

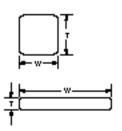
Table of Contents

How to Compute Circular	
Mil Area of Various Wire Shapes	
Table of SOLISTRAND and Budget Standard Wire Ranges	
Product Descriptions	
Stud Hole Sizes	
SOLISTRAND and Budget	
Ring Tongue Terminals	12-20
26 AWG - 600 MCM [0.1-304 mm²]	
Right Angle Ring Tongue Terminals22 AWG – 300 MCM [0.26–152 mm²]	21
Heavy Duty Ring Tongue Terminals	,
Rectangular Tongue Terminals 22 – 10 AWG [0.26 – 6.64 mm²]	
Spade Tongue Terminals	
Short Spring Spade Tongue Terminals 26-10 AWG [0.1-6.64 mm²]	
Long Spring Spade Tongue Terminals	
Flanged Spade Tongue Terminals	
Slotted Ring Tongue Terminals	
Hook Tongue Terminals	32
22 – 10 AWG [0.26 – 6.64 mm²] Tab Tongue Terminals	32
22 – 8 AWG [0.26 – 10.5 mm²]	22.24
Flag Ring Tongue Terminals	
Parallel Splices 22 AWG-600 MCM [0.26 - 304 mm²]	30
Butt Splices 26 AWG – 600 MCM [0.1 – 304 mm²]	36, 37
DIAMOND GRIP	
Ring Tongue Terminals	38, 39
26 – 10 AWG [0.1–6.64 mm ²]	
Knife Disconnect Splices	40
Slotted Ring Tongue	40
26 – 16 AWG [0.1 – 1.65 mm²]	
Rectangular Tongue Terminals	
Flanged Spade Tongue Terminals 26–14 AWG [0.1–2.62 mm²]	
Spade Tongue Terminals	42
Standard "B"	
Knife Disconnect Splices	43
Rectangular Tongue Terminals	43
Military Approvals, Part Numbers & Requirements	44 – 48
U.L. Requirements	
Application Tooling	
Part Number Index	



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.

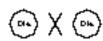
CMA = W x T x 1.2732 - radius factor

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 x T x 1973.525 - radius factor

Round Solid Wire AWG



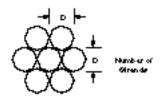
Multiply the diameter in mils by itself.

 $CMA = D^2$

Multiply the diameter in milllimetres 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	То	Multiply By
CMA	mm²	.0005067075
CMA	in²	.0000007854
mm²	in²	.001550003
mm²	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 mm² 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		ninal e Size		Strands Diam	eter		ximate r Diameter
CIVIA	AWG	mm²	No.	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 1	0.0045	0.114	0.0045	0.114
25.0 31.4	36 35	0.013 0.016	1	0.005 0.0056	0.127 0.142	0.005 0.0056	0.127 0.142
39.7	34	0.020	1	0.0063	0.142	0.0063	0.142
50.0	33	0.025	1	0.00707	0.180	0.0003	0.180
50.4	33	0.026	1	0.00717	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 70	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
304 313	26 25	0.154 0.159	19 1	0.004 0.0177	0.102 0.450	0.02 0.018	0.508 0.457
314	25	0.159	10	0.0056	0.430	0.018	0.437
318	25	0.161	8	0.0063	0.142	0.021	0.533
320	25	0.162	1	0.0003	0.455	0.021	0.333
388	24	0.102	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	256		0.813	0.032	0.813
1024	20	0.519	256	0.002	0.051	0.039	0.991
1025 1032	20	0.519 0.523	41 26	0.005	0.127 0.160	0.038	0.965 0.991
1111	20	0.523	7	0.0063	0.160	0.039	0.991
1186	20	0.601	19	0.0126	0.320	0.039	1.041
1289	19	0.653	19	0.0359	0.201	0.036	0.914
1492	18.5	0.756	7	0.0146	0.371	0.030	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



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

Wire Sizes in AWG and mm² to CMA

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

		ninal		Strands		ximate	
CMA	AWG	e Size mm²	No.	Diam		Conducto Inch	r Diameter mm
1617	18	0.819	7	0.0152	mm 0.386	0.042	1.067
1624	18	0.823	1	0.0403	1.024	0.042	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 2048	17 17	1.038	32 512	0.008	0.203 0.051	0.047	1.194 1.245
2052	17	1.040	1	0.002	1.151	0.049	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 2942	16 15.5	1.419 1.491	7	0.02 0.0205	0.508 0.521	0.061 0.059	1.549 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 4106	14 14	2.077	41 19	0.01 0.0147	0.254 0.373	0.077 0.076	1.956 1.930
4109	14	2.082	19	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 10	0.072	1.829	0.072	1.829
6088 6343	12 12	3.085 3.214	19 165	0.0179	0.455 0.157	0.096 0.095	2.438
6475	12	3.281	259	0.005	0.137	0.105	2.413
6500	12	3.294	65	0.003	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 7	0.0315	0.800	0.094	2.388
7856 7985	11.5 11.5	3.981 4.046	/ 19	0.0335	0.851	0.1	2.540 2.565
8064	11.5	4.046	56	0.0205 0.012	0.521 0.305	0.101 0.102	2.505
8226	11.5	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 1	0.0385	0.978	0.096 0.102	2.438
10384 10404	10 10	5.262 5.272	19	0.1019 0.0234	2.588 0.594	0.102	2.591 2.972
10500	10	5.320	105	0.0234	0.254	0.117	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 1.20	0.145	3.68
15595	8	8	7	.0472		0.142	3.60



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

Wire Sizes in AWG and mm² to CMA

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

СМА		ninal Size		Strands Diam	otor		oximate or Diameter
CMA	AWG	mm²	No.	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	11	.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 7	.2040	5.182	0.204	5.18
41718 41771	4	21 21	7 37	.0772	1.961 0.853	0.232	5.89 6.10
41771	4	21	19	.0469	1.191	0.240	5.74
42615	4	21	133	.0409	0.455	0.220	6.90
43356	3.5	22	7	.0787	2.000	0.272	6.00
48312	3.3	25	196	.0157	0.400	0.260	6.60
48867	3	25	783	.0079	0.200	0.280	7.10
49745	3	25	765	.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	<u>.</u> 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 299823	300	152	61	.0701	1.781	0.631	16.03
	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 mm² to CMA

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

		minal		Strands			oximate
CMA	Wire Size		No.	Diameter		Conductor Diamet	
	AWG	mm²		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*	AWG	Dia. inches
4/0	.460	212,000	19	.036
3/0	.410	168,000	20	.032
2/0	.365	133,000	21	.0285
1/0	.325	106,000	22	.0253
1	.289	83,700	23	.0226
2	.258	66,400	24	.0201
3	.229	52,600	25	.0179
4	.204	41,700	26	.0159
5	.182	33,100	27	.0142
6	.162	26,300	28	.0126
7	.144	20,800	29	.0113
8	.128	16,500	30	.0100
9	.114	13,100	31	.0089
10	.102	10,400	32	.0080
11	.091	8,230	33	.0071
12	.081	6,530	34	.0063
13	.072	5,180	35	.0056
14	.064	4,110	36	.0050
15	.057	3,260	37	.0045
16	.051	2,580	38	.0040
17	.045	2,050	39	.0035
18	.040	1,620	40	.0031

Metric Dimensions

CMA*

1,290

1.020

810

642

509

404

320

254

202

160

127

101

79.7

63.2

31.5

19.8

15.7

12.5

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

Dia.

mm

0.9

0.8

0.7

0.65

0.6

0.55

0.5

0.45

0.4

0.35

0.32

0.29

0.26

0.18

0.16

0.14

0.12

0.1

CMA*

1,260

992

759

655

558

469

338

314

248

190

159

130

105

82

50.2

39.7

22.3

15.5

mm²	Dia. mm	CMA*	mm²
113.1	12	223,000	0.6362
78.54	10	155,000	0.5027
63.62	9	125,000	0.3848
50.27	8	99,200	0.3318
38.48	7	75,900	0.2827
33.18	6.5	65,500	0.2376
28.27	6	55,800	0.1964
23.76	5.5	46,900	0.159
19.64	5	38,800	0.1257
15.90	4.5	31,400	0.09621
12.57	4	24,800	0.08042
9.621	3.5	19,000	0.06605
8.042	3.2	15,900	0.05309
6.605	2.9	13,000	0.04155
5.309	2.6	10,500	0.03142
4.155	2.3	8,200	0.02545
3.142	2	6,200	0.02011
2.545	1.8	5,020	0.01539
2.011	1.6	3,970	0.01131
1.539	1.4	3,040	0.00785
1.131	1.2	2,230	
0.7854	1	1,550	-

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

BASIC TERMINAL MATERIAL. The

basic terminal is constructed of fine

grade high conductivity copper per ASTM B-152 and tin-plated per



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 mm²] through 600 MCM [304 mm²].

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

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

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

The Crimp

The "W" Crimp is one of several timeproven 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.

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.

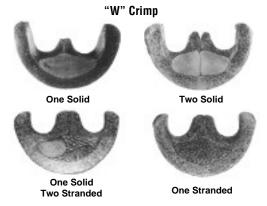
Temperature Rating: 170°C Max.

AMP SOLISTRAND Terminals and Splices (Use SOLISTRAND Tooling)

AMP Inc.	Listed	LR 7189
Wire Size	File No. E13288	Certified
22–16	22–16	22–16
Solid or Stranded	Solid or Stranded	Solid or Stranded
16–14	16–14	16–14
Solid or Stranded	Solid or Stranded	Solid or Stranded
16–14 Heavy Duty	16–14 Heavy Duty	16–14 Heavy Duty
Solid or Stranded	Stranded	Solid or Stranded
14–12	14–12	14–12
Solid or Stranded	Stranded	Solid or Stranded
12–10	12–10	12–10
Solid or Stranded	Stranded	Solid or Stranded
8 thru 600 MCM	8 thru 600 MCM	8 thru 600 MCM
Solid or Stranded	Stranded	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 mm²] through 10 AWG [6.64 mm²].

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.

Temperature Rating: 170°C Max.

AMP Budget Terminals and Splices (Use Budget Tooling)

Listed File No. E13288
22–16 Stranded
16–14 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.

SERRATIONS. Serrations inside



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.

COPPER SLEEVE. The specially designed copper sleeve, fitted the barrel provide maximum contact over the terminal barrel, provides and tensile strength after crimping. 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. **BELL MOUTH.** Assures 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.

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.

Temperature Rating: 170°C Max.

DIAMOND GRIP Terminals and Splices (Use DIAMOND GRIP Tooling)

-		
AMP Wire Range	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 S	ize		Typical Terminal
U.S. Cust.	Metric	Stud Dia	Stud Hole Diameter
#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 S		Stud Dia.	Typical Terminal Stud Hole Diameter
U.S. Cust.	Metric	Otuu Dia.	Stud Hole Diameter
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



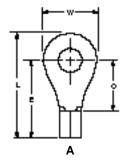
Ring Tongue Terminals

Wire Size Range AWG 26 to 16, CMA 202 to 3,260 [0.1 to 1.65 mm²]

Material

Terminal Body — Copper per ASTM B-152

Plating — Tin per MIL-T-10727



Wire Size	Stud Size			Dimer	nsions		Material	Wire Barrel	I.D. Min.	Part Nu	mbers
Circular Mils [mm²]		Style	L Max.	E Max.	C Min.	w	Thickness Max.	Solistrand	Budget	Solistrand	Budget
-	0	Α	.329 8.36	.256 6.50	.121 3.07	.140 3.56	.020 0.51	_	.035 0.89	_	31423
		Α	.329 8.36	.256 6.50	.121 3.07	.140 3.56	.020 0.51	_	.035 0.89	_	31425 2-31425-2
	2 M2	Α	.450 11.43	.346 8.79	.211 5.36	.203 5.16	.020 0.51	_	.035 0.89	_	33695
		Α	.419 10.64	.346 8.79	.211 5.36	.140 3.56	.020 0.51	.031 0.79	.035 0.89	50334*	322771
26–22	4	Α	.450 11.43	.346 8.79	.211 5.36	.203 5.16	.020 0.51	_	.035 0.89	_	31428
202–810 [0.1–0.41]	6	Α	.450 11.43	.346 8.79	.211 5.36	.203 5.16	.020 0.51	_	.035 0.89	_	31430
	M3.5	Α	.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
	8	Α	.544 13.82	.416 10.57	.281 7.14	.250 6.35	.020 0.51	_	.035 0.89	_	32859
	10	Α	.544 13.82	.416 10.57	.281 7.14	.250 6.35	.020 0.51	_	.035 0.89	_	32860
	1	Α	.449 11.40	.337 8.56	.156 3.96	.218 5.54	.033 0.84	_	.065 1.65	_	31087
	2 M2	Α	.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
		Α	.446 11.33	.353 8.97	.172 4.37	.182 4.62	.033 0.84	.061 1.55	.065 1.65	322927	320677
	4	Α	.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
		Α	.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
		Α	.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	Α	.449 11.40	.337 8.56	.156 3.96	.218 5.54	.033 0.84	_	.065 1.65	_	31090 2-31090-1
22–16 509–3,260 [0.26–1.65]		Α	.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
[0.20-1.00]		Α	.528 13.41	.416 10.57	.156 3.96	.218 5.54	.033 0.84	.061 1.55	.065 1.65	34194	31101
	6 M3.5	Α	.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
		Α	.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
		Α	.653 16.59	.478 12.14	.297 7.54	.344 8.74	.033 0.84	_	.065 1.65	_	32822
		Α	.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
	8 M4	Α	.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*
		Α	.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.



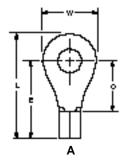
Wire Size Range

AWG 22 to 14, CMA 509 to 5,180 [0.26 to 2.62 mm²]

Material

Terminal Body — Copper per ASTM B-152

Plating — Tin per MIL-T-10727



Wire Size	Stud				nsions		Material	Wire Barrel	I.D. Min.	Part Nu	mbers
Circular Mils [mm²]	Size	Style	L Max.	E Max.	C Min.	W	Thickness Max.	Solistrand	Budget	Solistrand	Budget
		Α	.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
	10	Α	.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
		Α	.653 16.59	.478 12.14	.297 7.54	.344 8.74	.033 0.84	.061 1.55	.065 1.65	323087*	32824
22–16	12	Α	.621 15.77	.462 11.73	.281 7.14	.312 7.92	.033 0.84	_	.065 1.65	_	30694 2-30694-1
509–3,260 [0.26–1.65]	1/4 M6	Α	.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	31172
	5/16	Α	.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
	M8	Α	.995 25.27	.727 18.47	.546 13.87	.531 13.49	.033 0.84	_	.065 1.65	_	324124
	3/8	Α	.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	Α	1.070 27.18	.711 18.06	.530 13.46	.713 18.11	.033 0.84	.061 1.55	.065 1.65	329966*	328970
	2 M2	Α	.480 12.19	.352 8.94	.171 4.34	.250 6.35	.033 0.84	_	.089 2.26	_	321007
		Α	.445 11.30	.352 8.94	.171 4.34	.180 4.57	.033 0.84	.085 2.16	.089 2.26	328377	326854
	4	Α	.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
		Α	.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	Α	.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*
		Α	.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
16–14 2,050–5,180 [1.04–2.62]	8	Α	.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*
[2.02]	M4	Α	.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
		Α	.621 15.77	.462 11.73	.281 7.14	.312 7.92	.033 0.84		.089 2.26		51872-5
	10	Α	.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*
		А	.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
	12	Α	.855 21.72	.618 15.70	.437 11.10	.469 11.91	.033 0.84	_	.089 2.26	_	31163
	14	Α	.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.

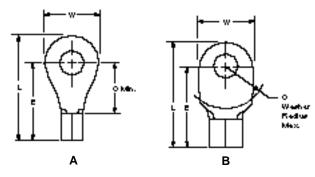


Wire Size Range AWG 16 to 10, CMA 2,050 to 13,100 [1.04 to 6.64 mm²]

Material

Terminal Body — Copper per ASTM B-152

Plating — Tin per MIL-T-10727



Wire Size	Stud			Dimer	nsions		Material	Wire Barrel	I.D. Min.	Part Nur	nbers
Circular Mils [mm²]	Size	Style	L Max.	E Max.	С	w	Thickness Max.	Solistrand	Budget	Solistrand	Budget
	1/4 M6	Α	.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	Α	.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
16–14 2,050–5,180 [1.04–2.62]	3/8	Α	.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
[1.04 2.02]	1/2	Α	1.070 27.18	.711 18.06	.530 13.46	.713 18.11	. 033 0.84	_	.089 2.26	_	328971
	M12	Α	1.184 30.07	.806 20.47	.625 15.88	.750 19.05	.033 0.84	.085 2.16	.089 2.26	50981	50982
	8 M4	В	.685 17.40	.526 13.36	.250 6.35	.312 7.92	.042 1.07	.098 2.49	_	321827	_
	40	В	.739 18.77	.526 13.36	.250 6.35	.421 10.69	.042 1.07	.098 2.49	_	34484 1-34484-0	_
14–12 3,260–8,230 [1.65–4.17]	10	В	.685 17.40	.526 13.36	.250 6.35	.312 7.92	.042 1.07	.098 2.49	_	321828 1-321828-0	_
[1.05–4.17]	1/4 M6	В	.739 18.77	.526 13.36	.250 6.35	.421 10.69	.042 1.07	.098 2.49	_	34487	_
	3/8	В	1.120 28.45	.774 19.66	.437 11.10	.687 17.45	.042 1.07	.098 2.49	_	34486	_
	4	Α	.630 16.00	.487 12.37	.219 5.56	.281 7.14	.042 1.07	.129 3.28	.134 3.40	322447	34891
		Α	.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	Α	.729 18.52	.570 14.48	.302 7.67	.312 7.92	.042 1.07	.129 3.28	.134 3.40	324911	324910
		Α	.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	Α	.708 17.98	.549 13.94	.281 7.14	.312 7.92	.042 1.07	.129 3.28	.134 3.40	322454*	34404*
	M4	Α	.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
12–10		Α	.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
5,180–13,100 [2.62–6.64]		Α	.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	Α	.808 20.52	.618 15.70	.343 8.71	.375 9.53	.042 1.07	.129 3.28	.134 3.40	31805	321829
		Α	.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
		Α	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	Α	.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
	M6	Α	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	Α	.865 21.97	.612 15.54	.344 8.74	.500 12.70	.042 1.07	_	.134 3.40	_	34966
	M8	Α	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.

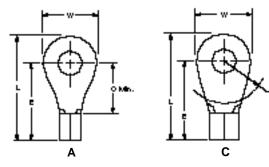


Wire Size Range AWG 12 to 8, CMA 5,180 to 20,800 [2.62 to 10.5 mm²]

Material

Terminal Body — Copper per ASTM B-152

Plating — Tin per MIL-T-10727



Wire Size	Stud	0.1.			nsions		Material	Wire Barrel	I.D. Min.	Part Num	bers
Circular Mils [mm²]	Size	Style	L Max.	E Max.	С	W	Thickness Max.	Solistrand	Budget	Solistrand	Budget
	3/8	Α	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 ³	30972
	3/6	Α	1.271 32.28	.893 22.68	.625 15.88	.750 19.05	. 042 1.07	.129 3.28	.134 3.40	322242	34833
		Α	1.102 27.99	.742 18.85	.474 12.04	.715 18.16	.042 1.07	_	.134 3.40	_	52269-1
12-10	1/2 M12	Α	1.271 32.28	.893 22.68	.625 15.88	.750 19.05	.042 1.07	.129 3.28	.134 3.40	35135 2-35135-2³	34834
5,180–13,100 [2.62-6.64]	E/0	Α	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
, ,	5/8 M16	Α	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	Α	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
	7/8 M22	Α	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	_
	1	Α	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 M4	С	.949 24.10	.743 18.87	.359 9.12	.406 10.31	.051 1.30	.172 4.37	_	324061*	_
		С	.933 23.70	.696 17.68	.359 9.12	.469 11.91	.051 1.30	.172 4.37	_	32996*	_
	10	С	.933 23.70	.696 17.68	.359 9.12	.469 11.91	.051 1.30	.172 4.37	_	33460* 2-33460-2*1 2-33460-3*2	_
		С	.949 24.10	.743 18.87	.359 9.12	.406 10.31	0.51 1.30	.172 4.37	_	31807 2-31807-2*2	_
	1/4	С	.933 23.70	.696 17.68	.359 9.12	.469 11.91	.051 1.30	.172 4.37	_	33461* 2-33461-2* ¹ 2-33461-3* ²	_
	M6	Α	1.168 29.67	.868 22.05	.531 13.49	.594 15.09	.051 1.30	.172 4.37	_	35247*	_
8 13,100–20,800 [6.64–10.5]		Α	1.168 29.67	.868 22.05	.531 13.49	.594 15.09	.051 1.30	.172 4.37	_	33462* 2-33462-1 ²	_
[0.04-10.0]	5/16 M8	Α	1.074 27.28	.790 20.07	.406 10.31	.562 14.27	.051 1.30	.172 4.37	_	31808*	_
		С	.933 23.70	.696 17.68	.359 9.12	.469 11.91	.051 1.30	.172 4.37	_	55991-1 55991-2	_
	3/8	A	1.168 29.67	.868 22.05	.531 13.49	.594 15.09	.051 1.30	.172 4.37		33463*	_
		Α	1.965 49.91	1.337 33.96	1.000 25.40	1.250 31.75	.051 1.30	.172 4.37		36499	_
	1/2 M12	Α	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	Α	1.965 49.91	1.337 33.96	1.000 25.40	1.250 31.75	.051 1.30	.172 4.37	_	35665	_
	3/4	Α	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.

requires a 00230-1 fleavy buty far LTRONIC and 00242-2 die set for application

^{*}Part numbers are available in small quantity packages.

¹Requires a 69875 standard TAPETRONIC machine for application.

Requires a 68250-1 Heavy Duty TAPETRONIC machine for application.
Requires a 68250-1 Heavy Duty TAPETRONIC and 68242-2 die set for application.

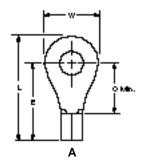


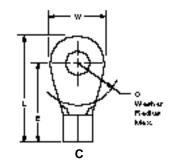
Wire Size Range AWG 6 to 4, CMA 20,800 to 52,600 [10.5 to 26.7 mm²]

Material

Terminal Body — Copper per ASTM B-152

Plating — Tin per MIL-T-10727





Wire Size	Stud			Dimer	sions		Material	Wire Barrel I.D. Min.	Part Numbers
Circular Mils [mm²]	Size	Style	L Max.	E Max.	С	w	Thickness Max.	Solistrand	Solistrand
		С	1.181 30.00	.931 23.65	.531 13.49	.406 10.31	.060 1.52	.232 5.89	52197* 52197-1
		С	1.181 30.00	.984 24.99	.584 14.83	.406 10.31	.060 1.52	.232 5.89	53106-1
	10	С	1.246 31.65	.931 23.65	.531 13.49	.625 15.88	.060 1.52	.232 5.89	33464*
		С	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	С	1.246 31.65	.931 23.65	.531 13.49	.625 15.88	.060 1.52	.232 5.89	33465* 2-33465-1
	M6	С	1.168 29.67	.931 23.65	.531 13.49	.468 11.89	.060 1.52	.232 5.89	321598* 2-321598-3
6	5/16 M8	С	1.246 31.65	.931 23.65	.531 13.49	.625 15.88	.060 1.52	.232 5.89	33466* 2-33466-3
20,800–33,100 [10.5–16.8]	0.10	С	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	Α	2.033 51.64	1.400 35.56	1.000 25.40	1.250 31.75	.060 1.52	.232 5.89	36807
	7/16	С	1.246 31.65	.931 23.65	.531 13.49	.625 15.88	.060 1.52	.232 5.89	320745
	1/2 M12	С	1.840 46.74	1.400 35.56	1.000 25.40	.875 22.23	.060 1.52	.232 5.89	320344*
		Α	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	Α	2.033 51.64	1.400 35.56	1.000 25.40	1.250 31.75	.060 1.52	.232 5.89	36809
	3/4	Α	2.033 51.64	1.400 35.56	1.000 25.40	1.250 31.75	.060 1.52	.232 5.89	36810
		А	1.314 33.38	.978 24.84	.516 13.11	.656 16.66	.073 1.85	.296 7.52	33468*
	10	С	1.199 30.45	.946 24.03	.437 11.10	.500 12.70	.073 1.85	.280 7.11	33114
	1/4	Α	1.314 33.38	.978 24.84	.516 13.11	.656 16.66	.073 1.85	.296 7.52	33469*
	M6	С	1.199 30.45	.946 24.03	.437 11.10	.500 12.70	.073 1.85	.280 7.11	2-31811-4
4 33,100–52,600	5/16	Α	1.314 33.38	.978 24.84	.516 13.11	.656 16.66	.073 1.85	.296 7.52	33470*
[16.8–26.7]	M8	С	1.324 33.63	1.009 25.63	.500 12.70	.625 15.88	.073 1.85	.280 7.11	33115
		Α	1.314 33.38	.978 24.84	.516 13.11	.656 16.66	.073 1.85	.296 7.52	33471*
	0/0	Α	2.090 53.09	1.462 37.13	1.000 25.40	1.250 31.75	.073 1.85	.296 7.52	36815
	3/8	С	1.902 48.31	1.462 37.13	1.000 25.40	.875 22.23	.073 1.85	.296 7.52	322704
		С	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.

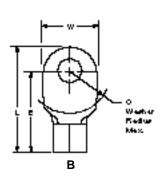
semi-automatic pneumatic crimping system.

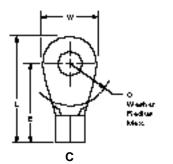


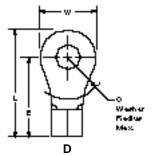
Wire Size Range AWG 4 to 1/0, CMA 33,100 to 119,500 [16.8 to 60.6 mm²]

Material

Terminal Body — Copper per ASTM B-152







Wire Size	Stud			Dimer	nsions		Material	Wire Barrel I.D. Min.	Part Numbers
Circular Mils [mm²]	Size	Style	L Max.	E Max.	С	w	Thickness Max.	Solistrand	Solistrand
	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	A**	2.090 53.09	1.462 37.13	1.000 25.40	1.250 31.75	.073 1.85	.296 7.52	35668*
4 33,100–52,600 [16.8–26.7]	1/2 M12	В	1.902 48.31	1.462 37.13	1.000 25.40	.875 22.23	.073 1.85	.296 7.52	327175*
[10.0 20.7]	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
	10	В	1.527 38.79	1.212 30.78	.531 13.49	.625 15.88	.073 1.85	.370 9.40	330301
	1/4	В	1.527 38.79	1.212 30.78	.531 13.49	.625 15.88	.073 1.85	.370 9.40	320383*
	M6	D	1.657 42.09	1.212 30.78	.531 13.49	.890 22.61	.073 1.85	.370 9.40	320138
	5/16	D	1.657 42.09	1.212 30.78	.531 13.49	.890 22.61	.073 1.85	.370 9.40	35183
	M8	В	1.527 38.79	1.212 30.78	.531 13.49	.625 15.88	.073 1.85	.370 9.40	322870*
	3/8	В	1.527 38.79	1.212 30.78	.531 13.49	.625 15.88	.073 1.85	.370 9.40	321600*
2 52,600–83,700		D	1.657 42.09	1.212 30.78	.531 13.49	.890 22.61	.073 1.85	.370 9.40	35184
[26.7–42.4]	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	D	1.657 42.09	1.212 30.78	.531 13.49	.890 22.61	.073 1.85	.370 9.40	35185*
	M12	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
	1/4	С	1.956 49.68	1.529 38.84	.625 15.88	.875 22.23	.073 1.85	.444 11.28	36915
	M6	С	1.925 48.90	1.532 38.91	.625 15.88	.807 20.50	.073 1.85	.444 11.28	321866
	5/16	С	1.956 49.68	1.529 38.84	.625 15.88	.875 22.23	.073 1.85	.444 11.28	36916*
1/0 83,700–119,500	M8	С	1.925 48.90	1.532 38.91	.625 15.88	.807 20.50	.073 1.85	.444 11.28	321867*
[42.4–60.6]	2/0	С	1.956 49.68	1.529 38.84	.625 15.88	.875 22.23	.073 1.85	.444 11.28	36917*
	3/8	С	1.925 48.90	1.532 38.91	.625 15.88	.807 20.50	.073 1.85	.444 11.28	321868
	7/16	С	1.956 49.68	1.529 38.84	.625 15.88	.875 22.23	.073 1.85	.444 11.28	36918

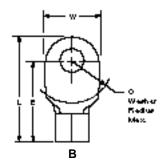
^{*}Part numbers are available in small quantity packages.
** See style A art on preceding page.

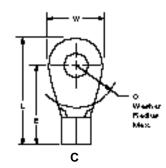


Wire Size Range AWG 1/0 to 3/0, CMA 83,700 to 190,000 [42.4 to 96.3 mm²]

Material

Terminal Body — Copper per ASTM B-152





Wire Size	Stud Size			Dimer	nsions		_Material	Wire Barrel I.D. Min.	Part Number
Circular Mils [mm²]		Style	L Max.	E Max.	С	w	Thickness Max.	Solistrand	Solistrand
	1/2	С	1.956 49.68	1.529 38.84	.625 15.88	.875 22.23	.073 1.85	.444 11.28	36919*
1/0 83.700–119.500	M12	С	2.678 68.02	2.063 52.40	1.125 28.58	1.265 32.13	.073 1.85	.444 11.28	322291
[42.4–60.6]	5/8 M16	С	2.678 68.02	2.063 52.40	1.125 28.58	1.265 32.13	.073 1.85	.444 11.28	320744
	3/4	С	2.678 68.02	2.063 52.40	1.125 28.58	1.265 32.13	.073 1.85	.444 11.28	320748
	1/4	С	1.930 49.02	1.550 39.37	.625 15.88	.926 23.52	.083 2.11	.504 12.80	321869
	M6	С	2.000 50.80	1.545 39.24	.625 15.88	.946 24.03	.083 2.11	.504 12.80	36921
	5/16	С	1.930 49.02	1.550 39.37	.625 15.88	.926 23.52	.083 2.11	.504 12.80	321870*
	M8	С	2.000 50.80	1.545 39.24	.625 15.88	.946 24.03	.083 2.11	.504 12.80	36922
		С	1.930 49.02	1.550 39.37	.625 15.88	.926 23.52	.083 2.11	.504 12.80	321871*
2/0	3/8	С	2.000 50.80	1.545 39.24	.625 15.88	.946 24.03	.083 2.11	.504 12.80	36923*
19,500–150,500 [60.6–76.3]	7/16	С	1.930 49.02	1.550 39.37	.625 15.88	.926 23.52	.083 2.11	.504 12.80	321872
		С	1.930 49.02	1.550 39.37	.625 15.88	.926 23.52	.083 2.11	.504 12.80	321873*
	1/2 M12	С	2.000 50.80	1.545 39.24	.625 15.88	.946 24.03	.083 2.11	.504 12.80	36925*
		С	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	С	2.671 67.84	2.056 52.22	1.125 28.58	1.270 32.26	.083 2.11	.504 12.80	322224
	3/4	С	2.671 67.84	2.056 52.22	1.125 28.58	1.270 32.26	.083 2.11	.504 12.80	322225
	1/4	В	2.112 53.64	1.622 41.20	.625 15.88	1.020 25.91	.094 2.39	.565 14.35	323868
	5/16	В	2.112 53.64	1.622 41.20	.625 15.88	1.020 25.91	.094 2.39	.565 14.35	321874
3/0	M8	В	2.143 54.43	1.643 41.73	.625 15.88	1.082 27.48	.094 2.39	.565 14.35	320266
50,500–190,000 [76.3–96.3]		В	2.112 53.64	1.622 41.20	.625 15.88	1.020 25.91	.094 2.39	.565 14.35	321875*
	3/8	В	2.143 54.43	1.643 41.73	.625 15.88	1.082 27.48	.094 2.39	.565 14.35	36927*
	7/16	В	2.112 53.64	1.622 41.20	.625 15.88	1.020 25.91	.094 2.39	.565 14.35	321876

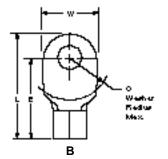
^{*}Part numbers are available in small quantity packages.

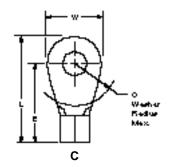


Wire Size Range AWG 3/0 to 300 MCM, CMA 150,500 to 300,000 [76.3 to 152 mm²]

Material

Terminal Body — Copper per ASTM B-152





Wire Size	Stud			Dimer	sions		Material	Wire Barrel I.D. Min.	Part Numbers
	Size	Style	L Max.	E Max.	С	w	Thickness Max.	Solistrand	Solistrand
	1/2	В	2.143 54.43	1.643 41.73	.625 15.88	1.082 27.48	.094 2.39	.565 14.35	36929*
	M12	В	2.112 53.64	1.622 41.20	.625 15.88	1.020 25.91	.094 2.39	.565 14.35	321877*
3/0 150,500–190,000 [76.3–96.3]	5/8	С	2.699 68.55	2.084 52.93	1.125 28.58	1.270 32.26	.094 2.39	.565 14.35	322222
[70.5–90.5]	M16	В	2.143 54.43	1.643 41.73	.625 15.88	1.082 27.48	.094 2.39	.565 14.35	36930
	3/4	С	2.699 68.55	2.084 52.93	1.125 28.58	1.270 32.26	.094 2.39	.565 14.35	322223
	1/4 M6	В	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	В	2.537 64.44	1.985 50.42	1.078 27.38	1.150 29.21	.105 2.67	.635 16.13	321271
		В	2.206 56.03	1.644 41.76	. 625 15.88	1.150 29.21	.105 2.67	.635 16.13	36932
	3/8	В	2.178 55.32	1.657 42.09	.625 15.88	1.087 27.61	.105 2.67	.635 16.13	321878*
	7/16	В	2.178 55.32	1.657 42.09	.625 15.88	1.087 27.61	.105 2.67	.635 16.13	321879
4/0		В	2.178 55.32	1.657 42.09	. 625 15.88	1.087 27.61	.105 2.67	.635 16.13	321880*
190,000–231,000 [96.3–117]	1/2 M12	В	2.206 56.03	1.644 41.76	.625 15.88	1.150 29.21	.105 2.67	.635 16.13	36934*
		В	2.537 64.44	1.985 50.42	1.078 27.38	1.150 29.21	.105 2.67	.635 16.13	321163
	5/8	В	2.206 56.03	1.644 41.76	.625 15.88	1.150 29.21	.105 2.67	.635 16.13	36935
	M16	С	2.732 69.39	2.117 53.77	1.078 27.38	1.275 32.39	.105 2.67	.635 16.13	322227
	3/4	С	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	С	2.732 69.39	2.117 53.77	1.078 27.38	1.275 32.39	.105 2.67	.635 16.13	321625
	3/8	В	2.602 66.09	1.987 50.47	.625 15.88	1.435 36.45	.130 3.30	.753 19.13	322252
	7/16	В	2.602 66.09	1.987 50.47	. 625 15.88	1.435 36.45	.130 3.30	.753 19.13	322253
250-300 MCM 231.000-300.000	1/2 M12	В	2.602 66.09	1.987 50.47	.625 15.88	1.435 36.45	.130 3.30	. 753 19.13	322254
[117–152]	5/8 M16	В	2.602 66.09	1.987 50.47	.625 15.88	1.435 36.45	.130 3.30	.753 19.13	323050
	3/4	В	3.259 82.78	2.566 65.18	1.203 30.56	1.435 36.45	.130 3.30	.753 19.13	323140
	1	В	3.259 82.78	2.566 65.18	1.203 30.56	1.435 36.45	.130 3.30	. 753 19.13	323034

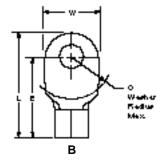
^{*}Part numbers are available in small quantity packages.



Wire Size Range 300 to 600 MCM, CMA 300,000 — 600,000 [152 to 304 mm²]

Material

Terminal Body — Copper per ASTM B-152



Wire Size	Stud			Dimer	sions		Material	Wire Barrel I.D. Min.	Part Numbers
Circular Mils [mm²]	Size	Style	L Max.	E Max.	С	w	Thickness Max.	Solistrand	Solistrand
	0/0	В	2.671 67.84	2.056 52.22	.625 15.88	1.545 39.24	.140 3.56	.819 20.80	322257
	3/8	В	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	В	2.671 67.84	2.056 52.22	.625 15.88	1.545 39.24	.140 3.56	.819 20.80	322258
300–350 MCM 300,000–380,000	1/2	В	2.671 67.84	2.056 52.22	.625 15.88	1.545 39.24	.140 3.56	.819 20.80	322259
[152–193]	M12	В	3.422 86.92	2.675 67.95	1.250 31.75	1.545 39.24	.140 3.56	.819 20.80	322764
	5/8	В	2.671 67.84	2.065 52.22	.625 15.88	1.545 39.24	.140 3.56	.819 20.80	324105
	3/4	В	3.422 86.92	2.675 67.95	1.250 31.75	1.545 39.24	.140 3.56	.819 20.80	322428
	3/8	В	2.790 70.87	2.175 55.25	.625 15.88	1.749 44.42	.158 4.01	.930 23.62	322262
	7/16	В	2.790 70.87	2.175 55.25	.625 15.88	1.749 44.42	.158 4.01	. 930 23.62	322263
	1/2	В	2.790 70.87	2.175 55.25	.625 15.88	1.749 44.42	.158 4.01	.930 23.62	322264
400 MCM 380,000–478,000	M12	В	3.644 92.56	2.795 70.99	1.250 31.75	1.749 44.42	.158 4.01	. 930 23.62	327882
[193–242]	5/8 M16	В	2.790 70.87	2.175 55.25	.625 15.88	1.749 44.42	.158 4.01	. 930 23.62	324202
	3/4	В	3.644 92.56	2.795 70.99	1.250 31.75	1.749 44.42	.158 4.01	. 930 23.62	323222
	1	В	3.644 92.56	2.795 70.99	1.250 31.75	1.749 44.42	.158 4.01	. 930 23.62	322939
		В	3.187 80.95	2.447 62.15	.750 19.05	2.015 51.18	.182 4.62	1.075 27.31	322267
	3/8	В	4.176 106.07	3.194 81.13	1.500 38.10	2.015 51.18	.182 4.62	1.075 27.31	322772
	1/2	В	3.187 80.95	2.447 62.15	.750 19.05	2.015 51.18	.182 4.62	1.075 27.31	322269
500–600 MCM 478,000–600,000	M12	В	4.176 106.07	3.194 81.13	1.500 38.10	2.015 51.18	.182 4.62	1.075 27.31	322773
[242–304]	5/8 M16	В	3.187 80.95	2.447 62.15	.750 19.05	2.015 51.18	.182 4.62	1.075 27.31	322270
	3/4	В	4.176 106.07	3.194 81.13	1.500 38.10	2.015 51.18	.182 4.62	1.075 27.31	322271
	1	В	4.176 106.07	3.194 81.13	1.500 38.10	2.015 51.18	.182 4.62	1.075 27.31	322273

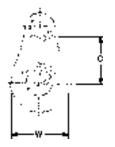


Right Angle Ring Tongue Terminals

Wire Size Range AWG 22 to 300 MCM, CMA 509 — 300,000 [0.26 to 152 mm²]

Material

Terminal Body — Copper per ASTM B-152



Wire Size	Stud		nsions	_Material	_Wire	
Circular Mils [mm²]	Size	C Min.	W	Thickness Max.	Barrel ID Min	Part Number
22-16	6	.171 4.34	.281 7.14	.033 .838	.061 1.55	321262
509-3,260 - [0.26-1.65]	10	.187 4.75	.312 7.92	.033 .838	.061 1.55	322768
16-14	8	.185 4.70	.343 8.71	.050 1.27	.105 2.67	184269
2,050-5,180 – [1.04-2.62]	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	1/4	.390 9.91	.625 15.88	.060 1.52	.232 5.89	35678
20,800-33,100 – [10.5-16.8]	5/16	.390 9.91	.625 15.88	.060 1.52	.232 5.89	33466-1
	1/4	.375 9.53	.656 16.66	.073 1.85	.296 7.52	35625
4 33,100-52,600	5/16	.348 8.84	.625 15.88	.073 1.85	.280 7.11	33115-1
[16.8-26.7] _	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
•	1/4	. 437 11.10	.807 20.50	.073 1.85	.444 11.28	322905
1/0	5/16	.531 13.49	.807 20.50	.073 1.85	.444 11.28	321867-1
83,700-119,500 – [42.4-60.6]	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	5/16	.500 12.70	.946 24.03	.083 2.11	.504 12.80	36922-1
119,500-150,500	3/8	.531 13.49	.926 23.52	.083 2.11	.504 12.80	322912
	5/16	.531 13.49	1.020 25.91	.094 2.39	.565 14.35	321874-1
3/0 - 150,500-190,000	3/8	.468 11.89	1.082 27.48	.094 2.39	.565 14.35	324035
[76.3-96.3] _	1/2	.468 11.89	1.062 26.97	.094 2.39	.565 14.35	36929-1
4/0	5/16	.750 19.05	1.150 29.21	.105 2.67	.635 16.13	321272
90,000-231,000 – [96.3-117]	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



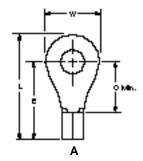
Heavy Duty Ring Tongue Terminals

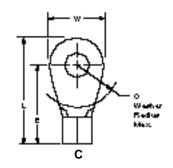
Wire Size Range AWG 16 to 8, CMA 2,050 to 20,800 [1.04 to 10.5 mm²]

Material

Terminal Body — Copper per ASTM B-152

Plating — Tin per MIL-T-10727





Wire Size	Stud				nsions	_	_Material	Wire Barrel	I.D. Min.	Part Nur	nbers
Circular Mils [mm²]	Size	Style	L Max.	E Max.	С	w	Thickness Max.	Solistrand	Budget	Solistrand	Budget
	4	Α	.630 16.00	.487 12.37	.219 5.56	.281 7.14	.050 1.27	_	.110 2.79	_	33728
	6	Α	.630 16.00	.487 12.37	.219 5.56	.281 7.14	.050 1.27	_	.110 2.79	_	33729
	M3.5	Α	.723 18.36	.549 13.94	.281 7.14	.343 8.71	.050 1.27	.105 2.67	.110 2.79	322833	33716
	8 M4	Α	.723 18.36	.549 13.94	.281 7.14	.343 8.71	.050 1.27	.105 2.67	.110 2.79	35432	33717
		Α	.723 18.36	.549 13.94	.281 7.14	.343 8.71	.050 1.27	.105 2.67	.110 2.79	34567* 2-34567-1	33718
	10	Α	.865 21.97	.612 15.54	.344 8.74	.500 12.70	.050 1.27	_	.110 2.79	_	34967
		Α	.973 24.71	.705 17.91	.437 11.10	.531 13.49	.050 1.27	_	.110 2.79	_	33646
	1/4	Α	.865 21.97	.612 15.54	.344 8.74	.500 12.70	.050 1.27	.105 2.67	.110 2.79	35775* 2-35775-1	34968
16–14 2,050–5,180	M6	Α	.973 24.71	.705 17.91	.437 11.10	.531 13.49	.050 1.27	_	.110 2.79	_	33195
[1.04–2.62]	5/16	Α	.865 21.97	.612 15.54	.344 8.74	.500 12.70	.050 1.27	.105 2.67	.110 2.79	35776	34969
	M8	Α	.973 24.71	.705 17.91	.437 11.10	.531 13.49	.050 1.27	_	.110 2.79	_	33647
	3/8	Α	.973 24.71	.705 17.91	.437 11.10	.531 13.49	.050 1.27	.105 2.67	.110 2.79	322832	33648
	G/ G	Α	1.271 32.28	.893 22.68	.625 15.88	.750 19.05	.050 1.27	.105 2.67	.110 2.79	327732	34829
	1/2	Α	1.271 32.28	.893 22.68	.625 15.88	.750 19.05	.050 1.27	.105 2.67	.110 2.79	321165*	34830
	M12	Α	1.896 48.16	1.268 32.21	1.000 25.40	1.250 31.75	.050 1.27	_	.110 2.79	_	36199
	5/8 M16	Α	1.896 48.16	1.268 32.21	1.000 25.40	1.250 31.75	.050 1.27	.105 2.67	.110 2.79	320758	36200
	3/4	Α	1.896 48.16	1.268 32.21	1.000 25.40	1.250 31.75	.050 1.27	.105 2.67	.110 2.79	320759	36201
	10	С	1.273 32.33	.977 24.82	.443 11.25	.587 14.91	.095 2.41	.177 4.50		331414	
8 13,100–20,800	1/4	С	.949 24.10	.696 17.68	.240 6.10	.500 12.70	.095 2.41	.177 4.50	_	330968	_
[6.64–10.5]	M6	С	.933 23.70	.696 17.68	.250 6.35	.468 11.89	.095 2.41	.177 4.50	_	332042	_
	5/16 M8	С	1.273 32.33	.977 24.82	.443 11.25	.587 14.91	.095 2.41	.177 4.50		1-331414-1	

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

*Part numbers are available in small quantity packages.

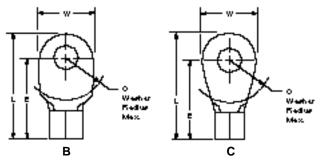


Heavy Duty Ring Tongue Terminals (Continued)

Wire Size Range AWG 6 to 1/0, CMA 20,800 to 119,500 [10.5 to 60.6 mm²]

Material

Terminal Body — Copper per ASTM B-152



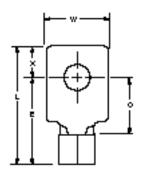
Wire Size	Stud			Dimer	sions		Material	Wire Barrel I.D. Min.	Part Numbers
Circular Mils [mm²]	Size	Style	L Max.	E Max.	С	w	Thickness Max.	Solistrand	Solistrand
	10	В	1.184 30.07	.931 23.65	.370 9.40	.500 12.70	.095 2.41	.232 5.89	2-330969-1
6	1/4	В	1.184 30.07	.931 23.65	.370 9.40	.500 12.70	.095 2.41	.232 5.89	330969
20,800–33,100 [10.5–16.8]	M6	С	1.415 35.94	1.100 27.94	.454 11.53	.625 15.88	.095 2.41	.232 5.89	331417
	3/8	С	1.415 35.94	1.100 27.94	.454 11.53	.625 15.88	.095 2.41	.232 5.89	1-331417-1
	1/4	В	1.230 31.24	.977 24.82	.390 9.91	.500 12.70	.095 2.41	.296 7.52	330970
4 33,100–52,600	M6	С	1.535 38.99	1.193 30.30	.456 11.58	.679 17.25	.095 2.41	.296 7.52	331420
[16.8–26.7]	5/16 M8	С	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	С	1.535 38.99	1.193 30.30	.456 11.58	.679 17.25	.095 2.41	.296 7.52	1-331420-1
2 52,600–83,700	3/8	С	1.745 44.32	1.315 33.40	.639 16.23	.855 21.72	.095 2.41	.375 9.53	1-331423-0
[26.7–42.4]	1/2 M12	С	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	3/8	В	1.928 48.97	1.519 38.58	.691 17.55	.822 20.88	.095 2.41	.439 11.15	1-331880-0
[42.4–60.6]	1/2 M12	В	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 mm²]

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



Wire Size	Stud			Dimension	ıs		_Material	Wire Barrel	I.D. Min.	Part Nur	nbers
Circular Mils [mm²]	Size	L Max.	E Max.	C Min.	w	X	Thickness Max.	Solistrand	Budget	Solistrand	Budget
	2 M2	.551 14.00	.431 10.95	.250 6.35	.182 4.62	.115 2.92	.033 0.84	_	.065 1.65	_	320870
		.529 13.44	.384 9.75	.203 5.16	.213 5.41	.140 3.56	.033 0.84	_	.065 1.65	_	32579
	4	.670 17.02	.517 13.13	.237 6.02	.237 6.02	.143 3.63	.033 0.84	.061 1.55	.065 1.65	328363	328349
		.551 14.00	.431 10.95	.250 6.35	.182 4.62	.115 2.92	.033 0.84	.061 1.55	.065 1.65	323119	322408
		.811 20.60	.606 15.39	.404 10.26	.237 6.02	.195 4.95	.033 0.84	_	.065 1.65	_	327955
22-16 509–3,260 [0.26–1.65]	6 M3.5	.982 24.94	.745 18.92	.465 11.81	.302 7.67	.227 5.77	.033 0.84	.061 1.55	.065 1.65	328353	328339
[0.20-1.03]		.670 17.02	.462 11.73	.281 7.14	.312 7.92	.203 5.16	.033 0.84	.061 1.55	.065 1.65	323112	321691
	8 M4	.982 24.94	.745 18.92	.465 11.81	.302 7.67	.227 5.77	.033 0.84	.061 1.55	.065 1.65	328355	328341
		.748 19.00	.540 13.72	.281 7.14	.312 7.92	.203 5.16	.033 0.84	.061 1.55	_	330539	_
	10	.670 17.02	.462 11.73	.281 7.14	.375 9.53	.203 5.16	.033 0.84	.061 1.55	.065 1.65	323106 2-323106-1	34525
		.546 13.87	.399 10.13	.218 5.54	.344 8.74	.142 3.61	.033 0.84	.061 1.55	.065 1.65	34459	31821
	4	.576 14.63	.462 11.73	.281 7.14	.215 5.46	.109 2.77	.033 0.84	_	.089 2.26	_	31691
	5 M3	.632 16.05	.479 12.17	.277 7.04	.277 7.04	.143 3.63	.033 0.84	_	.089 2.26	_	327951
	6	.560 14.22	.368 9.35	.187 4.75	.250 6.35	.187 4.75	.033 0.84	.085 2.16	.089 2.26	320815	320814
16–14	M3.5	.529 13.44	.384 9.75	.203 5.16	.296 7.52	.140 3.56	.033 0.84	.085 2.16	.089 2.26	34266 2-34266-1	31813
2,050–5,180 [1.04–2.62]	8	.633 16.08	.493 12.52	.312 7.92	.244 6.20	.125 3.18	.033 0.84	_	.089 2.26	_	35278
	M4	.982 24.94	.745 18.92	.465 11.81	.302 7.67	.227 5.77	.033 0.84	.085 2.16	.089 2.26	328356	328342
	10	.717 18.21	.462 11.73	.281 7.14	.312 7.92	.250 6.35	.033 0.84	.085 2.16	.089 2.26	320819	320818
	12	.951 24.16	.618 15.70	.437 11.10	.375 9.53	.328 8.33	.033 0.84	_	.089 2.26	_	320820

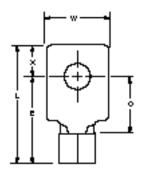
Note: Part numbers are shown as loose piece over tape mounted product.



Rectangular Tongue Terminals (Continued)

Wire Size Range AWG 12 to 10, CMA 5,180 to 13,100 [2.62 to 6.64 mm²]

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



Wire Size	Stud			Dimension	s		Material	Wire Barrel	I.D. Min.	Part Nur	nbers
Circular Mils [mm²]	Size	L Max.	E Max.	C Min.	W	X	Thickness Max.	Solistrand	Budget	Solistrand	Budget
	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
		.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
12–10	6 M3.5	.898 22.81	.693 17.60	.404 10.26	.237 6.02	.195 4.95	.042 1.07	_	.134 3.40	_	327959
5,180–13,100 [2.62–6.64]		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.



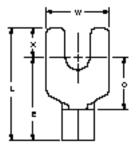
Spade Tongue Terminals

Wire Size Range AWG 26 to 10, CMA 202 to 13,100 [0.1 to 6.64 mm²]

Material

Terminal Body — Copper per ASTM B-152

Plating — Tin per MIL-T-10727



Wire Size	Stud	-		imension	S		Material	Wire Barrel	I.D. Min.	Part Nur	nbers
Circular Mils [mm²]	Size	L Max.	E Max.	C Min.	w	X	Thickness Max.	Solistrand	Budget	Solistrand	Budget
26–22	0	.280 7.11	.213 5.41	.078 1.98	.125 3.18	.062 1.57	.020 0.51	_	.035 0.89	_	32501
202–810 [0.1–0.41]	4	.431 10.95	.346 8.79	.211 5.36	.203 5.16	.076 1.93	.020 0.51	_	.035 0.89	_	34247
	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
	4	.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
	_	.685 17.40	.493 12.52	.312 7.92	.375 9.53	.187 4.75	.033 0.84	_	.065 1.65	_	31634
	6 M3.5	.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
22–16 509–3,260 [0.26–1.65]		.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*
[0.20-1.03]	8	.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*
	M4	.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
	10	.685 17.40	.493 12.52	.312 7.92	.375 9.53	.187 4.75	.033 0.84	.061 1.55	.065 1.65	34118* 2-34118-2	31636*
		.685 17.40	.493 12.52	.312 7.92	.385 9.78	.187 4.75	.033 0.84	_	.089 2.26	_	31704
	6 M3.5	.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*
		.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
16–14	8	.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*	31705*
2,050–5,180 [1.04–2.62]	M4	.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*	31442
	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	_
		.772 19.61	.564 14.33	.296 7.52	.406 10.31	.203 5.16	.042 1.07	_	.134 3.40	_	31587
	6 M3.5	.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
		.772 19.61	.564 14.33	.296 7.52	.312 7.92	.203 5.16	.042 1.07	_	.134 3.40	_	35493
12–10 5,180–13,100 [2.62–6.64]	8	.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
[2.02 0.04]	M4	.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*	31588*
	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	33479* 2-33479-1	31589
	10	.772 19.61	.564 14.33	.296 7.52	.375 9.53	.203 5.16	.042 1.07	. 129 3.28	.134 3.40	35495* 2-35495-2	35494*

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



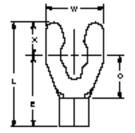
Short Spring Spade Tongue Terminals

Wire Size Range AWG 26 to 16, CMA 202 to 3,260 [0.1 to 1.65 mm²]

Material

Terminal Body — Phosphor Bronze per ASTM B-103

Plating — Tin per MIL-T-10727



Wire Size	Stud		D	imension	s		Material	Wire Barrel	I.D. Min.	Part Nui	nbers
Circular Mils [mm²]	Size	L Max.	E Max.	C Min.	w	х	Thickness Max.	Solistrand	Budget	Solistrand	Budget
	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
26–22	4	.499 12.67	.354 8.99	.219 5.56	.203 5.16	.140 3.56	.020 0.51	_	.034 0.86	_	53001-1
202–810 [0.1–0.41]	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
	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	.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
22–16	M3.5	.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
509–3,260 [0.26–1.65]	8	.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
	M4	.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.



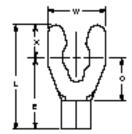
Short Spring Spade Tongue Terminals (Continued)

Wire Size Range AWG 16 to 10, CMA 2,050 to 13,100 [1.04 to 6.64 mm²]

Material

Terminal Body — Phosphor Bronze per ASTM B-103

Plating — Tin per MIL-T-10727



Wire Size	Stud			imension	ns	_	_Material	Wire Barrel	I.D. Min.	Part Nui	mbers
Circular Mils [mm²]	Size	L Max.	E Max.	C Min.	W	X	Thickness Max.	Solistrand	Budget	Solistrand	Budget
	5 M3	.576 14.63	.431 10.95	.250 6.35	.250 6.35	.140 3.56	.033 0.84	.085 2.16	.089 2.26	53177-1	53009-1
	6 M3.5	.576 14.63	.431 10.95	.250 6.35	.250 6.35	.140 3.56	.033 0.84	.085 2.16	.089 2.26	53123-1* 53123-2	53010-1
16–14 2,050–5,180	8	.637 16.18	.462 11.73	.281 7.14	.375 9.53	.170 4.32	.033 0.84	.085 2.16	.089 2.26	53124-1* 53124-2	53011-1
[1.04–2.62]	M4	.637 16.18	.462 11.73	.281 7.14	.244 6.20	.170 4.32	.033 0.84	.085 2.16	.089 2.26	53833-1 53833-2	53270-2
	10	.685 17.40	.462 11.73	.281 7.14	.406 10.31	.218 5.54	.033 0.84	.085 2.16	.089 2.26	53125-1* 53125-2	53012-1
		.685 17.40	.462 11.73	.281 7.14	.294 7.47	.218 5.54	.033 0.84	.085 2.16	.089 2.26	53834-1 53834-2	53271-2
	1/4-28 UNF M6	.810 20.57	.524 13.31	.343 8.71	.625 15.88	.281 7.14	.033 0.84	_	.089 2.26	_	53032-1
	5 M3	.636 16.15	.447 11.35	.169 4.29	.250 6.35	.184 4.67	.042 1.07	_	.134 3.40	_	53013-1
	6 M3.5	.636 16.15	.452 11.48	.174 4.42	.250 6.35	.179 4.55	.042 1.07	.129 3.28	.134 3.40	53126-1* 53126-2	53014-1
	8	.729 18.52	.554 14.07	.276 7.01	.375 9.53	.170 4.32	.042 1.07	.129 3.28	.134 3.40	53127-1* 53127-2	53015-1
12–10 5,180–13,100	M4	.729 18.52	.554 14.07	.276 7.01	.312 7.92	.170 4.32	.042 1.07	.129 3.28	.134 3.40	53835-1 53835-2	53273-2
[2.62–6.64]	10	.777 19.74	.554 14.07	.276 7.01	.406 10.31	.218 5.54	.042 1.07	.129 3.28	.134 3.40	53128-1* 53128-2	53016-1
		.777 19.74	.554 14.07	.276 7.01	.312 7.92	.218 5.54	.042 1.07	.129 3.28	.134 3.40	53836-1 53836-2	53274-2
	1/4-28 UNF M6	.902 22.91	.616 15.65	.338 8.59	.375 9.53	.281 7.14	.042 1.07	_	.134 3.40	_	53226-2

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



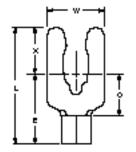
Long Spring Spade Tongue Terminals

Wire Size Range AWG 26 to 10, CMA 202 to 13,100 [0.1 to 6.64 mm²]

Material

Terminal Body — Phosphor Bronze per ASTM B-103

Plating — Tin per MIL-T-10727



Wire Size	Stud			imension	ıs		Material	Wire Barrel	I.D. Min.	Part Nur	nbers
Circular Mils [mm²]	Size	L Max.	E Max.	C Min.	W	X	Thickness Max.	Solistrand	Budget	Solistrand	Budget
	4	.637 16.18	.341 8.66	.206 5.23	.203 5.16	.276 7.01	.020 0.51	_	.034 0.86	_	52733-1
26–22 202–810 [0.1–0.41]	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
[0.1-0.41]	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
	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
22–16 509–3,260 [0.26–1.65]	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* 52710-2	52701-1
[0.20-1.03]	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
	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
16–14 2.050–5.180	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* 52713-2	52704-1 52704-3
[1.04–2.62]	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	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
[2.62–6.64]	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.



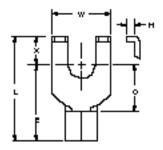
Flanged Spade Tongue Terminals

Wire Size Range AWG 26 to 10, CMA 202 to 13,100 [0.1 to 6.64 mm²]

Material

Terminal Body — Copper per ASTM B-152

Plating — Tin per MIL-T-10727



Wire Size	Stud	_			nsions			_Material	Wire Barrel	I.D. Min.	Part Nu	mbers
Circular Mils [mm²]	Size	L Max.	E Max.	C Min.	w	X	H Min.	Thickness Max.	Solistrand	Budget	Solistrand	Budget
	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
26–22 202–810 [0.1–0.41]	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
[0.1-0.41]	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
	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	.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* 2-320749-2	32418
22–16 509–3,260	M3.5	.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* 2-323136-1	322776
[0.26–1.65]	8	.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
	M4	.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* 52730-1	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
	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* 2-320855-1	320852
16–14 2,050–5,180 [1.04–2.62]	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* 2-320856-1	320853
[1.04 2.02]	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* 2-320857-1	320854
42.40	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
12-10 5,180–13,100 [2.62–6.64]	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.



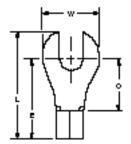
Slotted Ring Tongue Terminals

Wire Size Range AWG 26 to 10, CMA 202 to 13,100 [0.1 to 6.64 mm²]

Material

Terminal Body — Copper per ASTM B-152

Plating — Tin per MIL-T-10727



Wire Size Stu			Dimer	nsions		Material	Wire Barrel	Wire Barrel I.D. Min.		mbers
Circular Mils [mm²]	Size	L Max.	E Max.	C Min.	w	Thickness Max.	Solistrand	Budget	Solistrand	Budget
26–22 202–810 [0.1–0.41]	6 M3.5	.523 13.28	.416 10.57	.281 7.14	.250 6.35	.020 0.51	_	.035 0.89	_	322211
	4	.425 10.80	.353 8.97	.172 4.37	.182 4.62	.033 0.84	.061 1.55	.065 1.65	321288*	323838
22–16	6 M3.5	.423 10.74	.337 8.56	.156 3.96	.218 5.54	.033 0.84	.061 1.55	.065 1.65	321289 2-321289-1	323835
509–3,260 [0.26–1.65]	8	.547 13.89	.431 10.95	.250 6.35	.281 7.14	.033 0.84	.061 1.55	.065 1.65	323129	36953
	10	.588 14.94	.462 11.73	.281 7.14	.312 7.92	.033 0.84	_	.065 1.65	_	323832
	1/4	.816 20.73	.618 15.70	.437 11.10	.469 11.91	.033 0.84	.061 1.55	.065 1.65	321809 2-321809-1	323837
	6 M3.5	.459 11.66	.352 8.94	.171 4.34	.250 6.35	.033 0.84	.085 2.16	.089 2.26	322514	35555
16–14 2,050–5,180	8 M4	.616 15.65	.462 11.73	.281 7.14	.344 8.74	.033 0.84	_	. 089 2.26	_	34520
[1.04–2.62]	10	.604 15.34	.462 11.73	.281 7.14	.343 8.71	.033 0.84	_	. 089 2.26	_	328872
	1/4 M6	.816 20.73	.618 15.70	.437 11.10	.469 11.91	.033 0.84	_	. 089 2.26	_	36216
12–10 5,180–13,100 [2.62–6.64]	1/4 M6	.952 24.18	.736 18.69	.468 11.89	.531 13.49	.042 1.07	.129 3.28	.134 3.40	35680*	55812-2

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

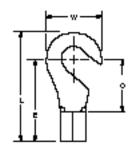
^{*}Part numbers are available in small quantity packages.



Hook Tongue Terminals

Wire Size Range AWG 22 to 10, CMA 509 to 13,100 [0.26 to 6.64 mm²]

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



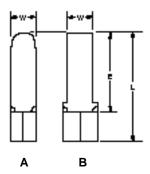
Wire Size	Stud	Stud					Wire Barrel I.D. Min.		Part Numbers	
Circular Mils [mm²]	Size	L Max.	E Max.	C Min.	W	Thickness Max.	Solistrand	Budget	Solistrand	Budget
22–16	6 M3.5	.530 13.46	.384 9.75	.203 5.16	.281 7.14	.033 0.84	_	.065 1.65	_	34261
509–3,260 [0.26–1.65]	8 M4	.656 16.66	.482 12.24	.296 7.52	.343 8.71	.033 0.84	_	.065 1.65	_	31628
	6 M3.5	.636 16.15	.462 11.73	.281 7.14	.343 8.71	.033 0.84	_	.089 2.26	_	35212
16–14 2,050–5,180 [1.04–2.62]	8 M4	.636 16.15	.462 11.73	.281 7.14	.343 8.71	.033 0.84	_	.089 2.26	_	32503
[1.01 2.02]	10	.636 16.15	.462 11.73	.281 7.14	.343 8.71	.033 0.84	_	.089 2.26	_	33437
12–10	10	.760 19.30	.570 14.48	.302 7.67	.375 9.53	.042 1.07	.129 3.28	.134 3.40	324209 2-324209-1	327902
5,180–13,100 [2.62–6.64]	1/4 M6	1.004 25.50	.736 18.69	.468 11.89	.531 13.49	.042 1.07	.129 3.28	.134 3.40	321632 2-321632-1	327905

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 mm²]

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



Wire Size			Dimensions		Material	Wire Barrel I.D. Min.	Part Numbers
Circular Mils [mm²]			Thickness Max.	Solistrand	Solistrand		
22-16 509-3,260 [0.26-1.65]	Α	.681 17.30	.500 12.70	.125 3.18	.033 0.84	.061 1.55	323135
16-14 HD¹ 2,050-5,180 [1.04-2.62]	В	.863 21.92	.615 15.62	.125 3.18	.050 1.27	.105 2.67	322441
12–10 5,180–13,100 [2.62–6.64]	В	.863 21.92	.613 15.57	.125 3.18	.042 1.07	.129 3.28	322443
8 13,100–20,800 [6.64–10.5]	В	.937 23.80	.625 15.88	.221 5.61	.051 1.30	.177 4.50	322445

¹Heavy Duty for extra mechanical strength.

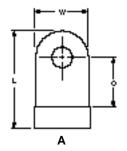


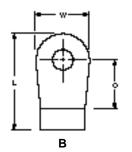
Flag Ring Tongue Terminals

Wire Size Range AWG 16 to 2, CMA 2,050 to 83,700 [1.04 to 42.4 mm²]

Material

Terminal Body — Copper per ASTM B-152





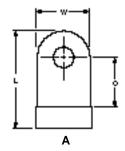
Wire Size	Stud			Dimensions		Material	Wire Barrel I.D. Min.	Part Numbers
Circular Mils [mm²]	Size	Style	L Max.	C Min.	w	Thickness Max.	Solistrand	Solistrand
16–14 2,050–5,180	8 M4	Α	.579 14.71	.250 6.35	.312 7.92	.033 0.84	.085 2.16	325069
[1.04–2.62]	10	Α	.579 14.71	.250 6.35	.312 7.92	.033 .084	.085 2.16	322819
_	6 M3.5	Α	.702 17.83	.281 7.14	.375 9.53	.042 1.07	.129 3.28	36269
12–10 5,180–13,100 –	8 M4	Α	.702 17.83	.281 7.14	.375 9.53	.042 1.07	.129 3.28	36270
[2.62–6.64]	10	Α	.702 17.83	.281 7.14	.375 9.53	.042 1.07	.129 3.28	36271*
	1/4 M6	Α	.702 17.83	.281 7.14	.375 9.53	.042 1.07	.129 3.28	36272
8	10	В	.791 20.09	.250 6.35	.500 12.70	.043 1.09	.180 4.57	321051
13,100–20,800 [6.64–10.5]	10	В	.918 23.32	.378 9.60	.500 12.70	.043 1.09	.180 4.57	321441
	1/4 M6	В	1.130 28.70	.525 13.34	.609 15.47	.043 1.09	.180 4.57	322727
_	10	Α	.841 21.36	.250 6.35	.500 12.70	.048 1.22	.224 5.69	323196
6 20,800–33,100 –	1/4 M6	Α	.960 24.38	.371 9.42	.500 12.70	.048 1.22	.224 5.69	321576
[10.5–16.8]	5/16 M8	В	1.200 30.48	.528 13.41	.625 15.88	.048 1.22	.224 5.69	321056
	3/8	В	1.200 30.48	.528 13.41	.625 15.88	.048 1.22	.224 5.69	322204
_	10	Α	1.048 26.62	.368 9.35	.546 13.87	.051 1.30	.280 7.11	321059
4 33,100–52,600 –	1/4 M6	Α	1.048 26.62	.368 9.35	.546 13.87	.051 1.30	.280 7.11	321275
[16.8–26.7]	5/16 M8	В	1.278 32.46	.530 13.46	.682 17.32	.051 1.30	.280 7.11	321060
	3/8	В	1.278 32.46	.530 13.46	.682 17.32	.051 1.30	.280 7.11	321121
_	10	В	1.437 36.50	.534 13.56	.713 18.11	.060 1.52	.357 9.07	321063
2 -	1/4 M6	В	1.437 36.50	.534 13.56	.713 18.11	.060 1.52	.357 9.07	321201
52,600–83,700 [26.7–42.4]	5/16 M8	В	1.437 36.50	.534 13.56	.713 18.11	.060 1.52	.357 9.07	321064
_	3/8	В	1.437 36.50	.534 13.56	.713 18.11	.060 1.52	.357 9.07	321253
_	10 mm	В	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.



Wire Size Range AWG 1/0 to 4/0, CMA 83,700 to 231,000 [42.4 to 117 mm²]

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



Wire Size	04			Dimensions		Material	Wine Dennell D. Min	Don't Normalisma
Circular Mils [mm²]	Stud Size	Style	L Max.	L C W		Thickness Max.	Wire Barrel I.D. Min. Solistrand	Part Numbers Solistrand
	1/4 M6	А	1.733 44.02	.666 16.92	.875 22.23	.073 1.85	.444 11.28	322215
1/0 83,700–119,500 –	5/16 M8	А	1.733 44.02	.666 16.92	.875 22.23	.073 1.85	.444 11.28	321580
[42.4–60.6] –	3/8	А	1.733 44.02	.666 16.92	.875 22.23	.073 1.85	.444 11.28	321066
	1/2 M12	А	1.733 44.02	.666 16.92	.875 22.23	.073 1.85	.444 11.28	321123
2/0	5/16 M8	А	1.848 46.94	.671 17.04	.920 23.37	.083 2.11	.504 12.80	321582
119,500–150,500 - [60.6–76.3]	3/8	А	1.848 46.94	.671 17.04	.920 23.37	.083 2.11	.504 12.80	321584
3/0 150,500–190,000 [76.3–96.3]	3/8	Α	2.001 50.83	.676 17.17	1.056 26.82	.094 2.39	.565 14.35	327887
4/0 — 190,000-231,000 [96.3–117] _	5/16 M8	А	2.131 54.13	.681 17.30	1.115 28.32	.105 2.67	.635 16.13	321277
	3/8	А	2.131 54.13	.681 17.30	1.115 28.32	.105 2.67	.635 16.13	321277-1
	1/2 M12	А	2.131 54.13	.681 17.30	1.115 28.32	.105 2.67	.635 16.13	321259



Parallel Splices

Wire Size Range AWG 22 to 600 MCM, CMA 509 to 600,000 [0.26 to 304 mm²]

Material

Splice Body—Copper per ASTM B-152



Wire Size		Dimensions		Material	Don't Noverbarra
Circular Mils¹ [mm²]	L Max.	I.D. Min.	O.D. Max.	Thickness Max.	Part Numbers Solistrand
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).



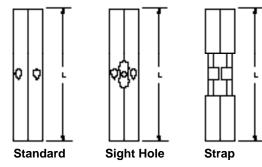
Butt Splices

Wire Size Range AWG 26 to 2, CMA 202 to 83,700 [0.1 to 42.4 mm²]

Material

ASTM B-152

Plating — Tin per MIL-T-10727



Wire Size	Style	Solistrand Dimensions				Budget Dimension:	s	Material	Part Numbers	
Circular Mils¹ [mm²]	Style	L Max.	I.D. Min.	O.D. Max.	L Max.	I.D. Min.	O.D. Max.	Thickness 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	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
509–3,260 [0.26–1.65]	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*
į	Sight Hole	.578 14.68	.061 1.55	.141 3.58	_	_	_	.033 0.84	330367*	_
	Strap	.591 15.01	.085 2.16	.165 4.19	.591 15.01	.089 2.26	.160 4.06	.033 0.84	322459	32464
16–14 2,050–5,180	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*
[1.04–2.62]	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	_
	Strap	_	_	_	.703 17.86	.134 3.40	.221 5.61	.042 1.07	_	30953
12–10 5,180–13,100	Sight Hole	.567 14.40	.129 3.28	.226 5.74	_	_	_	.042 1.07	330369*	_
[2.62–6.64]	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	Standard	.827 21.01	.172 4.37	.296 7.52	_	_	_	.051 1.30	34321*	_
[6.64–10.5]	Sight Hole	.827 21.01	.172 4.37	.296 7.52	_	_	_	.051 1.30	36906*	_
6 20.800–33.100	Standard	1.015 25.78	.232 5.89	.369 9.37	_	_	_	.060 1.52	34322*	_
[10.5–16.8]	Sight Hole	1.015 25.78	.232 5.89	.369 9.37	_	_	_	.060 1.52	36886*	_
4 33,100–52,600	Standard	1.140 28.96	.296 7.52	.463 11.76	_	_	_	.073 1.85	34323*	_
[16.8–26.7]	Sight Hole	1.140 28.96	.296 7.52	.463 11.76	_	_	_	.073 1.85	320238	_
2 700	Standard	1.265 32.13	.370 9.40	.539 13.69	_	_	_	.073 1.85	35189*	_
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.

'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).

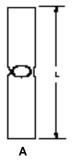


Butt Splices (Continued)

Wire Size Range AWG 1/0 to 600 MCM, CMA 83,700 to 600,000 [42.4 to 304 mm²]

Material

Splice Body—Copper per **ASTM B-152**



Wire Circular Mils ¹	Style		Solistrand Dimensions		Material	Part Numbers	
[mm²]	Otyle	L Max.	I.D. Min.	O.D. Max.	Thickness Max.	Solistrand	
1/0 83,700–119,500 [42.4–60.6]	Α	1.412 35.86	.444 11.28	.613 15.57	.073 1.85	36957*	
2/0 119,500–150,500 [60.6–76.3]	А	1.437 36.50	.504 12.80	.693 17.60	.083 2.11	36958*	
3/0 150,500–190,000 [76.3–96.3]	А	1.480 37.60	.565 14.35	.775 19.69	.094 2.39	36959*	
4/0 190,000–231,000 [96.3–117]	А	1.484 37.69	.635 16.13	.869 22.07	.105 2.67	36960*	
250–300 MCM 231,000–300,000 [117–152]	А	2.093 53.16	.753 19.13	1.054 26.77	.130 3.30	322279	
300–350 MCM 300,000–380,000 [152–193]	А	2.217 56.31	.819 20.80	1.137 28.88	.140 3.56	322280	
400 MCM 380,000–478,000 [193–242]	А	2.467 62.66	.925 23.50	1.287 32.69	.158 4.01	322281	
500–600 MCM 478,000–600,000 [242–304]	А	2.811 71.40	1.070 27.18	1.483 37.67	.182 4.62	322282	

^{*}Part numbers are available in small quantity packages.

'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).

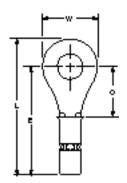


Ring Tongue Terminals

Wire Size Range AWG 26 to 16, CMA 202 to 3,260 [0.1 to 1.65 mm²]

Material

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



Wire Size	Stud		Dimen	sions		Material	Wire	Part N	lumbers
Circular Mils [mm²]	Size	L Max.	E Max.	C Min.	w	Thickness Max.	Insulation Dia. Max.	Loose Piece	Tape Mounted
	0	.464 11.79	.391 9.93	.121 3.07	.140 3.56	.020 0.51	.082 2.08	31516	_
	2	.464 11.79	.391 9.93	.121 3.07	.140 3.56	.020 0.51	.082 2.08	31518	2-31518-1
	M2	.564 14.33	.481 12.22	.211 5.36	.165 4.19	.020 0.51	. 082 2.08	3216211	1-321621-0¹
26–22 202–810 [0.1–0.41]	4	.585 14.86	.481 12.22	.211 5.36	.203 5.16	.020 0.51	.082 2.08	31679	2-31679-1
[0.1 0.41]	6	.585 14.86	.481 12.22	.211 5.36	.203 5.16	.020 0.51	.082 2.08	31681	2-31681-2
M3.5 	M3.5	.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
	2 M2	.600 15.24	.507 12.88	.172 4.37	.182 4.62	.033 0.84	.125 3.18	320678	_
	4	.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
		.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	_
		.728 18.49	.585 14.86	.250 6.35	.281 7.14	.033 0.84	.140 3.56	31396	2-31396-2
22–16 509–3,260 [0.26–1.65]		.775 19.69	.616 15.65	.281 7.14	.312 7.92	.033 0.84	.125 3.18	30996	2-30996-1
[0.20 1.00]	8	.775 19.69	.616 15.65	.281 7.14	.312 7.92	.033 0.84	.140 3.56	31160	2-31160-1
	M4	.728 18.49	.585 14.86	.250 6.35	.281 7.14	.033 0.84	.125 3.18	31270	2-31270-1
		.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
	10	.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	1.009 25.63	.772 19.61	.437 11.10	.469 11.91	.033 0.84	.140 3.56	31176	2-31176-1
	M6	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. 'Slightly unusual tongue shape.

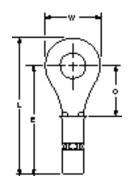


Ring Tongue Terminals (Continued)

Wire Size Range AWG 16 to 10, CMA 2,050 to 13,100 [1.04 to 6.64 mm²]

Material

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



Wire Size	644		Dimen	sions		Material	Wire	Part N	lumbers
Circular Mils [mm²]	Stud Size	L Max.	E Max.	C Min.	W	Thickness Max.	Insulation Dia. Max.	Loose Piece	Tape Mounted
		.634 16.10	.506 12.85	.171 4.34	.250 6.35	.033 0.84	.150 3.81	32187	_
	4	.634 16.10	.506 12.85	.171 4.34	.250 6.35	.033 0.84	.170 4.32	32189	_
		.790 20.07	.616 15.65	.281 7.14	.343 8.71	.033 0.84	. 170 4.32	30926	_
	6 M3.5	.634 16.10	.506 12.85	.171 4.34	.250 6.35	.033 0.84	.150 3.81	32188	_
16–14 2,050–5,180		.634 16.10	.506 12.85	.171 4.34	.250 6.35	.033 0.84	.170 4.32	32190	2-32190-1
[1.04–2.62]		.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
	10	.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
40.441101	10	.970 24.64	.796 20.22	.281 7.14	.343 8.71	.050 1.27	.230 5.84	33722	2-33722-1
16–14HD¹ 2,050–5,180 [1.04–2.62]	1/4	1.220 30.99	.952 24.18	.437 11.10	.531 13.49	. 050 1.27	.230 5.84	33639	_
[]	M6	1.282 32.56	1.014 25.76	.437 11.10	.531 13.49	.050 1.27	. 300 7.62	322296	_
		1.007 25.58	.817 20.75	.302 7.67	.375 9.53	. 042 1.07	.230 5.84	31825	_
	6 M3.5	.877 22.28	.734 18.64	.219 5.56	.281 7.14	.042 1.07	.230 5.84	321501	2-321501-1
12–10 — 5,180–13,100 [2.62–6.64] —		.976 24.79	.817 20.75	.302 7.67	.312 7.92	.042 1.07	.230 5.84	326889	_
	8 M4	.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. Heavy Duty for extra mechanical strength.

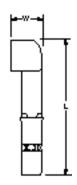


Knife Disconnect Splices

Wire Size Range AWG 22 to 10, CMA 509 to 13,100 [0.26 to 6.64 mm²]

Material

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



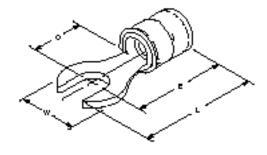
Wire Size	Dime	nsions	Wire	Part I	Numbers
Circular Mils [mm²]	L Max.	w	Insulation Dia. Max.	Loose Piece	Tape Mounted
22–16	.794 20.17	.203 5.16	.125 3.18	31770	_
509–3,260 [0.26–1.65]	.794 20.17	.203 5.16	.140 3.56	31777	2-31777-1
16–14	.794 20.17	.203 5.16	.150 3.81	31943	_
2,050–5,180 [1.04–2.62]	.794 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 mm²]

Material

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



Wire Size	Stud		Dimensions				Wire	Part N	umbers
Circular Mils [mm²]	Size	L Max.	E Max.	C Min.	w	Thickness Max.	Insulation Dia. Max.	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	6 M3.5	.710 18.03	.585 14.86	.250 6.35	.281 7.14	.033 0.84	.125 3.18	34101	_
[0.26–1.65]	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.

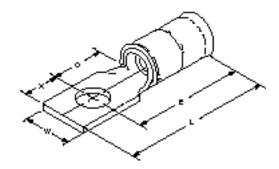


Rectangular Tongue Terminals

Wire Size Range AWG 22 to 16, CMA 509 to 3,260 [0.26 to 1.65 mm²]

Material

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



Wire Size	Wire Size Stud			Dimensions			Wire	Part Numbers	
Circular Mils [mm²]	Size	L Max.	E Max.	C Min.	W		Insulation Dia. Max.	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	_

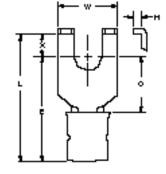
Note: "C" dimension applies from edge of metal wire barrel to center of stud hole.

Flanged Spade Tongue Terminals

Wire Size Range AWG 26 to 14, CMA 202 to 5,180 [0.1 to 2.62 mm²]

Material

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



Wire Size	Stud		Dimensions						Wire	Part N	lumbers
Circular Mils [mm²]	Size	L Max.	E Max.	C Min.	w	х	Н	Thickness Max.	Insulation Dia. Max.	Loose Piece	Tape Mounted
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 0.51	.082 2.08	324598	2-324598-1
22–16	6 M3.5	.668 16.97	.538 13.67	.203 5.16	.296 7.52	.125 3.18	.046 1.17	.033 0.84	.125 3.18	32419	2-32419-1
509–3,260 [0.26–1.65]	8 M4	.761 19.33	.585 14.86	.250 6.35	.416 10.57	.171 4.34	.062 1.57	.033 0.84	.125 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 0.84	.170 4.32	320859	_

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

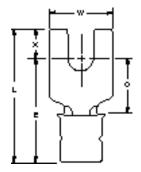


Spade Tongue Terminals

Wire Size Range AWG 26 to 16, CMA 202 to 3,260 [0.1 to 1.65 mm²]

Material

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



Wire Size			ı	Dimension	5		Material	Wire	Part N	umbers
	Size	L Max.	E Max.	C Min.	W	х	Thickness Max.	Insulation Dia. Max.	Loose Piece	Tape Mounted
26–22 202–810	0	.415 10.54	.348 8.84	.078 1.98	.125 3.18	.062 1.57	.020 0.51	.082 2.08	32502	_
[0.1–0.41]	4	.558 14.17	.481 12.22	.211 5.36	.203 5.16	.072 1.83	.020 0.51	.082 2.08	34248	_
	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	_
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	.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.



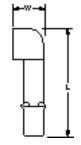
Knife Disconnect Splices

Wire Size Range AWG 22 to 8, CMA 509 to 20,800 [0.26 to 10.5 mm²]

Material

Splice Body and Sleeve — Copper per ASTM B-152

Plating — Tin per MIL-T-10727



Wire Size	Dimen:	sions	Part Numbers
Circular Mils [mm²]	L Max.	W	Loose Piece
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

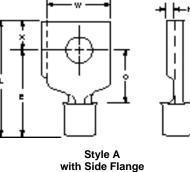
Rectangular Tongue Terminals

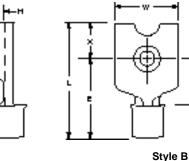
Wire Size Range AWG 22 to 14, CMA 509 to 5,180 [0.26 to 2.62 mm²]

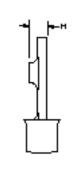
Material

Copper per ASTM B-152

Terminal Body and Sleeve — Plating — Tin per MIL-T-10727







with Bossed Hole

Wire Size	Stud				Dimer	nsions			Material	Part Numbers
Circular Mils [mm²]	Circular Wills	Style	L Max.	E Max.	C Min.	W	Х	н	Thickness Max.	Loose Piece
22–16 509–3,260 [0.26–1.65]	6 M3.5	В	.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	Α	.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. Note: Several tape mounted SOLISTRAND part numbers are currently Class 2 approved.	For procurement by contractors and manufacurers 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
	1	34103	2	2
	1	2-34103-1	2	2
	2	34104	2	4
	2	2-34104-6	2	7
	3	34110	2	6
22-18	3	2-34110-3	2	O
22-10	4	34112	2	10
	4	2-34112-2	2	10
	5	34114	2	5/6
	5	2-34114-2	2	5/6
	6	34115	2	3/8
	O	2-34115-2	2	3/0
	7	321684	2	6
	1	2-321684-1	2	O
	8	320093	1 & 2	10
	0	2-320093-1	1 & 2	10
16-14	9	34125	2	5/16
10-14		2-34125-6		3/10
	10	34126	2	3/8
		2-34126-2	2	3/6
	11	34119	2	4
	11	2-34119-1	2	4

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
		33457	1&2	
	105	2-33457-2	2	10
12-10		33459	1&2	=/4.0
	106	2-33459-6	2	5/16
		31807		
8	107	2-31807-2	2	10
	108	31808	2	5/16
	109	321598	2	1/4
6	110	33467	2	3/8
	111	31811	2	1/4
4	112	31812	2	3/8
	113	320383	2	1/4
2	114	321600	2	3/8
	117	321866	2	1/4
1/0	118	321868	2	3/8
	119	321870	2	5/16
2/0	120	321871	2	3/8
	121	321875	2	3/8
3/0	122	321877	2	1/2
	123	321878	2	3/8
4/0	124	321880	2	1/2
12-10	128	33220	1&2	3/8
8	129	33463	2	3/8
	130	321298	2	10
6		33466		
O	131	2-33466-3	2	5/16
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		33461		
Ü	141	2-33461-2	2	1/4
6	143	320344	2	1/2
	144	33114	2	10
4	145	327175	2	1/2
	146	330301	2	10
2	147	322870	2	5/16
2	148	320741	2	7/16
	151	321867	2	5/16
1/0	152	36918	2	7/16
	153	321869	2	1/4
2/0	154	321872	2	7/16
	155	321874	2	5/16
3/0	156	321876	2	7/16
	157	321271	2	5/16
		321879	2	7/16
4/0	158 150			
	159 160	36935	2	5/8 3/4
	160	322228		3/4
12-10	165	35476	2	6
12-10		2-35476-1		
	166	35135	2	1/2

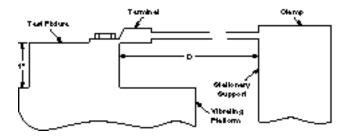
 $\textbf{Note:} \ \mathsf{Part} \ \mathsf{numbers} \ \mathsf{are} \ \mathsf{shown} \ \mathsf{as} \ \mathsf{loose} \ \mathsf{piece} \ \mathsf{over} \ \mathsf{tape} \ \mathsf{mounted} \ \mathsf{product}.$



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

Test Group	Test Sequence	Test Type	Test Description
1	А	Current Cycling	Samples subjected to 50 cycles, each cyle consisting of 30 minutes at 125% of the current listed on page 48 followed by 15 minutes with no load.
	В	Voltage Drop	See test method and requirements on page 48.
	Α	Vibration	See test method on page 46.
2	В	Voltage Drop	See test method and requirements on page 48.
	С	Tensile	See test method and requirements on page 47.
3	А	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%.
	В	Voltage Drop	See test method and requirements on page 48.
	С	Tensile	See test method and requirements on page 47.
4	А	Heat Age	Samples subjected to 193° C for 120 hours then cooled to 23° C within one hour.
	В	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%.
	С	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.



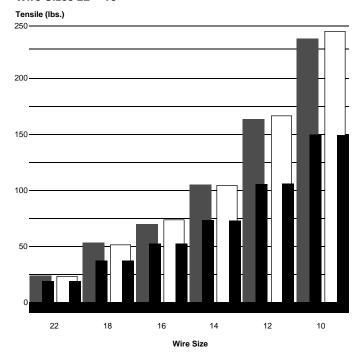
Military Tensile Test Results

Tensile Requirements Per MIL-T-7928G

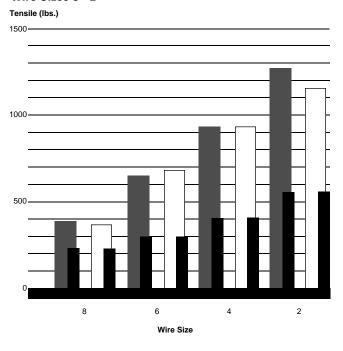
Wire Size AWG	Minimum Tensile Strength (Lbs)
22	15
20	19
18	38
16	50
14	70
12	110
10	150
8	225
6	300
4	400
2	550
1/0	700
2/0	750
3/0	825
4/0	875

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



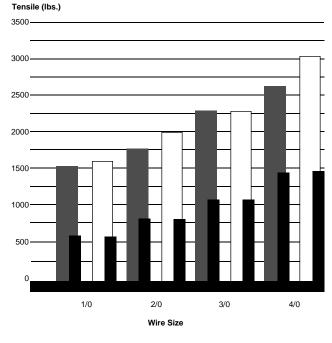
SOLISTRAND Tensile Test Results Wire Sizes 8-2



Tensile after

Vibration

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



MIL-T-7928 Requirement

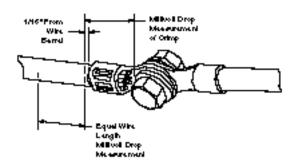
Tensile after

Salt Spray



Illustration of Millivolt Drop Measurement Procedure

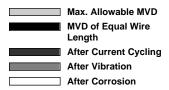
Military Specification MIL-T-7928G

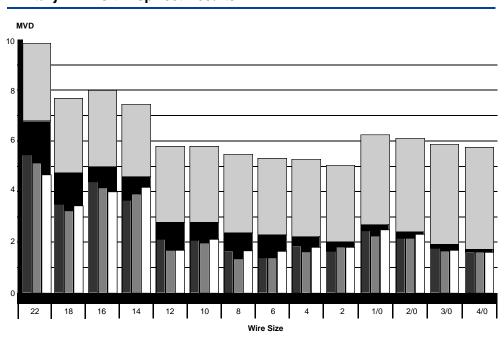


Wire Size	Test Current	Maximum Crimp MVD = EWL Measurement + Valve Listed Below		
AWG	(Amperes)	Initial	Final	
		Terminal	Terminal	
22	9			
20	11			
18	16			
16	22			
14	32			
12	41	1	3	
10	55			
8	73			
6	101			
4	135			
2	181			
1/0	245			
2/0	283	2	4	
3/0	328	۷	4	
4/0	380			

Military Millivolt Drop Test Results

SOLISTRAND Millivolt Drop Results Per MIL-T-7928G Using Military Approved Wire







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.

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

Static Heat Test Requirements

Test Current (Amperes)
9
12
17
18
30
35
50
70
95
125
170
230
265
310
360
405
445
505
545
620
690

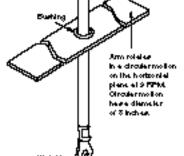
Requirement:

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.





Glationary

Mounting



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

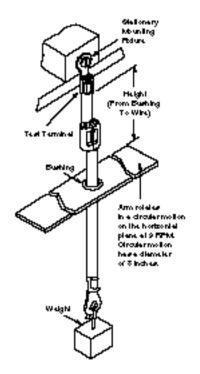
Wire Size AWG	Test Current (Amperes)
22	9
20	12
18	17
16	18
14	30
12	35
10	50
8	70
6	95
4	125
2	170
1/0	230
2/0	265
3/0	310
4/0	360
250	405
300	445
350	505
400	545
500	620
600	690

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

			Pneumatic	Tooling		Tooling For Tape Mounted Products
Product Type	AMP Hand Wire Tools	Crimping Heads for 6-26, Tool 189721-1		Dies for 6-26, Tool 189721-1 Requires Straight Action Adapter 217200-1 or 318161-1 Dies Also Fit 69710-1	Dies for 69875 AMP-TAPETRONIC AMP-O-LECTRIC ⁶ Requires Applicator	
			Single Wire Range	Multiple Wire Range	Hand Tool	AMPOMATOR CLS IV Requires Applicators
	26-22 24-20	69363 ²	_	_	_	_
All	22-16		314516-1	679301-1	47812	68240-1
SOLISTRAND terminals and	16-14	49935 ²	314517-1	679301-1	47813	68241-1
splices except	12-10 & 16-14 HD	58546-1 ³	_	679301-1	478141	68242-1
terminals	14-12	49592 ²	314518-1	_	_	90566-1
8	8	_	679302-1	_	_	68243-1
	6	_	679303-1	_	_	_
Flag Tongue terminals only	16-14 12-10	49975 ² 49965 ²	217204-1 217203-1	_	_	Flag terminals not available in tape
			217200-1			mounted form
5.1.	26-22	69363²	-			
Budget terminals and	22-16	58508-14		_		68259-1
splices	16-14	58508-14				68094
	12-10 & 16-14 HD	49656, 58508-14				
	26-22	48070	_	_	_	69902
DIAMOND	24-20	_	_	_	_	_
GRIP	22-16	49512	_			69903
terminals and splices	16-14	49513			46251-2	69904
· 12-	12-10 & 16-14 HD	59054	_	_		_
	26-22	_	_	_	_	_
Standard	22-16	48364	_	_	_	_
"B"	16-14	_	_	_		
terminals	12-10	49736	_		_	_
	8	49737	_	_	_	_

¹For standard wire only.

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

²CERTI-CRIMPHand Tool.

Contains die set 58545-1. PRO-CRIMPER II commercial tool not approved for UL applications.

Contains die set 58509-1. PRO-CRIMPER II commercial tool not approved for UL applications. Not approved for use with Budget Spring Spade terminals. ⁵With locator, for terminals only.

⁶Call Tooling Assistance Center for Machine & Applicator part numbers.



Application Tooling Information for SOLISTRAND Terminals and Splices

Wire Size Range AWG 8 to 600 MCM

		F	neumalic Tooling	Hydraulic SelfConta	Tools Will ined Dies	;				nd Batlery Nierchange			Toolin Tape Mount	ig For sed Product
Product Type	AMP Wire Sire	Hand Tool	69015	Hand Tool	Latish Head	Falish 69065, 1	Heads	"C"	197° Head	58445-1 ² Lalish Head	69082° "C" Head	69099° "C" Head	Dies for 69875 JUP-TARETRON Listed des are See productin	singleindent Ibemallon be
						Nest	Indent		Indent				proper apeapplication boing selection	
	8_	633551	49956			48126	48355	46146	46145			63216	68243-1	68312-1
	ε	59083 No CERTI- CRIMP	48172	59975-1	60099	48128	48127	46134	46133			63217		68313-1
	4	59131	48173	•		48129	40121	46135	40 100	_	_	69218		
	2		48174			48130		46136		_	-	45433		
	1/0	-	48183			48132		46138	46137			45436		
	2/0	-		•		48133						45439		
Randerd		-				48134	48131					45442		
emirab. and	4/0	-				300430						45445		
	250-300 MCM	5								48816	69911	10110		
	300-350 MCM	5								48817	69912			
,	400 MCM	•			_					48818	69913	_		
	500-600 MCM	5								48819	69914			
	8HD					48128-1								
Heavy	6HD	•				48129-1	48127-1							
Duby (4HD	•		_		48130-1	'			_				
emineb	2HD	•				48132-1								
	1/0 HD	-				48133-1	48131-1							
	8		48412				9057 heed used for minels 48505							
Tooling for Fleq	<u>б</u>		48413 48414	_	_	48508 48509	49507		_	_				
emineb orly	1/0	_,	48415 48416	-		48510 48652								
	2/0					48805 48806	48511							
	4/0	•				48807	•							

¹CERTI-CRIMPHand Tool.

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

²These crimping heads are recommended for use only with AMP Hydraulic Hand Pump 314979-1, DYNA-CRIMPHydraulic 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.



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)

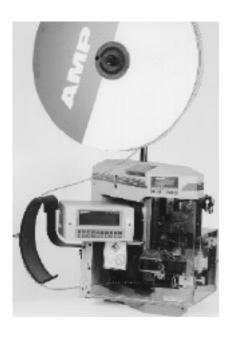


Application Tooling (Continued)

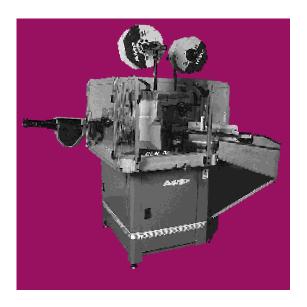
Tape Mounted



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)



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



Application Tooling (Continued)

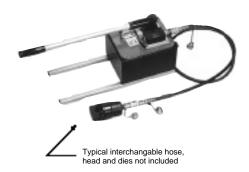
DYNA-CRIMP II Battery Operated Hydraulic Power Unit



Part No. 122271-14

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.

Hand Operated Power Unit



314979-12 (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) - 69120-13 230 Volts (60 Hz) - 69120-23



Control



Hose Assembly



Control



Multidirectional Valve

Power Units Accessories

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

¹ Contact AMP Incorporated for usage recommendations.

Also see AMP Customer Manual 409-5860.
 Also see AMP Customer Manual 409-1950.
 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).



Part Number Index

Note: This numerical index lists all cata-

Part No.	Page
0691	12
0692	12
30693	13
30694	13
30695	13
30696	13
30697	13
30926	39
30927	39
30928	39
30953	36
30972	15
30993	39
30995	38
30996	38
30997	38
31049	13
31087	12
31088	12
31089	12
31090	12
31091	12
31094	38
31096	38
31101	12
31112	14
31113	14
31114	14
31120	14
31122	14
31123	14
31159	38
31160 31161	38 38
31163	13
31164	14
31165	14
31169	39
31172	13
31173	13
31176	38
31251	38
31256	39
31264	12
31265	12
31266	13
31269	38
31270	38
31393	38
31396	38
31397	38
31398	38
31423	12
31425	12
31428	12
31430	12
31442	26
21/02	12

art No.	Page
499	14
	38
1516	38
1518	
1587	26
1588	26
1589	26
1628	32
1634	26
1635	26
1636	26
1674	43
1679	38
1681	38
1691	24
1704	26
1705	26
1706	26
1762	43
1763	43
1770	40
1771	39
1772	39
1777	40
1805	14
1807	15
1808	15
1811	16
1812	16, 21
1813	24
1818	36
1819	36
1821	24
1825	39
1828	39
1942	40
1943	40
1944	40
1945	43
2151	36
2161	43
2185	13
2186	13
2187	39
2188	39
2189	39
2190	39
2416	30
2418	30
2418 2419	41
2463	36
2464	36
2494	30
2495	41
2501	26
2502	42
2503	32
0570	24
2579	
2579 2822	12
	12 12
2822	
2822 2823	12

Part No.	Page	Part No.	Page
32860	12	34119	13
32861 32862	38	34120 34121	13 13
32882	14	34121	13
32994	14	34123	13
32995	26	34124	14
32996	15	34125	14
33114	16	34126	14
33115	16, 21	34128	26
33195	22	34129	26
33202	26	34130	35
33219	26	34137	35
33220	15	34138	35
33221	26	34194	12
33426	25	34226	36
33437	32	34227	36
33456	14	34228	36
33457	14	34247	26
33458	14	34248	42
33459	14	34261	32
33460	15	34266	24
33461	15	34318	35
33462	15	34319	35
33463	15	34320	35
33464	16	34321	36
33465 33466	16 16, 21	34322 34323	36 36
33467	16, 21	34384	26
33468	16	34404	14
33469	16	34459	24
33470	16	34484	14
33471	16	34486	14
33479	26	34487	14
33639	39	34518	26
33646	22	34520	31
33647	22	34525	24
33648	22	34567	22
33695	12	34582	26
33716	22	34583	26
33717	22	34829	22
33718	22	34830	22
33722	39	34833	15
33728	22	34834	15
33729	22	34891	14
33765	26	34892	14
33766	42	34896	13
33799	42	34964	14
34101	40 12	34965	14
34103 34104	12	34966 34967	14 22
34105	12	34968	22
34107	12	34969	22
34108	12	35116	26
34109	13	35135	15
34110	12	35183	17
34111	12	35184	17
34112	13	35185	17
34113	13	35187	35
34114	13	35189	36
34115	13	35212	32
34117	26	35247	15
34118	26	35277	21

31498

13



Part Number Index (Continued)

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
35278	24	36958	37	53150	27	320857	30
35432	22	36959	37	53175	27	320859	41
35476	14	36960	37	53177	28	320870	24
35493	26	50334	12	53226	28	321007	13
35494	26	50981	14	53235	27	321024	36
35495	26	50982	14	53266	27	321051	33
35555	31	51872	13	53267	27	321056	33
35625	21	51875	30	53268	27	321059	33
35664	15	52197	16	53270	28	321060	33
35665	15	52269	15	53271	28	321063	33
35666	15	52512	30	53273	28	321064	33
35668	17	52700	29	53274	28	321066	34
35669	17	52701	29	53555	26	321121	33
35670	17	52702	29	53830	27	321123	34
35678	21	52703	29	53831	27	321163	19
35680	31	52704	29	53832	27	321165	22
35771	14	52705	29	53833	28	321198	36
35772	14	52706	29	53834	28	321201	33
35775	22	52707	29	53835	28	321253	33
35776	22	52708	29	53836	28	321259	34
36189	12	52709	29	55812	31	321262	21
36195	26	52710	29	55991	15	321265	21
36199	22	52712	29	184147	33	321271	19
36200	22	52713 52714	29	184269	21	321272	21
36201	22		29	320093	13	321275	33
36216	31	52715 52716	29 29	320138 320238	17 36	321277	34
36269	33		29	320266	18	321280 321288	36 31
36270 36271	33	52717 52730	30	320344	16	321289	31
36272	33	52733	29	320379	42	321298	16
36451	14	52734	29	320383	17	321441	33
36467	12	52735	29	320671	43	321463	26
36499	15	52772	29	320677	12	321499	25
36807	16	53000	27	320678	38	321501	39
36808	16	53000	27	320741	17	321543	40
36809	16	53001	27	320743	17	321557	25
36810	16	53002	27	320744	18	321558	25
36815	16	53004	27	320745	16	321576	33
36880	26	53005	27	320748	18	321580	34
36886	36	53006	27	320749	30	321582	34
36906	36	53007	27	320754	17	321584	34
36909	35	53007	28	320755	17	321598	16
36915	17	53010	28	320758	22	321600	17
36916	17	53011	28	320759	22	321621	38
36917	17	53012	28	320760	15	321625	19
36918	17	53013	28	320761	15	321632	32
36919	18	53014	28	320762	15	321683	13
36921	18	53015	28	320763	15	321684	13
36922	18, 21	53016	28	320764	15	321691	24
36923	18	53032	28	320765	15	321801	36
36925	18	53033	29	320814	24	321809	31
36927	18	53047	29	320815	24	321827	14
36929	19, 21	53106	16	320818	24	321828	14
36930	19	53111	29	320819	24	321829	14
36932	19	53120	27	320820	24	321866	17
36934	19	53121	27	320822	25	321867	17, 21
36935	19	53123	28	320823	25	321868	17
36946	35	53124	28	320852	30	321869	18
36948	35	53125	28	320853	30	321870	18
36951	35	53126	28	320854	30	321871	18
36953	31	53127	28	320855	30	321872	18
	0.1					· - · -	.0



Part Number Index (Continued)

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
321874	18, 21	322408	24	323127	26	327175	17
321875	18	322418	12	323129	31	327732	22
321876	18	322428	20	323135	32	327882	20
321877	19	322441	32	323136	30	327887	34
321878	19	322443	32	323140	19	327902	32
321879	19	322445	32	323143	30	327905	32
321880	19	322447	14	323144	30	327951	24
322204	33	322451	26	323196	33	327953	25
322210	40	322454	14	323222	20	327955	24
322211	31	322455	14	323291	17	327959	25
322215	34	322459	36	323823	26	327971	25
322222	19	322514	31	323832	31	328050	25
322223	19	322704	16	323834	26	328339	24
322224	18	322725	30	323835	31	328341	24
322225	18	322727	33	323837	31	328342	24
322227	19	322763	20	323838	31	328349	24
322228	19	322764	20	323868	18	328353	24
322235	13	322768	21	324001	36	328355	24
322242	15	322771	12	324023	21	328356	24
322246	36	322772	20	324035	21	328363	24
322252	19	322773	20	324061	15	328377	13
322253	19	322776	30	324105	20	328395	26
322254	19	322819	33	324124	13	328500	41
322257	20	322821	21	324202	20	328522	30
322258	20	322832	22	324209	32	328872	31
322259	20	322833	22	324521	26	328970	13
322262	20	322870	17, 21	324523	39	328971	14
322263	20	322905	21	324578	30	329966	13
322264	20	322906	21	324579	30	330301	17
322267	20	322909	21	324598	41	330367	36
322269	20	322912	21	324599	30	330368	36
322270	20	322927	12	324599	30	330369	36
322271	20	322939	20	324605	30	330539	24
322273	20	322945	25	324893	36	330827	26
322275	35	322945	25	324898	36	330968	22
322275	35	322946	26	324990	14	330969	23
322276	35						
322277	35	323034	19 19	324911	14	330970	23
322278	37	323050 323086	12	324955	13 33	331269	25 12
				325069		331401	
322280	37	323087	13	325195	26	331414	22
322281	37	323096	12	325196	26	331417	23
322282	37	323106	24	326850	12	331420	23
322291	18	323112	24	326854	13	331423	23
322296	39	323119	24	326889	39	331880	23
322391	18	323124	30	327025	36	332042	22



Americas

Argentina - Buenos Aires Phone: + 54-1-733-2000 Fax: + 54-1-717-0988

Brazil – Sao Paulo Phone: + 55-11-861-1311 Fax: + 55-11-861-0397

Canada – Toronto Phone: + 1-905-475-6222 Fax: + 1-905-474-5520

Chile - Santiago Phone: + 56-2-739-1230 Fax: + 56-2-739-1227

Colombia - Bogota Phone: + 57-1-231-9398 Fax: + 57-1-240-3769

Mexico - Mexico City Phone: + 52-5-729-0400 Fax: + 52-5-361-8545

United States - Harrisburg, PA Phone: + 1-717-564-0100 Fax: + 1-717-986-7575

Venezuela – Caracas Phone: + 58-2-986-7774 Fax: + 58-2-986-9739

For Latin/South American Countries not shown Phone: +54-11-4733-2015 Fax: +54-11-4733-2083

Asia/Pacific

Australia - Sydney Phone: + 61-2-9840-8200 Fax: + 61-2-9899-5649

India – Bangalore Phone: + 91-80-841-0200 Fax: + 91-80-841-0210

Indonesia - Jakarta Phone: + 6221-526-7852 Fax: + 6221-526-7856

Japan – Tokyo Phone: + 81-44-844-8111 Fax: + 81-44-812-3207

Korea - Seoul

Phone: + 82-2-3274-0535 Fax: + 82-2-3274-0524/0531 Malaysia - Selangor Phone: + 60-3-7053055 Fax: + 60-3-7053066

New Zealand – Auckland Phone: + 64-9-634-4580 Fax: 64-9-634-4586

People's Republic of China

Hong Kong Phone: + 852-2735-1628 Fax: + 852-2735-0243

Shanghai

Phone: + 86-21-6485-0602 Fax: + 86-21-6485-0728

Phone: + 86-765-7751368 Fax: + 86-765-7752823

Philippines - Makati City Phone: + 632-867-8641 Fax: + 632-867-8661

Singapore – Singapore Phone: + 65-482-0311 Fax: + 65-482-1012

Taiwan - Taipei

Phone: + 886-2-2325-0391 Fax: + 886-2-2325-0398

Thailand - Bangkok Phone: + 66-2-955-0500 Fax: + 66-2-955-0505

Vietnam – Ho Chi Minh City Phone: + 84-8-8232-546/7 Fax: + 84-8-8221-443

Europe/Middle East/Africa

Austria - Vienna

Phone: + 0222-277-97-0 Fax: + 0222-277-97-333 Inside:

Outside: Phone: + 43-1-277-97-0

Fax: + 43-1-277-97-333

Belgium – Kessel - Lo Phone: + 32-16-35-23-00 Fax: + 32-16-35-23-52

Bulgaria - Sofia

Phone: + 359-2-971-2152 Fax: + 359-2-971-2153

Czech Republic – Kurim Phone: + 420-5-41-162-111 Fax: + 420-5-41-162-223

Denmark - Viby Phone: + 45-86-295-055 Fax: + 45-86-295-133

Egypt – Cairo Phone: + 202-417-76-47 Fax: + 202-419-23-34

Estonia - Haabneeme Phone: + 372-6205-900 Fax: + 372-6205-980

Finland – Helsinki Phone: + 358-9-512-34210 Fax: + 358-9-512-34250

France – Cergy - Pontoise Phone: + 33-1-3420-8888 Fax: + 33-1-3420-8600

Germany – Bensheim Phone: + 49-6251-133-0 Fax: + 49-6251-133-600

Germany - Neunkirchen - HTS Div. Phone: + 49-2247-305-0

Fax: + 49-2247-305-122 Great Britain - London Phone: + 44-208-954-2356 Fax: + 44-208-954-6234

Greece - Athens Phone: + 30-1-9370-396/7 Fax: + 30-1-9370-655

Holland – 's-Hertogenbosch Phone: + 31-73-624-62-46 Fax: + 31-73-621-23-65

Hungary – Budapest Phone: + 36-1-350-8633 Fax: + 36-1-350-8634

Ireland - Dublin Phone: + 353-1-820-3000 Fax: + 353-1-820-9790

Israel – Tel Aviv Phone: + 972-3-649-1482 Fax: + 972-3-648-4041

Italy - Torino Phone: + 39-011-4012-111 Fax: + 39-011-4031-116

Lithuania – Vilnius Phone: + 370-2-231-402 Fax: + 370-2-231-403 Norway - Nesbru Phone: + 47-66-77-8899 Fax: + 47-66-77-8855

Poland - Warsaw Phone: + 48-22-611-59-30 Fax: + 48-22-672-47-88

Portugal – Lisbon Phone: + 351-1-387-70-16 Fax: + 351-1-387-71-72

Romania - Bucharest Phone: + 40-1-311-3479/3596 Fax: + 40-1-312-0574

Russia - Moscow Phone: + 7-095-926-5506/07/08/09 Fax: + 7-095-926-5505

Russia - St. Petersburg Phone: + 7-812-325-30-83 Fax: + 7-812-325-32-88

Slovakia – Banska Bystrica Phone: + 421-88-415-20-11/12 Fax: + 421-88-415-20-13

Slovenia – Ljubljana Phone: + 386-61-161-3270 Fax: + 386-61-161-3240

South Africa - Midrand Phone: + 27-11-314-10-89 Fax: + 27-11-314-19-10

Spain - Barcelona Phone: + 34-93-291-0330 Fax: + 34-93-201-7879 **Sweden** – Upplands Vasby Phone: + 46-8-50-72-50-00 Fax: + 46-8-50-72-50-01

Switzerland - Steinach Phone: + 41-71-447-0447 Fax: + 41-71-447-0444

Turkey - Istanbul Phone: + 90-212-281-8181/2/3 Fax: + 90-212-281-8184

Ukraine - Kiev Phone: + 38-044-246-5501 Fax: + 38-044-246-5501

For Middle East/African Countries not shown Phone: +33-1-34-20-83-83 Fax: +33-1-34-20-86-09