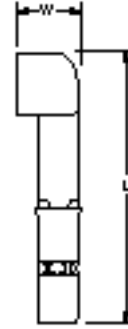
## Knife Disconnect Splices

**Wire Size Range**  
AWG 22 to 10,  
CMA 509 to 13,100  
[0.26 to 6.64 mm<sup>2</sup>]

**Material**

**Splice Body and Sleeve** — Copper  
per ASTM B-152

**Plating** — Tin per MIL-T-10727



Wire Size Circular Mils [mm <sup>2</sup> ]	Dimensions		Wire Insulation Dia. Max.	Part Numbers	
	L Max.	W		Loose Piece	Tape Mounted
22-16 509-3,260 [0.26-1.65]	.794 20.17	.203 5.16	.125 3.18	31770	—
	.794 20.17	.203 5.16	.140 3.56	31777	2-31777-1
16-14 2,050-5,180 [1.04-2.62]	.794 20.17	.203 5.16	.150 3.81	31943	—
	.794 20.17	.203 5.16	.170 4.32	31944	—
12-10 5,180-13,100 [2.62-6.64]	1.176 29.87	.281 7.14	.230 5.84	31942	2-31942-1

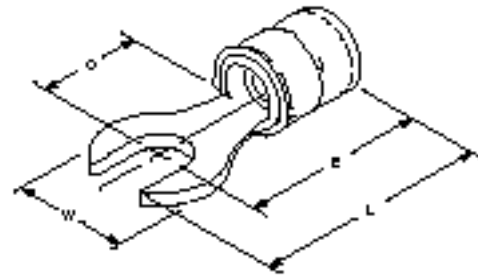
## Slotted Ring Tongue Terminals

**Wire Size Range**  
AWG 26 to 16,  
CMA 202 to 3,260  
[0.1 to 1.65 mm<sup>2</sup>]

**Material**

**Terminal Body and Sleeve** —  
Copper per ASTM B-152

**Plating** — Tin per MIL-T-10727



Wire Size Circular Mils [mm <sup>2</sup> ]	Stud Size	Dimensions				Material Thickness Max.	Wire Insulation Dia. Max.	Part Numbers	
		L Max.	E Max.	C Min.	W			Loose Piece	Tape Mounted
26-22 202-810 [0.1-0.41]	6 M3.5	.658 16.71	.551 14.00	.281 7.14	.250 6.35	.020 0.51	.082 2.08	322210	—
22-16 509-3,260 [0.26-1.65]	6 M3.5	.710 18.03	.585 14.86	.250 6.35	.281 7.14	.033 0.84	.125 3.18	34101	—
	8 M4	.701 17.81	.585 14.86	.250 6.35	.281 7.14	.033 0.84	.140 3.56	321543	—

**Note:** "C" dimension applies from edge of metal wire barrel to center of stud hole.

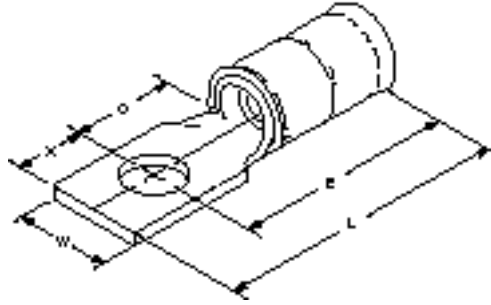


## Rectangular Tongue Terminals

**Wire Size Range**  
AWG 22 to 16,  
CMA 509 to 3,260  
[0.26 to 1.65 mm<sup>2</sup>]

**Material**

**Terminal Body and Sleeve** —  
Copper per ASTM B-152  
**Plating** — Tin per MIL-T-10727



Wire Size Circular Mils [mm <sup>2</sup> ]	Stud Size	Dimensions				Material Thickness Max.	Wire Insulation Dia. Max.	Part Numbers	
		L Max.	E Max.	C Min.	W			Loose Piece	Tape Mounted
22-16 509-3,260 [0.26-1.65]	5 M3	.786 19.96	.633 16.08	.277 7.04	.277 7.04	.033 0.84	.140 3.56	328500	—

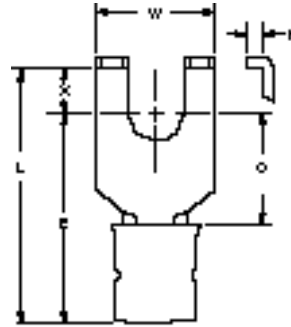
**Note:** "C" dimension applies from edge of metal wire barrel to center of stud hole.

## Flanged Spade Tongue Terminals

**Wire Size Range**  
AWG 26 to 14,  
CMA 202 to 5,180  
[0.1 to 2.62 mm<sup>2</sup>]

**Material**

**Terminal Body and Sleeve** —  
Copper per ASTM B-152  
**Plating** — Tin per MIL-T-10727



Wire Size Circular Mils [mm <sup>2</sup> ]	Stud Size	Dimensions					Material Thickness Max.	Wire Insulation Dia. Max.	Part Numbers	
		L Max.	E Max.	C Min.	W	X			H	Loose Piece
26-22 202-810 [0.1-0.41]	2 M2	.588 14.94	.473 12.01	.203 5.16	.182 4.62	.110 2.79	.031 0.79	.020 2.08	324598	2-324598-1
22-16 509-3,260 [0.26-1.65]	6 M3.5	.668 16.97	.538 13.67	.203 5.16	.296 7.52	.125 3.18	.046 1.17	.033 3.18	32419	2-32419-1
	8 M4	.761 19.33	.585 14.86	.250 6.35	.416 10.57	.171 4.34	.062 1.57	.033 3.18	32495	—
16-14 2,050-5,180 [1.04-2.62]	8 M4	.685 17.40	.555 14.10	.203 5.16	.294 7.47	.125 3.18	.052 1.32	.033 4.32	320859	—

**Note:** "C" dimension applies from edge of metal wire barrel to center of stud hole.

## Spade Tongue Terminals

### Wire Size Range

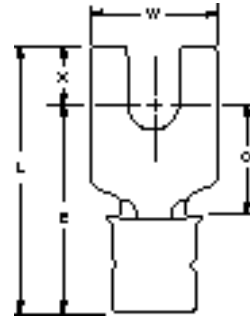
**AWG 26 to 16,  
CMA 202 to 3,260  
[0.1 to 1.65 mm<sup>2</sup>]**

### Material

**Terminal Body and Sleeve —**

Copper per ASTM B-152

**Plating —**Tin per MIL-T-10727



Wire Size Circular Mils [mm <sup>2</sup> ]	Stud Size	Dimensions					Material Thickness Max.	Wire Insulation Dia. Max.	Part Numbers	
		L Max.	E Max.	C Min.	W	X			Loose Piece	Tape Mounted
26–22 202–810 [0.1–0.41]	0	.415 10.54	.348 8.84	.078 1.98	.125 3.18	.062 1.57	.020 0.51	.082 2.08	32502	—
	4	.558 14.17	.481 12.22	.211 5.36	.203 5.16	.072 1.83	.020 0.51	.082 2.08	34248	—
22–16 509–3,260 [0.26–1.65]	6 M3.5	.684 17.37	.538 13.67	.203 5.16	.297 7.54	.141 3.58	.033 0.84	.125 3.18	33766	—
	6 M3.5	.684 17.37	.538 13.67	.203 5.16	.297 7.54	.141 3.58	.033 0.84	.140 3.56	33799	—
	10	.807 20.50	.631 16.03	.296 7.52	.343 8.71	.171 4.34	.033 0.84	.125 3.18	320379	—

**Note:** “C” dimension applies from edge of metal wire barrel to center of stud hole.

## Knife Disconnect Splices

### Wire Size Range

AWG 22 to 8,  
CMA 509 to 20,800  
[0.26 to 10.5 mm<sup>2</sup>]

### Material

**Splice Body and Sleeve** — Copper  
per ASTM B-152

**Plating** — Tin per MIL-T-10727



Wire Size Circular Mils [mm <sup>2</sup> ]	Dimensions		Part Numbers Loose Piece
	L Max.	W	
22-16 509-3,260 [0.26-1.65]	.745 18.92	.203 5.16	31762
16-14 2,050-5,180 [1.04-2.62]	.750 19.05	.203 5.16	31763
12-10 5,180-13,100 [2.62-6.64]	.940 23.88	.281 7.14	31945
8 13,100-20,800 [6.64-10.5]	1.225 31.12	.390 9.91	32161

## Rectangular Tongue Terminals

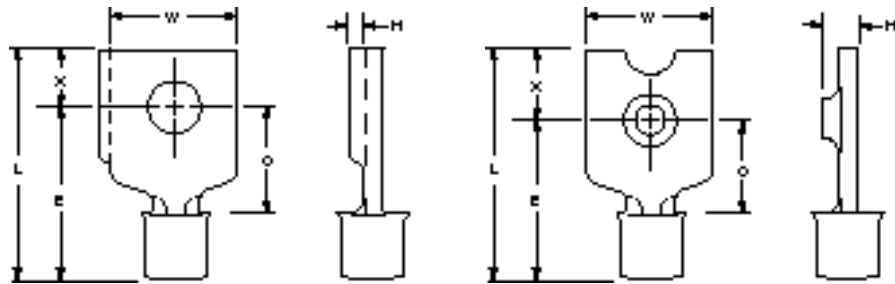
### Wire Size Range

AWG 22 to 14,  
CMA 509 to 5,180  
[0.26 to 2.62 mm<sup>2</sup>]

### Material

**Terminal Body and Sleeve** —  
Copper per ASTM B-152

**Plating** — Tin per MIL-T-10727



Style A  
with Side Flange

Style B  
with Bossed Hole

Wire Size Circular Mils [mm <sup>2</sup> ]	Stud Size	Style	Dimensions						Material Thickness Max.	Part Numbers Loose Piece
			L Max.	E Max.	C Min.	W	X	H		
22-16 509-3,260 [0.26-1.65]	6 M3.5	B	.733 18.62	.541 13.74	.250 6.35	.250 6.35	.187 4.75	.047 1.19	.033 0.84	320671
16-14 2,050-5,180 [1.04-2.62]	8 M4	A	.647 16.43	.484 12.29	.219 5.56	.344 8.74	.156 3.96	.094 2.39	.033 0.84	31674

**Note:** "C" dimension applies from edge of metal wire barrel to center of stud hole.

## SOLISTRAND Military Approved Terminals

Military Specification	SOLISTRAND Approval	Approved Wire Range
MS 20659	Class 1 & 2	12-10
MS 20659	Class 2 Only	8-4/0
M7928/7	Class 2 Only*	22-14

SOLISTRAND Class 1 and Class 2 military approved terminals meet the performance requirements outlined in specification Mil-T-7928G.

\*320093 also class 1 approved.

### Class 1 and Class 2 Military Approvals

Approval	Dimensional Requirement	Application Tooling	Use	Performance Requirement
Class 1	Terminals must comply with the dimensional requirements specified by the military.	Hand application tool which must conform to the military's dimensional and performance specification.	For procurement by government agencies for maintenance and repair.	
Class 2	Dimensional requirements are maintained by the terminal manufacturers. For field repair purposes Class 2 terminals must be capable of being replaced by Class 1 Terminals	The terminal manufacturers recommended application tooling. <b>Note:</b> Several tape mounted SOLISTRAND part numbers are currently Class 2 approved.	For procurement by contractors and manufacturers for high volume production, modification, and repair.	Per Military Specification Mil-T-7928G

**Note:** Where class 2 approval exists all similar (form, fit and function) parts in that product line are approved.

## Cross Reference Military to AMP Part Number

### Military Specification M7928/7

### Wire Size Range AWG 22 to 14

AWG	M7928/7 Dash Numbers	SOLISTRAND Part Numbers	Class	Stud Size
22-18	1	34103	2	2
		2-34103-1		
	2	34104	2	4
		2-34104-6		
	3	34110	2	6
		2-34110-3		
4	34112	2	10	
	2-34112-2			
5	34114	2	5/6	
	2-34114-2			
6	34115	2	3/8	
	2-34115-2			
7	321684	2	6	
	2-321684-1			
	320093			
8	2-320093-1	1 & 2	10	
	34125			
	2-34125-6			
9	34126	2	5/16	
	2-34126-2			
10	34119	2	3/8	
	2-34119-1			
11	34119	2	4	
	2-34119-1			

**Note:** Part numbers are shown as loose piece over tape mounted product.

### Cross Reference Military to AMP Part Number

**Military Specification  
MS 20659**

**Wire Size Range  
AWG 12 to 4/0**

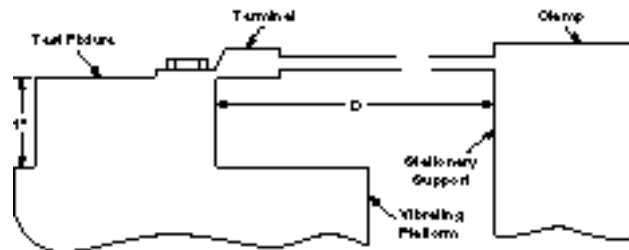
AWG	MS20659 Dash Numbers	SOLISTRAND Part Numbers	Class	Stud Size
12-10	105	33457	1&2	10
		2-33457-2	2	
	106	33459	1&2	5/16
		2-33459-6	2	
8	107	31807	2	10
		2-31807-2		
	108	31808	2	5/16
6	109	321598	2	1/4
	110	33467	2	3/8
4	111	31811	2	1/4
	112	31812	2	3/8
2	113	320383	2	1/4
	114	321600	2	3/8
1/0	117	321866	2	1/4
	118	321868	2	3/8
2/0	119	321870	2	5/16
	120	321871	2	3/8
3/0	121	321875	2	3/8
	122	321877	2	1/2
4/0	123	321878	2	3/8
	124	321880	2	1/2
12-10	128	33220	1&2	3/8
8	129	33463	2	3/8
	130	321298	2	10
6	131	33466	2	5/16
		2-33466-3		
4	132	33115	2	5/16
1/0	135	36919	2	1/2
2/0	136	321873	2	1/2
4/0	137	321625	2	7/8
	140	324061	2	8
8	141	33461	2	1/4
		2-33461-2		
6	143	320344	2	1/2
4	144	33114	2	10
	145	327175	2	1/2
2	146	330301	2	10
	147	322870	2	5/16
1/0	148	320741	2	7/16
	151	321867	2	5/16
2/0	152	36918	2	7/16
	153	321869	2	1/4
3/0	154	321872	2	7/16
	155	321874	2	5/16
4/0	156	321876	2	7/16
	157	321271	2	5/16
12-10	158	321879	2	7/16
	159	36935	2	5/8
	160	322228	2	3/4
12-10	165	35476	2	6
		2-35476-1		
	166	35135	2	1/2

**Note:** Part numbers are shown as loose piece over tape mounted product.

## Description of MIL-T-7928G Test Procedures and Requirements for Terminals

Test Group	Test Sequence	Test Type	Test Description
1	A	Current Cycling	Samples subjected to 50 cycles, each cycle consisting of 30 minutes at 125% of the current listed on page 48 followed by 15 minutes with no load.
	B	Voltage Drop	See test method and requirements on page 48.
2	A	Vibration	See test method on page 46.
	B	Voltage Drop	See test method and requirements on page 48.
	C	Tensile	See test method and requirements on page 47.
3	A	Salt Spray/Corrosion	Samples subjected to a salt spray/fog for 48 hours. Salt concentration to be 5%, temperature to be 35° C (95° F), relative humidity to be 95-98%.
	B	Voltage Drop	See test method and requirements on page 48.
	C	Tensile	See test method and requirements on page 47.
4	A	Heat Age	Samples subjected to 193° C for 120 hours then cooled to 23° C within one hour.
	B	Salt Spray/Corrosion	Samples subjected to a salt spray/fog for 48 hours. Salt concentration to be 5%, temperature to be 35° C (95° F), relative humidity to be 95-98%.
	C	Voltage Drop	See test method and requirements on page 48.
	D	Tensile	See test method and requirements on page 47.

## Procedure for Vibration Testing of Terminals per MIL-T-7928G



Wire Size	"D" Dimension	Duration of Test
#12 AWG and larger or terminals with insulation support	12 inches	18 hours each on horizontal and vertical axis.
#14 AWG and smaller with no insulation support	17 inches	2 hours each on horizontal and vertical axis.

Vibration to be a simple harmonic motion with an amplitude of 0.03 inches (0.06 total excursion). Frequency to vary uniformly from 10–55 Hz and back to 10 Hz. Frequency to be traversed in approximately one minute.

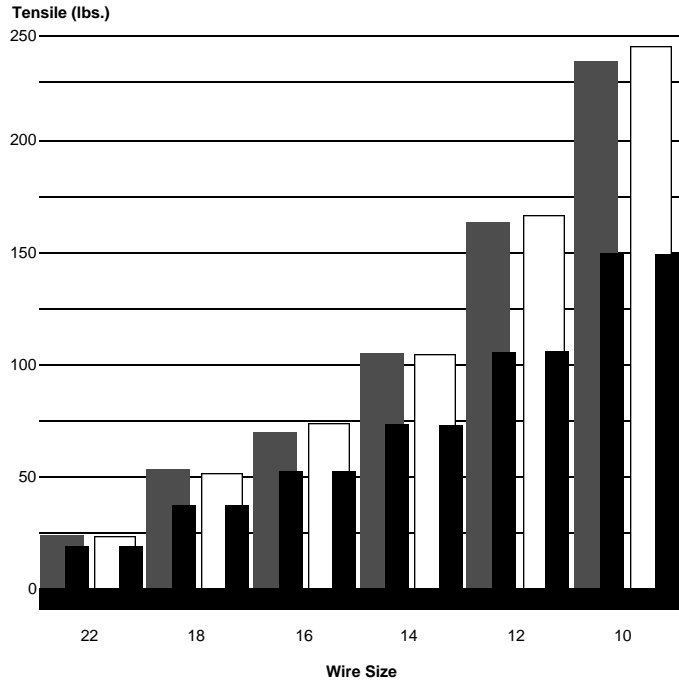
## Military Tensile Test Results

### Tensile Requirements Per MIL-T-7928G

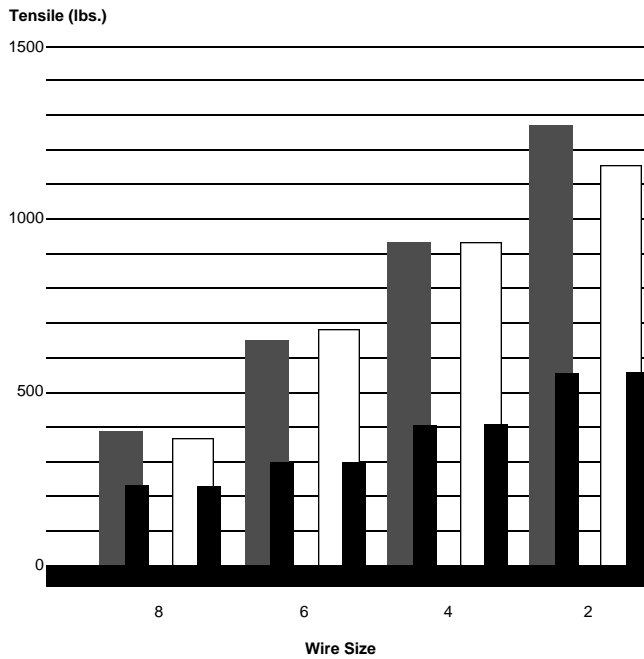
Wire Size AWG	Minimum Tensile Strength (Lbs)
22	15
20	19
18	38
16	50
14	70
12	110
10	150
8	225
6	300
4	400
2	550
1/0	700
2/0	750
3/0	825
4/0	875

**Note:** 1. Samples tensile tested to destruction at a rate of one inch/minute using military approved wire.

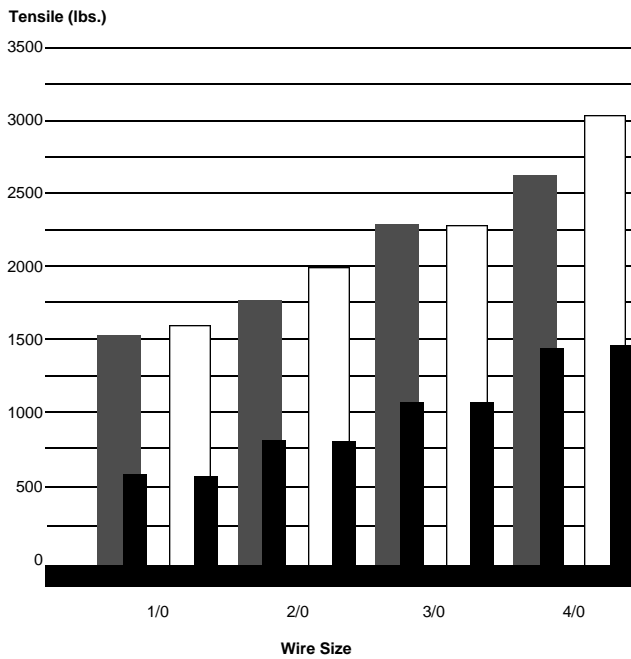
### SOLISTRAND Tensile Test Results Wire Sizes 22 – 10



### SOLISTRAND Tensile Test Results Wire Sizes 8 – 2



### SOLISTRAND Tensile Test Results Wire Sizes 1/0 – 4/0



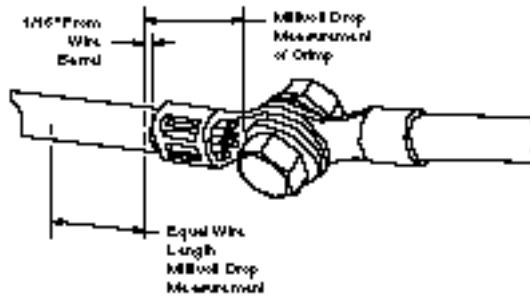
Tensile after  
Vibration

Tensile after  
Salt Spray

MIL-T-7928  
Requirement

### Illustration of Millivolt Drop Measurement Procedure

Military Specification  
MIL-T-7928G



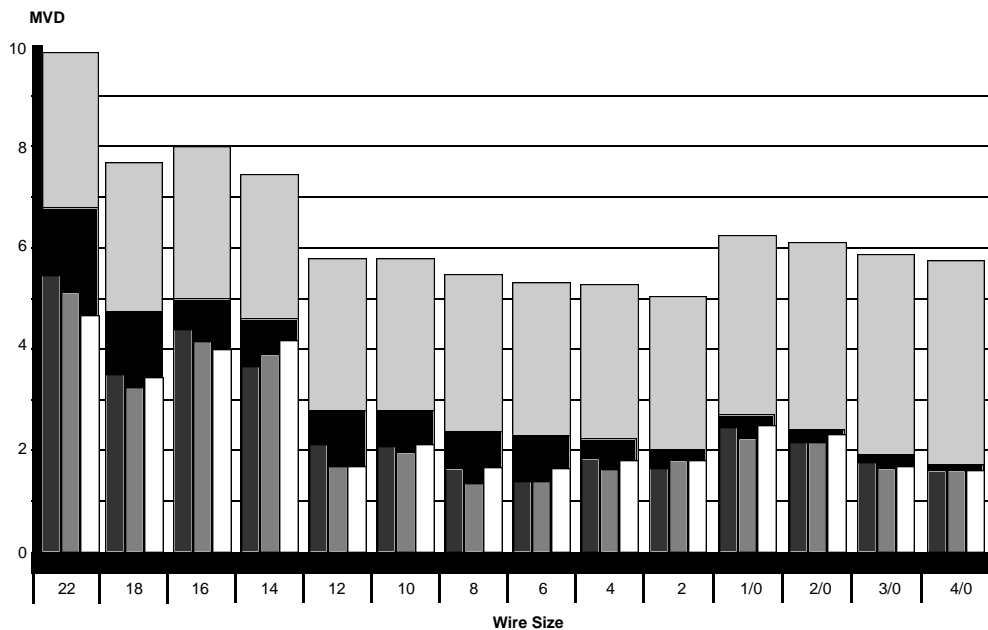
Wire Size AWG	Test Current (Amperes)	Maximum Crimp MVD = EWL Measurement + Valve Listed Below	
		Initial Terminal	Final Terminal
22	9		
20	11		
18	16		
16	22		
14	32		
12	41	1	3
10	55		
8	73		
6	101		
4	135		
2	181		
1/0	245		
2/0	283	2	4
3/0	328		
4/0	380		

### Military Millivolt Drop Test Results

**SOLISTRAND**  
Millivolt Drop Results  
Per MIL-T-7928G

Using Military  
Approved Wire

- Max. Allowable MVD
- MVD of Equal Wire Length
- After Current Cycling
- After Vibration
- After Corrosion





## Description of UL 486A Test Procedures and Requirements for Terminals

### Wire Size Range AWG 22 to 600 MCM

#### Test Sequences

##### Test Group 1

##### Mechanical Sequence

1. Secureness
2. Pullout

##### Test Group 2

##### Mechanical Sequence

1. Secureness
2. Static Heat
3. Pullout

### Pullout Test Requirements

Terminal must not be separate from wire when subjected to the listed load for one minute.

Wire Size AWG	Pullout Force (lbs.)
22	8
20	13
18	20
16	30
14	50
12	70
10	80
8	90
6	100
4	140
2	180
1/0	250
2/0	300
3/0	350
4/0	450
250	500
300	550
350	600
400	650
500	800
600	900

**Note:** Testing conducted on non-plated copper wire with UL approved insulation.

### Static Heat Test Requirements

Wire Size AWG	Test Current (Amperes)
22	9
20	12
18	17
16	18
14	30
12	35
10	50
8	70
6	95
4	125
2	170
1/0	230
2/0	265
3/0	310
4/0	360
250	405
300	445
350	505
400	545
500	620
600	690

#### Requirement:

Connector temperatures must not exceed the ambient temperature plus 50°C [90°F] after stability is attained.

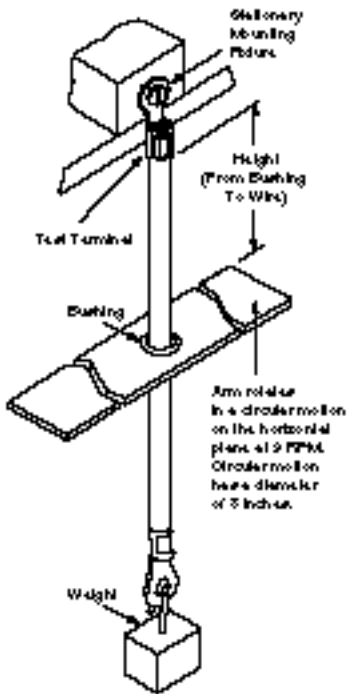
#### Stability:

A test sample is considered to have attained a stable temperature when three readings taken at not less than 10 minute intervals show no more than a 2°C [3.6°F] variation between any two readings.

### Secureness Test Requirements

Wire Size AWG	Bushing Dia.	Height	Weight (lbs.)
18-16	1/4	10 1/4	2
14	3/8	11	3
12-10	3/8	11	5
8	3/8	11	8
6	1/2	11 3/4	18
4	1/2	11 3/4	30
2	9/16	12 1/2	30
1/0	5/8	13 1/2	50
2/0	3/4	14 1/2	50
3/0	3/4	14 1/2	60
4/0	3/4	14 1/2	60
250	7/8	16	60
300	7/8	16	80
350-400	1	17	80
500-600	1 1/8	18 1/4	100

**Note:** Test Duration = 30 Minutes



## Description of UL 486A & C Test Procedures and Requirements for Butt and Parallel Type Splices

### UL 486 C Wire Size AWG 22 to 6

### UL 486 A Wire Size AWG 4 to 600 MCM

#### Test Sequences

##### Test Group 1

##### Mechanical Sequence

1. Secureness
2. Pullout

##### Test Group 2

##### Mechanical Sequence

1. Secureness
2. Static Heat
3. Pullout

### Pullout Test Requirements

Splices must not be separate from wire when subjected to the listed load for one minute.

Wire Size AWG	Pullout Force (lbs.)
22	8
20	10
18	10
16	15
14	25
12	35
10	40
8	45
6	50
4	140
2	180
1/0	250
2/0	300
3/0	350
4/0	450
250	500
300	550
350	600
400	650
500	800
600	900

**Note:** Testing conducted on non-plated copper wire with UL approved insulation.

### Static Heat Test Requirements

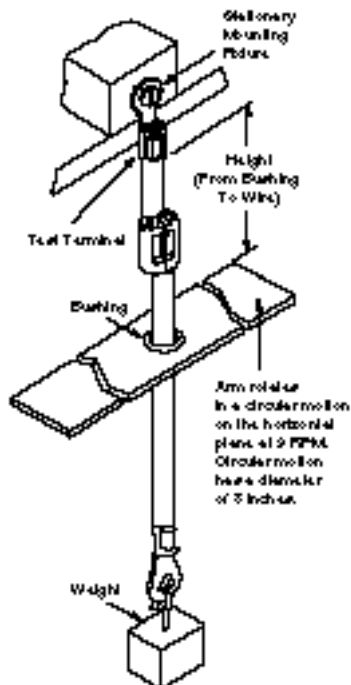
Wire Size AWG	Test Current (Amperes)
22	9
20	12
18	17
16	18
14	30
12	35
10	50
8	70
6	95
4	125
2	170
1/0	230
2/0	265
3/0	310
4/0	360
250	405
300	445
350	505
400	545
500	620
600	690

#### Requirement:

Connector temperatures must not exceed the ambient temperature plus 50°C [90°F] after stability is attained.

#### Stability:

A test sample is considered to have attained a stable temperature when three readings taken at not less than 10 minute intervals show no more than a 2°C [3.6°F] variation between any two readings.



### Secureness Test Requirements

Wire Size AWG	Bushing Dia.	Height	Weight (lbs.)
18-16	1/4	10 1/4	2
14	3/8	11	3
12-10	3/8	11	5
8	3/8	11	8
6	1/2	11 3/4	18
4	1/2	11 3/4	30

**Note:** Test Duration=30 Minutes

## Application Tooling Information for SOLISTRAND, Budget and DIAMOND GRIP Products

### Wire Size Range AWG 26 to 6

Product Type	AMP Wire Size	Hand Tools	Pneumatic Tooling		Dies for 6-26, Tool 189721-1 Requires Straight Action Adapter 217200-1 or 318161-1 Dies Also Fit 69710-1 Hand Tool	Tooling For Tape Mounted Products Dies for 69875 AMP-TAPETRONIC AMP-O-ELECTRIC <sup>5</sup> Requires Applicator AMPOMATOR CLS IV Requires Applicators	
			Crimping Heads for 6-26, Tool 189721-1	Single Wire Range			Multiple Wire Range
All SOLISTRAND terminals and splices except for Flag Tongue terminals	26-22	69363 <sup>2</sup>	—	—	—	—	
	24-20		—	—	—	—	
	22-16	49935 <sup>2</sup>	314516-1	679301-1	47812	68240-1	
	16-14		314517-1	679301-1	47813	68241-1	
	12-10 & 16-14 HD	58546-1 <sup>3</sup>	—	679301-1	47814 <sup>1</sup>	68242-1	
	14-12		49592 <sup>2</sup>	314518-1	—	90566-1	
	8		—	679302-1	—	68243-1	
6	—	679303-1	—	—	—		
Flag Tongue terminals only	16-14	49975 <sup>2</sup>	217204-1	—	—	Flag terminals not available in tape mounted form	
	12-10	49965 <sup>2</sup>	217203-1	—	—		
Budget terminals and splices	26-22	69363 <sup>2</sup>	—	—	—	—	
	22-16	58508-1 <sup>4</sup>	—	—	—	68259-1	
	16-14	58508-1 <sup>4</sup>	—	—	—	68094	
	12-10 & 16-14 HD	49656, 58508-1 <sup>4</sup>	—	—	—	68260-1	
DIAMOND GRIP terminals and splices	26-22	48070	—	—	—	69902	
	24-20	—	—	—	—	—	
	22-16	49512	—	—	—	69903	
	16-14	49513	—	—	46251-2	69904	
	12-10 & 16-14 HD	59054	—	—	—	—	
Standard "B" terminals	26-22	—	—	—	—	—	
	22-16	48364	—	—	—	—	
	16-14	—	—	—	—	—	
	12-10	49736	—	—	—	—	
	8	49737	—	—	—	—	

<sup>1</sup>For standard wire only.

<sup>2</sup>CERTI-CRIMP Hand Tool.

<sup>3</sup>Contains die set 58545-1. PRO-CRIMPER II commercial tool not approved for UL applications.

<sup>4</sup>Contains die set 58509-1. PRO-CRIMPER II commercial tool not approved for UL applications. Not approved for use with Budget Spring Spade terminals.

<sup>5</sup>With locator, for terminals only.

<sup>6</sup>Call Tooling Assistance Center for Machine & Applicator part numbers.

Chart lists common AMP Application Tooling. For additional information call the Tooling Assistance Center 1-800-722-1111.

## Application Tooling Information for SOLISTRAND Terminals and Splices

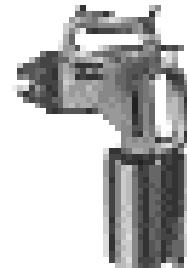
### Wire Size Range AWG 8 to 600 MCM

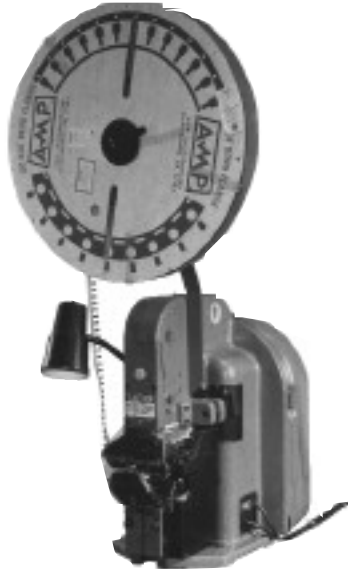
Product Type	AMP Wire Size	Hand Tool	Pneumatic Tooling		Hydraulic Tools With Self-Contained Dies		Hydraulic and Battery Powered Tools With Interchangeable Dies				Tooling For Tape Mounted Product			
			69015	Hand Tool	Latch Head	59973-1 Hand Tool, 69065 <sup>1</sup> & 69067 <sup>1</sup> Latch Heads	69097 <sup>1</sup> "C" Head	59445-1 <sup>1</sup> Latch Head	69062 <sup>2</sup> "C" Head	69069 <sup>2</sup> "C" Head	Die for 69875 AMP-TAFETRONIC	Die for 69250-1 HD AMP-TAFETRONIC	Die for 69813-1 AMP-TAFETRONIC	
Standard Terminals and Splices	8	69065 <sup>1</sup>	49956			48126	48355	46146	46145			69216	69243-1	69812-1
	6	59063 No CERTI-CRIMP	48172	59975-1	69069 <sup>2</sup>	48128		46134				69217		69813-1
	4	59131	48173			48129	48127	46135	46133			69218		
	2		48174			48130		46136				45433		
	1/0		48183			48132		46138	46137			45436		
	2/0					48133	48131					45439		
	3/0					48134						45442		
	4/0					900490						45445		
	250-300 MCM										48816	69911		
	300-380 MCM										48817	69912		
	400 MCM										48818	69913		
	500-600 MCM										48819	69914		
Heavy Duty Terminals	8 HD					48128-1								
	6 HD					48129-1	48127-1							
	4 HD					48130-1								
	2 HD					48132-1	48131-1							
	1/0 HD					48133-1								
Tooling for Flag Terminals only	8		48412			Only the 69067 head can be used for Flag terminals								
	6		48413			48506	48505							
	4		48413			48506								
	2		48414			48509	48507							
	1/0		48415			48510								
	2/0		48416			48552								
	3/0					48805	48511							
4/0					48806									

<sup>1</sup>CERTI-CRIMP Hand Tool.

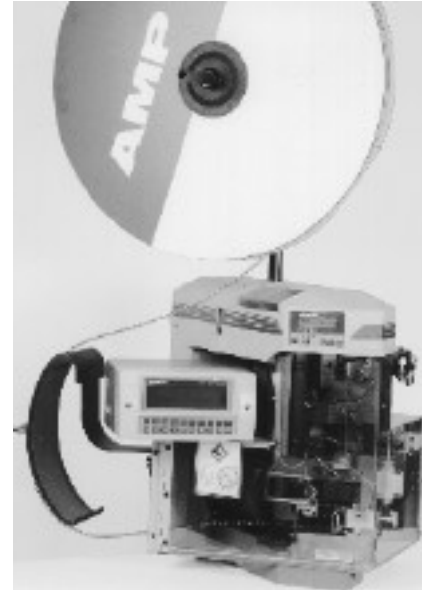
<sup>2</sup>These crimping heads are recommended for use only with AMP Hydraulic Hand Pump 314979-1, DYNA-CRIMP Hydraulic Power Units 69120-1 (115 VAC) and 69120-2 (230 VAC), and with DYNA-CRIMP II Battery Operated Hydraulic Power Unit 122271-1. See pages 55 & 56.

Chart lists common AMP Application Tooling. For additional information call the Tooling Assistance Center 1-800-722-1111.

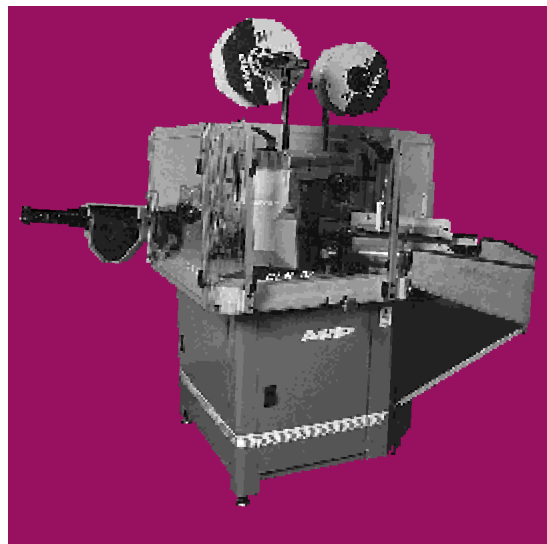
**Application Tooling****Loose Form Terminal  
and Splice Tooling****CERTI-CRIMP Hand Tools****Double Action  
Hand Tool****Heavy Head Hand Tool  
Part No. 69355****"C" Head Straight  
Action Hand Tool  
Part No. 69710-1****PRO-CRIMPER II  
Hand Tool  
Part No. 58546-1 SOLISTRAND  
58508-1 Budget****Pneumatic Tools****6-26 Pneumatic Tool  
Part No. 189721-1****Part No. 69015****Hydraulic Hand Tools****Part No. 59975-1  
(Self Contained Dies)****Part No. 59973-1  
(Dies Required)****For additional tooling information, call 1-800-722-1111.**

**Application Tooling** (Continued)**Tape Mounted**

**AMP-TAPETRONIC Machine**  
69875, 68250-1  
(Requires Dies)



**AMP-O-LECTRIC, Model "G" Machine**  
(Requires Applicator and Dies)



**AMPOMATOR CLS IV Machine 217500-1**  
(Requires Applicators and Dies)



**Entry Level Terminator**  
(Requires Applicators and Dies)

**For additional tooling information, call 1-800-722-1111.**

**Application Tooling** (Continued)**Latch Heads and Dies****Part No.**  
69065**Part No.**  
58445-1**Part No.**  
69067**Part No. 69069**  
(Self Contained Dies)**Part No.**  
69099**Part No.**  
69082**Part No.**  
69097**For additional tooling information, call 1-800-722-1111.**

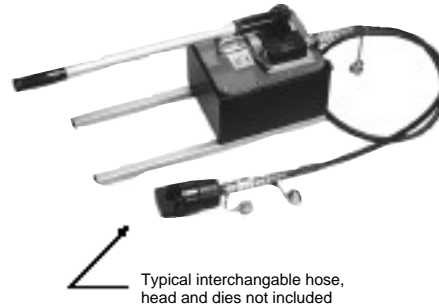
**Application Tooling** (Continued)

**DYNA-CRIMP II  
Battery Operated  
Hydraulic Power Unit**



Part No. 122271-1<sup>4</sup>

**Hand Operated Power Unit**



Typical interchangeable hose,  
head and dies not included

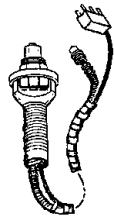
314979-1<sup>2</sup> (Hose, head and dies not included)  
Refer to the table below for accessories.

**DYNA-CRIMP Electric  
Hydraulic Power Unit**



**Power Unit Only**  
(Includes Pressure Release)  
**115 Volts (60 Hz) — 69120-1<sup>3</sup>**  
**230 Volts (60 Hz) — 69120-2<sup>3</sup>**

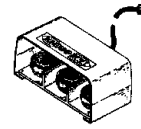
AMP application tools are designed to produce a carefully controlled uniform pressure crimp, regardless of how they are powered. All tools shown are specially designed for AMP products and are precision machined from hard tool steel.



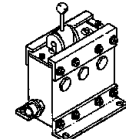
Handle Control



Hose Assembly



Foot Control



Multidirectional Valve

**Power Units Accessories**

For Use With Power Unit No.	Accessory Description	Accessory Part No.	Remarks
	7' Handle Control Assembly—Hose & Cord	59907-7	
	15' Handle Control Assembly—Hose & Cord	1-59907-5	
	21' Handle Control Assembly—Hose & Cord	2-59907-1	
	28' Handle Control Assembly—Hose & Cord	2-59907-8	
69120-1 <sup>3</sup> 69120-2 <sup>3</sup> 314979-1 <sup>2</sup> 122271-1 <sup>4</sup>	15' Foot Switch Assembly	68284-1	Need Hose Assembly
	3' Hose Assembly	59909-3	68284-1 Foot Switch Assembly needed with these Hose Assemblies and 69120
	7' Hose Assembly	59909-7	
	15' Hose Assembly	1-59909-5	
	21' Hose Assembly	2-59909-1	
	2' Hose Assembly (1/4" I.D.)	314990-1	More Flexible, Lighter Weight. Recommended for use with DYNA-CRIMP II Battery Operated Hydraulic Power Unit
	3' Hose Assembly (1/4" I.D.)	314990-2	
	7' Hose Assembly (1/4" I.D.)	314990-3	
	15' Hose Assembly (1/4" I.D.)	314990-4	
69120-1 <sup>3</sup> 69120-2 <sup>3</sup>	3-Way Multi-Directional Valve	59220 <sup>1</sup>	For use with Foot Switch only
	3-Way Multi-Directional Valve (Elec.Ctl)	59220-2 <sup>1</sup>	

<sup>1</sup> Contact AMP Incorporated for usage recommendations.

<sup>2</sup> Also see AMP Customer Manual 409-5860.

<sup>3</sup> Also see AMP Customer Manual 409-1950.

<sup>4</sup> Also see AMP Customer Manual 409-5869.

**Note:** All Hoses and Handle Control Assemblies have a 3/8" high flow male coupler (311470-1) on each end. All Power Units and Heads have a 3/8" high flow female coupler (311471-1).

**For additional tooling information, call 1-800-722-1111.**



## Part Number Index

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