tyco Electronics

AMP

Machine Applied Terminations, Open Barrel Terminals

(Rings, Spades, Pins, Receptacles, Splices, Tabs)

Catalog 82227 Revised 8-04

Table of Contents

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Introduction

Operating Temperatures of Materials and Finishes

Brass, phosphor bronze and steel are the normal materials for Tyco Electronics terminals. Various finishes are available.

Brass

Plain

Allowable Connection Temperature: 110°C.

Plain brass is used frequently, where applications have optional environmental conditions.

Tin Plated

Allowable Connection Temperature: 110°C.

Tin plating of receptacle and tab creates satisfactory operation at higher temperatures, and in addition protects the connection against corrosion.

Silver Plated

Allowable Connection Temperature: 130°C

Silver plated connections allow the highest operating temperature for brass and a higher current carrying capacity than plain and tin plated brass.

Phosphor Bronze

Plain

Allowable Connection Temperature: 110°C

Phosphor bronze is used in applications where brass would normally be corroded, for example the various freezing mixtures and ammonias.

Tin Plated

Allowable Connection Temperature: 110°C

Tin plated phosphor bronze for higher temperatures; additional corrosion protection over plain phosphor bronze.

Silver Plated

Allowable Connection Temperature: 130°C

Silver plated connections allow the highest operating temperature for phosphor bronze and higher current carrying capacity than plain and tin plated phosphor bronze.

Steel

Nickel plated

Allowable Connection Temperature: 250°C

This combination allows a reliable connection at high temperatures, for example in stoves, cooking appliances, etc. To assure optimum performance, these nickel-plated receptacles are used with compatible lead wires and wires and tabs that can be welded to heating units.

Many part numbers are recognized under the Component Program of Underwriters Laboratories, Inc., File No. E13288 and File No. LR 7189. Certified by Canadian Standards Association. Contact Tyco Electronics customer service for a specific part number inquiry.

Need more information?

Call Technical Support at the numbers listed below.

Technical Support is staffed with specialists well versed in all Tyco Electronics products. They can provide you with:

- Technical support
- Catalogs
- Technical Documents
- Product Samples
- Tyco Electronics Authorized Distributor Locations

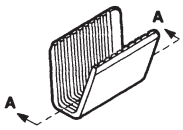
Instant Information by the Tyco Electronics FAX Service 24 hours a day…

Call Technical Support and choose the Tyco Electronics FAX service option at the voice prompt. The information you request will be faxed to you within a few minutes. From the Tyco Electronics FAX service you get:

- **Drawings (the drawing number in this case is the part number)**
- **Instruction Sheets**
- **Product Specifications**
- **Latest Revisions of Catalog Pages. (You will be prompted to enter any part number on the old catalog page. The Tyco Electronics FAX service will then fax you the latest catalog page(s) covering this part.**
- **The list of your closest distributors**
- **Instructions on how to use the Tyco Electronics FAX service**

Crimp Configuration Specifications

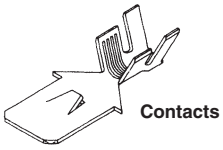
AMPLIVAR

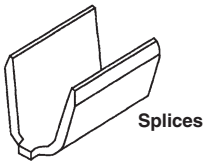


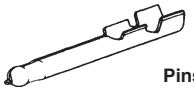
The basic design of the AMPLIVAR Terminals encompasses two main areas, the burrs at the top of the serrations and the serrations themselves. During the crimping operation the burrs pierce the insulation of the magnet wire and extrude the bare conductors into the serrations—creating intimate metal contact.

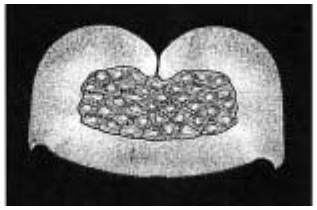
In a one-step operation the magnet wire is automatically multiple ring stripped of its insulation as it is forced into the serrations during the precisely controlled crimp. The resulting termination produces a high tensile strength, air sealed connection that is as resistant to corrosion as the insulated conductor.

Standard "F"





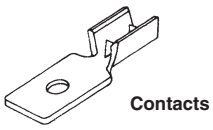


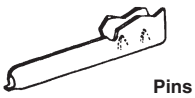


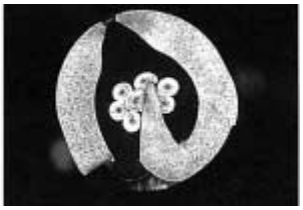
In the standard "F" crimp design, the open barrel consists of two wings that are wrapped around the conductor strands and butted together in a tight seam. Applied with Match-Mated tooling, the "F" Crimp offers the optimum combination of mechanical strength and electrical conductivity. This method of termination also assures maximum resistance to vibration and corrosion.

The insulation support feature was developed by Tyco Electronics for applications where vibration tends to be excessive. This design offers the same fine quality characteristics found in the standard line plus firm, fully circumferencial support to the wire insulation.

Insulation Piercing







The insulation piercing line enjoys a durable popularity with electrical circuitry manufacturers because of the simplicity of attachment. The barrel contains two perpendicular lances that drive through the wire insulation to make contact with the conductor within.

Tensile characteristics vary, depending on the type of wire insulation. Because the barrel wraps around the insulation, it deters insulation fraying. The insulation piercing line is a low cost, high speed attachment suitable for many requirements.

In general, insulation piercing terminals can be used where high currents, intensive vibration and mechanical loads are not critical factors on both stranded and tinsel wire.

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 Tyco Electronics devices.

For example, with stud #5 (.125 Diameter), use Tyco Electronics device listed for #5 stud (.129 Hole Diameter).

Terminal stud hole sizes may easily be checked by fitting sample terminal to black circle.

Stud Size		Stud Dia.	Minimum Terminal Hole Diameter	
U.S. Cust.	Metric			
#0		.060		.064
#1		.073		.077
#2	M2	.086		.090
#3		.099		.103
#4		.112		.116
#5	M3	.125		.129
#6	M3.5	.138		.142
#8	M4	.164		.168
#10		.190		.194
#12		.216		.220
#14		.242		.247
1/4″	M6	.250		.260
5/16″	M8	.312		.323
3/8″		.375		.385
7/16″		.437		.448
1/2″	M12	.500		.510

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Terminal Stud Hole Size (Continued)

Stud Size		Stud Dia.	Minimum Terminal Hole Diameter
U.S. Cust.	Metric		
5/8″	M16	**.625**	**.651**
3/4″		**.750**	**.776**
7/8″	M22	**.875**	**.901**
1″		**1.000**	**1.026**
1-1/8″		**1.125**	**1.151**
1-1/4″		**1.250**	**1.276**

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Description of UL 486A Test Procedures and Requirements for Terminals

Wire Size Range

AWG 22 to 2

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

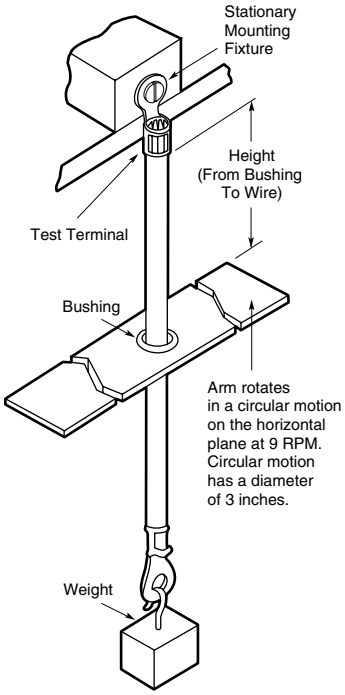
Note: Testing conducted on non-plated copper wire with UL approved insulation.

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

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

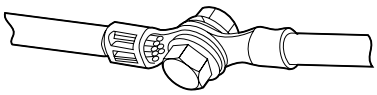
Stability:
A test sample is considered to have attained a stable temperature when three readings taken at not less than 10 minute intervals show no more than a 2°C [3.6°F] variation between any two readings.



Secureness Test Requirements

Wire Size AWG	Bushing Dia.	Height	Weight (lbs.)
18-16	1/4	10 1/4	2
14	3/8	11	3
12-10	3/8	11	5
8	3/8	11	8
6	1/2	11 3/4	18
4	1/2	11 3/4	30
2	9/16	12 1/2	30

Note: Test Duration = 30 Minutes



Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

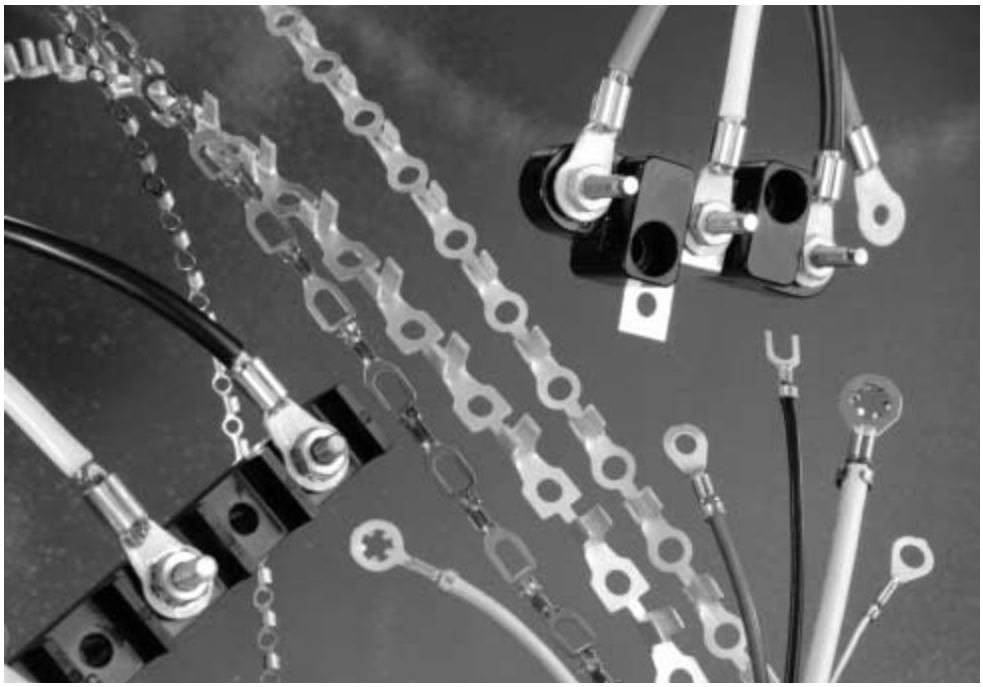
Introduction

Product Facts

- Reproducible crimping results
- High quality
- Reduced manufacturing costs
- No soldering required
- Proven crimp technology
- Large range of product configurations
- Excellent mechanical and electrical performance
- Recognized under the Component Recognition Program of Underwriters Laboratories Inc., File No. E13288, unless otherwise specified
- Certified by Canadian Standards Association, File No. LR 7189, unless otherwise specified

Applications

- Appliances
- Machine tools
- Automotive



Tyco Electronics open barrel rings and spades are manufactured in strip form and supplied on reels for Automachine termination. In the standard “F” crimp configuration, the open barrel consists of two “U” shaped wings that are crimped around the conductor strands and butted together into a tight seam. The crimping action of the Tyco Electronics application equipment is a precise operation that creates the proper crimp with each cycle of the machine. This ensures uniformity of all the crimp terminations.

The insulation support was a Tyco Electronics developed feature for applications where vibration tends to be excessive. The insulation support consists of two additional “U” shaped wings which are wrapped around the wire insulation. This prevents harmful flexing of the wire at the termination point where the wire is rigidly crimped to the wire barrel and deters fraying of the insulation. Because it increases the already significant tensile strength of the conductor crimp, the vibration resistance is great enough for more severe applications.

Tyco Electronics Open Barrel Rings and Spades are designed for wire sizes ranging from 28 AWG to 6 AWG. They come in a variety of stud sizes. These terminals are made from a variety of base materials and platings depending on your application (i.e. ambient temperature, humidity, and chemical exposure).

To help you choose the Tyco Electronics product best suited to your requirements, the following information about each terminal is shown in tabular form: wire size range, insulation diameter, stud size, stock thickness, type of base material, plating and physical dimensions.

Tyco Electronics has standardized the product listed in this catalog section. If you do not see a terminal to fit your application, please contact your Tyco Electronics Sales Engineer.

Open Barrel Insulation Piercing Terminals

The insulation piercing line of terminals enjoys popularity because of the simplicity of termination. The barrel contains two perpendicular lances that are driven through the wire insulation to make contact with the conductor. Consequently, wire stripping is eliminated and a one step circuitry termination is accomplished.

Tensile characteristics vary, depending on the type of wire insulation. Since the barrel wraps around the insulation, it deters insulation fraying. The insulation piercing line is a low-cost, high-speed termination, suitable for many applications.

In general, insulation piercing terminals can be used on both stranded and tinsel wire, where high currents, intense vibration and mechanical loads are not critical factors.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

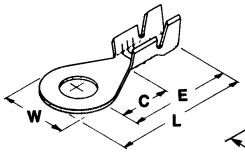
Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

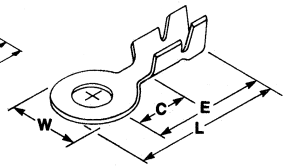
USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

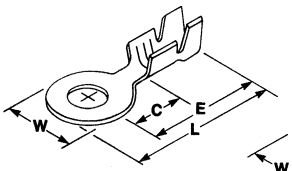
Ring Tongue Terminals, Insulation Support



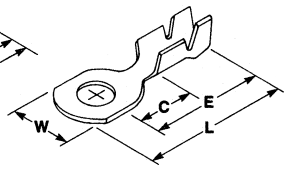
A
With Serrations



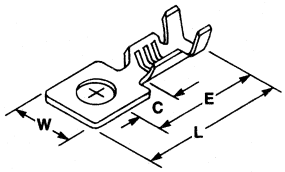
B
Circular Without Serrations



C
Circular With Serrations



D
Flat Sided



E
Square Tongue

Type	Wire Range AWG	Wire Range mm²	Insul. Size	Stud Size/ Dia.	Stock Thk.	Material and Finish	Dimensions W	Dimensions L	Dimensions E	Dimensions C	Part Number
E	26-24	0.12–0.6	**.035–.065** 0.89–1.65	**.065** 1.65	**.012** 0.31	Brass	**.156** 3.96	**.375** 9.53	**.295** 7.49	**.109** 2.77	61652-1
				.094 2.39	**.012** 0.31	Brass	**.156** 3.96	**.375** 9.53	**.295** 7.49	**.109** 2.77	61653-1
B	26-22	0.12–0.4	**.040–.060** 1.02–1.52	**.100** 2.54	**.014** 0.36	Tin Plated Brass	**.190** 4.83	**.425** 10.80	**.330** 8.38	**.130** 3.30	60007-2
				4	**.014** 0.36	Tin Plated Brass	**.190** 4.83	**.425** 10.80	**.330** 8.38	**.130** 3.30	42547-2
			.070–.110 1.78–2.79	**.100** 2.54	**.016** 0.41	Brass	**.190** 4.83	**.455** 11.56	**.365** 9.27	**.130** 3.30	61312-1
				.100 2.54	**.016** 0.41	Nickel Plated Brass	**.190** 4.83	**.456** 11.58	**.365** 9.27	**.130** 3.30	61312-2
D	26-20	0.12–0.6	**.048–.078** 1.22–1.98	**.142** 3.61	**.020** 0.51	Tin Plated Brass	**.250** 6.35	**.565** 14.35	**.444** 11.28	**.237** 6.02	60123-2
A	24-20	0.2–0.6	**.080–.100** 2.03–2.54	4	**.020** 0.51	Tin Plated Brass	**.290** 7.37	**.630** 16.00	**.485** 12.32	**.250** 6.35	41579
				6	**.020** 0.51	Tin Plated Brass	**.290** 7.37	**.630** 16.00	**.485** 12.32	**.250** 6.35	41580
				8	**.020** 0.51	Tin Plated Brass	**.290** 7.37	**.630** 16.00	**.485** 12.32	**.250** 6.35	41581
				10	**.020** 0.51	Tin Plated Brass	**.290** 7.37	**.630** 16.00	**.485** 12.32	**.250** 6.35	41582
			.048–.078 1.22–1.98	6	**.014** 0.36	Tin Plated Brass	**.250** 6.35	**.590** 14.99	**.440** 11.18	**.220** 5.59	60553-1
				10	**.014** 0.36	Tin Plated Brass	**.300** 7.62	**.590** 14.99	**.440** 11.18	**.220** 5.59	60555-1
				8	**.020** 0.51	Tin Plated Brass	**.312** 7.93	**.770** 19.56	**.615** 15.62	**.405** 10.29	42508-2
				10	**.020** 0.51	Tin Plated Brass	**.312** 7.93	**.770** 19.56	**.615** 15.62	**.405** 10.29	42164-2
				12	**.020** 0.51	Tin Plated Brass	**.312** 7.93	**.770** 19.56	**.615** 15.62	**.405** 10.29	63721-1
B	22-20	0.3–0.6	**.070–.120** 1.78–3.05	**.126** 3.20	**.020** 0.51	Tin Plated Brass	**.210** 5.33	**.460** 11.68	**.355** 9.02	**.135** 3.43	62638-1
C	22-18	0.3–0.9	**.050–.110** 1.27–2.79	**.120** 3.05	**.020** 0.51	Brass	**.210** 5.33	**.532** 13.51	**.427** 10.85	**.135** 3.43	109453-1
				6	**.020** 0.51	Brass	**.210** 5.33	**.532** 13.51	**.427** 10.85	**.135** 3.43	109453-3
			.100–.150 2.54–3.81	**.120** 3.05	**.020** 0.51	Brass	**.210** 5.33	**.532** 13.51	**.427** 10.85	**.135** 3.43	109454-1
A	22-18	0.3–0.9	**.060–.110** 1.52–2.79	6	**.020** 0.51	Tin Plated Brass	**.296** 7.52	**.642** 16.31	**.494** 12.55	**.234** 5.94	40697
				8	**.020** 0.51	Tin Plated Brass	**.296** 7.52	**.642** 16.31	**.494** 12.55	**.234** 5.94	40698
			.070–.100 1.78–2.54	5/16″	**.030** 0.76	Tin Plated Brass	**.468** 11.89	**.982** 24.94	**.748** 19.00	**.437** 11.10	41013
				1/4″	**.030** 0.76	Tin Plated Brass	**.468** 11.89	**.982** 24.94	**.748** 19.00	**.437** 11.10	41711
			.080–.110 2.03–2.79	4	**.020** 0.51	Tin Plated Brass	**.296** 7.52	**.662** 16.81	**.514** 13.06	**.234** 5.04	63797-1
				6	**.020** 0.51	Tin Plated Brass	**.296** 7.52	**.662** 16.81	**.514** 13.06	**.234** 5.04	42037
				8	**.020** 0.51	Brass	**.296** 7.52	**.662** 16.81	**.514** 13.06	**.234** 5.04	42036-1
				8	**.020** 0.51	Tin Plated Brass	**.296** 7.52	**.662** 16.81	**.514** 13.06	**.234** 5.04	42037-1
				10	**.020** 0.51	Brass	**.296** 7.52	**.662** 16.81	**.514** 13.06	**.234** 5.04	42036-2
				10	**.020** 0.51	Tin Plated Brass	**.296** 7.52	**.662** 16.81	**.514** 13.06	**.234** 5.04	42037-2
			.120–.170 3.05–4.32	8	**.020** 0.51	Nickel Plated Steel	**.296** 7.52	**.637** 16.18	**.494** 12.55	**.234** 5.04	485003-1

Note: The part numbers listed are for use with existing machine models. For AMP-O-LECTRIC Model G applicators part numbers, call the Technical Support Center at 1-800-522-6752.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

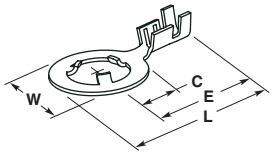
Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

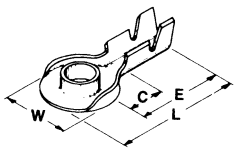
USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

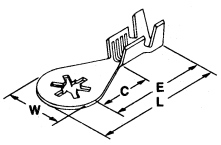
Ring Tongue Terminals, Insulation Support (Continued)



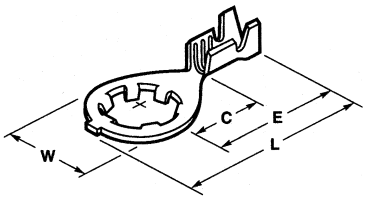
D
Stud Retaining



E
Extruded



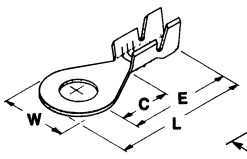
F
Anti-Rotational



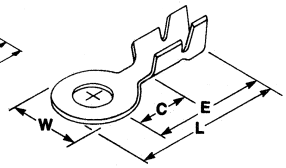
G
Stud Retaining

Type	Wire Range AWG	Wire Range mm²	Insul. Size	Stud Size/ Dia.	Stock Thk.	Material and Finish	Dimensions W	Dimensions L	Dimensions E	Dimensions C	Part Number
D	24-20	0.2–0.6	**.045–.080** 1.14–2.03	10	**.014** 0.36	Tin Plated Brass	**.375** 9.53	**.634** 16.11	**.447** 11.35	**.250** 6.35	61705-1
E	20-18	0.5–0.9	**.075–.110** 1.91–2.79	10	**.020** 0.51	Tin Plated Brass	**.335** 8.51	**.650** 16.51	**.468** 11.89	**.205** 5.21	40894
F	22-18	0.3–0.9	**.080–.120** 2.03–3.05	8	**.025** 0.69	Tin Plated Steel	**.370** 9.40	**.772** 19.61	**.587** 14.91	**.282** 7.16	640204-1
				8	**.025** 0.69	Nickel Plated Steel	**.370** 9.40	**.772** 19.61	**.587** 14.91	**.282** 7.16	640204-2
				10	**.025** 0.69	Tin Plated Steel	**.370** 9.40	**.772** 19.61	**.587** 14.91	**.282** 7.16	640271-1
G	22-16	0.3–1.4	**.100–.140** 2.54–3.56	6	**.025** 0.64	Tin Plated Brass	**.370** 9.40	**.772** 19.61	**.587** 14.91	**.282** 7.16	61588-1
				.177 4.50	**.025** 0.64	Brass	**.370** 9.40	**.772** 19.61	**.587** 14.91	**.282** 7.16	61436-1
				.177 4.50	**.025** 0.64	Tin Plated Brass	**.370** 9.40	**.772** 19.61	**.587** 14.91	**.282** 7.16	61436-2
				.177 4.50	**.025** 0.64	Tin Plated Steel	**.370** 9.40	**.772** 19.61	**.587** 14.91	**.282** 7.16	61556-1
				.261 6.63	**.025** 0.64	Tin Plated Brass	**.455** 11.56	**.805** 20.45	**.587** 14.91	**.282** 7.16	61283-1
			.105 2.67 Max.	**.177** 4.50	**.025** 0.64	Brass	**.370** 9.40	**.772** 19.61	**.587** 14.91	**.282** 7.16	350509-1

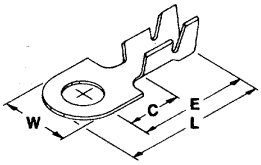
Note: The part numbers listed are for use with existing machine models. For AMP-O-LECTRIC Model G applicators part numbers, call the Technical Support Center at 1-800-522-6752.



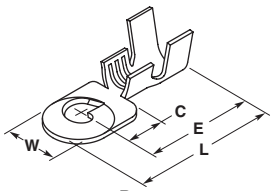
A
With Serrations



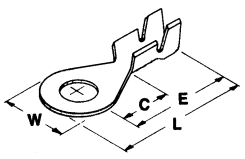
B
Circular Without Serrations



C
"D" Shape



D
Grounding



E
Without Serrations

Type	Wire Range AWG	Wire Range mm²	Insul. Size	Stud Size/ Dia.	Stock Thk.	Material and Finish	Dimensions W	Dimensions L	Dimensions E	Dimensions C	Part Number
D	20-16	0.5–1.4	**.075–.120** 1.91–3.05	6 x 20 Screw	**.020** 0.51	Stainless Steel	**.270** 6.86	**.590** 14.99	**.468** 11.89	**.218** 5.54	61904-1
C	20-16	0.5–1.4	**.075–.120** 1.91–3.05	8	**.020** 0.51	Tin Plated Brass	**.270** 6.86	**.603** 15.32	**.468** 11.89	**.218** 5.54	40888
A	20-16	0.5–1.4	**.100–.140** 2.54–3.56	10	**.030** 0.76	Tin Plated Brass	**.342** 8.67	**.784** 19.91	**.613** 15.57	**.312** 7.93	40955
B	20-16	0.5–1.4	**.075–.110** 1.91–2.79	**.099** 2.52	**.025** 0.64	Brass	**.246** 6.25	**.460** 11.68	**.352** 8.94	**.165** 4.19	41406
A	20-16	0.5–1.4	**.100–.140** 2.54–3.56	8	**.025** 0.64	Tin Plated Brass	**.342** 8.69	**.784** 19.91	**.613** 15.57	**.312** 7.93	41456
E	20-16	0.5–1.4	**.080–.120** 2.03–3.05	10	**.025** 0.64	Tin Plated Brass	**.342** 8.69	**.784** 19.91	**.613** 15.57	**.312** 7.93	160102-2
			.080–.120 2.03–3.05	12	**.025** 0.64	Tin Plated Brass	**.342** 8.69	**.784** 19.91	**.613** 15.57	**.312** 7.93	160108-2
B	20-16	0.5–1.4	**.090–.120** 2.29–3.05	6	**.025** 0.64	Brass	**.230** 5.59	**.460** 11.68	**.352** 8.94	**.165** 4.19	61764-1
			.100–.135 2.54–3.43	4	**.025** 0.64	Tin Plated Brass	**.230** 5.59	**.460** 11.68	**.352** 8.94	**.165** 4.19	61386-1
			.100–.135 2.54–3.43	**.156** 3.96	**.025** 0.64	Brass	**.246** 6.25	**.467** 11.86	**.352** 8.94	**.165** 4.19	41471
			.100–.135 2.54–3.43	**.156** 3.96	**.025** 0.64	Tin Plated Brass	**.246** 6.25	**.467** 11.86	**.352** 8.94	**.165** 4.19	41472

Note: The part numbers listed are for use with existing machine models. For AMP-O-LECTRIC Model G applicators part numbers, call the Technical Support Center at 1-800-522-6752.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

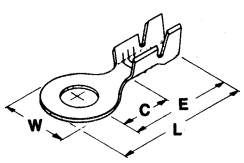
Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

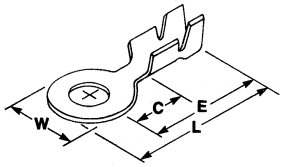
USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

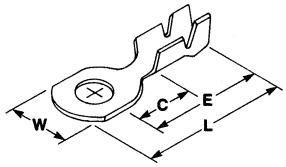
Ring Tongue Terminals, Insulation Support (Continued)



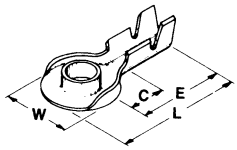
A
With Serrations



B
Circular Without Serrations



C
Flat Sided



D
Extruded

Type	Wire Range AWG	Wire Range mm²	Insul. Size	Stud Size/ Dia.	Stock Thk.	Material and Finish	Dimensions W	Dimensions L	Dimensions E	Dimensions C	Part Number
C	20-16	0.5–1.4	**.075–.110** 1.91–2.79	**.099** 2.52	**.025** 0.64	Brass	**.204** 5.18	**.460** 11.68	**.352** 8.94	**.165** 4.19	42065
B	20-16	0.5–1.4	**.075–.110** 1.91–2.79	**.132** 3.35	**.025** 0.64	Brass	**.246** 6.25	**.460** 11.68	**.352** 8.94	**.165** 4.19	42721-1
C	20-16	0.5–1.4	**.075–.110** 1.91–2.79	**.099** 2.52	**.025** 0.64	Tin Plated Brass	**.185** 4.70	**.460** 11.68	**.352** 8.94	**.165** 4.19	63514-1
A	20-16	0.5–1.4	**.100–.140** 2.54–3.56	10	**.030** 0.76	Br. Tin Plated Brass	**.342** 8.69	**.784** 19.91	**.612** 15.54	**.312** 7.92	640008-1
C	20-16	0.5–1.4	**.080–.120** 2.03–3.05	2	**.020** 0.51	Nickel Plated Steel	**.256** 6.50	**.935** 23.75	**.748** 19.00	**.437** 11.10	640082-1
A	20-16	0.5–1.4	**.080–.120** 2.03–3.05	1/4″	**.020** 0.51	Brass	**.468** 11.89	**.982** 24.94	**.748** 19.00	**.437** 11.10	60700-3
			.080–.120 2.03–3.05	1/4″	**.020** 0.51	Tin Plated Brass	**.468** 11.89	**.982** 24.94	**.748** 19.00	**.437** 11.10	60700-2
			.100–.140 2.54–3.56	10	**.020** 0.51	Brass	**.342** 8.69	**.764** 19.41	**.593** 15.06	**.305** 7.75	60394-1
			.110–.140 2.79–3.56	6	**.030** 0.76	Tin Plated Brass	**.342** 8.69	**.764** 19.41	**.593** 15.06	**.305** 7.75	42933-2
A	18-14	0.8–2.0	**.100–.140** 2.54–3.56	6	**.030** 0.76	Tin Plated Brass	**.342** 8.69	**.784** 19.91	**.613** 15.57	**.305** 7.75	40723
			.100–.140 2.54–3.56	8	**.030** 0.76	Brass	**.342** 8.69	**.784** 19.91	**.613** 15.57	**.305** 7.75	40660
B	18-14	0.8–2.0	**.100–.140** 2.54–3.56	8	**.030** 0.76	Tin Plated Brass	**.342** 8.69	**.784** 19.91	**.613** 15.57	**.305** 7.75	40724
			.100–.140 2.54–3.56	12	**.030** 0.76	Tin Plated Brass	**.342** 8.69	**.784** 19.91	**.613** 15.57	**.305** 7.75	63872-1
A	18-14	0.8–2.0	**.100–.140** 2.54–3.56	10	**.030** 0.76	Brass	**.342** 8.69	**.784** 19.91	**.613** 15.57	**.305** 7.75	40661
			.100–.140 2.54–3.56	10	**.030** 0.76	Tin Plated Brass	**.342** 8.69	**.784** 19.91	**.613** 15.57	**.305** 7.75	40725
			.120–.170 3.05–4.32	6	**.020** 0.51	Brass	**.296** 7.52	**.640** 16.26	**.494** 12.55	**.234** 5.94	41558*
			.120–.170 3.05–4.32	6	**.020** 0.51	Pre-Ni Plated Steel	**.296** 7.52	**.640** 16.26	**.494** 12.55	**.234** 5.94	41558-1*
D	18-14	0.8–2.0	**.120–.170** 3.05–4.32	**.194** 4.93	**.020** 0.51	Brass	**.335** 8.51	**.650** 16.51	**.468** 11.89	**.205** 5.21	60546-1

*Not recommended for 2 wires.
Note: The part numbers listed are for use with existing machine models. For AMP-O-LECTRIC Model G applicators part numbers, call the Technical Support Center at 1-800-522-6752.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

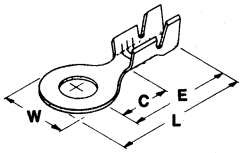
Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Ring Tongue Terminals, Insulation Support (Continued)



A
With Serrations

Type	Wire Range AWG	Wire Range mm²	Insul. Size	Stud Size/ Dia.	Stock Thk.	Material and Finish	Dimensions W	Dimensions L	Dimensions E	Dimensions C	Part Number
A	18-14	0.8–2.0	**.105–.170** 2.67–4.32	6	**.020** 0.51	Brass	**.296** 7.52	**.677** 17.20	**.529** 13.44	**.234** 5.94	109452-1
				6	**.020** 0.51	Pre-Tin Plated Brass	**.296** 7.52	**.677** 17.20	**.529** 13.44	**.234** 5.94	109452-2
				8	**.020** 0.51	Brass	**.296** 7.52	**.677** 17.20	**.529** 13.44	**.234** 5.94	109452-3
				8	**.020** 0.51	Pre-Tin Plated Brass	**.296** 7.52	**.677** 17.20	**.529** 13.44	**.234** 5.94	109452-4
				10	**.020** 0.51	Brass	**.296** 7.52	**.677** 17.20	**.529** 13.44	**.234** 5.94	109452-5
				10	**.020** 0.51	Pre-Tin Plated Brass	**.296** 7.52	**.677** 17.20	**.529** 13.44	**.234** 5.94	109452-6
			.120–.170 3.05–4.32	2	**.020** 0.51	Tin Plated Brass	**.296** 7.52	**.640** 16.26	**.494** 12.55	**.234** 5.94	63750-1
				6	**.020** 0.51	Tin Plated Brass	**.296** 7.52	**.640** 16.26	**.494** 12.55	**.234** 5.94	41330*
				8	**.020** 0.51	Brass	**.296** 7.52	**.640** 16.26	**.494** 12.55	**.234** 5.94	41559*
				8	**.020** 0.51	Tin Plated Brass	**.296** 7.52	**.640** 16.26	**.494** 12.55	**.234** 5.94	63678-2 †
				8	**.020** 0.51	Tin Plated Brass	**.296** 7.52	**.640** 16.26	**.494** 12.55	**.234** 5.94	41332*
				8	**.020** 0.51	Tin Plated Phos. Brz.	**.296** 7.52	**.640** 16.26	**.494** 12.55	**.234** 5.94	1217160-1
				10	**.020** 0.51	Brass	**.296** 7.52	**.640** 16.26	**.494** 12.55	**.234** 5.94	41560*
				10	**.020** 0.51	Pre-Tin Plated Brass	**.296** 7.52	**.640** 16.26	**.494** 12.55	**.234** 5.94	63628-1 †
				10	**.020** 0.51	Tin Plated Brass	**.296** 7.52	**.640** 16.26	**.494** 12.55	**.234** 5.94	41333*
			.085–.150 2.16–3.81	1/4″	**.025** 0.51	Tin Plated Brass	**.473** 12.01	**1.016** 25.81	**.780** 19.81	**.469** 11.91	626034-2
			.100–.140 2.54–3.56	8	**.025** 0.64	Tin Plated Brass	**.342** 8.69	**.782** 19.89	**.612** 15.55	**.305** 7.75	60024-2
				10	**.025** 0.64	Tin Plated Brass	**.342** 8.69	**.783** 19.89	**.612** 15.55	**.305** 7.75	60433-2
				1/4″	**.025** 0.64	Tin Plated Brass	**.342** 8.69	**.783** 19.89	**.612** 15.55	**.305** 7.75	60625-1
			.120–.160 3.05–4.07	10	**.025** 0.64	Brass	**.342** 8.69	**.789** 20.04	**.618** 15.70	**.305** 7.75	60744-1
				10	**.025** 0.64	Tin Plated Brass	**.342** 8.69	**.789** 20.04	**.618** 15.70	**.305** 7.75	60744-2
			.100–.140 2.54–3.56	6	**.018** 0.46	Brass	**.295** 7.49	**.734** 18.64	**.586** 14.88	**.282** 7.16	60770-1
				6	**.018** 0.46	Tin Plated Brass	**.295** 7.49	**.734** 18.64	**.586** 14.88	**.282** 7.16	60770-2
				8	**.018** 0.46	Brass	**.295** 7.49	**.734** 18.64	**.586** 14.88	**.282** 7.16	60771-1
				8	**.018** 0.46	Tin Plated Brass	**.295** 7.49	**.734** 18.64	**.586** 14.88	**.282** 7.16	60771-2
				10	**.018** 0.46	Brass	**.295** 7.49	**.734** 18.64	**.586** 14.88	**.282** 7.16	60772-1
				10	**.018** 0.46	Tin Plated Brass	**.295** 7.49	**.734** 18.64	**.586** 14.88	**.282** 7.16	60772-2

* Not recommended for 2 wire applications.
† Recommended for 2 wire applications.
Note: The part numbers listed are for use with existing machine models. For AMP-O-LECTRIC Model G applicators part numbers, call the Technical Support Center at 1-800-522-6752.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

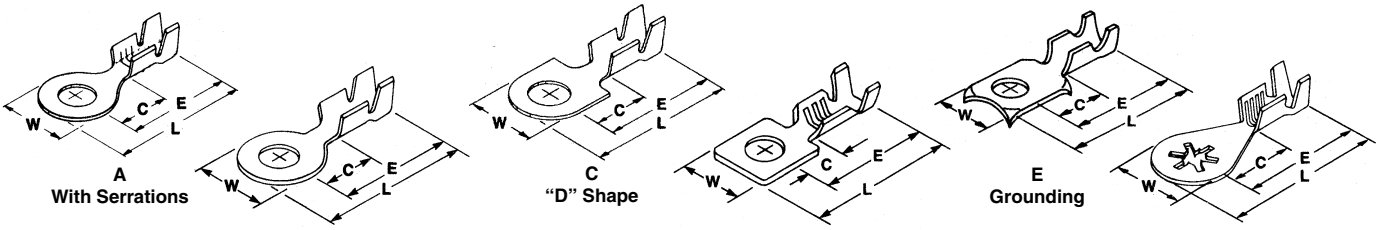
Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Ring Tongue Terminals, Insulation Support (Continued)



A
With Serrations

B
Circular Without Serrations

C
"D" Shape

D
Square Tongue

E
Grounding

F
Anti-Rotational

Type	Wire Range AWG	Wire Range mm²	Insul. Size	Stud Size/ Dia.	Stock Thk.	Material and Finish	Dimensions W	Dimensions L	Dimensions E	Dimensions C	Part Number
A	18-14	0.8–2.0	**.100–.140** 2.54–3.56	10	**.018** 0.46	Tin Plated Brass	**.295** 7.49	**.734** 18.64	**.586** 14.88	**.282** 7.16	60772-3
			.090–.145 2.29–3.68	1/2″	**.025** 0.64	Pre-Tin Plated Steel	**.687** 17.45	**1.245** 31.62	**.908** 23.06	**.500** 12.70	61777-1
			.140–.190 3.56–4.83	10	**.030** 0.76	Tin Plated Brass	**.342** 8.69	**.784** 19.91	**.608** 15.44	**.305** 7.75	61397-1
			.080–.150 2.03–3.81	1/4″	**.030** 0.76	Tin Plated Brass	**.490** 12.45	**1.050** 26.68	**.810** 20.57	**.460** 11.68	61867-2
E	18-14	0.8–2.0	**.090–.140** 2.29–3.56	5/16″	**.030** 0.76	Tin Plated Steel	**.592** 15.04	**1.150** 29.21	**.930** 23.62	**.615** 15.62	61359-1
F	18-14	0.8–2.0	**.105–.145** 2.67–3.68	8	**.024** 0.61	Stainless Steel	**.370** 9.40	**.772** 19.61	**.587** 14.91	**.282** 7.16	640051-1*
				5	**.025** 0.64	Tin Plated Steel	**.370** 9.40	**.772** 19.61	**.587** 14.91	**.282** 7.16	63640-1
				6	**.025** 0.64	Tin Plated Steel	**.370** 9.40	**.772** 19.61	**.587** 14.91	**.282** 7.16	61793-1
				8	**.025** 0.64	Tin Plated Steel	**.370** 9.40	**.772** 19.61	**.587** 14.91	**.282** 7.16	61794-1
				8	**.025** 0.64	Brass	**.370** 9.40	**.772** 19.61	**.587** 14.91	**.282** 7.16	61794-4
			.105–.145 2.67–3.68 or (2) **.110** 2.79	10	**.025** 0.64	Tin Plated Steel	**.445** 11.30	**.772** 19.61	**.587** 14.91	**.282** 7.16	63482-1
			.105–.145 2.67–3.68	10	**.024** 0.61	Stainless Steel	**.370** 9.40	**.772** 19.61	**.587** 14.91	**.282** 7.16	640052-1*
				10	**.025** 0.64	Tin Plated Steel	**.370** 9.40	**.772** 19.61	**.587** 14.91	**.282** 7.16	350436-2
				10	**.025** 0.64	Tin Plated Steel	**.445** 11.30	**.772** 19.61	**.587** 14.91	**.282** 7.16	61795-1
				10	**.025** 0.64	Tin Plated Steel	**.445** 11.30	**.772** 19.61	**.587** 14.91	**.282** 7.16	61795-3
			.090–.145 2.29–3.68	12	**.025** 0.64	Tin Plated Brass	**.687** 17.45	**1.245** 31.62	**.980** 24.89	**.495** 12.57	63997-1
			.105–.145 2.67–3.68	1/4″	**.025** 0.64	Stainless Steel	**.687** 17.45	**1.245** 31.62	**.908** 23.06	**.495** 12.57	63602-1*
A	18-14	0.8–2.0	**.090–.145** 2.29–3.68	1/2″	**.025** 0.64	Stainless Steel	**.687** 17.45	**1.245** 31.62	**.908** 23.06	**.495** 12.57	62786-1*
			.100–.180 2.54–4.57	10	**.030** 0.76	Brass	**.340** 8.64	**1.170** 29.72	**1.010** 25.65	**.660** 16.76	62700-1
			.080–.150 2.03–3.81	1/2″	**.030** 0.76	Tin Plated Brass	**.850** 21.59	**1.450** 36.83	**1.030** 26.16	**.680** 17.27	61863-2
B	18-14	0.8–2.0	**.090–.145** 2.29–3.68	5/16″	**.025** 0.64	Stainless Steel	**.687** 17.45	**1.245** 31.62	**.908** 23.06	**.495** 12.57	62787-1*
D	18-14	0.8–2.0	**.085–.140** 2.16–3.56	8	**.025** 0.64	Tin Plated Phos. Brz.	**.370** 9.40	**.835** 21.21	**.615** 15.62	**.250** 6.35	62975-1
C	18-14	0.8–2.0	**.085–.140** 2.16–3.56	1/4″	**.025** 0.64	Tin Plated Brass	**.470** 11.94	**.930** 23.62	**.705** 17.91	**.340** 8.64	485029-1
			.085–.140 2.16–3.56	5/16″	**.025** 0.64	Tin Plated Brass	**.470** 11.94	**.930** 23.62	**.705** 17.91	**.340** 8.64	485030-1

* Stainless steel wire connectors cannot be certified under the current CSA standard.
Note: The part numbers listed are for use with existing machine models. For AMP-O-LECTRIC Model G applicators part numbers, call the Technical Support Center at 1-800-522-6752.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

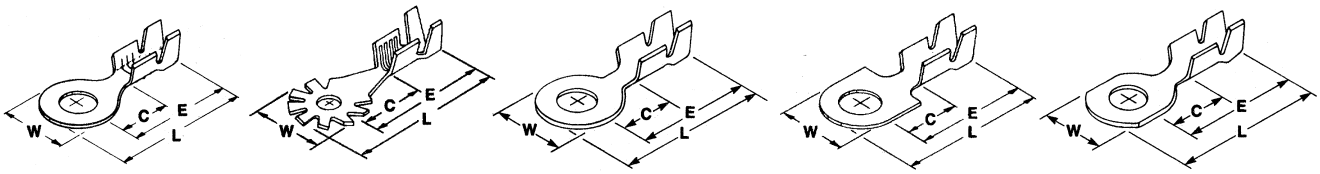
Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Ring Tongue Terminals, Insulation Support (Continued)



A With Serrations | **B** External Anti-Rotational | **C** Circular Without Serrations | **D** "D" Shape | **E** Flat Sided

Type	Wire Range AWG	Wire Range mm²	Insul. Size	Stud Size/ Dia.	Stock Thk.	Material and Finish	Dimensions W	Dimensions L	Dimensions E	Dimensions C	Part Number
E	18-14	0.8–2.0	**.100–.140** 2.54–3.56	5	**.020** 0.51	Tin Plated Brass	**.240** 6.10	**.833** 21.16	**.662** 16.82	**.312** 7.93	63518-1
B	18-14	0.8–2.0	**.085–.140** 2.16–3.56	10	**.025** 0.64	Tin Plated Steel	**.470** 11.94	**.940** 23.88	**.705** 17.91	**.340** 8.64	350080-1
				10	**.025** 0.64	Brass	**.470** 11.94	**.940** 23.88	**.705** 17.91	**.340** 8.64	63707-1
A	18-14	0.8–2.0	**.120–.175** 3.05–4.45	10	**.020** 0.51	Pre-Ni Plated Steel	**.342** 8.69	**.783** 19.89	**.612** 15.55	**.305** 7.75	350199-1
H	18-14	0.8–2.0	**.120–.170** 3.05–4.32	6–10	**.016** 0.41	Pre-Tin Plated Brass	**.300** 7.62	**.755** 19.18	**.595** 15.11	**.280** 7.11	350981-2
A	18-14	0.8–2.0	**.140–.190** 3.56–4.83	8	**.030** 0.76	Tin Plated Brass	**.342** 8.69	**.784** 19.91	**.608** 15.44	**.305** 7.75	640102-1
A	16-14	1.4–2.0	**.120–.170** 3.05–4.32	10	**.030** 0.76	Pre-Tin Plated Brass	**.296** 7.52	**.676** 17.17	**.528** 13.41	**.234** 5.94	109451-6
			.120–.180 3.05–4.57	**.257** 6.53	**.030** 0.76	Brass	**.470** 11.94	**1.046** 26.57	**.811** 20.60	**.384** 9.75	42751-1
				.257 6.53	**.030** 0.76	Tin Plated Brass	**.470** 11.94	**1.046** 26.57	**.811** 20.60	**.384** 9.75	42751-2
				.257 6.53	**.030** 0.76	Phos. Bronze	**.470** 11.94	**1.046** 26.57	**.811** 20.60	**.384** 9.75	42751-3
				.281 7.14	**.030** 0.76	Tin Plated Brass	**.470** 11.94	**1.046** 26.57	**.811** 20.60	**.384** 9.75	42938-2
				.323 8.20	**.030** 0.76	Tin Plated Brass	**.470** 11.94	**1.046** 26.57	**.811** 20.60	**.384** 9.75	42752-2
				3/8″	**.040** 1.02	Tin Plated Brass	**.687** 17.45	**1.245** 31.62	**.908** 23.06	**.495** 12.57	61336-1
				.390 9.91	**.032** 0.81	Tin Plated Brass	**.687** 17.45	**1.245** 31.62	**.902** 22.91	**.495** 12.57	1217330-1
C	16-14	1.25–2.0	**.120–.180** 3.05–4.57	10	**.020** 0.51	Brass	**.375** 9.53	**.873** 22.17	**.686** 17.42	**.312** 7.93	41294
					.030 0.76	Br. Tin Plated Brass	**.375** 9.53	**.873** 22.17	**.686** 17.42	**.312** 7.93	640007-1
				.257 6.53	**.030** 0.76	Br. Tin Plated Brass	**.470** 11.94	**1.046** 26.57	**.811** 20.60	**.384** 9.75	640011-1
F	16-12	1.25–3.0	**.130–.170** 3.30–4.32	8	**.025** 0.64	Brass	**.370** 9.40	**.772** 19.61	**.587** 14.91	**.282** 7.16	61624-1
G	16-12	1.25–3.0	**.130–.170** 3.30–4.32	8	**.025** 0.64	Tin Plated Brass	**.370** 9.40	**.772** 19.61	**.587** 14.91	**.282** 7.16	63698-1
A	16-12	1.25–3.0	(2) **.125** 3.18	10	**.018** 0.46	Tin Plated Brass	**.342** 8.69	**.784** 19.91	**.608** 15.44	**.305** 7.75	640253-2
D	14-12	2.0–3.0	**.150–.210** 3.81–5.33	10	**.030** 0.76	Tin Plated Brass	**.425** 10.80	**.972** 24.69	**.750** 19.05	**.344** 8.74	60485-1
			.130–.180 3.30–4.57	6	**.040** 1.02	Tin Plated Brass	**.425** 10.80	**.972** 24.69	**.750** 19.05	**.344** 8.74	40604-1
			.130–.180 3.30–4.57	8	**.040** 1.02	Tin Plated Brass	**.425** 10.80	**.972** 24.69	**.750** 19.05	**.344** 8.74	40605-1
			.130–.180 3.30–4.57	10	**.040** 1.02	Tin Plated Brass	**.425** 10.80	**.972** 24.69	**.750** 19.05	**.344** 8.74	40960
			.170–.210 4.32–5.33	10	**.040** 1.02	Tin Plated Brass	**.425** 10.80	**.972** 24.69	**.750** 19.05	**.344** 8.74	42639-1
			.170–.210 4.32–5.33	1/4″	**.040** 1.02	Brass	**.425** 10.80	**.972** 24.69	**.750** 19.05	**.344** 8.74	41604
			.130–.180 3.30–4.57	1/4″	**.040** 1.02	Tin Plated Brass	**.425** 10.80	**.950** 24.13	**.728** 18.49	**.344** 8.74	40973
			.130–.180 3.30–4.57	1/4″	**.040** 1.02	Tin Plated Phos. Bronze	**.425** 10.80	**.950** 24.13	**.728** 18.49	**.344** 8.74	40973-1

Note: The part numbers listed are for use with existing machine models. For AMP-O-LECTRIC Model G applicators part numbers, call the Technical Support Center at 1-800-522-6752.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

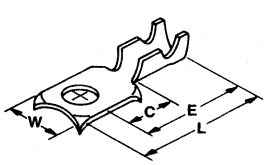
Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

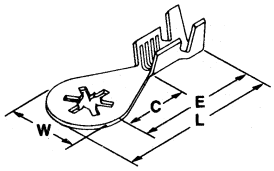
USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

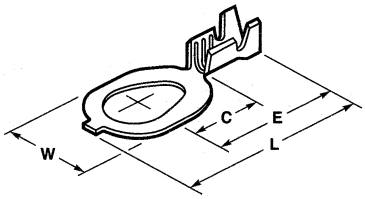
Ring Tongue Terminals, Insulation Support (Continued)



F
Grounding



G
Anti-Rotational



H
Multiple Stud Sizes

Type	Wire Range AWG	Wire Range mm²	Insul. Size	Stud Size/ Dia.	Stock Thk.	Material and Finish	Dimensions W	Dimensions L	Dimensions E	Dimensions C	Part Number
C	12-10	3.0–6.0	**.170–.210** 4.32–5.33	6	**.040** 1.02	Tin Plated Brass	**.343** 8.71	**.921** 23.39	**.750** 19.05	**.344** 8.74	61424-1
A	12-10	3.0–6.0	**.150–.210** 3.81–5.33	1/4″	**.040** 1.02	Tin Plated Copper	**.535** 13.59	**1.045** 26.54	**.780** 19.81	**.406** 10.31	61844-1
G	12-10	3.0–6.0	**.125–.220** 3.18–5.59	8	**.024** 0.61	Stainless Steel	**.470** 11.94	**.995** 25.27	**.770** 19.56	**.340** 8.64	62612-1
				8	**.025** 0.64	Tin Plated Steel	**.470** 11.94	**.995** 25.27	**.770** 19.56	**.340** 8.64	62612-2
				10	**.024** 0.61	Tin Plated Copper	**.470** 11.94	**.995** 25.27	**.770** 19.56	**.340** 8.64	62613-3
				10	**.025** 0.64	Tin Plated Steel	**.470** 11.94	**.995** 25.27	**.770** 19.56	**.340** 8.64	62613-2
A	12-10	3.0–6.0	**.150–2.10** 3.81–5.33	10	**.030** 0.76	Br. Tin Plated Brass	**.470** 11.94	**1.072** 27.23	**.839** 21.31	**.406** 10.31	640009-1
				10	**.030** 0.76	Tin Plated Brass	**.470** 11.94	**1.072** 27.23	**.839** 21.31	**.406** 10.31	41124
				.257 6.53	**.030** 0.76	Br. Tin Plated Brass	**.470** 11.94	**1.072** 27.23	**.839** 21.31	**.406** 10.31	640216-1
				.257 6.53	**.030** 0.76	Tin Plated Brass	**.470** 11.94	**1.072** 27.23	**.839** 21.31	**.406** 10.31	41125
				.323 8.20	**.030** 0.76	Tin Plated Brass	**.470** 11.94	**1.072** 27.23	**.839** 21.31	**.406** 10.31	41126
C	12-10	3.0–6.0	**.150–.210** 3.81–5.33	10	**.030** 0.76	Brass	**.470** 11.94	**1.072** 27.23	**.839** 21.31	**.406** 10.31	42722-1
			.170–.210 4.32–5.33	8	**.040** 1.02	Tin Plated Brass	**.343** 8.71	**.921** 23.39	**.750** 19.05	**.344** 8.74	42863-2
				10	**.040** 1.02	Brass	**.343** 8.71	**.921** 23.39	**.750** 19.05	**.344** 8.74	42864-1
				10	**.040** 1.02	Tin Plated Brass	**.343** 8.71	**.921** 23.39	**.750** 19.05	**.344** 8.74	42864-2
			.150–.210 3.81–5.33	1/4″	**.030** 0.76	Tin Plated Brass	**.470** 11.94	**1.072** 27.23	**.839** 21.31	**.406** 10.31	62691-2
A	12-8	3.0–8.0	**.150–.220** 3.81–5.59	**.344** 8.74	**.040** 1.02	Tin Plated Brass	**.687** 17.45	**1.245** 31.62	**.906** 23.01	**.495** 12.57	42946-2
				.344 8.74	**.040** 1.02	Br. Tin Plated Brass	**.687** 17.45	**1.245** 31.62	**.906** 23.01	**.495** 12.57	640012-1
				3/8″	**.040** 1.02	Tin Plated Brass	**.687** 17.45	**1.245** 31.62	**.908** 23.06	**.495** 12.57	61289-1
				.405 10.29	**.040** 1.02	Br. Tin Plated Brass	**.687** 17.45	**1.245** 31.62	**.906** 23.01	**.495** 12.57	42947-3
D	10-8	5.0–8.0	**.220–.315** 5.59–8.00	10	**.050** 1.27	Tin Plated Copper	**.550** 13.97	**1.105** 28.07	**.830** 21.08	**.350** 8.89	41808
				1/4″	**.050** 1.27	Tin Plated Copper	**.550** 13.97	**1.105** 28.07	**.830** 21.08	**.350** 8.89	41809
			.190–.230 4.83–5.84	10	**.040** 1.02	Br. Tin Plated Brass	**.425** 10.80	**.962** 24.43	**.750** 19.05	**.344** 8.74	640249-1
D	10-6	5.0–15.0	**.220–.315** 5.59–8.00	10	**.040** 1.02	Tin Plated Brass	**.550** 13.97	**1.105** 28.07	**.830** 21.08	**.350** 8.89	61352-1
				1/4″	**.040** 1.02	Tin Plated Brass	**.550** 13.97	**1.105** 28.07	**.830** 21.08	**.350** 8.89	42899-2
				5/16″	**.040** 1.02	Tin Plated Brass	**.550** 13.97	**1.105** 28.07	**.830** 21.08	**.350** 8.89	42913-2
A	10-6	5.0–15.0	**.145–.290** 3.68–7.37	10	**.040** 1.02	Tin Plated Brass	**.375** 9.53	**.992** 25.20	**.810** 20.57	**.400** 10.16	61866-1
				1/4″	**.040** 1.02	Tin Plated Brass	**.490** 12.45	**1.110** 28.19	**.870** 22.10	**.460** 11.68	61868-1
				1/4″	**.040** 1.02	Br. Tin Plated Brass	**.490** 12.45	**1.110** 28.19	**.870** 22.10	**.460** 11.68	61868-2

Note: The part numbers listed are for use with existing machine models. For AMP-O-LECTRIC Model G applicators part numbers, call the Technical Support Center at 1-800-522-6752.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

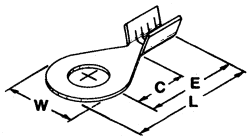
Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

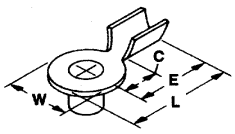
USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

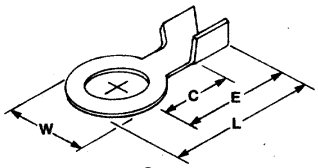
Ring Tongue Terminals, Non-Insulation Support



A
With Serrations



B
Extruded



C
Circular Tongue

Type	Wire Range AWG	Wire Range mm²	Stud Size/ Dia.	Stock Thk.	Material and Finish	Dimensions W	Dimensions L	Dimensions E	Dimensions C	Part Number
B	24-20	0.6–0.5	2	**.012** 0.30	Brass	**.200** 5.08	**.350** 8.89	**.245** 6.22	**.130** 3.30	61463-1
A	22-18	0.3–0.9	6	**.020** 0.51	Tin Plated Brass	**.300** 7.62	**.485** 12.32	**.335** 8.51	**.230** 5.84	62686-2
C	22-16	0.3–1.4	**.125** 3.18	**.020** 0.51	Tin Plated Brass	**.250** 6.35	**.531** 13.49	**.406** 10.31	**.250** 6.35	42185-2
			2	**.020** 0.51	Brass	**.175** 4.45	**.360** 9.14	**.270** 6.86	**.125** 3.18	40668
			.096 2.44	**.020** 0.51	Tin Plated Brass	**.175** 4.45	**.360** 9.14	**.270** 6.86	**.125** 3.18	40816
			.096 2.44	**.020** 0.51	Nickel Plated Steel	**.175** 4.45	**.338** 8.58	**.250** 6.35	**.125** 3.18	42204-1
			.096 2.44	**.020** 0.51	Tin Plated Brass	**.234** 5.94	**.331** 8.41	**.234** 5.94	**.129** 3.28	63457-1
			4	**.020** 0.51	Nickel Plated Steel	**.175** 4.45	**.338** 8.58	**.250** 6.35	**.125** 3.18	63676-1
			4	**.020** 0.51	Brass	**.175** 4.45	**.360** 9.14	**.270** 6.86	**.125** 3.18	40777
			4	**.020** 0.51	Tin Plated Brass	**.260** 6.60	**.400** 10.16	**.270** 6.86	**.145** 3.63	40810
A	20-16	0.5–1.4	5	**.020** 0.51	Brass	**.234** 5.94	**.331** 8.41	**.234** 5.94	**.129** 3.28	34578
			.130 3.30	**.020** 0.51	Tin Plated Brass	**.234** 5.94	**.331** 8.41	**.234** 5.94	**.129** 3.28	40884
			.131 3.33	**.020** 0.51	Tin Plated Brass	**.260** 6.60	**.400** 10.16	**.270** 6.86	**.145** 3.63	63243-1
			6	**.020** 0.51	Tin Plated Brass	**.260** 6.60	**.400** 10.16	**.270** 6.86	**.145** 3.63	40811
			6	**.020** 0.51	Tin Plated Steel	**.260** 6.60	**.400** 10.16	**.270** 6.86	**.145** 3.63	40811-1
			8	**.020** 0.51	Brass	**.260** 6.60	**.400** 10.16	**.270** 6.86	**.145** 3.63	40749
			8	**.020** 0.51	Tin Plated Brass	**.260** 6.60	**.400** 10.16	**.270** 6.86	**.145** 3.63	40812
			6	**.030** 0.76	Tin Plated Brass	**.218** 5.54	**.432** 10.97	**.330** 8.38	**.167** 4.24	40976
A	20-14	0.5–2.0	6	**.020** 0.51	Brass	**.250** 6.35	**.395** 10.03	**.285** 7.24	**.160** 4.07	40702
			.096 2.44	**.020** 0.51	Brass	**.175** 4.45	**.360** 9.14	**.255** 6.48	**.125** 3.18	41006
			.096 2.44	**.020** 0.51	Tin Plated Brass	**.175** 4.45	**.360** 9.14	**.255** 6.48	**.125** 3.18	41499
			6	**.020** 0.51	Brass	**.300** 7.62	**.535** 13.59	**.380** 9.65	**.230** 5.84	34848
			6	**.020** 0.51	Tin Plated Brass	**.300** 7.62	**.535** 13.59	**.380** 9.65	**.230** 5.84	40593
			6	**.020** 0.51	Pre-Ni Plated Steel	**.300** 7.62	**.535** 13.59	**.385** 9.78	**.230** 5.84	40979
A	18-14	0.8–2.0	8	**.020** 0.51	Brass	**.300** 7.62	**.535** 13.59	**.380** 9.65	**.230** 5.84	34812
			8	**.020** 0.51	Tin Plated Brass	**.300** 7.62	**.535** 13.59	**.380** 9.65	**.230** 5.84	40594
			8	**.020** 0.51	Pre-Ni Plated Steel	**.300** 7.62	**.535** 13.59	**.385** 9.78	**.230** 5.84	41346
			10	**.020** 0.51	Brass	**.300** 7.62	**.535** 13.59	**.380** 9.65	**.230** 5.84	34839
			10	**.020** 0.51	Tin Plated Brass	**.300** 7.62	**.535** 13.59	**.380** 9.65	**.230** 5.84	40595
			8	**.030** 0.76	Tin Plated Brass	**.343** 8.71	**.611** 15.52	**.435** 11.05	**.275** 6.99	40517

Note: The part numbers listed are for use with existing machine models. For AMP-O-LECTRIC Model G applicators part numbers, call the Technical Support Center at 1-800-522-6752.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

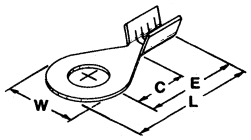
Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

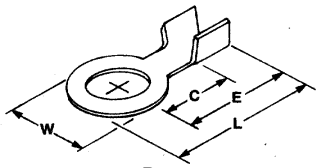
USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Ring Tongue Terminals, Non-Insulation Support (Continued)



A
With Serrations



B
Circular Tongue

Type	Wire Range AWG	Wire Range mm²	Stud Size/ Dia.	Stock Thk.	Material and Finish	Dimensions W	Dimensions L	Dimensions E	Dimensions C	Part Number
B	18-14	0.8–2.0	5	**.020** 0.51	Tin Plated Brass	**.234** 5.94	**.331** 8.41	**.234** 5.94	**.129** 3.28	60250-2
			4	**.025** 0.64	Tin Plated Brass	**.250** 6.35	**.460** 11.68	**.349** 8.86	**.160** 4.07	42054-2
A	18-14	0.8–2.0	6	**.025** 0.64	Brass	**.300** 7.62	**.570** 14.48	**.420** 10.67	**.230** 5.84	42110-1
			6	**.025** 0.64	Tin Plated Brass	**.300** 7.62	**.570** 14.48	**.420** 10.67	**.230** 5.84	42111-1
			8	**.025** 0.64	Tin Plated Brass	**.300** 7.62	**.570** 14.48	**.420** 10.67	**.230** 5.84	42111-2
			10	**.025** 0.64	Brass	**.300** 7.62	**.570** 14.48	**.420** 10.67	**.230** 5.84	42110-3
			10	**.025** 0.64	Tin Plated Brass	**.300** 7.62	**.570** 14.48	**.420** 10.67	**.230** 5.84	42111-3
			10	**.025** 0.64	Stainless Steel	**.300** 7.62	**.535** 13.59	**.385** 9.78	**.230** 5.84	42716-2
			5	**.030** 0.76	Tin Plated Brass	**.343** 8.71	**.611** 15.52	**.435** 11.05	**.275** 6.99	60505-1
			10	**.030** 0.76	Brass	**.343** 8.71	**.611** 15.52	**.435** 11.05	**.275** 6.99	40796
			10	**.030** 0.76	Tin Plated Brass	**.343** 8.71	**.611** 15.52	**.435** 11.05	**.275** 6.99	40977
B	18-14	0.8–2.0	6	**.020** 0.51	Tin Plated Brass	**.281** 7.14	**.455** 11.56	**.335** 8.51	**.210** 5.33	61142-2
			8	**.020** 0.51	Brass	**.281** 7.14	**.455** 11.56	**.335** 8.51	**.210** 5.33	40951
A	12-10	3.0–6.0	10	**.030** 0.76	Tin Plated Brass	**.343** 8.71	**.677** 17.20	**.501** 12.73	**.281** 7.14	40696
			8	**.040** 1.02	Brass	**.343** 8.71	**.677** 17.20	**.501** 12.73	**.281** 7.14	42425-1
			8	**.040** 1.02	Tin Plated Brass	**.343** 8.71	**.677** 17.20	**.501** 12.73	**.281** 7.14	40523
			10	**.040** 1.02	Brass	**.343** 8.71	**.677** 17.20	**.501** 12.73	**.281** 7.14	41911
			10	**.040** 1.02	Tin Plated Brass	**.343** 8.71	**.677** 17.20	**.501** 12.73	**.281** 7.14	40524
			10	**.040** 1.02	Tin Plated Copper	**.343** 8.71	**.670** 17.02	**.500** 12.70	**.281** 7.14	41090
			10	**.040** 1.02	Tin Plated Copper	**.500** 12.70	**.820** 20.83	**.582** 14.78	**.338** 8.58	42555-1
			1/4″	**.040** 1.02	Tin Plated Copper	**.500** 12.70	**.820** 20.83	**.582** 14.78	**.338** 8.58	41341
			1/4″	**.040** 1.02	Tin Plated Brass	**.500** 12.70	**.820** 20.83	**.582** 14.78	**.338** 8.58	41356
			5/16″	**.040** 1.02	Tin Plated Copper	**.500** 12.70	**.820** 20.83	**.582** 14.78	**.338** 8.58	42890-1

Note: The part numbers listed are for use with existing machine models. For AMP-O-LECTRIC Model G applicators part numbers, call the Technical Support Center at 1-800-522-6752.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

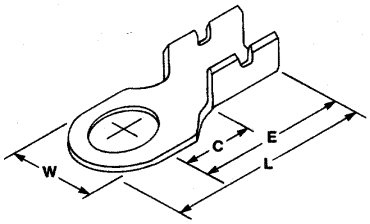
Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

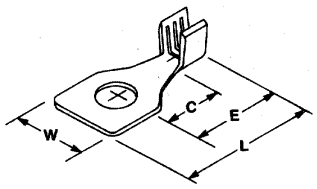
USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

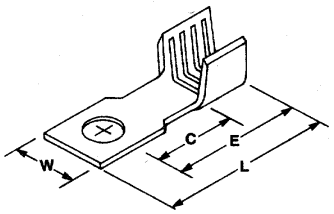
Ring Tongue Terminals, Non-Insulation Support (Continued)



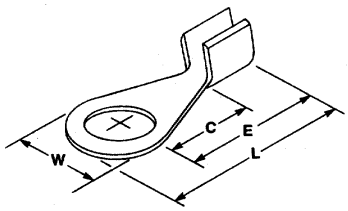
A
"D" Shape



B
Square



C
Square



D
Without Serrations

Type	Wire Range AWG	Wire Range mm²	Stud Size/ Dia.	Stock Thk.	Material and Finish	Dimensions W	Dimensions L	Dimensions E	Dimensions C	Part Number
C	12-10	3.0–6.0	6	**.030** 0.76	Tin Plated Brass	**.240** 6.10	**.659** 16.74	**.500** 12.70	**.281** 7.14	640257-1
B	10-8	5.0–8.0	10	**.040** 1.02	Tin Plated Brass	**.385** 9.78	**.717** 18.21	**.547** 13.89	**.340** 8.64	42673-2
D	10-6	5.0–15.0	10	**.050** 1.27	Brass	**.550** 13.97	**1.105** 28.07	**.830** 21.08	**.500** 12.70	485015-2
			10	**.050** 1.27	Tin Plated Brass	**.550** 13.97	**1.105** 28.07	**.830** 21.08	**.500** 12.70	485015-1
			5/16″	**.050** 1.27	Tin Plated Brass	**.550** 13.97	**1.105** 28.07	**.830** 21.08	**.500** 12.70	61546-1
A	8 or 10	8.0 or 5.0	1/4″	**.040** 1.02	Brass	**.428** 10.87	**.955** 24.26	**.743** 18.87	**.335** 8.51	40797

Note: The part numbers listed are for use with existing machine models. For AMP-O-LECTRIC Model G applicators part numbers, call the Technical Support Center at 1-800-522-6752.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

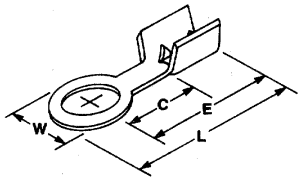
Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

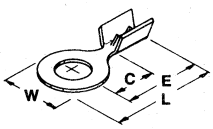
USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

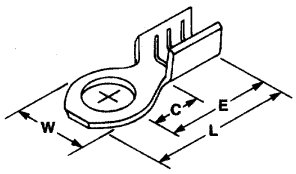
Ring Tongue Terminals, Insulation Piercing



A
Insulation Piercing



B
Insulation Piercing



C
Insulation Penetrating

Type	Wire Range AWG	Wire Range mm²	Insul. Size	Stud Size/ Dia.	Stock Thk.	Material and Finish	Dimensions W	Dimensions L	Dimensions E	Dimensions C	Part Number
B	22-20	0.3–0.6	**.050–.065** 1.27–1.65	2	**.013** 0.33	Nickel Plated Brass	**.165** 4.19	**.417** 10.59	**.300** 7.62	**.125** 3.18	60422-3
				.096 2.44	**.013** 0.33	Pre-Tin Plated Brass	**.165** 4.19	**.417** 10.59	**.330** 8.38	**.125** 3.18	41376
				5	**.013** 0.33	Tin Plated Brass	**.186** 4.72	**.423** 10.74	**.335** 8.51	**.125** 3.18	41409
	20-16	0.3–1.4	**.105–.120** 2.67–3.05	6	**.020** 0.51	Brass	**.300** 7.62	**.655** 16.64	**.505** 12.83	**.240** 6.10	42023
C	Tinsel Wire		**.030–.035** 0.76–0.89	5	**.014** 0.36	Gold Plated Brass	**.186** 4.72	**.440** 11.18	**.350** 8.89	**.130** 3.30	61505-1[1]
				5	**.014** 0.36	Tin Plated Brass	**.186** 4.72	**.440** 11.18	**.350** 8.89	**.130** 3.30	61505-2[1]
				5	**.014** 0.36	Tin Plated Brass	**.186** 4.72	**.440** 11.18	**.350** 8.89	**.130** 3.30	640189-1[1]
A	18-16	0.8–1.4	**.110–.130** 2.79–3.30	10	**.016** 0.41	Brass	**.281** 7.13	**.800** 20.32	**.660** 16.76	**.350** 8.89	61853-1

[1] Insulation penetrating.
Note: The part numbers listed are for use with existing machine models. For AMP-O-LECTRIC Model G applicators part numbers, call the Technical Support Center at 1-800-522-6752.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

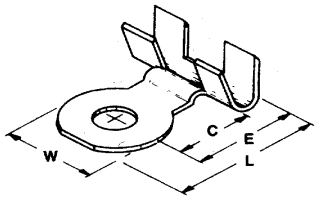
Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

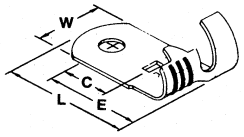
USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

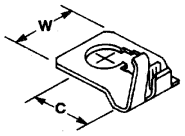
Ring Tongue Terminals, Flag



A
Reversible



B
Tab-Lok



C
"F" Crimp

Type	Wire Range AWG	Wire Range mm²	Insul. Size	Stud Size/ Dia.	Stock Thk.	Material and Finish	Dimensions W	Dimensions L	Dimensions E	Dimensions C	Part Number
A	18-16	0.8–1.4	—	6	**.020** 0.51	Tin Plated Brass	**.280** 7.11	**.496** 12.60	**.342** 8.69	**.220** 5.59	41443
C	18-14	0.8–2.0	**.100–.140** 2.54–3.56	**.176** 4.47	**.020** 0.51	Tin Plated Brass	**.380** 9.65	—	—	**.270** 6.86	61443-1
B	18-12	0.8–3.0	**.110–.210** 2.79–5.33	**.146** 3.71	**.018** 0.46	Tin Plated Brass	**.376** 9.55	**.720** 18.29	**.532** 13.51	**.263** 6.68	42189-1
				.172 4.37	**.018** 0.46	Tin Plated Brass	**.376** 9.55	**.720** 18.29	**.532** 13.51	**.263** 6.68	42190-1
				.203 5.16	**.018** 0.46	Tin Plated Brass	**.376** 9.55	**.720** 18.29	**.532** 13.51	**.263** 6.68	42191-1

Note: The part numbers listed are for use with existing machine models. For AMP-O-LECTRIC Model G applicators part numbers, call the Technical Support Center at 1-800-522-6752.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

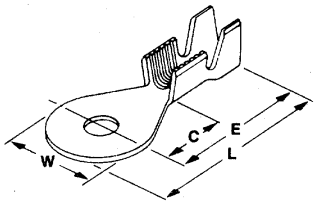
Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

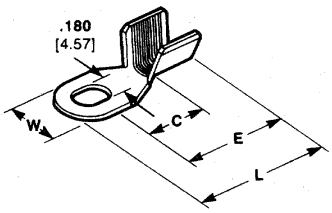
USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

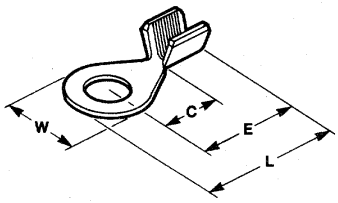
AMPLIVAR Ring Tongue Terminals



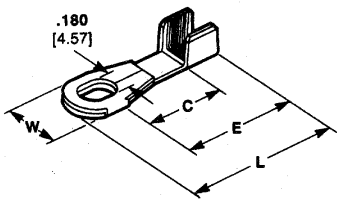
A
Insulation Support



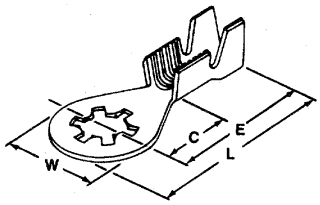
B
Oval Hole



C
Non-Insulation Support



D
Heavy Duty Oval Hole



E
Anti-Rotational

Type	Wire Range AWG	Wire Range mm²	Insul. Size	Hole Dia.	Stud Size/ Dia.	Stock Thk.	Material and Finish	Dimensions W	Dimensions L	Dimensions E	Dimensions C	Part Number
A	29-22	0.284–0.643	**.040–.060** 1.02–1.52	**.197** 5.00	10	**.020** 0.51	Tin Plated Brass	**.342** 8.69	**.833** 21.16	**.662** 16.81	**.312** 7.92	63399-1
A	23-19	0.574–0.912	**.100–.140** 2.54–3.56	**.171** 4.34	8	**.020** 0.51	Tin Plated Brass	**.342** 8.69	**.833** 21.16	**.662** 16.81	**.312** 7.92	60321-2
			.125–.165 3.18–4.19	**.171** 4.34	8	**.020** 0.51	Tin Plated Brass	**.300** 7.62	**.700** 17.73	**.550** 13.97	**.230** 5.84	60323-2
			.100–.140 2.54–3.56	**.197** 5.00	10	**.020** 0.51	Tin Plated Brass	**.342** 8.69	**.833** 21.16	**.662** 16.81	**.312** 7.92	60319-2
A	22-18	0.643–1.024	**.125–.165** 3.18–4.19	**.265** 6.73	1/4″	**.025** 0.64	Tin Plated Brass	**.420** 10.67	**.872** 22.15	**.662** 16.81	**.312** 7.92	63612-1
C	22-18	0.643–1.024	—	—	6	**.025** 0.64	Tin Plated Brass	**.290** 7.37	**.500** 12.70	**.355** 9.02	**.195** 4.95	63649-1
					8	**.025** 0.64	Brass	**.290** 7.37	**.500** 12.70	**.355** 9.02	**.195** 4.95	63446-1
					8	**.025** 0.64	Tin Plated Brass	**.290** 7.37	**.500** 12.70	**.355** 9.02	**.195** 4.95	63446-2
					1/4″	**.025** 0.64	Tin Plated Brass	**.420** 10.67	**.702** 17.83	**.492** 12.50	**.312** 7.92	62835-1
A	20-16	0.183–1.29	**.125–.165** 3.18–4.19	**.171** 4.34	8	**.020** 0.51	Tin Plated Brass	**.300** 7.62	**.695** 17.65	**.545** 13.84	**.230** 5.84	60322-2
A	18-14	1.024–1.628	**.100–.140** 2.54–3.56	**.171** 4.34	8	**.020** 0.51	Brass Tin Plated Brass	**.342** 8.69	**.833** 21.16	**.662** 16.81	**.312** 7.92	60320-1 60320-2
E	18-14	1.024–1.628	**.080–.120** 2.03–3.05	**.173** 4.39	8	**.028** 0.71	Lu-Bronze	**.370** 9.40	**.915** 23.24	**.730** 18.54	**.380** 9.65	485079-1[1]
				.185 4.70	8	**.028** 0.71	Lu-Bronze	**.365** 9.27	**.882** 22.40	**.700** 17.78	**.380** 9.65	485044-1[1]
D	14-12	1.628–2.05	—	**.180** 4.57	8	**.025** 0.64	Brass	**.342** 8.69	**.833** 21.16	**.657** 16.69	**.312** 7.92	62755-1
A	13-11	1.83–2.3	**.085–.150** 2.16–3.81	**.180** 4.57	8	**.025** 0.64	Brass	**.342** 8.69	**.833** 21.16	**.657** 16.69	**.312** 7.92	61710-1
C	13-11	1.83–2.3	—	**.180** 4.57	8	**.025** 0.64	Tin Plated Brass	**.342** 8.69	**.665** 16.89	**.495** 12.57	**.312** 7.92	350571-1
			—	**.197** 5.00	10	**.025** 0.64	Tin Plated Brass	**.342** 8.69	**.665** 16.89	**.495** 12.57	**.312** 7.92	640212-1
A	(2) 17 (2) 15	1.15 or 1.45 or	**.150–.190** 3.68–4.83	**.171** 4.34	8	**.025** 0.64	Tin Plated Brass	**.342** 8.69	**.827** 21.01	**.656** 16.66	**.312** 7.92	60752-2
B	17-13 1/2	1.51–1.78	—	**.180** 4.57	8	**.020** 0.51	Brass	**.310** 7.87	**.692** 17.58	**.492** 12.50	**.312** 7.92	63147-1

[1]High conductivity copper-tin-zinc alloy.
Note: The part numbers listed are for use with existing machine models. For AMP-O-LECTRIC Model G applicators part numbers, call the Technical Support Center at 1-800-522-6752.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

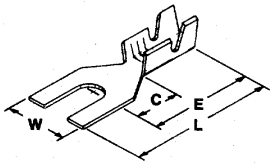
Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

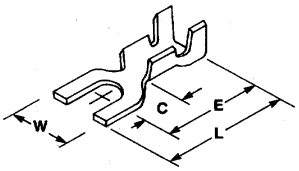
USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

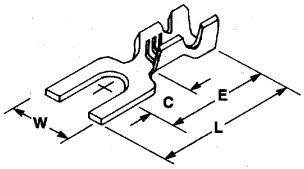
Spade Tongue Terminals, Insulation Support



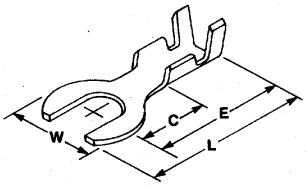
A
With Serrations



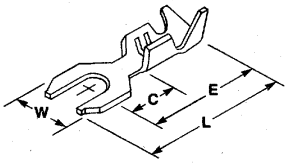
B
Without Serrations



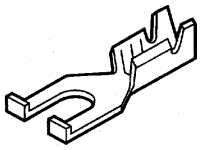
C
With Serrations



D
Round Tongue



E
Wrap Around Ins. Support



Flanged †

Type	Wire Range AWG	Wire Range mm²	Insul. Size	Stud Size/ Dia.	Stock Thk.	Material and Finish	Dimensions W	Dimensions L	Dimensions E	Dimensions C	Part Number
E	28-22	0.08–0.4	**.035–.045** 0.89–1.14	5	**.016** 0.41	Tin Plated Brass	**.240** 6.10	**.545** 13.84	**.435** 11.05	**.215** 5.46	350502-1
			.035–.045 0.89–1.14	5	**.016** 0.41	Brass	**.240** 6.10	**.545** 13.84	**.435** 11.05	**.215** 5.46	350502-2
A	26-20	0.12–0.6	**.048–.078** 1.22–1.98	6	**.020** 0.51	Tin Plated Brass	**.250** 6.35	**.563** 14.30	**.422** 10.72	**.215** 5.46	60124-2
				.185 4.70	**.020** 0.51	Tin Plated Brass	**.295** 7.49	**.585** 14.60	**.443** 11.25	**.236** 5.99	63374-1
A	24-20	0.2–0.6	**.048–.078** 1.22–1.98	6	**.014** 0.36	Tin Plated Brass	**.250** 6.35	**.590** 14.99	**.442** 11.23	**.215** 5.46	60445-2
			.048–.078 1.22–1.98	10	**.014** 0.36	Tin Plated Brass	**.300** 7.62	**.590** 14.99	**.442** 11.23	**.215** 5.46	60501-1
			.048–.078 1.22–1.98	**.115** 2.92	**.020** 0.51	Brass	**.187** 4.75	**.517** 13.13	**.392** 9.96	**.185** 4.70	42160-1
			.048–.078 1.22–1.98	**.115** 2.92	**.020** 0.51	Tin Plated Brass	**.187** 4.75	**.517** 13.13	**.392** 9.96	**.185** 4.70	42160-2
			.080–.100 2.03–2.54	8	**.020** 0.51	Tin Plated Brass	**.290** 7.37	**.621** 15.77	**.470** 11.94	**.220** 5.59	41589
			.080–.100 2.03–2.54	10	**.020** 0.51	Tin Plated Brass	**.290** 7.37	**.621** 15.77	**.470** 11.94	**.220** 5.59	41590
D	24-20	0.2–0.6	**.075–.100** 1.91–2.54	4	**.020** 0.51	Tin Plated Brass	**.250** 6.35	**.535** 13.59	**.442** 11.23	**.218** 5.54	61238-1
A	20-16	0.5–1.4	**.090–.130** 2.29–3.30	6	**.020** 0.51	Tin Plated Brass	**.275** 6.98	**.657** 16.69	**.465** 11.81	**.175** 4.44	40763
				8	**.020** 0.51	Tin Plated Brass	**.275** 6.98	**.657** 16.69	**.465** 11.81	**.175** 4.44	41343
C	20-16	0.5–1.4	**.100–.140** 2.54–3.56	6	**.020** 0.51	Brass	**.280** 7.11	**.755** 19.18	**.525** 13.33	**.225** 5.71	60389-1
				8	**.020** 0.51	Brass	**.280** 7.11	**.755** 19.18	**.525** 13.33	**.225** 5.71	60390-1
B	18-14	0.8–2.0	**.130–.180** 3.30–4.57	8	**.025** 0.64	Tin Plated Brass	**.312** 7.92	**.645** 16.38	**.520** 13.21	**.209** 5.31	60251-2
			.100–.140 2.54–3.56	10	**.030** 0.76	Tin Plated Brass	**.343** 8.71	**.752** 19.10	**.612** 15.54	**.312** 7.92	40808
A	18-14	0.8–2.0	**.130–.180** 3.30–4.57	6	**.020** 0.51	Tin Plated Brass	**.275** 6.98	**.657** 16.69	**.463** 11.76	**.175** 4.44	60725-1
			.100–.140 2.54–3.56	6	**.018** 0.46	Tin Plated Brass	**.296** 7.52	**.750** 19.05	**.540** 13.72	**.235** 5.97	60773-2
				8	**.018** 0.46	Brass	**.296** 7.52	**.750** 19.05	**.540** 13.72	**.235** 5.97	60774-1
				8	**.018** 0.46	Tin Plated Brass	**.296** 7.52	**.750** 19.05	**.540** 13.72	**.235** 5.97	60774-2
				10	**.018** 0.46	Brass	**.296** 7.52	**.750** 19.05	**.540** 13.72	**.235** 5.97	60775-1

† Terminals flangable by designated applicator.
Note: The part numbers listed are for use with existing machine models. For AMP-O-LECTRIC Model G applicators part numbers, call the Technical Support Center at 1-800-522-6752.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

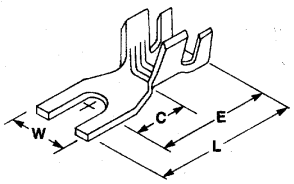
Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

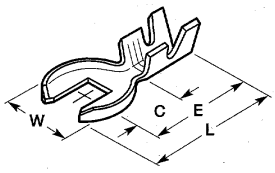
USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

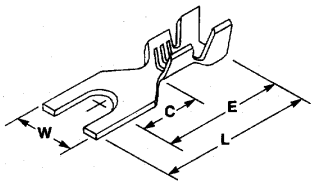
Spade Tongue Terminals, Insulation Support (Continued)



A
Insulation Support



B
Heavy Duty

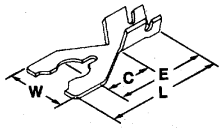


C
Insulation Support

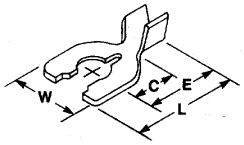
Type	Wire Range AWG	Wire Range mm²	Insul. Size	Stud Size/ Dia.	Stock Thk.	Material and Finish	Dimensions W	Dimensions L	Dimensions E	Dimensions C	Part Number
B	18-14	0.8–2.0	**.120–.180** 3.05–4.57	**.205 × .291** 5.21 × 7.39	**.030** 0.76	Tin Plated Copper	**.490** 12.45	**.800** 20.32	**.613** 15.57	**.333** 8.46	60998-1
				.255 × .291 6.48 × 7.39	**.030** 0.76	Tin Plated Copper	**.490** 12.45	**.710** 18.03	**.523** 13.28	**.333** 8.46	60999-1[1]
C	18-14	0.8–2.0	**.080–.150** 2.03–3.81	10	**.025** 0.64	Tin Plated Brass	**.375** 9.53	**.930** 23.62	**.750** 19.05	**.400** 10.16	61857-2
A	10-6	5.0–15.0	**.145–.290** 3.68–7.37	10	**.040** 1.02	Tin Plated Brass	**.375** 9.52	**1.015** 25.78	**.810** 20.57	**.400** 10.16	61855-1

[1] Tongue Bent 45°.
Note: The part numbers listed are for use with existing machine models. For AMP-O-LECTRIC Model G applicators part numbers, call the Technical Support Center at 1-800-522-6752.

Spring Spade



A
Insulation Support



B
Non-Insulation Support

Type	Wire Range AWG	Wire Range mm²	Insul. Size	Stud Size/ Dia.	Stock Thk.	Material and Finish	Dimensions W	Dimensions L	Dimensions E	Dimensions C	Part Number
A	18-14	0.8–2.0	**.100–.140** 2.54–3.56	6	**.030** 0.76	Tin Plated Brass	**.250** 6.35	**.690** 17.53	**.550** 13.97	**.243** 6.17	63268-1
				6	**.030** 0.76	Tin Plated Brass	**.343** 8.71	**.752** 19.10	**.612** 15.54	**.312** 7.92	60187-2
				8	**.030** 0.76	Tin Plated Brass	**.343** 8.71	**.752** 19.10	**.612** 15.54	**.312** 7.92	42168-2
				10	**.030** 0.76	Tin Plated Brass	**.343** 8.71	**.752** 19.10	**.612** 15.54	**.312** 7.92	42169-2
	16-12	1.4–3.0	**.110–.150** 2.79–3.81	8	**.030** 0.76	Tin Plated Brass	**.343** 8.71	**.745** 18.92	**.612** 15.54	**.312** 7.92	62795-1
B	20-16	0.5–1.4	—	**.138** 3.51	**.020** 0.51	Tin Plated Brass	**.260** 6.60	**.472** 11.99	**.350** 8.89	**.194** 4.93	485073-1
	18-14	0.8–2.0	—	8	**.020** 0.51	Tin Plated Brass	**.315** 8.00	**.554** 14.07	**.389** 9.88	**.249** 6.33	350568-1
	14-10	2.0–5.0	—	10	**.040** 1.02	Brass Tin Plated Brass	**.372** 9.45	**.668** 16.97	**.506** 12.85	**.281** 7.14	63610-1 63610-2

Note: The part numbers listed are for use with existing machine models. For AMP-O-LECTRIC Model G applicators part numbers, call the Technical Support Center at 1-800-522-6752.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

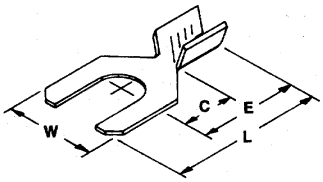
Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

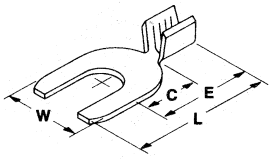
USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

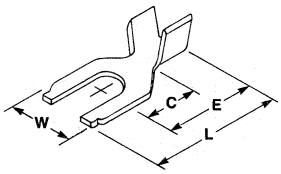
Spade Tongue Terminals, Non-Insulation Support



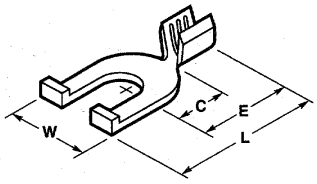
A
With Serrations



B
With Serrations



C
Without Serrations

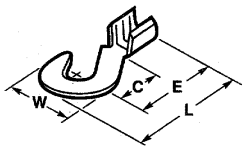


D
Flanged

Type	Wire Range AWG	Wire Range mm²	Insul. Size	Stud Size/ Dia.	Stock Thk.	Material and Finish	Dimensions W	Dimensions L	Dimensions E	Dimensions C	Part Number
D	20-16	0.5–1.4	—	6	**.020** 0.51	Tin Plated Brass	**.275** 6.99	**.527** 13.39	**.328** 8.33	**.175** 4.45	42318-2
B	18-14	0.8–2.0	—	10	**.030** 0.76	Tin Plated Brass	**.343** 8.71	**.628** 15.95	**.441** 11.20	**.275** 6.99	40521
A	18-14	0.8–2.0	—	6	**.025** 0.64	Brass	**.275** 6.99	**.482** 12.24	**.295** 7.49	**.175** 4.45	40577
C	18-14	0.8–2.0	—	8	**.025** 0.64	Brass	**.275** 6.99	**.482** 12.24	**.295** 7.49	**.175** 4.45	40705
			—	8	**.025** 0.64	Tin Plated Brass	**.275** 6.99	**.482** 12.24	**.295** 7.49	**.175** 4.45	41473
B	12-10	3.0–6.0	—	8	**.030** 0.76	Tin Plated Brass	**.312** 7.92	**.688** 17.48	**.450** 11.43	**.235** 5.97	42113-2
			—	10	**.030** 0.76	Brass	**.312** 7.92	**.688** 17.48	**.450** 11.43	**.235** 5.97	40891
			—	10	**.030** 0.76	Tin Plated Brass	**.312** 7.92	**.688** 17.48	**.450** 11.43	**.235** 5.97	41495
D	12-10	3.0–6.0	—	10	**.040** 1.02	Brass	**.440** 11.18	**.968** 24.58	**.700** 17.78	**.435** 11.05	63526-1

Note: The part numbers listed are for use with existing machine models. For AMP-O-LECTRIC Model G applicators part numbers, call the Technical Support Center at 1-800-522-6752.

Spade Hook Terminals



E
With Serrations

Type	Wire Range AWG	Wire Range mm²	Insul. Size	Stud Size/ Dia.	Stock Thk.	Material and Finish	Dimensions W	Dimensions L	Dimensions E	Dimensions C	Part Number
E	18-14	0.8–2.0	—	10	**.020** 0.51	Tin Plated Brass	**.280** 7.11	**.540** 13.72	**.374** 9.50	**.214** 5.44	41461

Note: The part numbers listed are for use with existing machine models. For AMP-O-LECTRIC Model G applicators part numbers, call the Technical Support Center at 1-800-522-6752.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

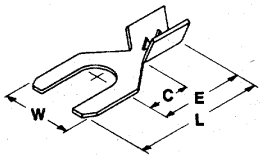
Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

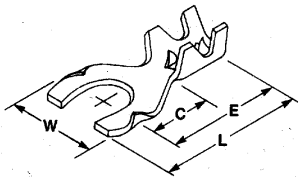
South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Spade Tongue Terminals

Spade Insulation Piercing



A
Insulation Piercing

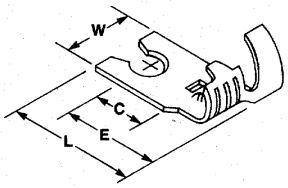


B
SPADE-LOK

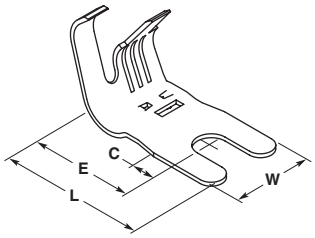
Type	Wire Range AWG	Wire Range mm²	Insul. Size	Stud Size/ Dia.	Stock Thk.	Material and Finish	Dimensions W	Dimensions L	Dimensions E	Dimensions C	Part Number
A	28-22	0.08–0.4	**.035–.040** 0.89–1.02	5	**.016** 0.41	Brass	**.250** 6.35	**.578** 14.68	**.422** 10.72	**.215** 5.46	61498-1
				5	**.016** 0.41	Tin Plated Brass	**.250** 6.35	**.578** 14.68	**.422** 10.72	**.215** 5.46	61498-2
				5	**.016** 0.41	Pre-Tin Plated Brass	**.250** 6.35	**.578** 14.68	**.422** 10.72	**.215** 5.46	61498-3
	26-22	0.12–0.4	**.045–.050** 1.14–1.27	5	**.016** 0.41	Brass	**.250** 6.35	**.578** 14.68	**.472** 11.99	**.265** 6.73	61519-1
				5	**.016** 0.41	Tin Plated Brass	**.250** 6.35	**.578** 14.68	**.422** 10.72	**.215** 5.46	60234-2
				5	**.016** 0.41	Tin Plated Brass	**.250** 6.35	**.578** 14.68	**.422** 10.72	**.215** 5.46	640260-2
			.035–.045 0.89–1.14	6	**.016** 0.41	Tin Plated Brass	**.250** 6.35	**.547** 13.89	**.422** 10.72	**.215** 5.46	61385-2
			.058–.062 1.47–1.58	5	**.020** 0.51	Tin Plated Brass	**.250** 6.35	**.500** 12.70	**.392** 9.96	**.187** 4.75	41933
B	20-16	0.5–1.4	**.085–.105** 2.16–2.67	6	**.020** 0.51	Tin Plated Brass	**.322** 8.18	**.750** 19.05	**.545** 13.84	**.281** 7.14	40764
				8	**.020** 0.51	Tin Plated Brass	**.322** 8.18	**.750** 19.05	**.545** 13.84	**.281** 7.14	40765
				10	**.020** 0.51	Tin Plated Brass	**.322** 8.18	**.750** 19.05	**.545** 13.84	**.281** 7.14	40766
A	20-18	0.5–0.8	**.065–.080** 1.65–2.03	5	**.020** 0.51	Tin Plated Brass	**.250** 6.35	**.542** 14.77	**.412** 10.46	**.206** 5.23	42339-2

Note: The part numbers listed are for use with existing machine models. For AMP-O-LECTRIC Model G applicators part numbers, call the Technical Support Center at 1-800-522-6752.

Flag Spade and Spring Spade



A
Tab-Lok Spring Spade



B
Tab-Lok

Type	Wire Range AWG	Wire Range mm²	Insul. Size	Stud Size/ Dia.	Stock Thk.	Material and Finish	Dimensions W	Dimensions L	Dimensions E	Dimensions C	Part Number
A	18-12	0.8–3.0	**.110–.210** 2.79–5.33	12	**.018** 0.46	Brass	**.315** 8.00	**.720** 12.29	**.535** 13.59	**.263** 6.68	63053-1
B	18-12	0.8–3.0	**.110–.210** 2.79–5.33	8	**.018** 0.46	Tin Plated Brass	**.376** 9.55	**.720** 12.29	**.535** 13.59	**.263** 6.68	42187-1[1]
				10	**.018** 0.46	Tin Plated Brass	**.376** 9.55	**.720** 12.29	**.535** 13.59	**.263** 6.68	42188-1[1]

[1] Terminals may be bent 45° in applicator (use suffix "N").
Note: The part numbers listed are for use with existing machine models. For AMP-O-LECTRIC Model G applicators part numbers, call the Technical Support Center at 1-800-522-6752.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Splices

Product Facts

- **Terminates stranded wire and/or solid wire combinations together or to leads on components or devices**
- **End feed splices available for pigtail connections.**
- **Side feed splices available for parallel connections.**
- **Available in brass, copper-nickel, phosphor bronze and steel material**
- **Precision formed, strip-fed splices terminated in AMP automatic machines for high production rates per hour**

Tyco Electronics offers a full selection of AMP open barrel splices that are specifically designed to terminate combinations of stranded wire and/or solid wire to themselves or to resistors, light emitting devices (LED), glass reed switch assemblies, etc.

Open barrel splices are available with or without serrations. Pre-stripped stranded or solid wire leads are forced into the serrations during the crimping process. The resulting termination produces a high tensile strength connection that is resistant to corrosion. Depending on your specific application, open barrel splices are available for terminations in the 400 to 30,000 CMA range in brass, copper-nickel, phosphor bronze and steel material.

Others are available with insulation support barrels to terminate round or square posts, resistance wire, and solid pin or calrod leads. The insulation support barrel prevents harmful flexing of the wire at the termination point where the wire is rigidly crimped in the wire barrel and deters fraying of the insulation. Depending on your specific application, open barrel insulation support splices are available for terminations in the 150 to 12,000 CMA range in brass and steel material.

Insulation piercing splices are also available to eliminate the need to pre-strip the insulated wire. The barrel contains two perpendicular lances that are driven through the wire insulation to make contact with the conductor.

Depending on your specific application, open barrel insulation piercing splices are available for terminations in the 16–22 AWG wire range in brass material.

Identification splices are available for wire marking. Up to three digits can be stamped on the bands during the crimping process. Depending on your specific application, open barrel identification splices are available for terminations from .150 to .300 insulation diameters in brass and aluminum material.

Open barrel splices are manufactured in strip form and supplied on reels for semi-automated and fully automated terminations on crimping machines for high output per hour production rates.

Technical Documents

Application Specifications describe requirements for using the product in its intended application and/or crimping information. They are intended for the Packaging and Design Engineer and the Machine Setup Person.

114-2088 — Pigtail and Thru Splices

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

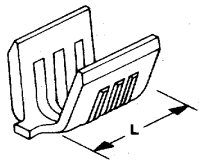
Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Splices (Continued)

Side Feed Splices — Non-Insulation Support



A

Type	Wire Range CMA	Wire Range mm²	Stock Thickness	Crimp Width	Dim. L	Material	Part Number
A	400-1300	0.20-0.66	**.016** 0.41	**.070** 1.78	**.100** 2.54	Brass	62759-1
						Tin Plated Brass	62759-2
						Steel	62759-5
	500-2200	0.25-1.11	**.030** 0.76	**.110** 2.79	**.100** 2.54	Brass	485016-1
	1200-2600	0.61-1.32	**.020** 0.51	**.090** 2.29	**.120** 3.05	Brass	61769-1
						Nickel Plated Steel	61769-2
					.190 4.83	Brass	60372-1
	1500-5000	0.76-2.53	**.020** 0.51	**.110** 2.79	**.155** 3.94	Brass	63130-2
						Tin Plated Brass	63130-3
						Tin Plated Phos. Bz.	63130-4
	4000-9000	2.03-4.56	**.020** 0.51	**.140** 3.56	**.250** 6.35	Brass	485043-1
						Tin Plated Brass	485043-2
						Nickel Plated Steel	485043-4
	7000-12500	3.55-6.33	**.031** 0.79	**.180** 4.57	**.265** 6.73	Tin Plated Steel	61299-1
						Tin Plated Brass	61299-2
						Brass	61299-3
	8500-14000	4.31-7.10	**.025** 0.64	**.180** 4.57	**.265** 6.73	Brass	1217967-1
						Tin Plated Brass	1217967-2
	14000-30000	7.10-15.20	**.030** 0.76	**.280** 7.11	**.310** 7.87	Brass	62754-1
						Tin Plated Brass	62754-2

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Splices (Continued)

End Feed Splices — Non-Insulation Support

A B

Type	Wire Range CMA	Wire Range mm²	Stock Thickness	Crimp Width	Dim. L	Material	Part Number
A	400-1100	0.20-0.56	.010 0.25	.055 1.40	.100 2.54	Brass	63834-1
	1000-3200	0.51-1.62	.020 0.51	.110 2.79	.150 3.81	Brass	41974
						Tin Plated Brass	41975
	1500-4600	0.76-2.33	.020 0.51	.110 2.79	.225 5.72	Nickel Plated Steel	62318-1
	2500-4700	1.27-2.38	.020 0.51	.120 3.05	.150 3.81	Brass	61492-1
						Tin/Cu Plated Brass	61492-2
						Copper-Nickel	61492-3
						Tin Plated Brass	40868
	3300-9000	1.67-4.56	.020 0.51	.140 3.56	.150 3.81	Brass	40509
						Tin Plated Brass	40552
						Nickel Plated Steel	40952
						Blackened St. Steel	60470-1
B	800-2600	0.41-1.32	.016 0.41	.090 2.29	.065 1.65	Brass	41459
						Copper-Nickel	41459-1
						Tin Plated Brass	41459-2
	1400-3600	0.71-1.82	.016 0.41	.090 2.29	.065 1.65	Tin Plated Brass	40862
	1400-2800	0.71-1.42	.016 0.41	.090 2.29	.100 2.54	Tin Plated Steel	61008-1
	2200-4200	1.11-2.13	.012 0.31	.090 2.29	.250 6.35	Nickel Plated Steel	63432-1
	2200-2900	1.11-1.47	.012 0.31	.090 2.29	.065 1.65	Tin Plated Steel	60933-2
	2200-4500	1.11-2.28	.012 0.31	.090 2.29	.065 1.65	Nickel Plated Steel	41215
	2500-4700	1.27-2.38	.020 0.51	.120 3.05	.150 3.81	Nickel Plated Steel	41397
					.125 3.17	Tin Plated Steel	60932-2
						Brass	60932-4
	3200-3900	1.62-1.98	.012 0.31	.100 2.54	.150 3.81	Nickel Plated Steel	42329-1
	3200-8000	1.62-4.05	.020 0.51	.140 3.56	.225 5.72	Brass	155352-1
	4000-10000	2.02-5.07	.025 0.64	.155 3.94	.250 6.35	Stainless Steel	41627-1
	6000-8000	3.04-4.05	.020 0.51	.155 3.94	.125 3.17	Tin Plated Steel	485020-1
	7000-13000	3.55-6.59	.025 0.64	.180 4.57	.225 5.72	Brass	155353-1
						Tin Plated Brass	155353-2
	7400-10000	3.75-5.07	.025 0.64	.180 4.57	.250 6.35	Tin Plated Brass	41996
						Brass	62357-1
	12000-18000	6.08-9.12	.025 0.64	.180 4.57	.250 6.35	Brass	60997-1
						Nickel Plated Steel	60997-3
						Stainless Steel	60997-5

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

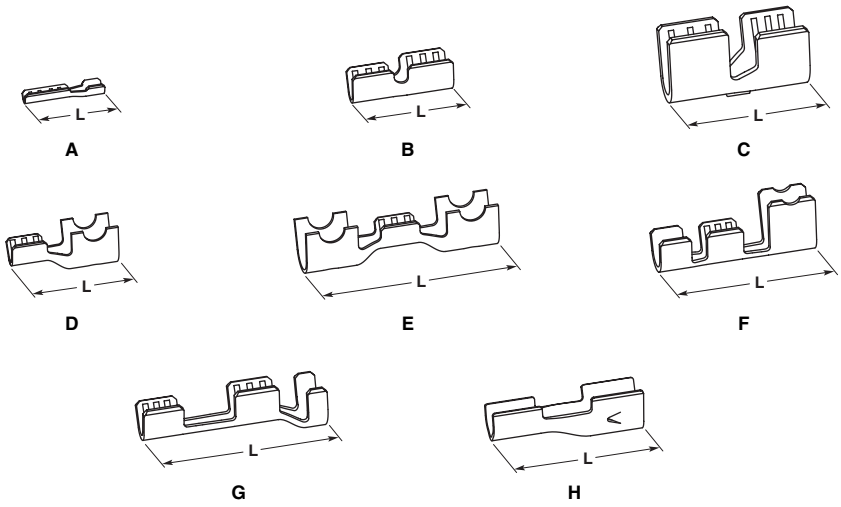
Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Splices (Continued)

Insulation Support Splices



Type	Wire Range** CMA	Wire Range** mm²	Insul. Dia.	Stock Thickness	Dim. L	Material	Part Number
A	150-480	0.76-2.43	**.035-.050** 0.89-1.27	**.010** 0.25	**.305** 7.75	Brass	62382-1
						Tin Plated Brass	62382-2
	250-500	0.13-0.25	—	**.010** 0.25	**.190** 4.83	Brass	1375622-1[1]
B	975-2700	0.49-1.37	**.080-.115** 2.03-2.92	**.012** 0.31	**.375** 9.52	Nickel Plated Steel	61021-1
	1200-2200	0.61-1.11	**.070-.100** 1.78-2.54	**.020** 0.51	**.230** 5.84	Nickel Plated Steel	62503-2
	3200-9000	1.62-4.56	**.120-.160** 3.05-4.06	**.020** 0.51	**.370** 9.40	Nickel Plated Steel	42627-4
C	6000-12000	3.04-6.08	**.140-.185** 3.55-4.70	**.031** 0.79	**.545** 13.85	Tin Plated Steel	61300-1
D	1600-4100	0.81-2.08	**.105-.145** 2.67-3.68	**.012** 0.31	**.450** 11.43	Brass	60806-1
E	1600-4100	0.81-2.08	**.105-.145** 2.67-3.68	**.012** 0.31	**.745** 18.92	Brass	62516-2
F	975-3100	0.49-1.57	**.080-.115** 2.03-2.92	**.020** 0.51	**.605** 15.37	Tin Plated Steel	505033-1[2]
G	a ~ 1000-3100 b ~ 1500-4500	a ~ 0.51-1.57 b ~ 0.76-2.28	**.135-.170** 3.43-4.32	**.020** 0.51	**.705** 17.90	Brass	62419-2
						Nickel Plated Steel	62419-3
H	1600-3000	0.81-1.52	**.105-.145** 2.67-3.68	**.014** 0.36	**.580** 14.70	Tin Plated Brass	1438246-2
						Brass	1438246-4
	4100-6900	2.08-3.50				Brass	1438246-5

** Wire sizes indicated do not apply to resistance (heater) wire applications.
[1] Crimps to .015 [0.38] round or square post.
[2] Crimps to .092 [2.33] dia. solid pin or calrod.

Insulation Piercing Crimp (AWG Wire, 7 Strands Min.)

Type	Wire Range CMA	Wire Range mm²	Insul. Dia.	Stock Thickness	Dim. L	Material	Part Number
A	20-16	0.5-1.4	**.070-.090** 1.78-2.29	**.020** 0.51	**.210** 5.33	Tin Plated Brass	40771
B	22	0.3-0.4	**.050-.065** 1.27-1.65	**.012** 0.31	**.210** 5.33	Brass	485064-1
						Gold Plated Brass	485064-2
						Nickel Plated Brass	485064-4

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

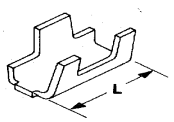
Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

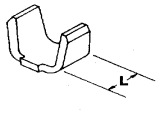
South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Splices (Continued)

Identification Bands **



A



B

Type	Wire Range AWG	Wire Range mm²	Insul. Dia.	Stock Thickness	Dim. L	Material	Part Number
A	—	—	**.190-.220** 4.82-5.59	**.020** 0.51	**.250** 6.35	Aluminum	41276
						Brass	41108
	—	—	**.210-.235** 5.33-5.97	**.020** 0.51	**.300** 7.62	Aluminum	1438254-1
			.240-.260 6.09-6.60			Aluminum	1438254-2
B	—	—	**.150-.300** 3.81-7.62	**.030** 0.76	**.180** 4.57	Brass	41282

** One to three digits can be stamped on bands in crimping operation.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425
South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

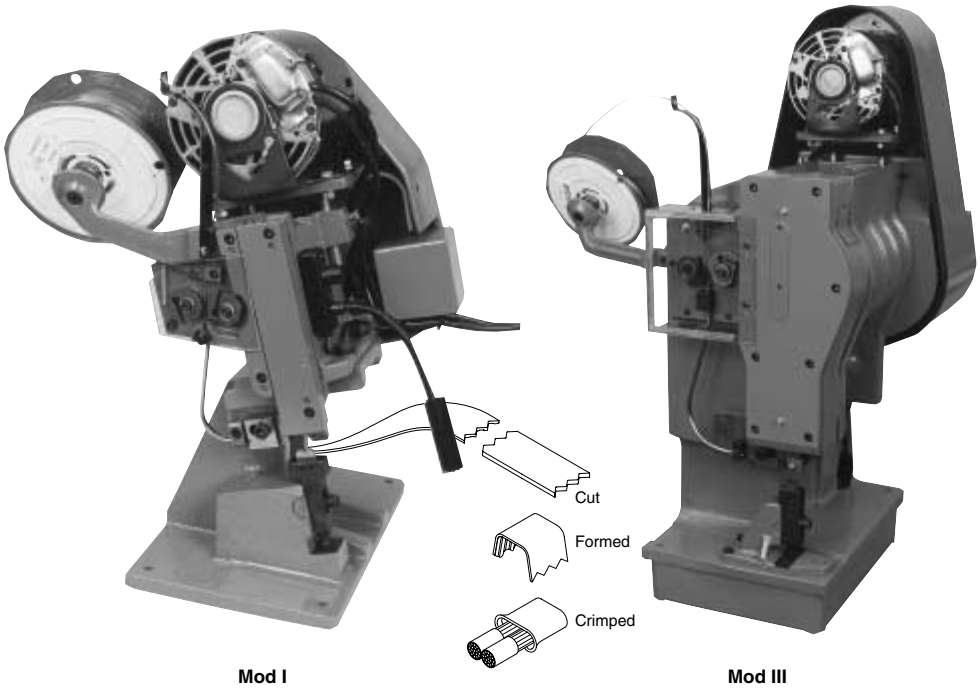
RTM Crimpband Splices

Product Facts

- Made from a continuous coil of "Ribbon Connector" material
- RTM Crimpband have grooved serrations for improved axial retention
- Available in brass, tin-plated brass and copper-nickel alloy (CA725) material
- Make parallel or pigtail connections on same machine
- Used for electrical and non-electrical connections
- 100% of RTM Crimpband material is used in scrap free terminations
- Crimpband material coupled with appropriate toolsets accommodate specific CMA ranges
- Produced in Tyco Electronics equipment on your production floor
- Meets UL 486C crimp tensile requirements

Applications

- Stranded and solid wire-to-wire connections
- Light bulb LED assembly
- Switch lead assembly
- Resistor lead assembly
- Printed circuit board lead assembly
- Flex-film lead assembly
- Glass reed switch lead assembly



Mod I

Mod III

Tyco Electronics features the AMP RTM Crimpband system that is comprised of two key features: the semi-automatic termination machine and a reel of RTM Crimpband material.

In a one-step crimping operation, the machine feeds, cuts, forms and crimps the material to provide a low-cost, high reliability crimp connection.

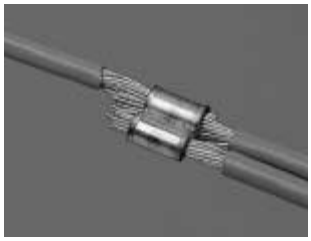
The RTM Crimpband splices are formed during the crimping process from milled longitudinal groove material that produce rolled, rounded serrations.

They are designed to terminate pre-stripped stranded and solid wire conductors together as well as wire conductors to switch tabs, resistors, printed circuit board, flex circuit and light bulb LED and glass reed switch assemblies, etc.

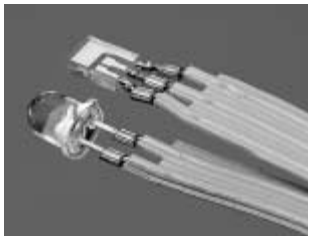
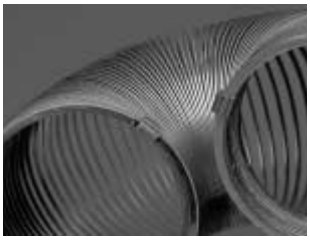
The flexibility of the RTM Crimpband system provides opportunity for use in custom applications for either electrical and / or mechanical connections.

Tyco Electronics provides a wide range of toolset types and crimpband splices to meet various production requirements.

Depending on your specific application, RTM Crimpband splices are available in 3, 6, 7, 8, 9, 10 14 and 20 ridge serration versions for terminations in the 170 to 13,000 CMA range.






Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

RTM Crimpband Splices (Continued)

RTM Crimpband Interconnection System

How the System Operates

① **Feed (Ribbon Connector Material)**
Machine feeds strip until the strip hits the wire stop.

② **Shear (Blank Length)**
The strip is cut by the cutter block former bar insert tooling.

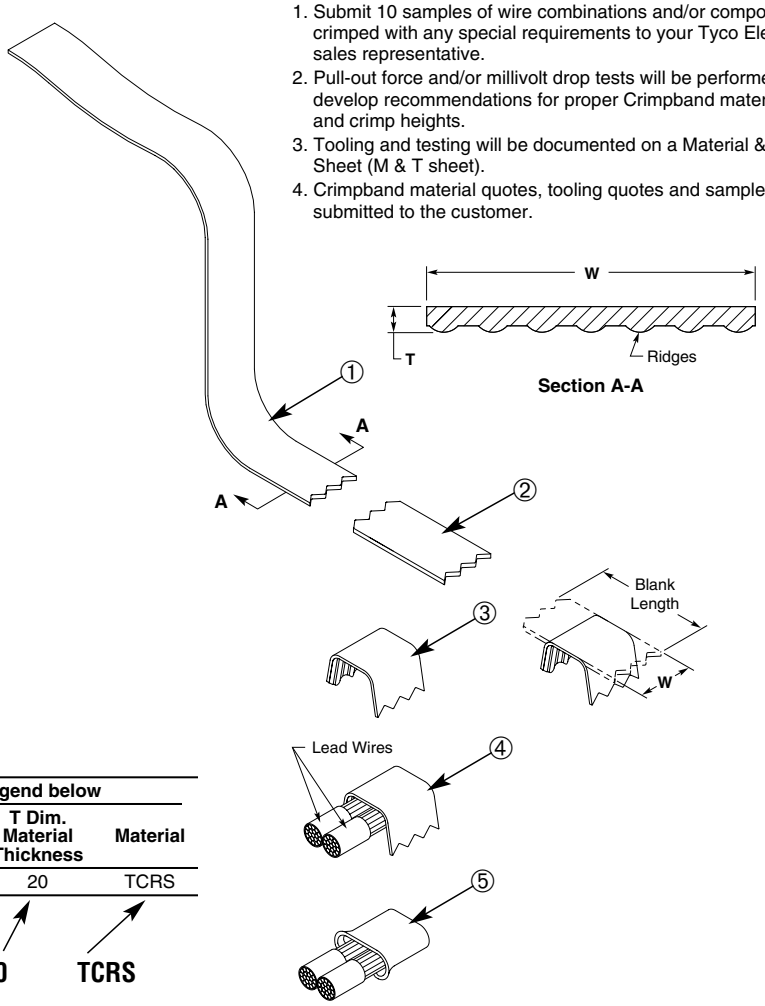
③ **Bend (Crimp Formed)**
The former bar drives the cut strip over the anvil, bending the cut strip into an upside down "U".

④ **Wire (Placement)**
Pigtail and Parallel (Thru) splice terminations are made on the same machine.

⑤ **Crimp (Crimp Formed)**
The anvil retracts as the driver takes the formed strip down into the clincher.

Notes: So that the proper Crimpband splice is chosen, Tyco Electronics recommends the following:

1. Submit 10 samples of wire combinations and/or components to be crimped with any special requirements to your Tyco Electronics sales representative.
2. Pull-out force and/or millivolt drop tests will be performed to develop recommendations for proper Crimpband material, toolset and crimp heights.
3. Tooling and testing will be documented on a Material & Tooling Sheet (M & T sheet).
4. Crimpband material quotes, tooling quotes and samples will be submitted to the customer.



Connector Specification Code

Machine Basis	See Figure 1 and/or Legend below			
	B.L. Dim. Tooling Size	W Dim. Connector Width	T Dim. Material Thickness	Material
L	092	F	20	TCRS

Splice No. Example: L 092 F 20 TCRS

Legend

Machine Basis	
L	P
Leased	Purchase

Tooling Size Code	Blank Length B/L (Nom.)
032	.167
032/036	.228
036	.224
045	.246
051	.267
061	.292
061/076	.324
076	.339
076/092	.361
092	.379
092/125	.413
125	.446
125/160	.485
125/165	.506
165	.546

Note: For B/L above, .546 consult factory for tooling size code

Connector Width Code	W Dim.	N No. of Ridges
B	.076	3
C	.138	6
D	.154	7
E	.185	8
F	.216	9
G	.234	10
H	.247	10
L	.086	3
M	.330	14
N	.500	20
P	.114	5

Material Thickness Code	T±.002 Dim.
12	.012
16	.016
18	.018
20	.020
22	.022
24	.024
25	.025

Material Code	Material/Finish
B	CDA 260 Brass
A	CDA 725 Copper/ Nickel Alloy
TB	Pre-Tin over CDA 260 Brass
TCRS	1010 Cold Rolled Steel, Tin Plated
SS	301 or 302 Stainless Steel
ST	Stainless Steel, Tin Plated

Wire Size AWG	UL486C Pull Out Force Requirements Underwriters Laboratory (lbs.)
26	3
24	5
22	8
20	10
18	10
16	15
14	25
12	35
10	40

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

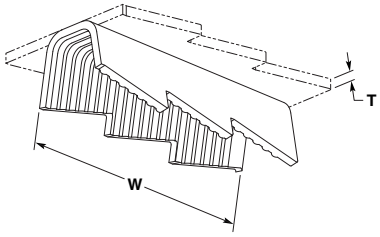
Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

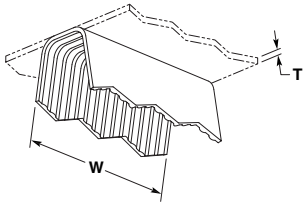
RTM Crimpband Splices (Continued)

20 Ridges



AWG/ mm²	Wire Range Solid Dia.	CMA Range	Stock Thk. (T)	Mat'l Width (W)	Material	Toolset	Part Number	Descriptive X-ref
11½-9 4.00-6.50	**.084-.114** 2.13-2.90	7000-13000	**.020** 0.51	**.500** 12.70	Tin Plated Brass	200/202	1601771-1	L200/202N20TB

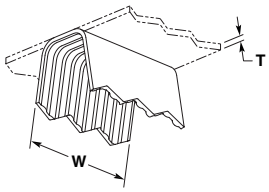
14 Ridges



AWG/ mm²	Wire Range Solid Dia.	CMA Range	Stock Thk. (T)	Mat'l Width (W)	Material	Toolset	Part Number	Descriptive X-ref
22-19 0.38-0.60	**.024-.036** 0.61-0.91	600-1300	**.012** 0.30	**.330** 8.38	Cu Ni	045	1601577-1†	L045M12A
22-19 0.38-0.60	**.024-.036** 0.61-0.91	600-1300	**.012** 0.30	**.330** 8.38	Brass	045	1601578-1	L045M12B

† These part numbers are available upon special request; contact Tyco Electronics Engineering for details.

10 Ridges



AWG/ mm²	Wire Range Solid Dia.	CMA Range	Stock Thk. (T)	Mat'l Width (W)	Material	Toolset	Part Number	Descriptive X-ref
22-19 0.38-0.60	**.024-.036** 0.61-0.91	600-1300	**.012** 0.30	**.234** 5.94	Brass	045	1601575-1	L045G12B
21-18½ 0.40-0.75	**.028-.039** 0.71-0.99	800-1500	**.016** 0.41	**.234** 5.94	Cu Ni	051	1601593-1†	L051G16A
20½-16 0.45-1.30	**.030-.051** 0.76-1.29	900-2600	**.012** 0.30	**.234** 5.94	Brass	061	1601632-1†	L061G12B
20½-16 0.45-1.30	**.030-.051** 0.76-1.29	900-2600	**.020** 0.51	**.234** 5.94	Brass	061	1601633-1	L061G20B
11½-9 4.00-6.50	**.084-.114** 2.13-2.90	7000-13000	**.020** 0.51	**.234** 5.94	Brass	200/202	1601853-1	P200/ 202G20B
11½-9 4.00-6.50	**.084-.114** 2.13-2.90	7000-13000	**.025** 0.64	**.234** 5.94	Brass	200/202	1601769-1	L200/ 202G25BX

† These part numbers are available upon special request; contact Tyco Electronics Engineering for details.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

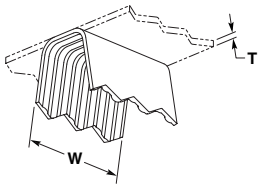
Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

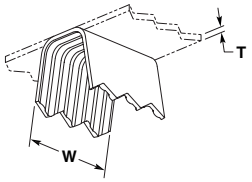
RTM Crimpband Splices (Continued)

9 Ridges



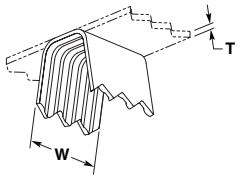
AWG/ mm²	Wire Range Solid Dia.	CMA Range	Stock Thk. (T)	Mat'l Width (W)	Material	Toolset	Part Number	Descriptive X-ref
22-19 0.38-0.60	**.024-.036** 0.61-0.91	600-1300	**.012** 0.30	**.216** 5.49	Stainless Steel	045	1601807-1	P045F12SS
20½-16 0.45-1.30	**.030-.051** 0.76-1.29	900-2600	**.012** 0.30	**.216** 5.49	Stainless Steel	061	1601520-1	G061F12SS

8 Ridges



AWG/ mm²	Wire Range Solid Dia.	CMA Range	Stock Thk. (T)	Mat'l Width (W)	Material	Toolset	Part Number	Descriptive X-ref
24-20 0.20-0.50	**.020-.033** 0.51-0.84	400-1100	**.012** 0.30	**.185** 4.70	Cu Ni	032/036	1601553-1	L032/ 036E12A
18-14 0.80-2.00	**.040-.063** 1.02-1.60	1600-4000	**.018** 0.46	**.185** 4.70	Tin Plated CRS	076	1601669-1	L076E18TCRS
11½-9 4.00-6.50	**.084-.114** 2.13-2.90	7000-13000	**.024** 0.61	**.185** 4.70	Brass	200/202	1601768-1	L200/ 202E24B

7 Ridges



AWG/ mm²	Wire Range Solid Dia.	CMA Range	Stock Thk. (T)	Mat'l Width (W)	Material	Toolset	Part Number	Descriptive X-ref
24-20 0.20-0.50	**.020-.033** 0.51-0.84	400-1100	**.012** 0.30	**.154** 3.91	Brass	032/036	1601550-1	L032/ 036D12B
24-20 0.20-0.50	**.020-.033** 0.51-0.84	400-1100	**.016** 0.41	**.154** 3.91	Cu Ni	032/036	1601551-1	L032/ 036D16A
24-20 0.20-0.50	**.020-.033** 0.51-0.84	400-1100	**.016** 0.41	**.154** 3.91	Brass	032/036	1601797-1	P032/ 036D16B
24-20 0.20-0.50	**.020-.033** 0.51-0.84	400-1100	**.016** 0.41	**.154** 3.91	Tin Plated Brass	032/036	1601798-1	P032/ 036D16TB
22-19 0.38-0.60	**.024-.036** 0.61-0.91	600-1300	**.012** 0.30	**.154** 3.91	Brass	045	1601572-1	L045D12B
22-19 0.38-0.60	**.024-.036** 0.61-0.91	600-1300	**.016** 0.41	**.154** 3.91	Cu Ni	045	1601573-1	L045D16A

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

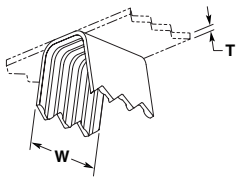
Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

RTM Crimpband Splices (Continued)

7 Ridges (Continued)



AWG/ mm²	Wire Range Solid Dia.	CMA Range	Stock Thk. (T)	Mat'l Width (W)	Material	Toolset	Part Number	Descriptive X-ref
22-19 0.38-0.60	**.024-.036** 0.61-0.91	600-1300	**.016** 0.41	**.154** 3.91	Brass	045	1601507-1†	G045D16B
21-18½ 0.40-0.75	**.028-.039** 0.71-0.99	800-1500	**.012** 0.30	**.154** 3.91	Brass	051	1601587-1	L051D12B
21-18½ 0.40-0.75	**.028-.039** 0.71-0.99	800-1500	**.016** 0.41	**.154** 3.91	Brass	051	1601588-1	L051D16B
21-18½ 0.40-0.75	**.028-.039** 0.71-0.99	800-1500	**.020** 0.51	**.154** 3.91	Nickel Plated Steel	051	1601591-1	L051D20NPS
21-18½ 0.40-0.75	**.028-.039** 0.71-0.99	800-1500	**.020** 0.51	**.154** 3.91	Tin Plated CRS	051	1601811-1†	P051D20TCRS
20½-16 0.45-1.30	**.030-.051** 0.76-1.29	900-2600	**.012** 0.30	**.154** 3.91	Cu Ni	061	1601818-1†	P061D12A
20½-16 0.45-1.30	**.030-.051** 0.76-1.29	900-2600	**.012** 0.30	**.154** 3.91	Brass	061	1601620-1†	L061D12B
20½-16 0.45-1.30	**.030-.051** 0.76-1.29	900-2600	**.012** 0.30	**.154** 3.91	Tin Plated Brass	061	1601514-1†	G061D12TB
20½-16 0.45-1.30	**.030-.051** 0.76-1.29	900-2600	**.016** 0.41	**.154** 3.91	Cu Ni	061	1601819-1	P061D16A
20½-16 0.45-1.30	**.030-.051** 0.76-1.29	900-2600	**.016** 0.41	**.154** 3.91	Brass	061	1601820-1	P061D16B
20½-16 0.45-1.30	**.030-.051** 0.76-1.29	900-2600	**.016** 0.41	**.154** 3.91	Tin Plated Brass	061	1601623-1	L061D16TB
20½-16 0.45-1.30	**.030-.051** 0.76-1.29	900-2600	**.018** 0.46	**.154** 3.91	Brass	061	1601625-1	L061D18B
20½-16 0.45-1.30	**.030-.051** 0.76-1.29	900-2600	**.018** 0.46	**.154** 3.91	Tin Plated Brass	061	1601628-1	L061D18TB
20½-16 0.45-1.30	**.030-.051** 0.76-1.29	900-2600	**.020** 0.51	**.154** 3.91	Cu Ni	061	1601629-1	L061D20A
20½-16 0.45-1.30	**.030-.051** 0.76-1.29	900-2600	**.020** 0.51	**.154** 3.91	Brass	061	1601630-1	L061D20B
20½-16 0.45-1.30	**.030-.051** 0.76-1.29	900-2600	**.020** 0.51	**.154** 3.91	Tin Plated Brass	061	1601631-1	L061D20TBX
20-15 0.60-1.60	**.033-.057** 0.84-1.45	1100-3200	**.016** 0.41	**.154** 3.91	Brass	061/076	1601601-1	L061/076D16B
19½-14½ 0.60-1.80	**.035-.061** 0.89-1.54	1200-3700	**.016** 0.41	**.154** 3.91	Brass	061/092	1601603-1	L061/092D16B
18-14 0.80-2.00	**.040-.063** 1.02-1.60	1600-4000	**.012** 0.30	**.154** 3.91	Cu Ni	076	1601828-1	P076D12A
18-14 0.80-2.00	**.040-.063** 1.02-1.60	1600-4000	**.012** 0.30	**.154** 3.91	Brass	076	1601655-1†	L076D12B
18-14 0.80-2.00	**.040-.063** 1.02-1.60	1600-4000	**.016** 0.41	**.154** 3.91	Cu Ni	076	1601656-1	L076D16A
18-14 0.80-2.00	**.040-.063** 1.02-1.60	1600-4000	**.016** 0.41	**.154** 3.91	Brass	076	1601829-1	P076D16B
18-14 0.80-2.00	**.040-.063** 1.02-1.60	1600-4000	**.016** 0.41	**.154** 3.91	Tin Plated Brass	076	1601658-1	L076D16TB
18-14 0.80-2.00	**.040-.063** 1.02-1.60	1600-4000	**.018** 0.46	**.154** 3.91	Cu Ni	076	1601660-1	L076D18AX
18-14 0.80-2.00	**.040-.063** 1.02-1.60	1600-4000	**.018** 0.46	**.154** 3.91	Brass	076	1601661-1	L076D18B
18-14 0.80-2.00	**.040-.063** 1.02-1.60	1600-4000	**.018** 0.46	**.154** 3.91	Tin Plated Brass	076	1601664-1	L076D18TB
18-14 0.80-2.00	**.040-.063** 1.02-1.60	1600-4000	**.020** 0.51	**.154** 3.91	Brass	076	1601665-1	L076D20B
18-14 0.80-2.00	**.040-.063** 1.02-1.60	1600-4000	**.020** 0.51	**.154** 3.91	Tin Plated CRS	076	1601667-1	L076D20TCRS
18-14 0.80-2.00	**.040-.063** 1.02-1.60	1600-4000	**.024** 0.61	**.154** 3.91	Brass	076	1601668-1	L076D24B

† These part numbers are available upon special request; contact Tyco Electronics Engineering for details.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

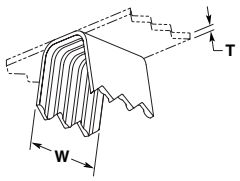
Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

RTM Crimpband Splices (Continued)

7 Ridges (Continued)



AWG/ mm²	Wire Range Solid Dia.	CMA Range	Stock Thk. (T)	Mat'l Width (W)	Material	Toolset	Part Number	Descriptive X-ref
17½-13 0.95-2.54	**.042-.068** 1.07-1.80	1800-4600	**.016** 0.41	**.154** 3.91	Brass	076/092	1601642-1	L076/ 092D16BX
16½-13 1.10-2.60	**.047-.072** 1.19-1.83	2200-5200	**.016** 0.41	**.154** 3.91	Cu Ni	092	1601689-1	L092D16ASP
16½-13 1.10-2.60	**.047-.072** 1.19-1.83	2200-5200	**.016** 0.41	**.154** 3.91	Brass	092	1601691-1	L092D16B
16½-13 1.10-2.60	**.047-.072** 1.19-1.83	2200-5200	**.016** 0.41	**.154** 3.91	Tin Plated Brass	092	1601693-1	L092D16TB
16½-13 1.10-2.60	**.047-.072** 1.19-1.83	2200-5200	**.018** 0.46	**.154** 3.91	Cu Ni	092	1601694-1	L092D18A
16½-13 1.10-2.60	**.047-.072** 1.19-1.83	2200-5200	**.018** 0.46	**.154** 3.91	Brass	092	1601695-1	L092D18B
16½-13 1.10-2.60	**.047-.072** 1.19-1.83	2200-5200	**.018** 0.46	**.154** 3.91	Tin Plated Brass	092	1601841-1	P092D18TB
16½-13 1.10-2.60	**.047-.072** 1.19-1.83	2200-5200	**.020** 0.51	**.154** 3.91	Brass	092	1601528-1†	G092D20B
16-12 1.30-3.46	**.051-.078** 1.29-1.98	2600-6100	**.020** 0.51	**.154** 3.91	Cu Ni	092/125	1601680-1	L092/ 125D20A
16-12 1.30-3.46	**.051-.078** 1.29-1.98	2600-6100	**.020** 0.51	**.154** 3.91	Brass	092/125	1601681-1	L092/ 125D20B
16-12 1.30-3.46	**.051-.078** 1.29-1.98	2600-6100	**.020** 0.51	**.154** 3.91	Tin Plated CRS	092/125	1601682-1	092/ 125D20TCRS
15½-12 1.54-3.46	**.055-.082** 1.40-2.10	3000-6750	**.016** 0.41	**.154** 3.91	Brass	125	1601529-1	G125D16B
15½-12 1.54-3.46	**.055-.082** 1.40-2.10	3000-6750	**.018** 0.46	**.154** 3.91	Cu Ni	125	1601531-1	G125D18A
15½-12 1.54-3.46	**.055-.082** 1.40-2.10	3000-6750	**.018** 0.46	**.154** 3.91	Brass	125	1601726-1	L125D18B
15½-12 1.54-3.46	**.055-.082** 1.40-2.10	3000-6750	**.018** 0.46	**.154** 3.91	Tin Plated Brass	125	1601729-1	L125D18TBX
15½-12 1.54-3.46	**.055-.082** 1.40-2.10	3000-6750	**.020** 0.51	**.154** 3.91	Brass	125	1601730-1	L125D20B
15½-12 1.54-3.46	**.055-.082** 1.40-2.10	3000-6750	**.020** 0.51	**.154** 3.91	Tin Plated Brass	125	1601731-1	L125D20TB
15½-12 1.54-3.46	**.055-.082** 1.40-2.10	3000-6750	**.020** 0.51	**.154** 3.91	Tin Plated CRS	125	1601733-1	L125D20TCRS
14½-11½ 1.80-4.00	**.059-.087** 1.50-2.21	3500-7500	**.018** 0.46	**.154** 3.91	Tin Plated Brass	125/165	1601709-1	L125/ 165D18TB
14½-11½ 1.80-4.00	**.059-.087** 1.50-2.21	3500-7500	**.020** 0.51	**.154** 3.91	Cu Ni	125/165	1601710-1	L125/ 165D20A
14½-11½ 1.80-4.00	**.059-.087** 1.50-2.21	3500-7500	**.020** 0.51	**.154** 3.91	Brass	125/165	1601711-1	L125/ 165D20B
14½-11½ 1.80-4.00	**.059-.087** 1.50-2.21	3500-7500	**.020** 0.51	**.154** 3.91	Tin Plated Brass	125/165	1601712-1	L125/ 165D20TB
14-11 2.00-4.20	**.063-.092** 1.60-2.34	4000-8500	**.020** 0.51	**.154** 3.91	Cu Ni	165	1601754-1†	L165D20A
14-11 2.00-4.20	**.063-.092** 1.60-2.34	4000-8500	**.020** 0.51	**.154** 3.91	Brass	165	1601755-1	L165D20B
13½-10½ 2.54-4.50	**.071-.097** 1.70-2.46	4500-9500	**.020** 0.51	**.154** 3.91	Brass	165/200	1601532-1	G165/ 200D20B
11½-9 4.00-6.50	**.084-.114** 2.13-2.90	7000-13000	**.016** 0.41	**.154** 3.91	Brass	200/202	1601764-1	L200/ 202D16B
11½-9 4.00-6.50	**.084-.114** 2.13-2.90	7000-13000	**.020** 0.51	**.154** 3.91	Cu Ni	200/202	1601765-1	L200/ 202D20A
11½-9 4.00-6.50	**.084-.114** 2.13-2.90	7000-13000	**.020** 0.51	**.154** 3.91	Brass	200/202	1601852-1	P200/ 202D20B
11½-9 4.00-6.50	**.084-.114** 2.13-2.90	7000-13000	**.020** 0.51	**.154** 3.91	Tin Plated Brass	200/202	1601766-1	L200/ 202D20TB

† These part numbers are available upon special request; contact Tyco Electronics Engineering for details.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

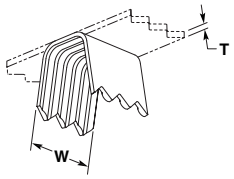
Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

RTM Crimpband Splices (Continued)

6 Ridges



AWG/ mm²	Wire Range Solid Dia.	CMA Range	Stock Thk. (T)	Mat'l Width (W)	Material	Toolset	Part Number	Descriptive X-ref
24-20 0.20-0.50	**.020-.033** 0.51-0.84	400-1100	**.012** 0.30	**.138** 3.51	Tin Plated Brass	032/036	1601548-1	L032/ 036C12TB
24-20 0.20-0.50	**.020-.033** 0.51-0.84	400-1100	**.016** 0.41	**.138** 3.51	Brass	032/036	1601549-1	L032/ 036C16B
22-19 0.38-0.60	**.024-.036** 0.61-0.91	600-1300	**.012** 0.30	**.138** 3.51	Brass	045	1601566-1	L045C12B
22-19 0.38-0.60	**.024-.036** 0.61-0.91	600-1300	**.016** 0.41	**.138** 3.51	Cu Ni	045	1601569-1	L045C16A
22-19 0.38-0.60	**.024-.036** 0.61-0.91	600-1300	**.016** 0.41	**.138** 3.51	Brass	045	1601571-1	L045C16B
21-18½ 0.40-0.75	**.028-.039** 0.71-0.99	800-1500	**.012** 0.30	**.138** 3.51	Brass	051	1601808-1†	P051C12B
21-18½ 0.40-0.75	**.028-.039** 0.71-0.99	800-1500	**.016** 0.41	**.138** 3.51	Cu Ni	051	1601809-1	P051C16A
21-18½ 0.40-0.75	**.028-.039** 0.71-0.99	800-1500	**.016** 0.41	**.138** 3.51	Brass	051	1601810-1	P051C16B
21-18½ 0.40-0.75	**.028-.039** 0.71-0.99	800-1500	**.018** 0.46	**.138** 3.51	Brass	051	1601586-1†	L051C18B
20½-16 0.45-1.30	**.030-.051** 0.76-1.29	900-2600	**.016** 0.41	**.138** 3.51	Cu Ni	061	1601614-1	L061C16A
20½-16 0.45-1.30	**.030-.051** 0.76-1.29	900-2600	**.016** 0.41	**.138** 3.51	Brass	061	1601511-1	G061C16B
20½-16 0.45-1.30	**.030-.051** 0.76-1.29	900-2600	**.016** 0.41	**.138** 3.51	Tin Plated Brass	061	1601617-1	L061C16TB
20½-16 0.45-1.30	**.030-.051** 0.76-1.29	900-2600	**.018** 0.46	**.138** 3.51	Cu Ni	061	1601618-1	L061C18AX
20½-16 0.45-1.30	**.030-.051** 0.76-1.29	900-2600	**.018** 0.46	**.138** 3.51	Brass	061	1601619-1	L061C18B
20½-16 0.45-1.30	**.030-.051** 0.76-1.29	900-2600	**.020** 0.51	**.138** 3.51	Brass	061	1601513-1†	G061C20B
20-15 0.60-1.60	**.033-.057** 0.84-1.45	1100-3200	**.016** 0.41	**.138** 3.51	Brass	061/076	1601597-1	L061/ 076C16B
20-15 0.60-1.60	**.033-.057** 0.84-1.45	1100-3200	**.016** 0.41	**.138** 3.51	Tin Plated Brass	061/076	1601599-1	L061/ 076C16TB
20-15 0.60-1.60	**.033-.057** 0.84-1.45	1100-3200	**.018** 0.46	**.138** 3.51	Brass	061/076	1601600-1†	L061/ 076C18B
18-14 0.80-2.00	**.040-.063** 1.02-1.60	1600-4000	**.016** 0.41	**.138** 3.51	Cu Ni	076	1601650-1	L076C16A
18-14 0.80-2.00	**.040-.063** 1.02-1.60	1600-4000	**.016** 0.41	**.138** 3.51	Brass	076	1601651-1	L076C16B
18-14 0.80-2.00	**.040-.063** 1.02-1.60	1600-4000	**.018** 0.46	**.138** 3.51	Cu Ni	076	1601652-1†	L076C18A
18-14 0.80-2.00	**.040-.063** 1.02-1.60	1600-4000	**.018** 0.46	**.138** 3.51	Brass	076	1601827-1	P076C18B
18-14 0.80-2.00	**.040-.063** 1.02-1.60	1600-4000	**.018** 0.46	**.138** 3.51	Tin Plated CRS	076	1601654-1†	L076C18TCRS
17½-13 0.95-2.54	**.042-.068** 1.07-1.80	1800-4600	**.016** 0.41	**.138** 3.51	Brass	076/092	1601640-1	L076/ 092C16B
16½-13 1.10-2.60	**.047-.072** 1.19-1.83	2200-5200	**.016** 0.41	**.138** 3.51	Cu Ni	092	1601837-1	P092C16AX
16½-13 1.10-2.60	**.047-.072** 1.19-1.83	2200-5200	**.016** 0.41	**.138** 3.51	Brass	092	1601687-1	L092C16B
15½-12 1.54-3.46	**.055-.082** 1.40-2.10	3000-6750	**.016** 0.41	**.138** 3.51	Tin Plated Brass	125	1601721-1	L125C16TB
15½-12 1.54-3.46	**.055-.082** 1.40-2.10	3000-6750	**.018** 0.46	**.138** 3.51	Cu Ni	125	1601722-1	L125C18A
15½-12 1.54-3.46	**.055-.082** 1.40-2.10	3000-6750	**.018** 0.46	**.138** 3.51	Brass	125	1601723-1	L125C18B

† These part numbers are available upon special request; contact Tyco Electronics Engineering for details.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

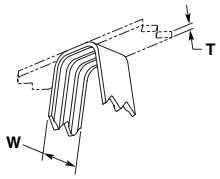
Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

RTM Crimpband Splices (Continued)

3 Ridges



AWG/ mm²	Wire Range Solid Dia.	CMA Range	Stock Thk. (T)	Mat'l Width (W)	Material	Toolset	Part Number	Descriptive X-ref
27½-21 0.09-0.40	**.013-.028** 0.33-0.71	170-800	**.012** 0.30	**.076** 1.93	Brass	032	1601555-1	L032B12B
24-20 0.20-0.50	**.020-.033** 0.51-0.84	400-1100	**.012** 0.30	**.076** 1.93	Cu Ni	032/036	1601542-1	L032/ 036B12A
24-20 0.20-0.50	**.020-.033** 0.51-0.84	400-1100	**.012** 0.30	**.076** 1.93	Brass	032/036	1601795-1	P032/ 036B12B
24-20 0.20-0.50	**.020-.033** 0.51-0.84	400-1100	**.016** 0.41	**.076** 1.93	Brass	032/036	1601545-1	L032/ 036B16B
24-20 0.20-0.50	**.020-.033** 0.51-0.84	400-1100	**.016** 0.41	**.076** 1.93	Tin Plated Brass	032/036	1601546-1	L032/ 036B16TB
24-20 0.20-0.50	**.020-.033** 0.51-0.84	400-1100	**.018** 0.46	**.076** 1.93	Brass	032/036	1601547-1†	L032/ 036B18B
22-19 0.38-0.60	**.024-.036** 0.61-0.91	600-1300	**.016** 0.41	**.076** 1.93	Cu Ni	045	1601503-1	G045B16A
22-19 0.38-0.60	**.024-.036** 0.61-0.91	600-1300	**.016** 0.41	**.076** 1.93	Brass	045	1601562-1	L045B16B
22-19 0.38-0.60	**.024-.036** 0.61-0.91	600-1300	**.016** 0.41	**.076** 1.93	Tin Plated Brass	045	1601504-1†	G045B16TB
22-19 0.38-0.60	**.024-.036** 0.61-0.91	600-1300	**.016** 0.41	**.076** 1.93	Tin Plated Brass	045	1601564-1	L045B16TBSP
21-18½ 0.40-0.75	**.028-.039** 0.71-0.99	800-1500	**.016** 0.41	**.076** 1.93	Cu Ni	051	1601580-1†	L051B16A
21-18½ 0.40-0.75	**.028-.039** 0.71-0.99	800-1500	**.016** 0.41	**.076** 1.93	Brass	051	1601582-1†	L051B16B
21-18½ 0.40-0.75	**.028-.039** 0.71-0.99	800-1500	**.016** 0.41	**.076** 1.93	Tin Plated Brass	045	1601583-1†	L051B16TB
21-18½ 0.40-0.75	**.028-.039** 0.71-0.99	800-1500	**.020** 0.51	**.076** 1.93	Brass	051	1601584-1	L051B20B
20½-16 0.45-1.30	**.030-.051** 0.76-1.29	900-2600	**.016** 0.41	**.076** 1.93	Tin Plated Brass	061	1601612-1†	L061B16TB
20½-16 0.45-1.30	**.030-.051** 0.76-1.29	900-2600	**.016** 0.41	**.076** 1.93	Cu Ni	061	1601610-1	L061B16A
20½-16 0.45-1.30	**.030-.051** 0.76-1.29	900-2600	**.016** 0.41	**.076** 1.93	Brass	061	1601611-1	L061B16B
20½-16 0.45-1.30	**.030-.051** 0.76-1.29	900-2600	**.016** 0.41	**.076** 1.93	Brass	061	1601635-1	L061L16B
20-15 0.60-1.60	**.033-.057** 0.84-1.45	1100-3200	**.016** 0.41	**.076** 1.93	Tin Plated Brass	061/076	1601596-1	L061/ 076B16TBX
18-14 0.80-2.00	**.040-.063** 1.02-1.60	1600-4000	**.016** 0.41	**.076** 1.93	Brass	076	1601825-1	P076B16B
18-14 0.80-2.00	**.040-.063** 1.02-1.60	1600-4000	**.020** 0.51	**.076** 1.93	Brass	076	1601649-1	L076B20B

† These part numbers are available upon special request; contact Tyco Electronics Engineering for details.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

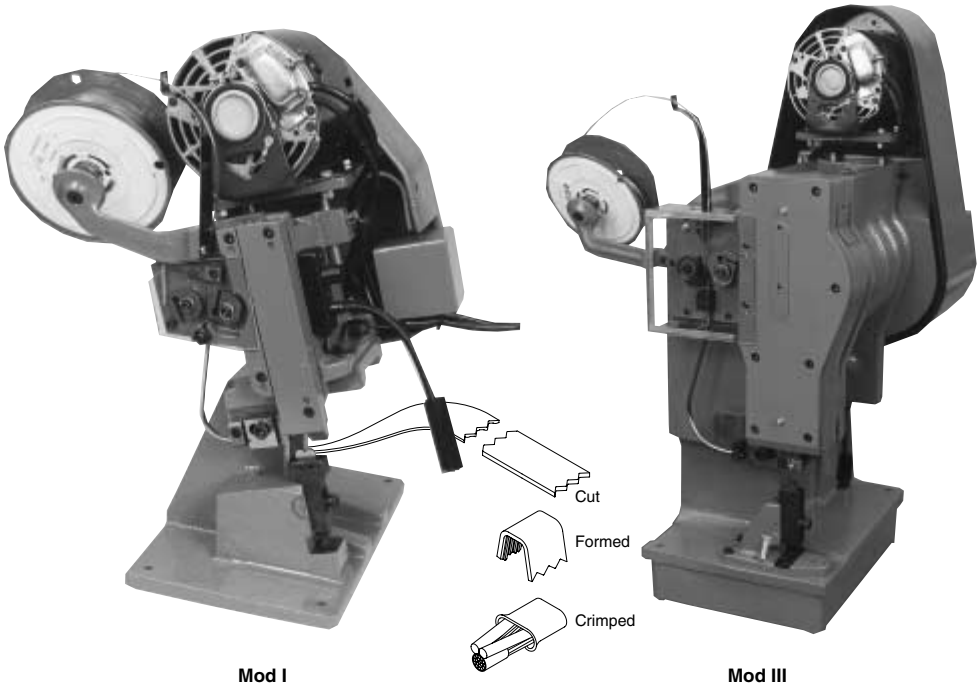
MTM Crimpband Splices

Product Facts

- Made from a continuous coil of "Ribbon Connector" material
- Magnet wires MTM Crimpband splices have machine-piercing serrations designed for displacing magnet wire insulation
- Available in brass, tin-plated brass, and copper-nickel alloy material
- Make parallel or pigtail connections on same machine
- 100% of Crimpband material is used in scrap free terminations
- Crimpband material coupled with appropriate toolsets accommodate specific CMA ranges
- Produced in Tyco Electronics equipment on your production floor
- Meets UL 486C crimp tensile requirements

Applications

- Motors windings and connections
- Coil connections
- Transformer windings and connections
- Lighting ballasts
- Power supplies



Mod I

Mod III

Tyco Electronics features the AMP MTM Crimpband system that is comprised of two key features: the semi-automatic termination machine and a reel of MTM Crimpband material.

In a one-step crimping operation, the machine feeds, cuts, forms and crimps the material to provide a low-cost, high reliability crimp connection.

The MTM Crimpband splices are formed during the crimping process from machined longitudinal grooved material that pierces magnet wire varnish film insulation during crimping.

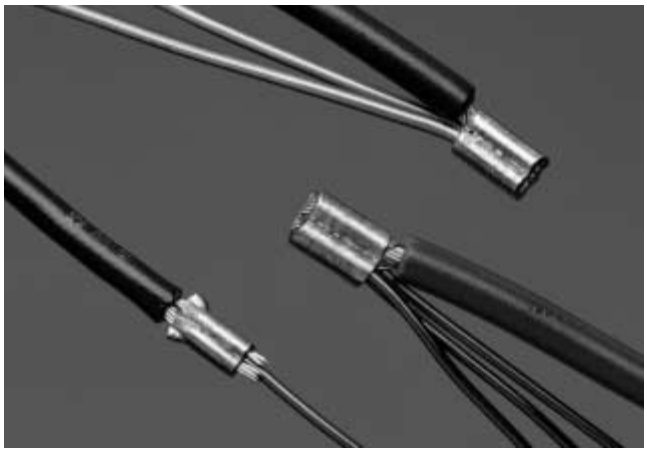
MTM Crimpband splices are specifically designed to terminate magnet wire to itself or in combination with standard solid or stranded lead wire.

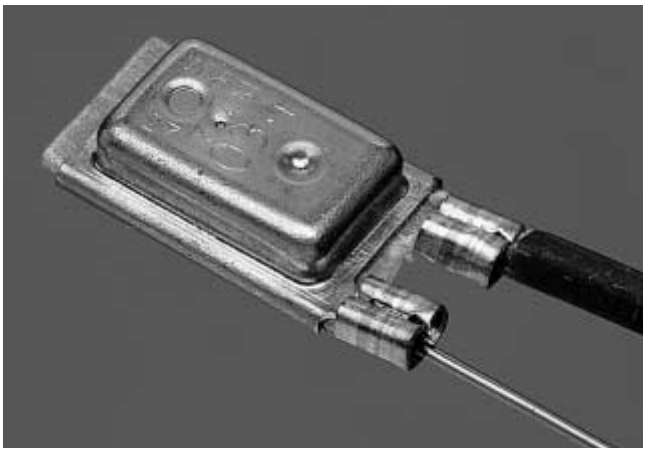
Three magnet wires maximum can be terminated together with stranded lead wire in one splice.

Tyco Electronics provides a wide range of toolset types and Crimpband splices to meet various production requirements.

Depending on your specific application, MTM Crimpband splices are available in 7, 9, 11 and 13 serration versions for terminations in the 400 to 13,000 CMA range.

When aluminum magnet wire is used, MTM Crimpband splices must be tin plated.





Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

MTM Crimpband Splices (Continued)

MTM Crimpband Interconnection System

How the System Operates

① **Feed (Magnet Wire Connector Material)**
Machine feeds strip until the strip hits the wire stop.

② **Shear (Blank Length)**
The strip is cut by the cutter block former bar insert tooling.

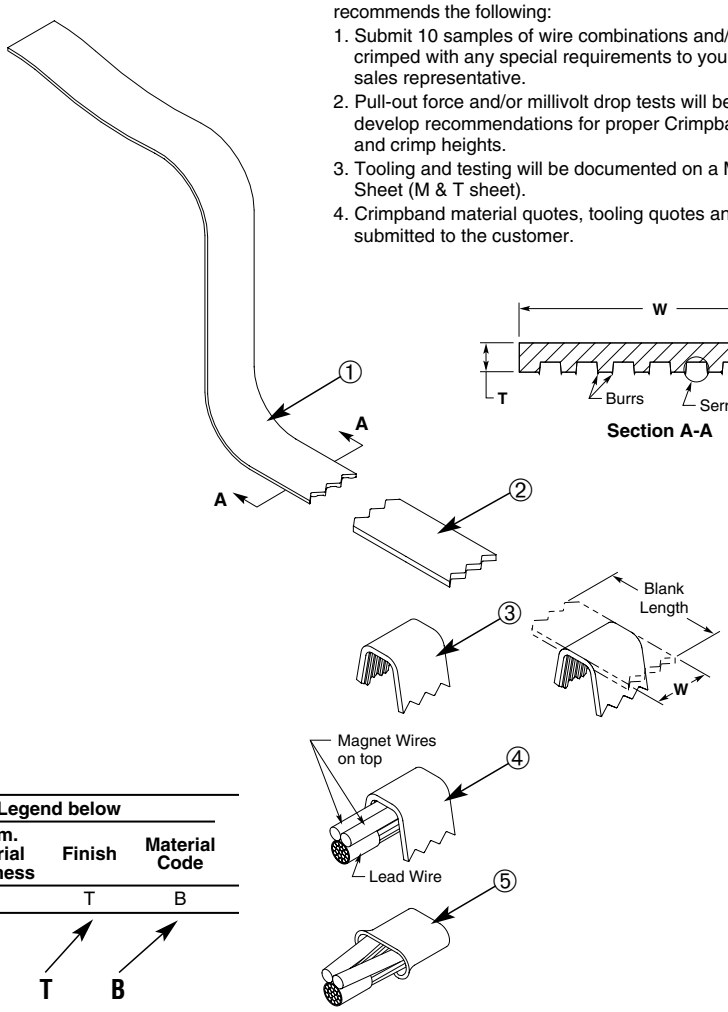
③ **Bend (Crimp Formed)**
The former bar drives the cut strip over the anvil, bending the cut strip into an upside down "U".

④ **Wire (Placement)**
In Pigtail and Parallel (Thru) splices magnet wires must be placed on top of the lead wire.

⑤ **Crimp (Crimp Formed)**
The anvil retracts as the driver takes the formed strip down into the clincher.

Notes: So that the proper Crimpband splice is chosen, Tyco Electronics recommends the following:

1. Submit 10 samples of wire combinations and/or components to be crimped with any special requirements to your Tyco Electronics sales representative.
2. Pull-out force and/or millivolt drop tests will be performed to develop recommendations for proper Crimpband material, toolset and crimp heights.
3. Tooling and testing will be documented on a Material & Tooling Sheet (M & T sheet).
4. Crimpband material quotes, tooling quotes and samples will be submitted to the customer.



Connector Specification Code

Machine Basis	See Figure 1 and/or Legend below				
	B.L. Dim. Tooling Size	W Dim. Connector Width	T Dim. Material Thickness	Finish	Material Code
L	092	6R	20	T	B

Splice No. Example: L 092 6R 20 T B

Legend

Machine Basis		
L	P	G*
Leased	Purchase	General

* Customer has their own Tooling

Tooling Size Code	Blank Length B/L (Nom.)
032	.167
032/036	.228
036	.224
045	.246
051	.267
061	.292
061/076	.324
076	.339
076/092	.361
092	.379
092/125	.413
125	.446
125/160	.485
125/165	.506
165	.546

Note: For B/L above, .546 consult Tyco Electronics for tooling size code.

Connector Width Code		W
4R	5 Serrations	.138
6R	7 Serrations	.154
8R	9 Serrations	.194
10R	11 Serrations	.234

Material Thickness Code	T±.002 Dim.	D Serration Depth
12	.012	.005
14	.014	.005
16	.016	.007
20	.020	.007
25	.025	.007

Material Code	Material/Finish
B	CDA 260 Brass
A	CDA 725 Copper/ Nickel Alloy
TB	Pre-Tin over CDA 260 Brass

Wire Size AWG	UL486C Pull Out Force Requirements Underwriters Laboratory (lbs.)
26	3
24	5
22	8
20	10
18	10
16	15
14	25
12	35
10	40

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

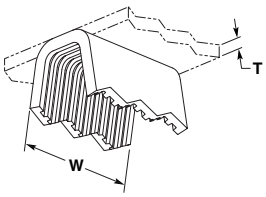
Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

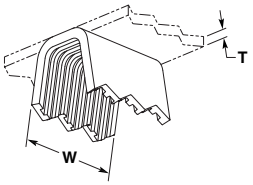
MTM Crimpband Splices (Continued)

11 Serrations



AWG/ mm²	Wire Range Solid Dia.	CMA Range	Stock Thk. (T)	Mat'l Width (W)	Material	Toolset	Part Number	Descriptive X-ref
14½-11½ 1.80-4.00	**.059-.087** 1.50-2.21	3500-7500	**.025** 0.64	**.234** 5.94	Brass	125/165	1601842-1	P125/ 16510R25B
14½-11½ 1.80-4.00	**.059-.087** 1.50-2.21	3500-7500	**.025** 0.64	**.234** 5.94	Tin Plated Brass	125/165	1601705-1	L125/ 16510R25TB
13½-10½ 2.54-4.50	**.071-.097** 1.70-2.46	4500-9500	**.025** 0.64	**.234** 5.94	Brass	165/200	1601847-1	P165/ 20010R25B
13½-10½ 2.54-4.50	**.071-.097** 1.70-2.46	4500-9500	**.025** 0.64	**.234** 5.94	Tin Plated Brass	165/200	1601848-1	P165/ 20010R25TB

9 Serrations



AWG/ mm²	Wire Range Solid Dia.	CMA Range	Stock Thk. (T)	Mat'l Width (W)	Material	Toolset	Part Number	Descriptive X-ref
24-20 0.20-0.50	**.020-.033** 0.51-0.84	400-1100	**.016** 0.41	**.194** 4.93	Tin Plated Brass	032/036	1601794-1†	P032/ 0368R16TB
20½-16 0.45-1.30	**.030-.051** 0.76-1.29	900-2600	**.018** 0.46	**.194** 4.93	Tin Plated Brass	061	1601607-1†	L0618R16TB
20½-16 0.45-1.30	**.030-.051** 0.76-1.29	900-2600	**.018** 0.46	**.194** 4.93	Brass	061	1601608-1	L0618R20B
20½-16 0.45-1.30	**.030-.051** 0.76-1.29	900-2600	**.018** 0.46	**.194** 4.93	Tin Plated Brass	061	1601814-1†	P0618R20TB
18-14 0.80-2.00	**.040-.063** 1.02-1.60	1600-4000	**.016** 0.41	**.194** 4.93	Tin Plated Brass	076	1601824-1	P0768R16TB
18-14 0.80-2.00	**.040-.063** 1.02-1.60	1600-4000	**.020** 0.51	**.194** 4.93	Tin Plated Brass	076	1601857-1	PO768R20TB
18-14 0.80-2.00	**.040-.063** 1.02-1.60	1800-4600	**.020** 0.51	**.194** 4.93	Brass	076/092	1601823-1	P076/ 0928R20B
18-14 0.80-2.00	**.040-.063** 1.02-1.60	1800-4600	**.020** 0.51	**.194** 4.93	Tin Plated Brass	076/092	1601639-1	L076/ 0928R20TB
16-12 1.30-3.46	**.051-.078** 1.29-1.98	2600-6100	**.020** 0.51	**.194** 4.93	Brass	092/125	1601833-1	P092/ 1258R20B
16-12 1.30-3.46	**.051-.078** 1.29-1.98	2600-6100	**.020** 0.51	**.194** 4.93	Tin Plated Brass	092/125	1601677-1	L092/ 1258R20TB
16-12 1.30-3.46	**.051-.078** 1.29-1.98	2600-6100	**.025** 0.64	**.194** 4.93	Brass	092/125	1601678-1†	L092/ 1258R25B
16-12 1.30-3.46	**.051-.078** 1.29-1.98	2600-6100	**.025** 0.64	**.194** 4.93	Tin Plated Brass	092/125	1601835-1†	P092/ 1258R25TB
15½-12 1.54-3.46	**.055-.082** 1.40-2.10	3000-6750	**.016** 0.41	**.194** 4.93	Brass	125	1601717-1†	L1258R16B
15½-12 1.54-3.46	**.055-.082** 1.40-2.10	3000-6750	**.016** 0.41	**.194** 4.93	Tin Plated Brass	125	1601718-1	L1258R16TB
15½-12 1.54-3.46	**.055-.082** 1.40-2.10	3000-6750	**.020** 0.51	**.194** 4.93	Brass	125	1601846-1	P1258R20B
15½-12 1.54-3.46	**.055-.082** 1.40-2.10	3000-6750	**.025** 0.64	**.194** 4.93	Brass	125	1601719-1	L1258R25B
14½-11½ 1.80-4.00	**.059-.087** 1.50-2.21	3500-7500	**.025** 0.64	**.194** 4.93	Brass	125/165	1601706-1	L125/ 1658R25B
14½-11½ 1.80-4.00	**.059-.087** 1.50-2.21	3500-7500	**.025** 0.64	**.194** 4.93	Tin Plated Brass	125/165	1601707-1	L125/ 1658R25TB
14-11 2.00-4.20	**.063-.092** 1.60-2.34	4000-8500	**.025** 0.64	**.194** 4.93	Tin Plated Brass	165	1601750-1†	L1658R25TB
11½-9 4.00-6.50	**.084-.114** 2.13-2.90	7000-13000	**.025** 0.64	**.194** 4.93	Tin Plated Brass	200/202	1601761-1	L200/ 2028R25TB

† These part numbers are available upon special request; contact Tyco Electronics Engineering for details.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

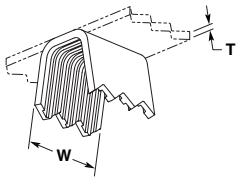
Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

MTM Crimpband Splices (Continued)

7 Serrations



AWG/ mm²	Wire Range Solid Dia.	CMA Range	Stock Thk. (T)	Mat'l Width (W)	Material	Toolset	Part Number	Descriptive X-ref
27½-21 0.09-0.40	**.013-.028** 0.33-0.71	170-800	**.012** 0.30	**.154** 3.91	Brass	032	1601800-1	P0326R12BUF[1]
24-20 0.20-0.50	**.020-.033** 0.51-0.84	400-1100	**.012** 0.30	**.154** 3.91	Brass	032/036	1601539-1	L032/ 0366R12B
24-20 0.20-0.50	**.020-.033** 0.51-0.84	400-1100	**.012** 0.30	**.154** 3.91	Cu Ni	032/036	1601538-1	L032/ 0366R12AUF[1]
24-20 0.20-0.50	**.020-.033** 0.51-0.84	400-1100	**.016** 0.41	**.154** 3.91	Brass	032/036	1601540-1	L032/ 0366R16B
24-20 0.20-0.50	**.020-.033** 0.51-0.84	400-1100	**.016** 0.41	**.154** 3.91	Tin Plated Brass	032/036	1601793-1	P032/ 0366R16TB
22-19 0.38-0.60	**.024-.036** 0.70-0.91	600-1300	**.016** 0.41	**.154** 3.91	Brass	045	1601559-1	L0456R16B
22-19 0.38-0.60	**.024-.036** 0.70-0.91	600-1300	**.020** 0.51	**.154** 3.91	Brass	045	1601560-1†	L0456R20B
20½-16 0.45-1.30	**.030-.051** 0.76-1.29	900-2600	**.016** 0.41	**.154** 3.91	Brass	061	1601604-1	L0616R16B
20½-16 0.45-1.30	**.030-.051** 0.76-1.29	900-2600	**.016** 0.41	**.154** 3.91	Tin Plated Brass	061	1601606-1	L0616R16TB
18-14 0.80-2.00	**.040-.063** 1.02-1.60	1600-4000	**.016** 0.41	**.154** 3.91	Brass	076	1601644-1	L0766R16B
18-14 0.80-2.00	**.040-.063** 1.02-1.60	1600-4000	**.016** 0.41	**.154** 3.91	Tin Plated Brass	076	1601646-1†	L0766R16TB
18-14 0.80-2.00	**.040-.063** 1.02-1.60	1600-4000	**.020** 0.51	**.154** 3.91	Brass	076	1601647-1†	L0766R20B
17½-13½ 0.95-2.54	**.042-.068** 1.07-1.80	1800-4600	**.016** 0.41	**.154** 3.91	Brass	076/092	1601637-1	L076/ 0926R16BX
16½-13 1.10-2.60	**.047-.072** 1.19-1.83	2200-5200	**.016** 0.41	**.154** 3.91	Tin Plated Brass	092	1601683-1	L0926R16TB
16-12 1.30-3.46	**.051-.078** 1.29-1.98	2600-6100	**.016** 0.41	**.154** 3.91	Tin Plated Brass	092/125	1601675-1	L092/ 1256R16TB
16-12 1.30-3.46	**.051-.078** 1.29-1.98	2600-6100	**.020** 0.51	**.154** 3.91	Brass	092/125	1601832-1	P092/ 1256R20B
15½-12 1.54-3.46	**.055-.082** 1.40-2.10	3000-6750	**.012** 0.30	**.154** 3.91	Brass	125	1601844-1	P1256R12B
15½-12 1.54-3.46	**.055-.082** 1.40-2.10	3000-6750	**.016** 0.41	**.154** 3.91	Brass	125	1601845-1	P1256R16B
15½-12 1.54-3.46	**.055-.082** 1.40-2.10	3000-6750	**.016** 0.41	**.154** 3.91	Tin Plated Brass	125	1601716-1†	L1256R16TB

[1] UF designates Ultra-Fine serrations which are recommended for applications using wire size 28 AWG [0.32 mm] or smaller.
† These part numbers are available upon special request; contact Tyco Electronics Engineering for details.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

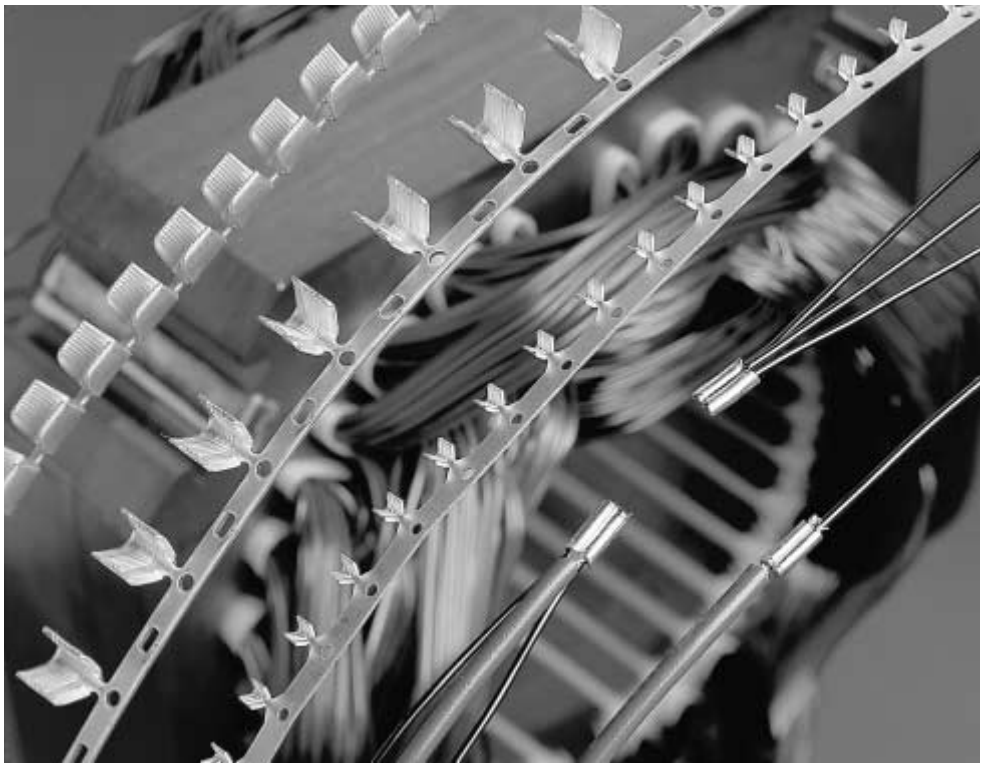
AMPLIVAR Splices

Product Facts

- **Compression crimp eliminates cold solder points, weld burns and wire embrittlement usually associated with thermal-type terminations**
- **Excellent tensile strength—vibration resistant**
- **Provides a superior electrical connection that is free of many contaminants such as stripper residue and solder flux**
- **Precision formed, strip-fed splices terminated in AMP automatic machines for high production rates per hour**
- **High termination rates, low wire consumption and the elimination of rejects caused by solder flux or heat damage results in the lowest applied costs**
- **Precisely controlled crimp termination helps eliminate human error for maximum reliability**
- **Splice up to 3 magnet wires together with stranded lead in one barrel**

Applications

- **Motor windings and connections**
- **Coil connections**
- **Transformer windings and connections**
- **Solid wire connections**
- **Lighting ballasts**
- **Power supplies**
- **Starters and alternators**



Tyco Electronics offers a full selection of AMPLIVAR splices that are specifically designed to terminate magnet wire to itself or in combination with standard solid or stranded lead wire.

AMPLIVAR splices have machined, sharp edged serrations inside the crimp barrels. These serrations, made by a special production process, pierce the insulating layer of magnet wires in a manner that provides a large contact area.

In a one-step operation the magnet wire is automatically multiple ring-stripped of its insulation as it is forced into the serrations during the precisely controlled crimp.

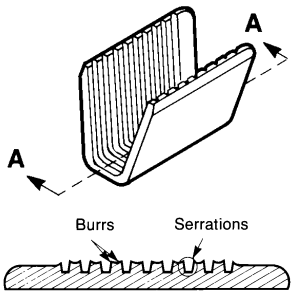
The resulting termination produces a high tensile strength, air-sealed connection that is as resistant to corrosion as the insulated conductor.

As many as three magnet wires can be terminated simultaneously in one splice. In addition, copper or aluminum magnet wire, or a combination of both, can be terminated.

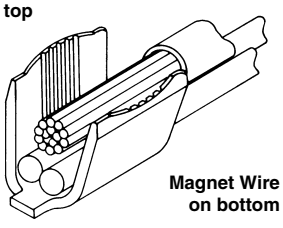
When required, copper or aluminum magnet wire can be combined with standard, pre-stripped solid or stranded lead wires.

Depending on your specific application, AMPLIVAR splices are available in 5, 7 and 9 serration versions for terminations in the 100 to 22,000 CMA range as well as miniature and subminiature designs for terminations in the 100 to 1850 CMA range.

The crimping of AMPLIVAR splices is done by semi-automatic crimping machines for high output per hour production rates.



Section AA



Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

AMPLIVAR Splices (Continued)

Technical Features

Applicable Types of Wire — Cu, Al (Solid) together or in combination with stranded lead wire

Wire Size Range — from 300 to 13,000 CMA (0.1 mm² to 6.6 mm²)

Terminal Base Material — Brass, phosphor bronze

Surface Finish — plain and tin plated except where noted

Temperature Range — –65°C to +150°C

Rated Current — according connected wire size

Rated Voltage — according terminated winding

Test Results

The AMPLIVAR products have been subjected to the following tests without significant millivolt losses.

Temperature Cycling — 25 cycles with each cycle consisting of 30 minutes at +125°C followed by 30 minutes at –65°C

Heat Age — 96 hours at +150°C

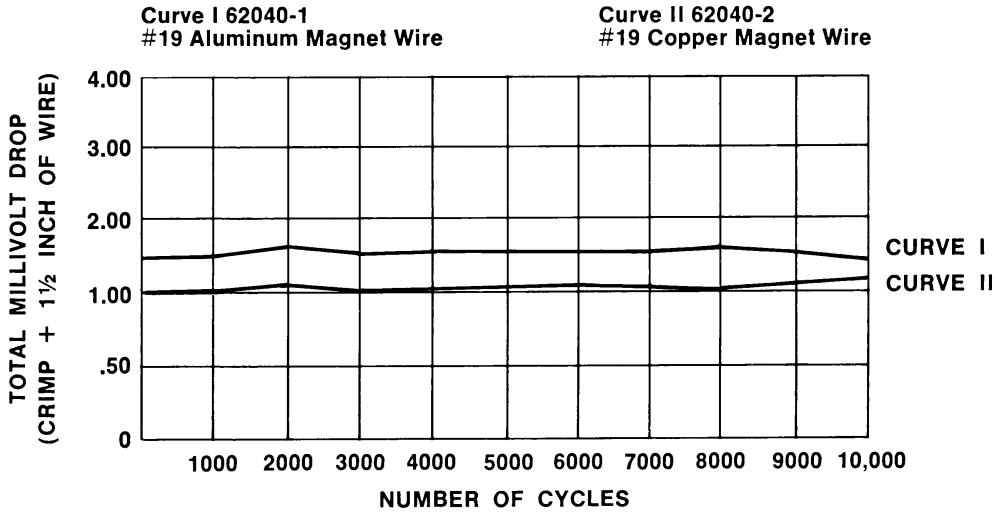
Thermal Shock — 25 cycles with each cycle consisting of 30 minutes at +150°C followed by 30 minutes at –65°C

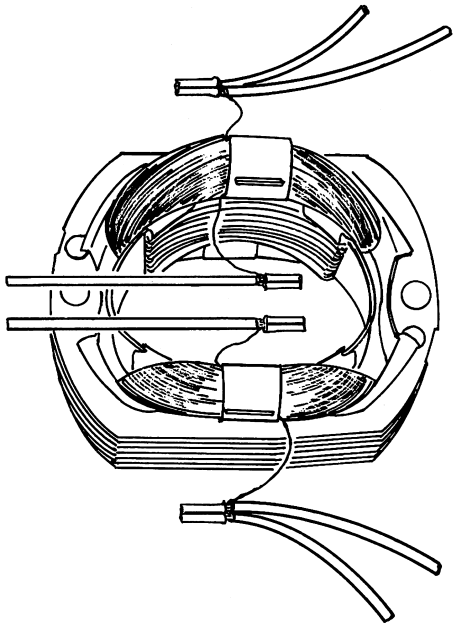
Salt Spray — 96 hours at +35°C with a 5% salt solution spray

Humidity — 96 hours at 90–95% relative humidity and +40°C

Current Cycling — 10,000 cycles with each consisting of 3 minutes on and 3 minutes off at a current (25 A) which establishes a wire temperature of +150°C

TYPICAL CURRENT CYCLING TEST RESULTS





Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

AMPLIVAR Splices (Continued)

General Application Guidelines

To assist you in obtaining the optimum AMPLIVAR splice termination, the following guidelines are recommended:

1. All magnet wires must be placed in the bottom of the wire barrel before crimping. If lead wire is to be crimped in the same termination, it should be placed on top of the magnet wires.
2. Wire barrels are designed to accept a maximum of three insulated magnet wires plus stranded lead wires.
3. The ratio of magnet wire diameters crimped in any wire barrel should not exceed 2:1. This ratio is approximately a range from the largest to the smallest magnet wire of six sizes.
4. The sum of the circular mil area (CMA) of the magnet wires and any lead wires should not exceed the capacity of the splice.
5. The sum of the diameters of the individual magnet wires plus twice the terminal stock thickness must be equal to or less than the crimp width.
6. Magnet wire of 26 AWG [0.40 mm] or smaller should be used with 7-serration splices having "shallow serrations," and magnet wire of 28 AWG [0.32 mm] or smaller should be used with 9-serration splices having "shallow serrations" (part numbers identified with asterisk [*] are in the tabular data on the following technical pages).
7. Magnet wire of 20 AWG [0.81 mm] or larger having an insulation thickness heavier than "single film coated," should not be used with splices having "shallow serrations" (those part numbers marked with an asterisk [*] in the tabular data on the following technical pages).
8. When aluminum magnet wire is used, splices and terminals must be tin plated.
9. Consult Tyco Electronics for splice and terminal selection and recommendations for all non-standard applications.

Technical Documents

Application Specifications describe requirements for using the product in its intended application and or crimping information. They are intended for the Packaging and Design Engineer and the Machine Setup Person.

114-2002	AMPLIVAR 7-Serration Pigtail Splices	114-2006	AMPLIVAR Subminiature Pigtail Splices
114-2003	AMPLIVAR 9-Serration Pigtail Splices	114-2009	AMPLIVAR 5-Serration Thru Splices
114-2005	AMPLIVAR Subminiature Thru Splices	114-2016	AMPLIVAR Miniature Pigtail Splices

Suggested Splice Selection Procedure

Use the following guide to help you to determine the proper splice for your application:

1. Use 9-serration splices, tin plated when terminating aluminum magnet wire or combinations with aluminum magnet wire.
2. Use 9-serration splices for hermetic and severe environment applications.
3. Use splices identified with an asterisk [*] when terminating 7-serration 26 AWG [0.40 mm] or smaller wires and 9-serration 28 AWG [0.32 mm] or smaller wires.
4. Calculate the total CMA of the magnet wires plus any lead wires to be terminated. Always use the coated magnet wire for CMA.
5. Calculate the total magnet wire diameters.
6. Select a splice for trial calculations. It should have the proper CMA range. Plating finish should be considered at this time.
7. Calculate the sum of the magnet wire diameters plus two splice stock thicknesses. If this total is less than the crimp width of the splice selected, it may be used. If the total is greater than the crimp width, a splice with a greater crimp width must be selected. Consult Tyco Electronics for special wide tooling recommendations.

Example:

■ Selection of a Pigtail Splice to terminate the following wires:

One 28 AWG [0.32 mm] copper magnet wire.
One 22 AWG [0.64 mm] aluminum magnet wire.
One 18 AWG [0.8–0.9 mm^2] 19-strand copper lead wire.

■ Calculate the total CMA (Procedure 4):

28 AWG [0.32 mm] coated magnet wire	= 185 CMA
22 AWG [0.64 mm] coated magnet wire	= 708 CMA
18 AWG [0.8–0.9 mm^2] stranded lead wire	= 1608 CMA
Total	**= 2501 CMA**

■ Calculate the sum of the magnet wire diameters (Procedure 5):

28 AWG [0.32 mm] coated magnet wire	= .0136 [0.35]
22 AWG [0.64 mm] coated magnet wire	= .0266 [0.68]
Total	**= .0402 [1.03]**

■ Select a terminal for trial calculations. Splice No. 62305-2, page 46 (Procedure 6):

CMA range	= 600–3000
Stock thickness	= .016 [0.41]
Crimp width	= .110 [2.79]

9-serration, tin plated for aluminum magnet wire (Procedure 1).

Splice identified with asterisk [*] for 28 AWG [0.32 mm] (Procedure 3).

■ Calculate the sum of the magnet wire diameters plus two splice stock thicknesses (Procedure 7):

.0402 + (.016 x 2) = .0722
[1.02 + (0.41 x 2) = 1.84

.0722 [1.84] is less than the splice crimp width of .110 [2.79]; therefore, Part No. 62305-2 may be used.

Catalog 82227
Revised 8-04
www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

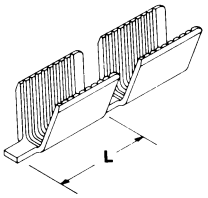
USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425
South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

AMPLIVAR Splices (Continued)

9 Serrations — Pigtail Type

Product Facts
(Plus All 7 Serration Facts)

- **Splice length is increased on larger CMA splices for improved performance**
- **Serration depths are varied within the splice to give optimum electrical/ mechanical performance on all wire sizes**
- **Serration sidewall angles are varied to allow better wire stripping and serration fill**
- **Flat bottom of splice helps keep magnet wires on bottom as required during crimping**
- **Magnet wires 28 AWG [0.32 mm] and larger may be terminated without requiring shallow serrations**
- **Additional serrations enhance stability of crimp**



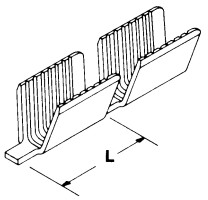
AWG/ mm²	Wire Range Solid Dia.	Wire Range CMA	Stock Thickness	Crimp Width	Dim. L	Material	Part Number
24-18.5 0.26-0.80	**.020-.039** 0.55-1.00	400-1500	**.016** 0.41	**.080** 2.03	**.225** 5.72	Tin Plated Brass	62303-2*
22-15.5 0.38-1.54	**.028-.055** 0.70-1.40	600-3000	**.020** 0.51	**.110** 2.79	**.225** 5.72	Tin Plated Brass	62304-2
22-15.5 0.38-1.54	**.028-.055** 0.70-1.40	600-3000	**.016** 0.41	**.110** 2.79	**.225** 5.72	Tin Plated Brass	62305-2*
18.5-13.5 0.80-2.54	**.039-.071** 1.00-1.80	1500-5000	**.020** 0.51	**.110** 2.79	**.225** 5.72	Tin Plated Brass	62306-2
18.5-13.5 0.80-2.54	**.039-.071** 1.00-1.80	1500-5000	**.016** 0.41	**.110** 2.79	**.225** 5.72	Tin Plated Brass	62307-2*
15.5-12 1.54-3.46	**.055-.083** 1.40-2.10	3000-7000	**.020** 0.51	**.140** 3.56	**.265** 6.73	Tin Plated Brass	62308-2
13.5-10 2.54-4.90	**.071-.098** 1.80-2.50	5000-10,000	**.025** 0.64	**.180** 4.57	**.265** 6.73	Tin Plated Brass	62309-2
12-9 3.46-6.38	**.083-.112** 2.10-2.85	7000-13,000	**.025** 0.64	**.180** 4.57	**.265** 6.73	Tin Plated Brass	62310-2
10-6.5 4.90-9.45	**.098-.137** 2.50-3.47	10,000-22,000	**.030** 0.76	**.220** 5.59	**.340** 8.64	Tin Plated Brass	62311-2[1]

*These splices are recommended for applications using wire size 28 AWG [0.32 mm] or smaller.
[1] Special high force application equipment required.

7 Serrations — Pigtail Type

Product Facts

- **Taper on both crimper and anvil improves flex life of termination**
- **Longer "flat" on tooling improves electrical performance (.125 vs. .080 [3.18 vs. 2.03])**
- **Radius on wire entry end of splice helps prevent nicking wires and improves mechanical performance**
- **Serrations are offset to sheared end to place additional serrations in "electrical" portion of crimped splice**
- **Splice CMA ranges are overlapped so that two splices are available for any given CMA**



AWG/ mm²	Wire Range Solid Dia.	Wire Range CMA	Stock Thickness	Crimp Width	Dim. L	Material	Part Number
22-15.5 0.38-1.54	**.028-.055** 0.70-1.40	600-3000	**.020** 0.51	**.110** 2.79	**.225** 5.72	Brass	62000-1
22-15.5 0.38-1.54	**.028-.055** 0.70-1.40	600-3000	**.020** 0.51	**.110** 2.79	**.225** 5.72	Brass	62157-1*
22-15.5 0.38-1.54	**.028-.055** 0.70-1.40	600-3000	**.020** 0.51	**.110** 2.79	**.225** 5.72	Tin Plated Brass	62000-2
22-15.5 0.38-1.54	**.028-.055** 0.70-1.40	600-3000	**.020** 0.51	**.110** 2.79	**.225** 5.72	Tin Plated Brass	62157-2*
22-15.5 0.38-1.54	**.028-.055** 0.70-1.40	600-3000	**.020** 0.51	**.110** 2.79	**.225** 5.72	Tin Plated Brass	62200-2[1]
18.5-13.5 0.80-2.54	**.039-.071** 1.00-1.80	1500-5000	**.020** 0.51	**.110** 2.79	**.225** 5.72	Brass	62040-2
18.5-13.5 0.80-2.54	**.039-.071** 1.00-1.80	1500-5000	**.020** 0.51	**.110** 2.79	**.225** 5.72	Tin Plated Brass	62040-1
18.5-13.5 0.80-2.54	**.039-.071** 1.00-1.80	1500-5000	**.020** 0.51	**.110** 2.79	**.225** 5.72	Phosphor Bronze	964156-1
15.5-12 1.54-3.46	**.055-.083** 1.40-2.10	3000-7000	**.020** 0.51	**.140** 3.56	**.225** 5.72	Brass	62001-1
15.5-12 1.54-3.46	**.055-.083** 1.40-2.10	3000-7000	**.020** 0.51	**.140** 3.56	**.225** 5.72	Tin Plated Brass	62001-2
15.5-12 1.54-3.46	**.055-.083** 1.40-2.10	3000-7000	**.020** 0.51	**.140** 3.56	**.225** 5.72	Tin Plated Brass	62201-2[1]
12-10 2.10-6.0	**.085-.110** 2.10-2.85	7000-12,000	**.025** 0.64	**.250** 6.35	**.225** 5.72	Tin Plated Brass	62295-1
12-10 2.10-6.0	**.085-.110** 2.10-2.85	7000-12,000	**.025** 0.64	**.250** 6.35	**.225** 5.72	Brass	62295-2
12-9 2.10-6.38	**.085-.115** 2.10-3.47	7000-13,000	**.025** 0.64	**.180** 4.57	**.225** 5.72	Tin Plated Brass	62002-2

*These splices are recommended for applications using wire size 26 AWG [0.40 mm] or smaller.
[1] Flat bottom.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

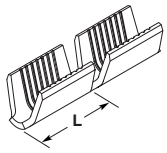
South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

AMPLIVAR Splices (Continued)

7 Serrations — Thru Type

Product Facts

- Crimp bellmouth provides retention in circular cavity slot in bobbin



AWG/ mm²	Wire Range Solid Dia.	Wire Range CMA	Stock Thickness	Crimp Width	Dim. L	Material	Part Number
22-15.5 0.38-1.54	**.028-.055** 0.70-1.40	600-3000	**.020** 0.51	**.110** 2.79	**.225** 5.72	Tin Plated Brass	1217384-1*

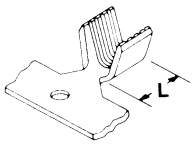
*These splices are recommended for applications using wire size 26 AWG [0.40 mm] or smaller.

5 Serrations — Thru Type

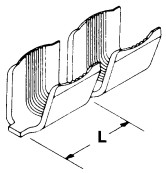
Product Facts

- Wide range of thru splices
- Serrations centered in splice to achieve optimum electrical and mechanical performance in a thru splice
- CMA range accepts a wide variety of wire sizes and combinations

A



B



Type	AWG/ mm²	Wire Range Solid Dia.	Wire Range CMA	Stock Thickness	Crimp Width	Dim. L	Material	Part Number
A	17-12.5 1.00-2.80	**.045-.075** 1.15-1.85	2000-5400	**.020** 0.51	**.110** 5.08	**.235** 5.97	Brass	63564-1
A	12-9 3.00-7.00	**.077-.118** 1.95-3.00	6000-14,000	**.025** 0.64	**.180** 4.57	**.265** 6.73	Brass	1217990-1
A	12-9 3.00-7.00	**.077-.118** 1.95-3.00	6000-14,000	**.025** 0.64	**.180** 4.57	**.265** 6.73	Tin Plated Brass	1217990-2
A	10-8 5.00-8.00	**.100-.125** 2.55-3.20	10,000-16,000	**.032** 0.80	**.180** 4.57	**.267** 6.78	Tin Plated Brass	63561-1
A	10-7.5 5.00-11.50	**.100-.150** 2.60-3.80	10,400-22,900	**.030** 0.76	**.300** 7.62	**.310** 7.87	Tin Plated Brass	63562-1
B	22-15.5 0.38-1.54	**.028-.055** 0.70-1.40	600-3000	**.020** 0.51	**.110** 2.79	**.225** 5.72	Brass	42076
B	22-15.5 0.38-1.54	**.028-.055** 0.70-1.40	600-3000	**.020** 0.51	**.110** 2.79	**.225** 5.72	Brass	42192-1*
B	22-15.5 0.38-1.54	**.028-.055** 0.70-1.40	600-3000	**.020** 0.51	**.110** 2.79	**.225** 5.72	Tin Plated Brass	42192-2*
B	22-15.5 0.38-1.54	**.028-.055** 0.70-1.40	600-3000	**.020** 0.51	**.110** 2.79	**.225** 5.72	Brass	42778-1*[1]
B	22-15.5 0.38-1.54	**.028-.055** 0.70-1.40	600-3000	**.020** 0.51	**.110** 2.79	**.225** 5.72	Tin Plated Brass	42778-2*[1]
B	18.5-13.5 0.80-2.54	**.039-.071** 1.00-1.80	1500-5000	**.020** 0.51	**.110** 2.79	**.225** 5.72	Brass	41765
B	18.5-13.5 0.80-2.54	**.039-.071** 1.00-1.80	1500-5000	**.020** 0.51	**.110** 2.79	**.225** 5.72	Tin Plated Brass	41899
B	18.5-13.5 0.80-2.54	**.039-.071** 1.00-1.80	1500-5000	**.020** 0.51	**.110** 2.79	**.225** 5.72	Brass	42119-1*
B	18.5-13.5 0.80-2.54	**.039-.071** 1.00-1.80	1500-5000	**.020** 0.51	**.110** 2.79	**.225** 5.72	Brass	42776-1*[1]
B	18.5-13.5 0.80-2.54	**.039-.071** 1.00-1.80	1500-5000	**.020** 0.51	**.110** 2.79	**.225** 5.72	Tin Plated Brass	42776-2*[1]
B	15.5-12 1.54-3.46	**.055-.083** 1.40-2.10	3000-7000	**.020** 0.51	**.140** 3.56	**.225** 5.72	Brass	41766
B	15.5-12 1.54-3.46	**.055-.083** 1.40-2.10	3000-7000	**.020** 0.51	**.140** 3.56	**.225** 5.72	Tin Plated Brass	41900
B	15.5-12 1.54-3.46	**.055-.083** 1.40-2.10	3000-7000	**.020** 0.51	**.140** 3.56	**.225** 5.72	Brass	42779-1[1]
B	15.5-12 1.54-3.46	**.055-.083** 1.40-2.10	3000-7000	**.020** 0.51	**.140** 3.56	**.225** 5.72	Tin Plated Brass	42779-2[1]
B	12-10 3.46-6.00	**.083-.110** 2.10-2.80	7000-12,000	**.025** 0.64	**.250** 6.35	**.225** 5.72	Tin Plated Brass	61074-1[1,2]
B	12-9 3.46-6.38	**.083-.112** 2.10-2.85	7000-13,000	**.025** 0.64	**.180** 4.57	**.225** 5.72	Brass	41770
B	12-9 3.46-6.38	**.083-.112** 2.10-2.85	7000-13,000	**.025** 0.64	**.180** 4.57	**.225** 5.72	Tin Plated Brass	41904
B	12-9 3.46-6.38	**.083-.112** 2.10-2.85	7000-13,000	**.025** 0.64	**.180** 4.57	**.225** 5.72	Brass	42780-1[1]
B	12-9 3.46-6.38	**.083-.112** 2.10-2.85	7000-13,000	**.025** 0.64	**.180** 4.57	**.225** 5.72	Tin Plated Brass	42780-2[1]

* These splices are recommended for applications using wire size 26 AWG [0.40 mm] or smaller.
[1] Increased terminal pitch.
[2] Increased U-diameter.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

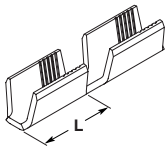
South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

AMPLIVAR Splices (Continued)

5 Serrations — Pigtail Type

Product Facts

- Serration depths are varied within the splice to give optimum electrical / mechanical performance on all wire sizes
- Flat bottom of splice helps keep magnet wires on bottom as required during crimping



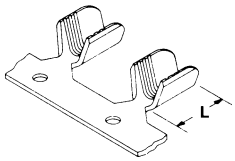
AWG/ mm²	Wire Range Solid Dia.	Wire Range CMA	Stock Thickness	Crimp Width	Dim. L	Material	Part Number
20-17 0.50-1.00	**.030-.045** 0.80-1.15	1000-2000	**.016** 0.41	**.100** 2.54	**.225** 5.72	Tin Plated Brass	62670-2*[1]

*These splices are recommended for applications using wire size 26 AWG [0.40 mm] or smaller.
[1] Flat bottom.

Miniature Splice — Pigtail Type

Product Facts

- The Miniature AMPLIVAR splice was developed for crimping thinner copper magnet wires having a diameter between .003 and .016 [0.08 and 0.40 mm] and has to be connected with a stranded conductor
- The diameter of one conductor strand should not exceed the magnet wire diameter to be applied

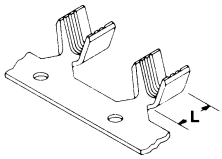


AWG/ mm²	Wire Range Solid Dia.	Wire Range CMA	Stock Thickness	Crimp Width	Dim. L	Material	Part Number
27-21 0.10-0.40	**.014-.030** 0.35-0.75	200-850	**.012** 0.30	**.055** 1.40	**.195** 4.95	Tin Plated Brass	63431-1
25-18 0.16-0.90	**.015-.045** 0.45-1.10	300-1850	**.012** 0.30	**.070** 1.78	**.195** 4.95	Copper-Nickel	61166-1
24-18.5 0.20-0.75	**.020-.039** 0.55-1.00	480-1500	**.014** 0.36	**.080** 2.03	**.195** 4.95	Tin Plated Brass	62341-1
24-18.5 0.20-0.75	**.020-.039** 0.55-1.00	480-1500	**.014** 0.36	**.080** 2.03	**.195** 4.95	Brass	62341-2
24-18 0.20-0.80	**.020-.040** 0.55-1.00	480-1700	**.016** 0.41	**.070** 1.78	**.195** 4.95	Brass	62044-1

Subminiature Splice — Thru or Pigtail Type

Product Facts

- The compactness of these splices makes them ideal for use in small subfractional motors, transformers, relays, solenoids, indicator lamps and small appliance terminations
- These splices provide the same reliability as the larger AMPLIVAR splices



AWG/ mm²	Wire Range Solid Dia.	Wire Range CMA	Stock Thickness	Crimp Width	Dim. L	Material	Part Number
30-26 0.05-0.15	**.010-.015** 0.30-0.50	100-300	**.010** 0.25	**.042** 1.08	**.080** 2.03	Tin Plated Brass	63621-2
24-19 0.26-0.60	**.020-.035** 0.55-0.90	400-1300	**.016** 0.41	**.070** 1.78	**.100** 2.54	Tin Plated Brass	62194-2
24-19 0.26-0.60	**.020-.035** 0.55-0.90	400-1300	**.016** 0.41	**.070** 1.78	**.100** 2.54	Gold Plated Brass	62194-4

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

AMPLIVAR Application Tooling

AMPLIVAR Product Terminator (APT)

Product Facts

- **No need to strip magnet wire**
- **Connects up to 3 wires in 1 splice**
- **Crimp Quality Monitor (CQM) system measures crimp heights**
- **Machine shut height easily adjusts in .0005 [0.013] increments**
- **Quick-change tooling without major shut-height adjustments**

Specifications

Weight — Approximately 150 lb [68 kg] with CQM

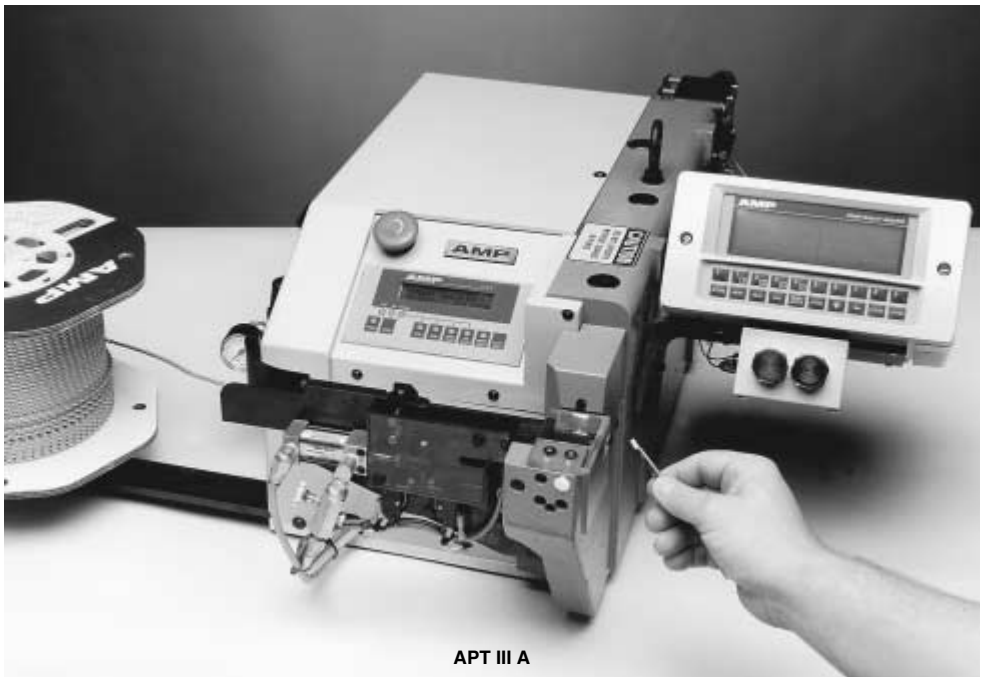
Width — 38 [965] with CQM and product reel

Depth — 35 [889]

Height — 14 [356]

Electrical — 120 VAC, 60 Hz, 1 A, 1f, or 240 VAC, 50 Hz, .5 A, 1f

Air — 80-100 psi [5.52-7.59 bar], 22 scfm [0.000141 m3/s]



APT III A

For pigtail splice connection of magnet wire, the AMPLIVAR Product Terminator (APT) and strip-form AMPLIVAR products offer a fast and efficient system, with no need to strip mag-wire insulation. To apply a splice, simply place the wires in the target area and depress the foot switch. The machine automatically shears the splice from the strip, crimps it, shears off excess wire, and advances the next splice into position.

APT semi-automatic bench machines are available in two versions: the IIIA with automatic precision adjustment controlled by the Crimp Quality Monitor (CQM), and the IIE with manual precision adjustment.

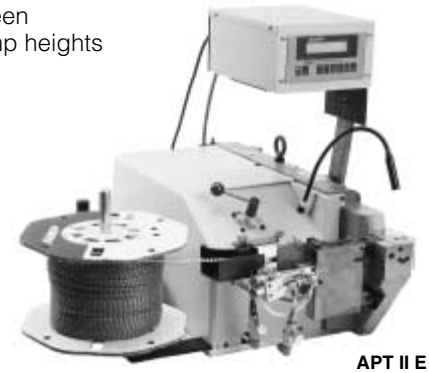
With CQM, the APT IIIA assists in achieving 6-sigma processing capability. In addition to providing 100% inspection and automatic adjustment of crimp heights as needed, the CQM also evaluates the quality of each crimp. If a questionable crimp is detected, visual and audible alarms alert the operator.

For operations with multiple wire sizes, the APT IIIA provides programmable sequencing of different crimp-height settings, and it can store up to 2,000 different programs of 7 different settings each. The maximum time to auto-adjust between programmed crimp heights is 2 seconds.

The lower cost, manual adjust IIE is a simpler version without CQM capability, with the advantage of faster set-up times.

To avoid the need to change product reels when wire combinations are smaller than the CMA range of the splice, an optional stuffer (part no. 679323-1 for APT IIIA, part no. 679323-2 for APT IIE.) inserts a stuffer wire into the splice prior to crimping, increasing the total CMA to the recommended range. The wire stuffer unit is for pigtail splices only.

APT III A with vertical base (679984-1) for direct connect terminals



APT II E

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

AMPLIVAR Application Tooling (Continued)

AMPLIVAR Product Terminator (APT) (Continued)

Machine Ordering Information

A "Base Part Number" is selected from the Basic Machine Part Numbers table. Then, a dash number or numbers are selected from one of the other two tables depending on the type of product to be applied.

Note: The wire stuffer is available for Pigtail-Type Splice only and may be added to the machine after installation.

679323-1 — APT IIIA
679323-2 — APT IIE

Basic Machine Part Numbers

Machine Features				Base Part Number*
Precision Adjust	Crimp Quality Monitor	Programmable Crimp-Height Sequencing	Model	Pigtail-type Splice
Manual	Not included	Not included	APT IIE**	□-1338906-□
Automatic	Included	Included	APT IIIA	□-679453-□

*See tables below for suffix and prefix dash numbers which indicate product to be applied, product crimp width, and voltage requirement.
**Not upgradable to an APT IIIA

AMPLIVAR Pigtail-Type Splice Suffix and Prefix Dash Numbers

(Aluminum base 679984-1 not included)

Pigtail-type Splice Base Number	Crimp Width	120/240 VAC IIE Machine □-1338906-□	120/240 VAC IIIA Machine □-679453-□
42775 42776	.110 [2.79]	1-( )-1	3-( )-7
42777 42778	.110 [2.79]	1-( )-2	3-( )-8
42779	.140 [3.56]	( )-8	3-( )-4
62000	.110 [2.79]	1-( )-2	3-( )-8
62001	.140 [3.56]	( )-7	3-( )-3
62001	.180 [4.57]	( )-6	3-( )-2
62201	.140 [3.56]	( )-8	3-( )-4
62002	.180 [4.57]	( )-3	2-( )-9
62040	.110 [2.79]	1-( )-1	3-( )-7
62157 62200	.110 [2.79]	1-( )-2	3-( )-8
62295	.250 [6.35]	( )-1	2-( )-7
62303	.080 [2.03]	1-( )-3	3-( )-9
62304 62305	.110 [2.79]	1-( )-2	3-( )-8
62306	.140 [3.56]	1-( )-0	3-( )-6
62306 62307	.110 [2.79]	1-( )-1	3-( )-7
62308	.140 [3.56]	( )-9	3-( )-5
62308	.180 [4.57]	( )-6	3-( )-2
62309	.220 [5.59]	5-( )-4	5-( )-3
62309	.180 [4.57]	( )-5	3-( )-1
62310	.220 [5.59]	( )-2	2-( )-8
62310	.180 [4.57]	( )-4	3-( )-0
280002	.110 [2.79]	1-( )-1	3-( )-7
280004	.110 [2.79]	1-( )-2	3-( )-8
964156	.110 [2.79]	1-( )-1	3-( )-7

Pins, Receptacles, Tab and Taper Tab Receptacles Terminals

Product Facts

- **Pin terminals are available in .080, .093, .109 and .125 diameters.**
- **Receptacle terminals are available that accept .032, .040, .050, .055, .062, .090, .093 and .109 pin diameters**
- **SHUR-PLUG terminals and Receptacle terminals are available in .156 and .180 diameters.**
- **Tab Receptacle terminals are available that accept tab thicknesses ranging from .010 - .060 and widths ranging from .025 - .250.**
- **Taper Tab Receptacle terminals are available in 78 Series and 98 Series**
- **Precision formed, strip-fed pins, receptacles and tab receptacle terminals terminated in AMP automatic machines for high production rates per hour**

Tyco Electronics offers a full selection of AMP open barrel pins, receptacles and tab receptacle terminals that are specifically designed to terminate various stranded and solid wire ranges for customer specific application requirements.

Pin terminals are available in .080, .093, .109 and .125 diameters to mate to industry standard or customer specific receptacle terminals. They are designed with and/or without insulation barrel supports, including one with an insulation piercing wire barrel to terminate flat wire while others are specifically designed for post overmolding. Depending on your specific application, pin terminals are available for terminations in the 14–30 AWG wire range in brass and tin plated brass material.

Receptacle terminals are available to accept .032, .040, .050, .055, .062, .090, 093 and .109 pin terminal diameters to mate to industry standard or customer specific pin terminal requirements. They are designed with and/or without insulation barrel supports for terminations ranging from 20–32 AWG stranded or solid wire as well as magnet wire ranging from 29–16 AWG. Some terminals are designed with or without locking feature and others are specifically designed for post overmolding. Receptacle terminals are manufactured in brass and phosphor bronze material with tin, silver and gold plating options available.

SHUR-PLUG terminals and SHUR-PLUG Receptacle terminals that are specifically designed for wiring harnesses used in the truck, bus, marine and off-highway vehicle marketplace. SHUR-PLUG terminals are available in .156 and .180 diameters that accept wire ranging from 24–5 AWG gage. They are available with or without insulation support barrels with various part numbers available for post overmolding and one specifically designed for a weld connection. SHUR-PLUG terminals are manufactured in brass material with tin or tin over nickel plating options available.

Tab Receptacle terminals are available to mate to industry standard and customer specific tab applications. They accept tab thicknesses ranging from .010–.060 in widths ranging from .025–.250. They accept wire ranging from 26–14 AWG and are available with or without insulation support barrels. Tab Receptacles are manufactured in brass and beryllium copper material with tin and gold plated versions available.

Taper Tab Receptacle terminals are available in 78 Series and 98 Series with insulation support. They terminate 24–22 AWG wire in tin plated brass material. The 78 Series insulation piercing terminals are manufactured in brass material with tin, nickel and gold plating options that terminate tinsel wire.

Pins, Receptacles and Tab Receptacle terminals are manufactured in strip form and supplied on reels for semi-automated and fully automated terminations on crimping machines for high output per hour production rates.

Technical Documents

Application Specifications describe requirements for using the product in its intended application and/or crimping information. They are intended for the Packaging and Design Engineer and the Machine Setup Person.

114-2080 — Pin Receptacle Contacts

114-2083 — Pin Receptacle Contact

114-2042 — .156 [3.96] Diameter SHUR-PLUG and Receptacle Terminals

114-2017 — .180 [4.57] Diameter SHUR-PLUG and Receptacle Terminals

Product Specifications

Product Specifications describe the product qualification test results completed by Tyco Electronics for consideration of product use in a specific application. They are intended for the Design and Product Reliability Engineer.

108-2027 — .156 [3.96] Diameter SHUR-PLUG and Receptacle terminals

Catalog 82227
Revised 8-04

www.tycoelectronics.com

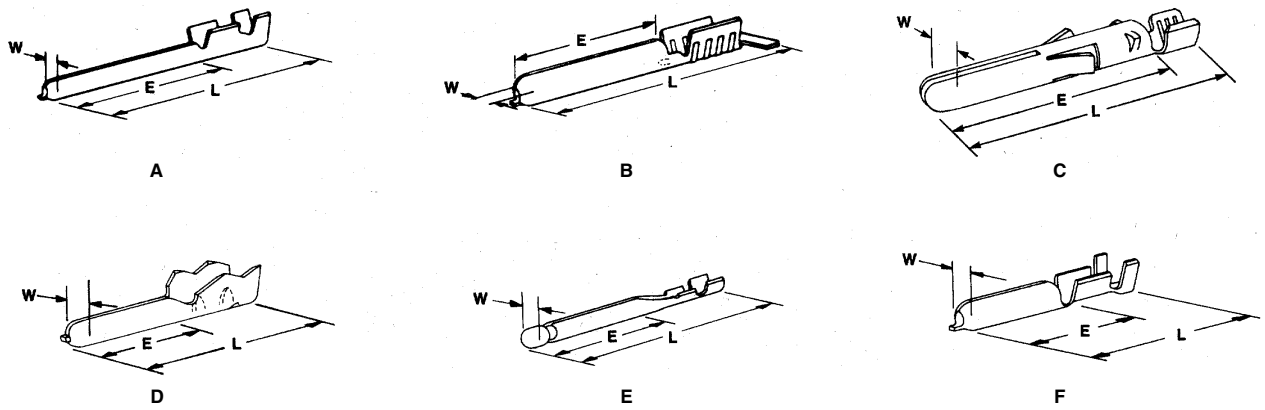
Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Pin Terminals



Type	Wire Range AWG	Wire Range mm²	Insul. Size	Pin Dia.	Stock Thk.	Material and Finish	Dimensions W	Dimensions L	Dimensions E	Part Number
A	30-26	0.05–0.12	**.042–.073** 1.07–1.85	**.080** 2.03	**.010** 0.25	Tin Plated Brass	**.080** 2.03	**1.280** 32.51	**1.000** 25.40	350053-2
F	24-20	0.2–0.6	**.060–.103** 1.52–2.62	**.125** 3.18	**.016** 0.41	Brass	**.125** 3.18	**.705** 17.51	**.450** 11.43	62074-1
E	24-20	0.2–0.6	**.060–.103** 1.52–2.62	**.125** 3.18	**.016** 0.41	Brass	**.125** 3.18	**.705** 17.51	**.450** 11.43	62344-1
A	24-20	0.2–0.6	**.042–.073** 1.07–1.85	**.080** 2.03	**.010** 0.25	Tin Plated Brass	**.080** 2.03	**1.000** 25.40	**.720** 18.29	62358-1
				.080 2.03	**.010** 0.25	Br. Tin Lead Plated Brass	**.080** 2.03	**1.000** 25.40	**.720** 18.29	62358-4
E	22-20	0.4–0.6	**.075–.090** 1.91–2.29	**.125** 3.18	**.016** 0.41	Brass	**.125** 3.18	**1.393** 35.38	**.800** 20.32	60115-1[1]
				.125 3.18	**.016** 0.41	Brass	**.125** 3.18	**1.393** 35.38	**.800** 20.32	60115-4[1]
C	22-18	0.3–0.9	—	**.130** 3.30	**.016** 0.41	Brass	**.130** 3.30	**.855** 21.72	**.660** 16.76	62505-1
B	22-16	0.3–1.4	—	**.093** 2.36	**.012** 0.31	Tin Plated Brass	**.093** 2.36	**.835** 21.21	**.652** 16.56	62820-1[1]
B	18-14	0.9–2.0	—	**.109** 2.77	**.016** 0.41	Tin Plated Brass	**.109** 2.77	**.925** 23.50	**.500** 12.70	61013-2[1]
				.109 2.77	**.016** 0.41	Brass	**.109** 2.77	**.920** 23.37	**.610** 15.44	62616-1
D	**.085 × .035** 2.16 × 0.89	Flat Wire	**.085** 2.16	**.109** 2.77	**.020** 0.51	Brass	**.109** 2.77	**.595** 15.11	**.350** 8.90	61674-1[2]

[1] Can be molded.
[2] Insulation Piercing.
Note: The part numbers listed are for use with existing machine models. For AMP-O-LECTRIC Model G applicators part numbers, call the Technical Support Center at 1-800-522-6752.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

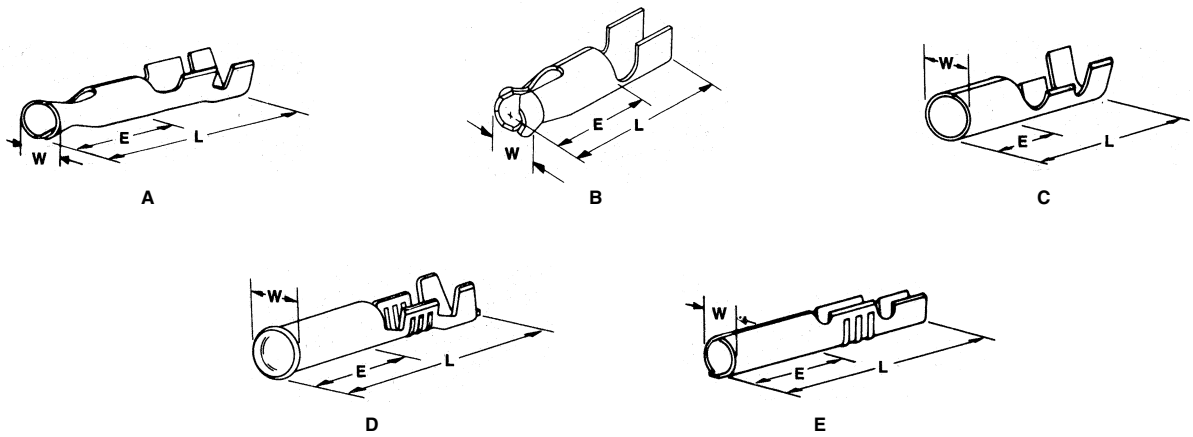
Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Receptacle Terminals



Type	Wire Range AWG	Wire Range mm²	Insul. Size	Pin Dia.	Stock Thk.	Material and Finish	Dimensions W	Dimensions L	Dimensions E	Part Number
C	32-26	0.03–0.15	**.060** 1.52 Max.	**.050** 1.27	**.008** 0.20	Pre-Tin Plated Phos. Bronze	**.070** 1.78	**.330** 8.38	**.150** 3.81	61547-2
B	28-26	0.09–0.15	—	**.040** 1.02	**.012** 0.31	Gold Plated Phos. Bronze	**.090** 2.29	**.370** 9.40	**.150** 3.81	62185-1
				.040 1.02	**.012** 0.31	Tin Plated Phos. Bronze	**.090** 2.29	**.370** 9.40	**.150** 3.81	62185-2
A	24-20	0.2–0.6	**.048–.071** 1.22–1.8	**.040** 1.02	**.012** 0.31	Tin Plated Phos. Bronze	**.095** 2.41	**.450** 11.43	**.220** 5.59	42428-5[1]
				.040 1.02	**.012** 0.31	Silver Plated Phos. Bronze	**.095** 2.41	**.450** 11.43	**.220** 5.59	42428-8
				.050 1.27	**.012** 0.31	Tin Plated Phos. Bronze	**.090** 2.29	**.360** 9.14	**.220** 5.59	60348-4
				.032 0.81	**.012** 0.31	Tin Plated Phos. Bronze	**.095** 2.41	**.450** 11.43	**.220** 5.59	60373-4
E	24-20	0.2–0.6	**.090–.130** 2.27–3.30	**.093** 2.36	**.010** 0.25	Brass	**.115** 2.92	**.560** 14.23	**.250** 6.35	60469-1
A	24-20	0.2–0.6	**.048–.071** 1.22–1.80	**.055** 1.40	**.013** 0.33	Gold/Nickel Plated Phos. Bronze	**.095** 2.41	**.450** 11.43	**.220** 5.59	60885-1
				.055 1.40	**.013** 0.33	Tin Plated Phos. Bronze	**.095** 2.41	**.450** 11.43	**.220** 5.59	60885-2[2]
D	24-20	0.2–0.6	**.070** 1.78 Max.	**.062**[3] 1.57	**.010** 0.25	Pre-Tin Plated Brass	**.100** 2.54	**.430** 10.92	**.190** 4.83	61622-1

[1] Reverse reel of 42428-2.
[2] Reverse reel of 42429-2.
[3] Or .045 [1.14] square post.
Note: The part numbers listed are for use with existing machine models. For AMP-O-LECTRIC Model G applicators part numbers, call the Technical Support Center at 1-800-522-6752.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

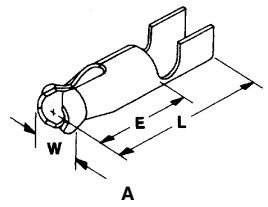
Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

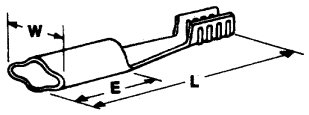
USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

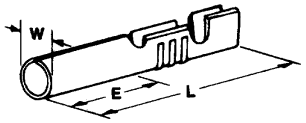
Receptacle Terminals (Continued)



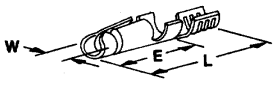
A



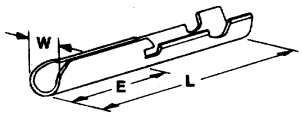
B



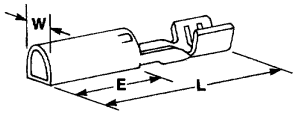
C



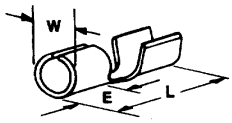
D



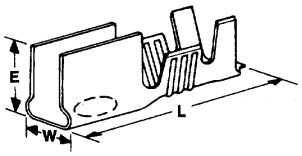
E



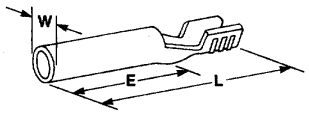
F



G



H



J

Type	Wire Range AWG	Wire Range mm²	Insul. Size	Pin Dia.	Stock Thk.	Material and Finish	Dimensions W	Dimensions L	Dimensions E	Part Number
A	24-20	0.2–0.6	—	**.040** 1.02	**.012** 0.31	Tin Plated Phos. Bronze	**.090** 2.29	**.360** 9.14	**.220** 5.59	62160-1
				.040 1.02	**.012** 0.31	Tin Plated Phos. Bronze	**.090** 2.29	**.360** 9.14	**.220** 5.59	42869-6
				.040 1.02	**.012** 0.31	Tin Plated Phos. Bronze	**.100** 2.54	**.360** 9.14	**.200** 5.08	62405-2
C	24-18	0.2–0.9	**.045–.085** 1.14–2.16	**.093** 2.36	**.012** 0.31	Tin Plated Brass	**.115** 2.92	**.560** 14.23	**.250** 6.35	42827-2
E	22-20	0.4–0.6	**.075–.100** 1.91–2.54	**.106** 2.69	**.012** 0.31	Tin Plated Brass	**.150** 3.81	**.690** 17.53	**.360** 9.14	60908-1
C	22-18	0.4–0.9	**.090–.130** 2.29–3.30	**.093** 2.36	**.012** 0.31	Tin Plated Brass	**.115** 2.92	**.560** 14.23	**.250** 6.35	41854
				.093 2.36	**.012** 0.31	Brass	**.115** 2.92	**.560** 14.23	**.250** 6.35	41870
				.093 2.36	**.012** 0.31	Silver Plated Brass	**.115** 2.92	**.560** 14.23	**.250** 6.35	41870-1
D	22-18	0.4–0.9	—	**.093** 2.36	**.010** 0.26	Brass	**.115** 2.92	**.530** 13.46	**.345** 8.76	60440-1
H	22-18	0.4–0.9	**.100** 2.54 Max.	**.093** 2.36	**.012** 0.31	Tin Plated Brass	**.130** 3.30	**.480** 12.19	**.150** 3.81	60884-3[1]
E	22-18	0.4–0.9	(2) **.060** 1.52 Max.	**.106** 2.69	**.012** 0.31	Tin Plated Brass	**.150** 3.81	**.690** 17.53	**.360** 9.14	62402-1[2]
F	22-18	0.4–0.9	—	**.109** 2.77	**.014** 0.36	Silver Plated Brass	**.133** 3.38	**.585** 14.86	**.250** 6.35	62720-2[3]
				.109 2.77	**.014** 0.36	Brass	**.133** 3.38	**.585** 14.86	**.250** 6.35	63594-1
				.109 2.77	**.014** 0.36	Silver Plated Brass	**.133** 3.38	**.585** 14.86	**.250** 6.35	63594-2
J	22-18	0.4–0.9	—	**.125** 3.18	**.014** 0.36	Brass	**.150** 3.81	**.635** 16.13	**.375** 9.52	63381-1
G	20-18	0.6–0.9	—	**.119** 3.02	**.016** 0.41	Brass	**.145** 3.68	**.375** 9.53	**.125** 3.18	40652
B	20-16	0.6–1.4	—	**.090** 2.29	**.018** 0.46	Tin Plated Phos. Bronze	**.235** 5.97	**.660** 16.76	**.255** 6.48	60733-1[4]

[1] Right angle pin entry.
[2] Without ears.
[3] Can be molded.
[4] Corrugated serrations, Can be bent 90°.
Note: The part numbers listed are for use with existing machine models. For AMP-O-LECTRIC Model G applicators part numbers, call the Technical Support Center at 1-800-522-6752.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

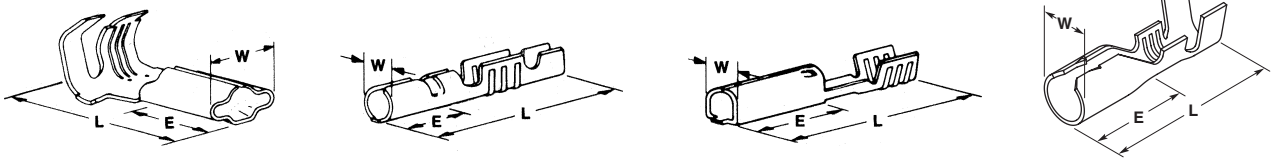
Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

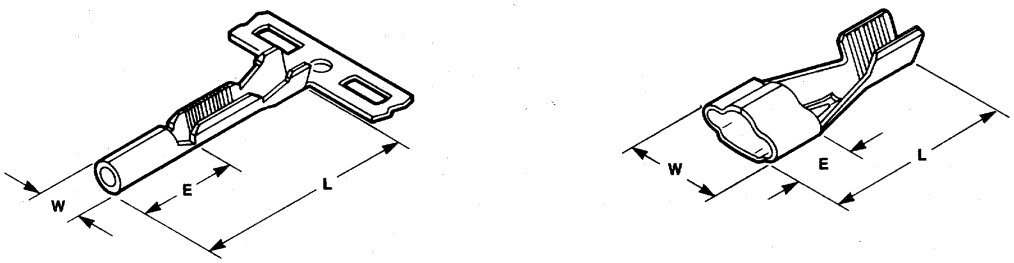
Receptacle Terminals (Continued)



A B C D

Type	Wire Range AWG	Wire Range mm²	Insul. Size	Pin Dia.	Stock Thk.	Material and Finish	Dimensions W	Dimensions L	Dimensions E	Part Number
A	20-14	0.6–2.0	**.120–.170** 3.04–4.31	**.090** 2.29	**.018** 0.46	Tin Plated Phos. Bronze	**.235** 5.97	**.550** 13.97	**.250** 6.35	42745-2
				.090 2.29	**.018** 0.46	Tin Plated Phos. Bronze	**.235** 5.97	**.550** 13.97	**.250** 6.35	60376-1[1]
				.090 2.29	**.018** 0.46	Beryllium Copper	**.235** 5.97	**.550** 13.97	**.250** 6.35	60376-2[1]
B	18-16	0.9–1.4	**.090–.120** 2.29–3.05	**.093** 2.36	**.014** 0.36	Tin Plated Brass	**.115** 2.92	**.560** 14.22	**.150** 3.81	42101-2[2]
C	18-14	0.9–2.0	—	**.109** 2.77	**.014** 0.36	Brass	**.133** 3.38	**.645** 16.38	**.300** 7.62	61012-1[3]
				.109 2.77	**.014** 0.36	Tin Plated Brass	**.133** 3.38	**.645** 16.38	**.300** 7.62	61012-3[3]
D	18-14	0.9–2.0	**.130–.175** 3.30–4.45	#10 Screw	**.016** 0.41	Brass	**.212** 5.38	**.690** 17.53	**.250** 6.35	42308-1

[1] Without locking dimple.
[2] Has locking feature for pin with indent.
[3] Can be molded.



A B

Type	Wire Range AWG	Wire Range mm²	Insul. Size	Pin Dia.	Stock Thk.	Material and Finish	Dimensions W	Dimensions L	Dimensions E	Part Number
A	29-22	0.28–0.64	**.040–.060** 1.02–1.52	**.062** 1.57	**.012** 0.30	Tin Plated Brass	**.084** 2.13	**.590** 14.99	**.195** 4.95	63506-1[1]
B	21-16	0.72–1.29	—	**.090** 2.29	**.018** 0.46	Tin Plated Phos. Bronze	**.235** 5.97	**.660** 16.76	**.255** 6.48	60177-2[1]

[1] Magnet wire.

Note: The part numbers listed are for use with existing machine models. For AMP-O-LECTRIC Model G applicators part numbers, call the Technical Support Center at 1-800-522-6752.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

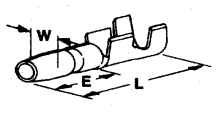
Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

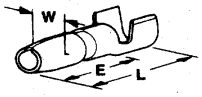
South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

SHUR-PLUG Terminals

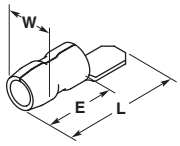
.156 [3.96] Diameter



A



B

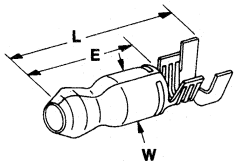


C

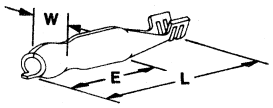
Type	Wire Range AWG	Wire Range mm²	Insul. Size	Stock Thk.	Material and Finish	Dimensions W	Dimensions L	Dimensions E	Part Number
A	20-16	0.6–1.4	**.095–.115** 2.41–2.92	**.018** 0.46	Pre-Tin Plated Brass	**.160** 4.06	**.710** 18.03	**.345** 8.76	61388-1[1]
B	18-14	0.9–2.0	**.125–.160** 3.18–4.06	**.020** 0.51	Pre-Tin Plated Brass	**.157** 3.99	**.535** 13.59	**.345** 8.76	41698
A	18-14	0.9–2.0	**.085–.125** 2.16–3.18	**.018** 0.46	Brass	**.160** 4.06	**.710** 18.03	**.345** 8.76	60766-1[1]
				.018 0.46	Pre-Tin Plated Brass	**.160** 4.06	**.710** 18.03	**.345** 8.76	60766-2[1]
B	18-14	0.9–2.0	—	**.018** 0.46	Pre-Tin Plated Brass	**.160** 4.06	**.500** 12.70	**.300** 7.62	61802-1[1]
A	18-14	0.9–2.0	**.085–.210** 2.16–5.33	**.018** 0.46	Brass	**.160** 4.06	**.710** 18.03	**.350** 8.89	61891-2[1]
B	12 or (2) 14	3.0 or (2) 2.0	—	**.018** 0.46	Pre-Tin Plated Brass	**.160** 4.06	**.600** 15.24	**.300** 7.62	63925-1[1]
B	14-10 or (2) 14	2.0–6.0 or (2) 2.0	—	**.018** 0.46	Tin Plated Brass	**.160** 4.06	**.625** 15.88	**.300** 7.62	1742039-1
C	Weld Tab		—	**.018** 0.46	Pre-Tin Plated Brass	**.160** 4.06	**.540** 13.72	**.300** 7.62	62829-1

[1] Can be molded.

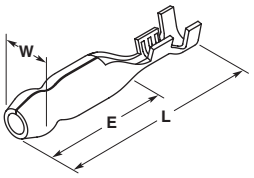
.180 [4.57] Diameter



A



B



C

Type	Wire Range AWG	Wire Range mm²	Insul. Size	Stock Thk.	Material and Finish	Dimensions W	Dimensions L	Dimensions E	Part Number
C	24-22	0.2–0.4	**.058–.082** 1.47–2.08	**.018** 0.46	Tin/Nickel Plated Brass	**.180** 4.57	**.885** 22.48	**.435** 11.05	62416-1[1]
				.018 0.46	Tin/Nickel Plated Brass	**.180** 4.57	**.865** 21.97	**.435** 11.05	1217104-1[1,2]
A	20-16	0.6–1.4	**.090–.125** 2.29–3.18	**.018** 0.46	Brass	**.180** 4.57	**.740** 18.80	**.447** 11.35	505038-1[1]
	18-14	0.9–2.0	**.090–.125** 2.29–3.18	**.018** 0.46	Tin Plated Brass	**.180** 4.57	**.740** 18.80	**.447** 11.35	60793-1[1]
				.018 0.46	Tin Plated Brass	**.180** 4.57	**.740** 18.80	**.447** 11.35	62739-1[1]
			.120–.175 3.05–4.45	**.018** 0.46	Tin Plated Brass	**.180** 4.57	**.740** 18.80	**.447** 11.35	60660-1[1]
				.018 0.46	Brass	**.180** 4.57	**.740** 18.80	**.447** 11.35	60660-2[1]
B	14-10	2.0–6.0	—	**.018** 0.46	Brass	**.180** 4.57	**.855** 21.72	**.435** 11.05	42865-1[1]
				.018 0.46	Tin Plated Brass	**.180** 4.57	**.855** 21.72	**.435** 11.05	42865-3[1]
				.018 0.46	Tin/Nickel Plated Brass	**.180** 4.57	**.855** 21.72	**.435** 11.05	42865-5[1]
				.018 0.46	Pre-Tin Plated Brass	**.180** 4.57	**.865** 21.97	**.435** 11.05	63989-1[1]
	12-8	3.0–8.0	—	**.030** 0.76	Tin Plated Brass	**.180** 4.57	**1.555** 34.50	**1.080** 27.43	1217142-1[1]
	(2) 8	(2) 8.0	—	**.030** 0.76	Tin Plated Brass	**.180** 4.57	**1.555** 34.50	**1.080** 27.43	1217185-1[1]

[1] Can be molded.
[2] Loose piece.
Note: The part numbers listed are for use with existing machine models. For AMP-O-LECTRIC Model G applicators part numbers, call the Technical Support Center at 1-800-522-6752.

Catalog 82227
Revised 8-04
www.tycoelectronics.com

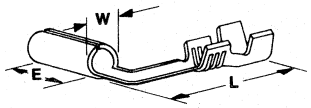
Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

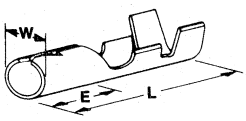
USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425
South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

SHUR-PLUG Receptacle Terminals

.156 [3.96] Diameter



A

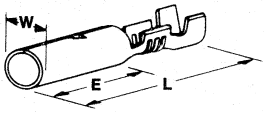


B

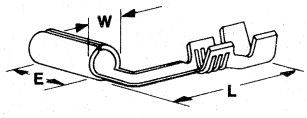
Type	Wire Range AWG	Wire Range mm²	Insul. Size	Stock Thk.	Material and Finish	Dimensions W	Dimensions L	Dimensions E	Part Number
B	22-18	0.4–0.9	**.085–.125** 2.16–3.18	**.016** 0.41	Tin Plated Brass	**.190** 4.83	**.690** 17.53	**.250** 6.35	42581-2
A	20-16	0.6–1.4	**.100–.140** 2.54–3.56	**.016** 0.41	Brass	**.190** 4.83	**.705** 17.91	**.370** 9.40	60017-3
B	18-14	0.9–2.0	**.130–.175** 3.30–4.45	**.016** 0.41	Tin Plated Brass	**.190** 4.83	**.690** 17.53	**.345** 8.76	42142-1
				.016 0.41	Brass	**.190** 4.83	**.690** 17.53	**.345** 8.76	42142-2
				.016 0.41	Tin Plated Brass	**.190** 4.83	**.695** 17.65	**.345** 8.76	63865-1[1]

[1] No indent.

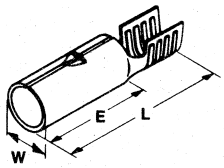
.180 [4.57] Diameter



A



B



C

Type	Wire Range AWG	Wire Range mm²	Insul. Size	Stock Thk.	Material and Finish	Dimensions W	Dimensions L	Dimensions E	Part Number
A	20-16	0.6–1.4	**.090–.120** 2.29–3.05	**.016** 0.41	Brass	**.208** 5.28	**.785** 19.94	**.420** 10.67	42531-1
				.016 0.41	Tin Plated Brass	**.208** 5.28	**.785** 19.94	**.420** 10.67	42531-2
B	20-16	0.6–1.4	**.100–.140** 2.54–3.56	**.016** 0.41	Brass	**.208** 5.28	**.715** 18.16	**.360** 9.14	42700-1 42700-3[2]
				.016 0.41	Brass	**.208** 5.28	**.715** 18.16	**.360** 9.14	42749-1
A	18-14	0.9–2.0	**.090–.125** 2.29–3.18	**.016** 0.41	Brass	**.208** 5.28	**.785** 19.94	**.420** 10.67	60798-2
				.016 0.41	Tin Plated Brass	**.208** 5.28	**.785** 19.94	**.420** 10.67	60798-4
				.016 0.41	Brass	**.208** 5.28	**.785** 19.94	**.420** 10.67	60799-2[1]
				.016 0.41	Pre-Tin/Nickel Plated Phos. Bronze	**.208** 5.28	**.785** 19.94	**.420** 10.67	60799-4[1]
				.016 0.41	Tin Plated Brass	**.208** 5.28	**.785** 19.94	**.420** 10.67	60799-5[1]
			.120–.175 3.05–4.45	**.016** 0.41	Brass	**.208** 5.28	**.785** 19.94	**.420** 10.67	61412-1
				.016 0.41	Tin Plated Brass	**.208** 5.28	**.785** 19.94	**.420** 10.67	61412-2
C	14-10	2.0–6.0	—	**.016** 0.41	Brass	**.208** 5.28	**.720** 18.29	**.420** 10.67	42868-1
				.016 0.41	Tin Plated Brass	**.208** 5.28	**.720** 18.29	**.420** 10.67	42868-2
				.016 0.41	Brass	**.208** 5.28	**.720** 18.29	**.420** 10.67	42891-1[1]
				.016 0.41	Tin Plated Brass	**.208** 5.28	**.720** 18.29	**.420** 10.67	42891-2[1]
	12-8	3.0–8.0	—	**.016** 0.41	Tin Plated Brass	**.208** 5.28	**.720** 18.29	**.420** 10.67	1217070-1
	(2) 8	(2) 8.0	—	**.016** 0.41	Brass	**.208** 5.28	**.770** 19.56	**.420** 10.67	1217074-1
				.016 0.41	Tin Plated Brass	**.208** 5.28	**.770** 19.56	**.420** 10.67	1217074-2

[1] No indent.
[2] Reverse reel of Part Number 42700-1.
Note: The part numbers listed are for use with existing machine models. For AMP-O-LECTRIC Model G applicators part numbers, call the Technical Support Center at 1-800-522-6752.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

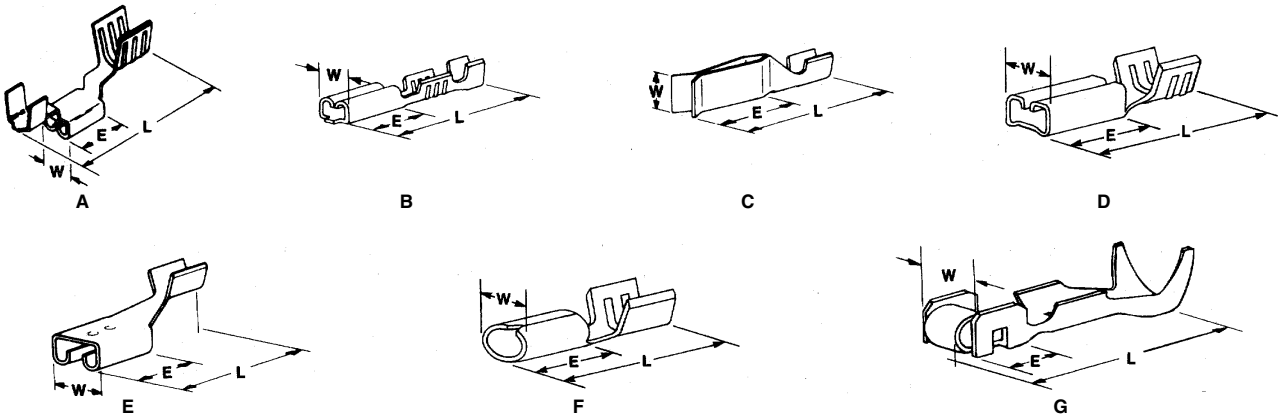
Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Tab Receptacle Terminals



Type	Wire Range AWG	Wire Range mm²	Insul. Dia. Range	Stock Thk.	Material and Finish	Fits Tab	Dimensions W	Dimensions L	Dimensions E	Part Number
B	26-22	0.12–0.4	**.035–.065** 0.89–1.65	**.010** 0.25	Pre-Tin Brass	**.031** × **.093** 0.79 × 2.36	**.120** 3.05	**.475** 12.06	**.190** 4.83	61813-1[6]
				.010 0.25	Pre-Tin Brass	**.014** × **.093** 0.36 × 2.36	**.120** 3.05	**.475** 12.06	**.190** 4.83	62041-1[7]
G	26-22	0.12–0.4	**.035–.060** 0.89–1.52	**.008** 0.20	Gold Plated Beryllium Copper	**.025** × **.025** 0.64 × 0.64	**.085** 2.16	**.390** 9.91	**.090** 2.29	61941-1
A	24-20	0.2–0.6	**.040–.080** 1.02–2.03	**.010** 0.25	Brass	**.045** × **.045** 1.14 × 1.14	**.095** 2.41	**.372** 9.45	**.130** 3.30	60524-1
				.010 0.25	Gold Plated Brass	**.045** × **.045** 1.14 × 1.14	**.095** 2.41	**.372** 9.45	**.130** 3.30	60524-3
				.010 0.25	Tin Plated Beryllium Copper	**.045** × **.045** 1.14 × 1.14	**.095** 2.41	**.372** 9.45	**.130** 3.30	60524-5
				.010 0.25	Gold Plated Brass	**.031** × **.062** 0.79 × 1.57	**.090** 2.29	**.372** 9.45	**.130** 3.30	60477-1
				.010 0.25	Tin Plated Brass	**.023** × **.062** 0.58 × 1.57	**.090** 2.29	**.372** 9.45	**.130** 3.30	60436-2
B	24-20	0.2–0.6	**.040–.080** 1.02–2.03	**.010** 0.25	Tin Plated Brass	**.031** × **.062** 0.79 × 1.57	**.090** 2.29	**.462** 11.73	**.187** 4.75	60900-1[1]
				.010 0.25	Gold Plated Brass	**.031** × **.062** 0.79 × 1.57	**.090** 2.29	**.462** 11.73	**.187** 4.75	60900-2
				.010 0.25	Tin Plated Brass	**.031** × **.062** 0.79 × 1.57	**.090** 2.29	**.462** 11.73	**.187** 4.75	60900-4[2]
				.010 0.25	Gold Plated Brass	**.031** × **.062** 0.79 × 1.57	**.090** 2.29	**.462** 11.73	**.187** 4.75	60900-5[8]
				.010 0.25	Tin Plated Brass	**.031** × **.062** 0.79 × 1.57	**.090** 2.29	**.462** 11.73	**.187** 4.75	61454-1[3]
F	24-20	0.2–0.6	—	**.010** 0.25	Tin Plated Brass	**.015** × **.050** 0.38 × 1.27	**.070** 1.78	**.310** 7.87	**.145** 3.68	62352-1
E	22-20	0.3–0.6	—	**.010** 0.25	Tin Plated Brass	**.037** × **.125** 0.94 × 3.18	**.160** 4.06	**.425** 10.80	**.190** 4.83	41989
A	22-18	0.3–0.9	**.060–.110** 1.52–2.79	**.010** 0.25	Tin Plated Brass	**.031** × **.062** 0.79 × 1.57	**.090** 2.29	**.372** 9.45	**.130** 3.30	61489-1
				.010 0.25	Gold Plated Brass	**.031** × **.062** 0.79 × 1.57	**.090** 2.29	**.372** 9.45	**.130** 3.30	61616-1
B	22-18	0.3–0.9	**.050–.085** 1.27–2.16	**.010** 0.25	Pre-Tin Brass	**.010** × **.093** 0.25 × 2.36	**.120** 3.05	**.480** 12.19	**.190** 4.83	63391-1[4,5]
				.010 0.25	Pre-Tin Brass	**.010** × **.093** 0.25 × 2.36	**.120** 3.05	**.480** 12.19	**.190** 4.83	63391-2[5]
			.080–.120 2.03–3.05	**.010** 0.25	Pre-Tin Brass	**.032** × **.103** 0.81 × 2.62	**.126** 3.20	**.480** 12.19	**.200** 5.08	60252-1[7]
	20-18	0.5–0.9	**.080–.120** 2.03–3.05	**.010** 0.25	Pre-Tin Brass	**.020** × **.103** 0.51 × 2.62	**.126** 3.20	**.480** 12.19	**.200** 5.08	60432-1[7]
				.010 0.25	Tin Plated Brass	**.020** × **.156** 0.51 × 3.96	**.179** 4.55	**.480** 12.19	**.200** 5.08	62399-1
D	20-18	0.5–0.9	—	**.010** 0.25	Brass	**.010** × **.110** 0.25 × 2.79	**.148** 3.76	**.380** 9.65	**.200** 5.08	62589-1
E	20-16	0.5–1.3	—	**.010** 0.25	Tin Plated Brass	**.032** × **.125** 0.81 × 3.18	**.160** 4.06	**.330** 9.65	**.090** 2.29	63615-1
C	18-14	0.8–2.0	—	**.025** 0.64	Brass	**.060** × **.250** 1.52 × 6.35	**.250** 6.35	**.985** 25.02	**.520** 13.20	60312-1

[1] Available in Loose Piece form, order Part No. 61454-1.
[2] Reverse reel of 60900-1.
[3] Loose Piece form, of Part No. 60900-1.
[4] Loose Piece form, of Part No. 63391-2.
[5] Compliant base.
[6] No Dimple.
[7] Dimple.
[8] Reverse reel of 60900-2.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

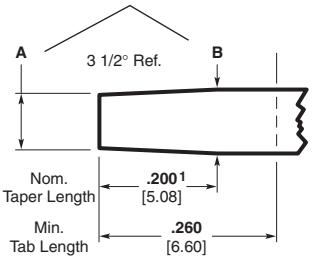
South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Taper Tab Receptacle Terminals

Precision formed taper tab receptacles are available to mate with tabs having front end dimensions of .078 [1.98] and .098 [2.49]. These receptacles are available in strip form, reel fed for high speed automatic machine termination.

Taper Tab Specifications

Difference between these two dimensions must be held from .0115 to .0125 [0.29 to 0.32]



[1] Intersection must be clean no offset and no increase in taper (both sides) over this length.

78 Series

A = .078 ± .001
[1.98 ± 0.03]

B = .090 ± .001
[2.29 ± 0.03]

Tab Thickness — .023/.016
[0.58/0.41]

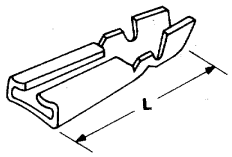
98 Series

A = .098 ± .001
[2.49 ± 0.03]

B = .110 ± .001
[2.79 ± 0.03]

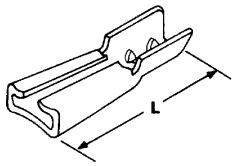
Tab Thickness — .025/.016
[0.64/0.41]

78 Series—Insulation Support



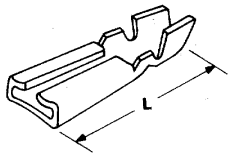
Wire Range AWG	Wire Range mm²	Insul. Dia. Range	Dim. L	Finish	Strip Form Part Number For Use With Standard Appl.	Strip Form Part Number For Use With Miniature Appl.
24-22	0.2–0.4	**.030–.050** 0.76–1.27	**.500** 12.70	Tin	—	42765-1

78 Series—Insulation Piercing



Wire Range AWG	Wire Range mm²	Insul. Dia. Range	Dim. L	Finish	Strip Form Part Number For Use With Standard Appl.	Strip Form Part Number For Use With Miniature Appl.
Tinsel	—	**.065–.075** 1.65–1.91	**.366** 9.30	Gold	60442-1	—
Tinsel	—	**.065–.075** 1.65–1.91	**.366** 9.30	Nickel	60442-2	—
Tinsel	—	**.065–.075** 1.65–1.91	**.500** 12.70	Tin	42519-1	—

98 Series—Insulation Support



Wire Range AWG	Wire Range mm²	Insul. Dia. Range	Dim. L	Finish	Strip Form Part Number For Use With Standard Appl.	Strip Form Part Number For Use With Miniature Appl.
24-22	0.2–0.4	**.040–.060** 1.02–1.52	**.562** 14.27	Tin	—	60891-1

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

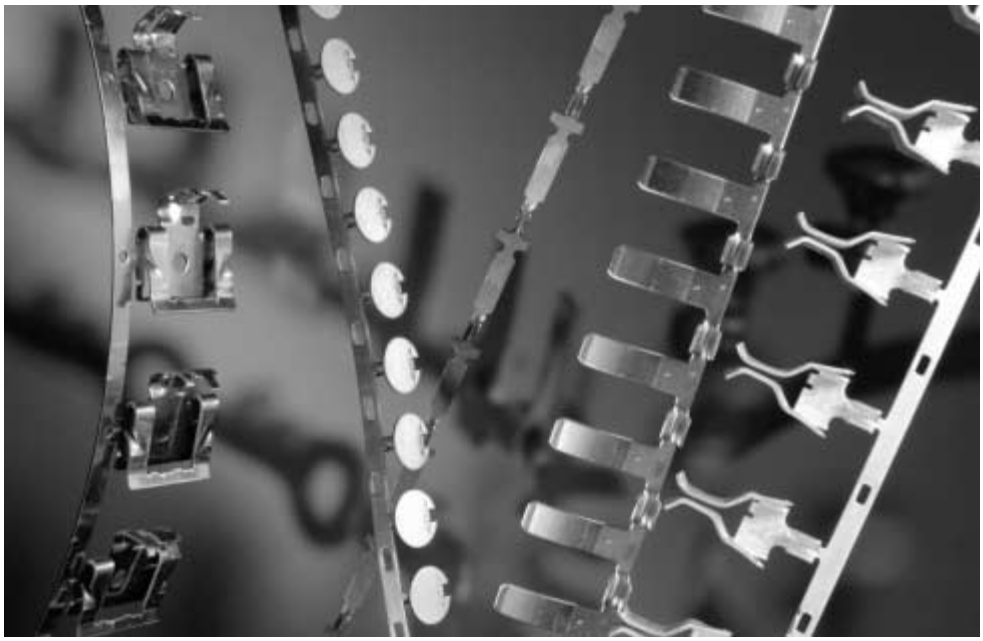
USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Contact and Welding Tab Terminals

Product Facts

- **Welding Tab terminals available for 26 -14 AWG lead wire**
- **Brush contacts available for 24–14 AWG lead wire**
- **Button contacts available for 20–16 AWG lead wire**
- **Grounding clip terminals accept .019 - .071 panel thicknesses**
- **Non-insulated Wire Pins available for lead wires ranging from 10 to 22 AWG lead wire**
- **Non-insulated Wire Pins available for magnet wire leads ranging from 13–27 AWG**
- **Precision formed, strip-fed terminals terminated in AMP automatic machines for high production rates per hour**



Tyco Electronics offers a full selection of AMP open barrel miscellaneous contact and welding tab terminals that are specifically designed to terminate various stranded and solid lead wire ranges for customer specific application requirements.

Welding tab terminals are available with and without insulation support barrels that terminate 26–14 AWG lead wire. They are manufactured in brass, phosphor bronze and steel material with tin, nickel and gold plating options available.

Brush contacts are manufactured without insulation support barrels, one part number being the exception, that terminate 24–14 AWG lead wire. They are manufactured in brass and phosphor bronze material with silver plating as an option.

Button contacts are available with and without insulation support barrels that terminate 20 -16 AWG lead wire. They are manufactured in brass material with tin plated versions available as well.

Grounding clip terminals are available that can be terminated to 22–14 AWG lead wire and accept panel thickness ranging from .019–.071. They are designed to pierce through enameled painted sheet metal panels in the appliance and lighting industry. They are manufactured out of stainless steel or tin plated phosphor bronze and steel material.

Special Tab Receptacles are available without insulation support barrels that can be terminated to 20–16 AWG lead wire. They are manufactured in brass, phosphor bronze and steel with tin and silver plated version available.

A Plug Blade terminal is featured and readily available to terminate 20–18 AWG lead wire in brass material.

Fuse terminals are available for .250 [6.5] diameters without insulation support that can be terminated to 22–10 AWG lead wire. They are manufactured in brass material with tin plated brass as an option.

Wire Strain Relief Clamps are available for insulation diameters ranging from .150–.310. They are manufactured in aluminum, phosphor bronze and tin plated steel.

A .250 Spark Plug Receptacle is available that is manufactured in nickel plated steel.

A Thermal Protector Crimp Pin is featured that can be terminated directly to a thermal protector open barrel that will accept 16-14 lead wire. The terminal is manufactured in tin plated brass.

Non-insulated Wire Pins are readily available for lead wires ranging from 10 to 22 AWG lead wire. They are manufactured in copper zinc with pre-plated and post plated tin and silver plated versions options listed. Nickel plated steel terminals are also featured.

Non-insulated AMPLIVAR Wire Pins with insulation supports are available to terminate directly to magnet wire leads ranging from 13–27 AWG. They are manufactured in brass with pre-plated and post tin plated versions available.

Technical Documents

Application Specifications describe requirements for using the product in its intended application and or crimping information. They are intended for the Packaging and Design Engineer and the Machine Setup Person.

114-2093 — Carbon Brush Contacts

114-2129 — Grounding Clip

Product Specifications

Product Specifications describe the product qualification test results completed by Tyco Electronics for consideration of product use in a specific application. They are intended for the Design and Product Reliability Engineer.

108-1376 — Grounding Clip

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

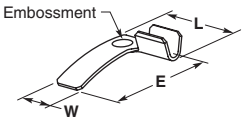
Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

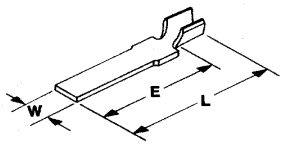
South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Contact and Welding Tab Terminals (Continued)

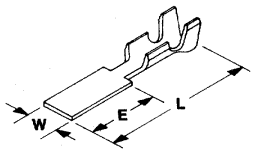
Miscellaneous Contacts and Weld Tabs



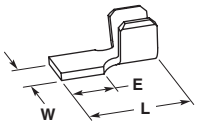
A (Left Hand)



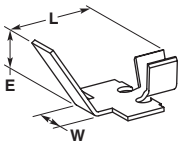
B



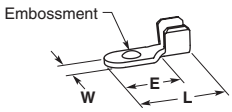
C



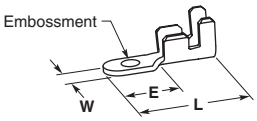
D



E



F



G

Type	Wire Range AWG	Wire Range mm²	Insul. Dia.	Stock Thickness	Dimensions W	Dimensions L	Dimensions E	Tab Direction	Material	Part Number
A	18-14	0.8-2.0	—	**.020** 0.51	**.155** 3.94	**.340** 8.64	**.390** 9.91	L.H.	Phosphor Bronze	42920-3[4]
								R.H.	Phosphor Bronze	42920-4[4]
B	22-18	0.3-0.9	—	**.016** 0.41	**.140** 3.56	**.740** 18.80	**.615** 15.62	—	Brass	155386-1[1,6]
									Tin Plated Brass	155386-2[1,6]
									Brass	155386-3[1,7]
	24-22	0.2-0.4	—	**.008** 0.20	**.115** 2.92	**.600** 15.24	**.470** 11.94	—	Stainless Steel	62827-1
C	26-22	0.12-0.40	**.055-.080** 1.40-2.03	**.012** 0.30	**.090** 2.29	**.365** 9.27	**.100** 2.54	—	Nickel Plated Steel	62062-1
				.008 0.20	**.115** 2.92	**.685** 17.40	**.375** 9.53	—	Stainless Steel	61263-1
D	18-14	0.8-2.0	—	**.016** 0.41	**.140** 3.56	**.350** 8.90	**.210** 5.33	—	Nickel Plated Steel	62134-2
E	18-14	0.8-2.0	—	**.016** 0.41	**.140** 3.56	**.540** 13.72	**.345** 8.76	—	Brass	42349-1[2]
F	20-16	0.5-1.4	—	**.020** 0.51	**.125** 3.18	**.270** 6.86	**.175** 4.45	—	Tin Plated Steel	62153-1[3]
									Nickel Plated Steel	63701-1[4]
G	20-16	0.5-1.4	**.090-.130** 2.29-3.30	**.020** 0.51	**.125** 3.18	**.365** 9.27	**.165** 4.19	—	Tin Plated Steel	40990-1[4]
									Gold Plated Steel	40990-2[5]
									Tin Plated Steel	60581-1[5]
									Tin Plated Steel	1217510-1[3]

[1] .062 [1.57] diameter hole in tab.
[2] Tab bent up 60° in applicator.
[3] Tab embossment up.
[4] Tab embossment down.
[5] No tab embossment.
[6] Standard applicator reeling.
[7] Mini applicator reeling.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

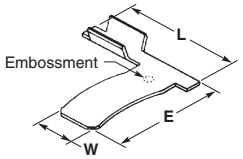
Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

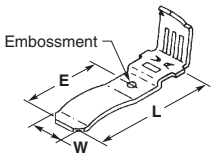
South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Contact and Welding Tab Terminals (Continued)

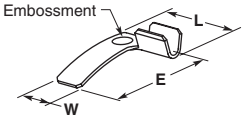
Brush Contacts



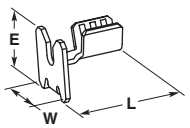
A (Right Hand)



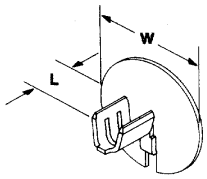
B



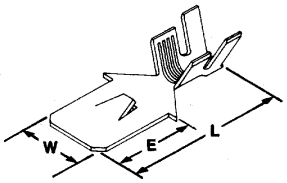
C (Left Hand)



D



E



F

Type	Wire Range AWG	Wire Range mm²	Insul. Dia.	Stock Thickness	Dimensions W	Dimensions L	Dimensions E	Tab Direction	Material	Part Number
A	22-17 Magnet Wire	0.3-1.0 Magnet Wire	—	**.020** 0.51	**.215** 5.46	**.425** 10.80	**.425** 10.80	L.H.	Phosphor Bronze	62214-1
								R.H.	Phosphor Bronze	62214-2
	18-14	0.8-2.0	—	**.020** 0.51	**.187** 4.75	**.435** 11.05	**.640** 16.25	R.H.	Phosphor Bronze	60812-1
								L.H.	Phosphor Bronze	60812-2
					.125 3.18			R.H.	Phosphor Bronze	350010-1
B	20-14	0.5-2.0	—	**.018** 0.46	**.187** 4.75	**.620** 15.75	**.425** 10.80	R.H.	Phosphor Bronze	62008-1[1]
									Silver Plated Ph Bz	62008-2[1]
								L.H.	Phosphor Bronze	62009-1[1]
									Silver Plated Ph Bz	62009-2[1]
						.495 12.57	**.300** 7.62	R.H.	Phosphor Bronze	63182-1[1]
								L.H.	Phosphor Bronze	63183-1[1]
C	20-18	0.5-0.8	—	**.012** 0.30	**.125** 3.18	**.330** 8.38	**.305** 7.75	L.H.	Phosphor Bronze	1217698-1
								R.H.	Phosphor Bronze	1217698-2
D	20-16	0.5-1.4	—	**.018** 0.46	**.240** 6.10	**.275** 6.98	**.240** 6.10	—	Brass	61524-2[2]
E	24-20	0.2-0.6	—	**.018** 0.46	**.285** 7.24	**.210** 5.33	—	—	Brass	61933-1[2]
				.016 0.41	**.312** 7.29	**.185** 4.70	—	—	Brass	63020-1[2]
	20-16	0.5-1.4	—	**.018** 0.46	**.285** 7.24	**.210** 5.33	—	—	Brass	1217507-1[2]
				.016 0.41	**.360** 9.14	**.185** 4.70	—	—	Brass	63930-1[2]
F	18-14	0.8-2.0	**.110-.160** 2.79-4.06	**.016** 0.41	**.255** 6.48	**.775** 19.69	**.355** 9.02	—	Brass	61390-1

[1] Tab lock crimp.
[2] Carbon brush application equipment available.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

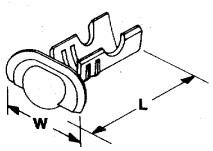
Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

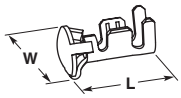
South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Miscellaneous Terminals

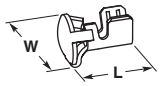
Button Contacts



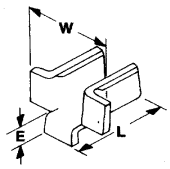
A



B



C

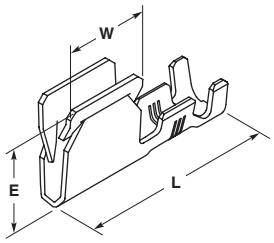


D

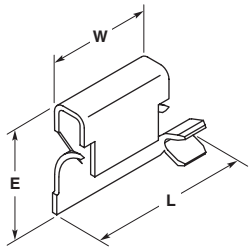
Type	Wire Range AWG	Wire Range mm²	Insul. Dia.	Stock Thickness	Dimensions W	Dimensions L	Dimensions E	Material	Part Number
A	20-16	0.5-1.4	**.090-.120** 2.29-3.05	**.016** 0.41	**.195** 4.95	**.240** 6.10	—	Brass	42218-3[1]
B	20-16	0.5-1.4	**.090-.125** 2.29-3.18	**.016** 0.41	**.195** 4.95 — **.240** 6.10	**.310** 7.87	—	Brass	61165-1[2]
								Tin Plated Brass	61165-2[2]
								Brass	61039-1
								Tin Plated Brass	505034-1
								Tin Plated Brass	505034-2[2]
								Brass	505034-3[2]
C	20-16	0.5-1.4	—	**.016** 0.41	**.195** 4.95	**.235** 5.97	—	Brass	61280-1
								Brass	61280-2[2]
D	20-16	0.5-1.4	—	**.020** 0.51	**.230** 5.84	**.175** 4.45	**.060**[3] 1.52	Brass	406623[3]

[1] fits .150 [3.81] dia hole
[2] alternate reeling direction for mini applicator compatibility
[3] tab bent down in applicator

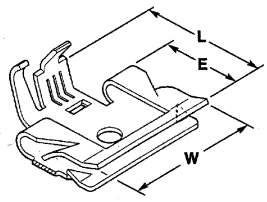
Grounding Clips



A



B



C

Type	Wire Range AWG	Wire Range mm²	Insul. Dia. Range	Application Panel Thk.	Stock Thk.	Dimensions W	Dimensions L	Dimensions E	Material	Part Number
A	18-14	0.8-2.0	**.090-.125** 2.29-3.18	**.020-.030** 0.51-0.76	**.020** 0.51	**.140** 3.56	**.730** 18.54	**.382** 9.70	Stainless Steel	63895-1
				.047-.057 1.19-1.45	**.020** 0.51	**.190** 4.83	**.730** 18.54	**.382** 9.70	Stainless Steel	1217012-1
B	22-18	0.3-0.8	—	**.020-.040** 0.51-1.02	**.020** 0.51	**.140** 3.56	**.620** 15.75	**.440** 11.18	Tin Plated Steel	63733-1
				.020-.040 0.51-1.02	**.020** 0.51	**.140** 3.56	**.620** 15.75	**.440** 11.18	Tin Plated Phos. Bronze	63733-2
C	18-14	0.8-2.0	**.100-.140** 2.54-3.56	**.019-.071** 0.48-1.80	**.020** 0.51	**.615** 15.62	**.675** 17.10	**.440** 11.18	Stainless Steel	63575-1

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

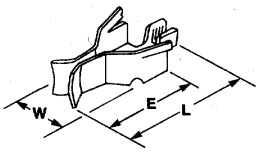
Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

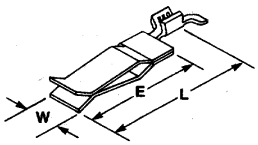
South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Miscellaneous Terminals

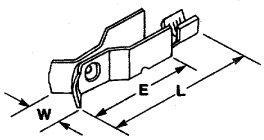
Tab Receptacles — Special



A
Twist Lock Receptacle



B
Receptacle, 250 Series

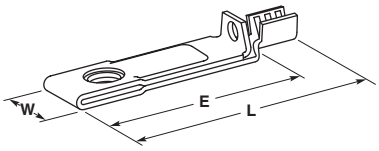


C
Receptacle

Type	Wire Range AWG	Wire Range mm²	Insul. Dia.	Stock Thickness	Dimensions W	Dimensions L	Dimensions E	Material	Part Number
A	20-16	0.5-1.4	—	**.025** 0.64	**.320** 8.13	**.905** 23.00	**.665** 16.89	Tin Plated Phos Bz	63035-1
	18-14	0.8-2.0						Tin Plated Phos Bz	63863-1
								Silver Plated Phos Bz	63863-2
B	20-16	0.5-1.4	—	**.025** 0.64	**.200** 5.08	**.995** 25.27	**.790** 20.06	Brass	62281-1
C	20-16	0.5-1.4	—	**.025** 0.64	**.270** 6.86	**1.000** 25.40	**.750** 19.05	Tin Plated Steel	62727-1
								Tin Plated Steel	63723-1[1]
								Tin Plated Phos Bz	63723-2[1]

[1] Includes locking feature similar to style A.

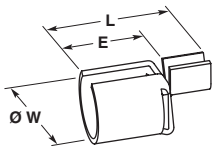
Plug Blade



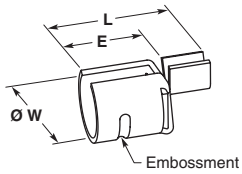
A

Type	Wire Range AWG	Wire Range mm²	Insul. Dia.	Stock Thickness	Dimensions W	Dimensions L	Dimensions E	Material	Part Number
A	20-18	0.5-0.9	—	**.020** 0.51	**.250** 6.35	**.995** 25.27	**.845** 21.46	Brass	156523-1

Fuse Receptacles — .250 [6.35] Dia.



A



B

Type	Wire Range AWG	Wire Range mm²	Insul. Dia.	Stock Thickness	Dimensions W	Dimensions L	Dimensions E	Material	Part Number
A	22-18	0.3-0.9	—	**.020** 0.51	**.250** 6.35	**.475** 12.07	**.310** 7.87	Tin Plated Brass	505020-2
	16-14	1.3-2.0						Tin Plated Brass	40626
	12-10	3.0-6.0				**.495** 12.57		Tin Plated Brass	62587-1
B	22-18	0.3-0.9	—	**.020** 0.51	**.250** 6.35	**.475** 12.07	**.310** 7.87	Brass	1217881-1
	16-14	1.3-2.0						Tin Plated Brass	60654-1
								Brass	60654-2

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

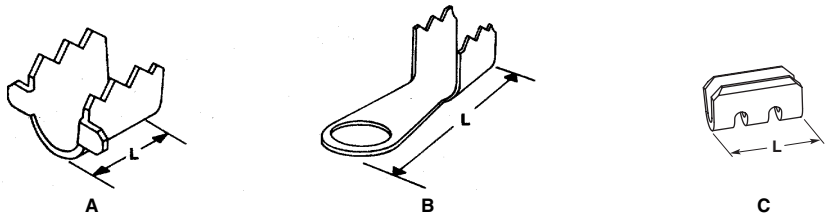
Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Miscellaneous Terminals (Continued)

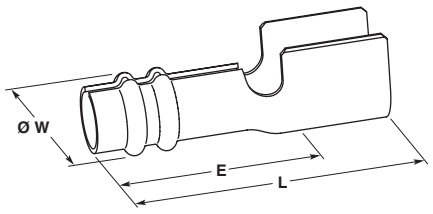
Wire Strain Relief Clamps



Type	Wire Range AWG	Wire Range mm²	Insul. Dia.	Stock Thickness	Dimensions W	Dimensions L	Dimensions E	Material	Part Number
A	—	—	**.180-.230** 4.57-5.84	**.025** 0.64	**.575** 14.60	**.405** 10.29	—	Aluminum	42412-5
			.150-.200 3.81-5.08	**.028** 0.71	**.500** 12.70	**.250** 6.35		Tin Plated Steel	61831-1
			.290-.310 7.37-7.87		**.640** 16.26			Tin Plated Steel	61987-1
B	—	—	**.180-.230** 4.57-5.84	**.025** 0.64	**.285** 7.24	**.750** 19.05	—	Aluminum	61520-1[1]
C	—	—	—	**.030** 0.76	—	**.345** 8.76	—	Phosphor Bronze	1217440-8[2]

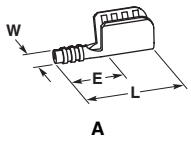
[1] Ring .200 [5.08] hole diameter.
[2] Strain relief for .045 [1.14] dia. stranded steel cable.

Spark Plug Receptacle — .250 [6.35] Dia.



Type	Wire Range AWG	Wire Range mm²	Insul. Dia.	Stock Thickness	Dimensions W	Dimensions L	Dimensions E	Material	Part Number
A	—	—	**.275** 7.00	**.018** 0.46	**.320** 8.13	**1.155** 29.34	**.745** 18.92	Nickel Plated Steel	40800

Thermal Protector Crimp Pin



Type	Wire Range AWG	Wire Range mm²	Insul. Dia.	Stock Thickness	Dimensions W	Dimensions L	Dimensions E	Material	Part Number
A	16-14	1.3-2.0	—	**.016** 0.41	**.050** 1.27	**.375** 9.53	**.175** 4.45	Tin Plated Brass	1217569-1[1]

[1] Pin is crimped in thermal protector wire barrel.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

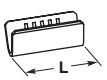
Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

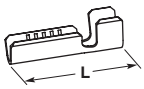
South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Miscellaneous Terminals (Continued)

Wire Pins



A



B

Type	Wire Range AWG	Wire Range mm²	Insul. Dia.	Stock Thickness	Dim. L	Material and Finish	Part Number
A	20-17	0.5–1.0	—	**.013** 0.32	**.276** 7.00	Brass	926823-1
						Pre-Tin Plated Brass	926823-2
						Brass	926823-3[1]
						Pre-Tin Plated Brass	926823-4[1]
	20-17	0.5–1.0	—	**.013** 0.32	**.276** 7.00	Phos. Bronze	926823-5
						Pre-Tin Plated Phos. Bronze	926823-6
						Phos. Bronze	926823-7[1]
						Pre-Tin Plated Phos. Bronze	926823-8[1]
	17-13½	1.0–2.5	—	**.013** 0.32	**.276** 7.00	Brass	926824-1
						Pre-Tin Plated Brass	926824-2
						Brass	926824-3[1]
						Pre-Tin Plated Brass	926824-4[1]
	17-13½	1.0–2.5	—	**.013** 0.32	**.276** 7.00	Phos. Bronze	926824-5
						Pre-Tin Plated Phos. Bronze	926824-6
						Phos. Bronze	926824-7[1]
						Pre-Tin Plated Phos. Bronze	926824-8[1]
	17-13½	1.0–2.5	—	**.013** 0.32	**.276** 7.00	Nickel Plated Brass	926824-9[1]
						Nickel Plated Brass	1-926824-0
B	22-18	0.30–0.82	**.079–.098** 2.00–2.50	**.013** 0.32	**.429** 10.90	Brass	925667-1
						Pre-Tin Plated Brass	925667-2
	22-18	0.30–0.82	**.079–.098** 2.00–2.50	**.013** 0.32	**.429** 10.90	Nickel Plated Steel	925667-4
	22-18	0.30–0.82	**.079–.098** 2.00–2.50	**.013** 0.32	**.429** 10.90	Brass	925667-5[1]
						Pre-Tin Plated Brass	925667-6[1]
	22-18	0.30–0.82	**.079–.098** 2.00–2.50	**.013** 0.32	**.429** 10.90	Nickel Plated Steel	925667-8[1]
	20-17	0.5–1.0	**.071–.130** 1.80–3.30	**.013** 0.32	**.429** 10.90	Brass	925552-1
						Pre-Tin Plated Brass	925552-2
	20-17	0.5–1.0	**.071–.130** 1.80–3.30	**.013** 0.32	**.429** 10.90	Nickel Plated Steel	925552-4
	20-17	0.5–1.0	**.071–.130** 1.80–3.30	**.013** 0.32	**.429** 10.90	Brass	925552-5[1]
						Pre-Tin Plated Brass	925552-6[1]
	20-17	0.5–1.0	**.071–.130** 1.80–3.30	**.013** 0.32	**.429** 10.90	Nickel Plated Steel	925552-8[1]
	20-17	0.5–1.0	**.071–.130** 1.80–3.30	**.013** 0.32	**.429** 10.90	Pre-Tin Plated Phos. Bronze	1-925552-0
	20-17	0.5–1.0	**.071–.130** 1.80–3.30	**.013** 0.32	**.429** 10.90	Tin Plated Brass	1-925552-1
						Tin Plated Brass	1-925552-2[1]
	20-15½	0.5–1.5	**.071–.130** 1.80–3.30	—	**.630** 16.00	Brass	926866-1
						Pre-Tin Plated Brass	926866-2
						Brass	926866-3[1]
						Pre-Tin Plated Brass	926866-4[1]

[1] Splice Free.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

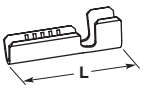
Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Miscellaneous Terminals (Continued)

Wire Pins (Continued)



B

C

Type	Wire Range AWG	Wire Range mm²	Insul. Dia.	Stock Thickness	Dim. L	Material and Finish	Part Number
B	20-15½	0.5–1.5	**.098–.150** 2.50–3.80	**.013** 0.32	**.311** 7.90	Brass	141093-1
						Tin Plated Brass	141093-2
	20-15½	0.5–1.5	**.091–.126** 2.30–3.20	**.016** 0.40	**.216** 5.50	Brass	160644-1
						Silver Plated Brass	160644-2
						Tin Plated Brass	160644-3
						Silver Plated Brass	160644-4[1]
	20-15½	0.5–1.5	**.091–.126** 2.30–3.20	**.016** 0.40	**.216** 5.50	Nickel Plated Steel	160644-6[1]
	20-15½	0.5–1.5	**.091–.126** 2.30–3.20	**.016** 0.40	**.216** 5.50	Tin Plated Brass	160644-7[1]
						Brass	160644-8
						Nickel Plated Brass	160644-9
						Tin Plated Brass	1-160644-0[1]
	17-13½	1.0–2.5	**.098–.150** 2.50–3.80	**.013** 0.32	**.429** 10.90	Brass	925553-1
						Pre-Tin Plated Brass	925553-2
	17-13½	1.0–2.5	**.098–.150** 2.50–3.80	**.013** 0.32	**.429** 10.90	Phos. Bronze	925553-3
						Pre-Tin Plated Phos. Bronze	925553-4
	17-13½	1.0–2.5	**.098–.150** 2.50–3.80	**.013** 0.32	**.429** 10.90	Nickel Plated Steel	925553-6
	17-13½	1.0–2.5	**.098–.150** 2.50–3.80	**.013** 0.32	**.429** 10.90	Brass	925553-7[1]
						Pre-Tin Plated Brass	925553-8[1]
	17-13½	1.0–2.5	**.098–.150** 2.50–3.80	**.013** 0.32	**.429** 10.90	Phos. Bronze	925553-9[1]
						Pre-Tin Plated Phos. Bronze	1-925553-0[1]
	17-13½	1.0–2.5	**.098–.150** 2.50–3.80	**.013** 0.32	**.429** 10.90	Nickel Plated Steel	1-925553-2[1]
	13½-10	2.5–6.0	**.177** 4.50 Max.	**.013** 0.32	**.630** 16.00	Brass	926867-1
						Pre-Tin Plated Brass	926867-2
						Brass	926867-3[1]
						Pre-Tin Plated Brass	926867-4[1]
C	18½-17	0.75–1.0	—	**.010** 0.25	**.236** 6.00	Pre-Tin Plated Brass	926933-1
						Brass	926933-2
						Pre-Tin Plated Brass	926933-3
						Brass	926933-4
	18½-17	0.75–1.0	—	**.010** 0.25	**.236** 6.00	Pre-Tin Plated Phos. Bronze	926933-5
						Phos. Bronze	926933-6
						Pre-Tin Plated Phos. Bronze	926933-7
						Phos. Bronze	926933-8
	18½-17	0.75–1.0	—	**.010** 0.25	**.236** 6.00	Copper Nickel	926933-9
	15½-13½	1.5–2.5	—	**.010** 0.25	**.276** 7.00	Pre-Tin Plated Brass	925856-1
						Brass	925856-2
	15½-13½	1.5–2.5	—	**.010** 0.25	**.276** 7.00	Phos. Bronze	925856-3
						Pre-Tin Plated Phos. Bronze	925856-4

[1] Splice Free.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

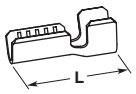
Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Miscellaneous Terminals (Continued)

AMPLIVAR Wire Pins with Insulation Support



A

Type	Wire Range		Insul. Dia.	Stock Thickness	Dim. L	Material	Part Number
	CMA	mm²					
A	27-19	0.10-0.60	**.055-.087** 1.40-2.20	**.016** 0.40	**.272** 6.90	Brass	141075-1
						Tin Plated Brass	141075-2
	27-19	0.10-0.60	**.098-.150** 2.50-3.80	**.016** 0.40	**.311** 7.90	Brass	141175-1[1]
						Tin Plated Brass	141175-2[1]
						Brass	1-141175-1[2]
	18-13	0.70-2.50	**.098-.150** 2.50-3.80	**.016** 0.40	**.319** 8.10	Brass	737060-1
						Tin Plated Brass	737060-2
						Pre-Tin Plated Brass	737060-3

[1] Reeled “U-up”.
[2] Reeled “U-down”.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Application Tooling

AMP-O-LECTRIC Model G Terminating Machines, 354500-1, -9, -11

A totally new design of our most popular machine for bench-top operation. It features a quiet and highly-reliable direct motor drive, electronic controls for ease of setup and operation, and improved guarding and lighting for operator convenience and safety. All versions also include either manual or automatic precision adjustment for crimp height. For use with miniature style applicators only.

(Shown with optional Crimp Quality Monitor [CQM].)

Specifications

Weight — Approximately 240 lb [110 kg]

Width — 18.7-25.3 [475-643] depending on type of applicator used

Depth — 21.5-28.1 [546-713] depending on type of applicator used

Height — 20 [508] without reel

Electrical — 120 or 220 VAC, 50 or 60 Hz

Air — 90-110 psi [6.21-7.59 bar] when required for use with air-feed applicators

Wire Range — 26-10 AWG [0.12-6.0 mm^2] solid or stranded, depending on product applied

For more information, request Catalog **65828**.

AMP 3K/40 and AMP 5K/40 Terminating Machines

Specifications

Height — 20 [510] (without reel support)

Weight — Approx. 150 lb [68 kg]

Capacity — AMP 3K/40 — 3,000 lb [1361 kg] max. crimp force; AMP 5K/40 — 5,000 lb [2268 kg] max. crimp force

Noise — 76 dBa maximum at 3,000 lb [1361 kg] full capacity; 80 dBa maximum at 5,000 lb [2268 kg] full capacity

Electrical — 100-240 VAC, 50/60 Hz (6A) • Average <1 A at 120 VAC when used as a bench-top unit at 2 000 cycles per hour operating rate

Air — 90-100 psi [6.21-6.90 bar], 6 scfm [0.00282 m^3/s] (when required for use with air-feed applicators)
Note: Optional Air Feed Valve Assembly required.

The AMP 3K/40 and AMP 5K/40 Terminators are designed for customers that require the increased output and quality of a semiautomatic machine at a competitive price. By incorporating the most commonly requested features as standard and offering a long list of optional equipment, these terminators offer flexibility to meet the specific needs of various applications at the lowest possible cost.

- 3,000 lb [1361 kg] max. crimp force (AMP 3K/40) 5,000 lb [2268 kg] max. crimp force (AMP 5K/40)
- Tool-less removal of applicators and guards
- Jog capability
- Quiet, fast operation — 80/76 dBa and cycle time less than 0.400 seconds
- Accepts Heavy Duty Mini style applicators
- Wide range of optional equipment such as tool-less precision crimp height adjust, batch counter, CQM capability and work light
- Order Catalog 1654856 for specs and part numbers

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Application Tooling (Continued)

Optional Stripping Module for the AMP 3K/40, AMP 5K/40 and AMP-O-LECTRIC Model G Terminating Machines

The combination of the Stripping Module with the AMP 3K/40, AMP 5K/40 or the AMP-O-LECTRIC Model G terminating machines provides our customers with an economic and proficient method of stripping the wire and crimping terminals on the same machine. No longer is a special machine needed for just stripping the wire. The wires are stripped moments before crimping, which means that there is virtually no chance of damaging the wire conductors during handling or storage. Wire placement accuracy is also improved because once the wire is fed into the start sensor, the Stripping Module does the rest.

Specifications

Wire Range Base Module — 32-14 AWG [0.03 mm^2 - 2.5 mm^2] (30-32 AWG may require special kit.)
Max. Insulation — .200 [5.08]
Cable Breakout — > 1.1 [29]
Strip Length — .100 - .400 [2.5 – 10.16]
Noise — Less than 82 dBA (Typical at operator position with standard mechanical feed applicator)
Weight — 10 lb [4.53 Kilograms]
Height — 5 [127]
Electrical — 100-240 VAC, 50/60 Hz, single phase current, obtains power from the terminator
Air — 90-100 psi [620-760 kPa], 6 scfm [2.83 liters/sec]
Wire Sensor — Gold plated contacts with laser etched target

For more information, request Catalog **1309085**.

Crimp Quality Monitor (CQM)

This unique system provides 100% on-the-fly crimp inspection. It measures the crimp height of each termination, and evaluates the quality of each crimp. If a crimp is questionable, the monitor alerts the operator with both visual and audible alarms. It also provides ports for printing and networking.

When used with AMP-O-LECTRIC Model "G" Termination Machines, the monitor is mounted to the machine. When used with AMPOMATOR CLS IV Lead Making Machines, it is integrated into the machine's operating system, with the information displayed on the machine's touch screen.

Specifications

Width — 8.5 [216]
Depth — 9 [229]
Height — 4.5 [114]
Electrical — 120 VAC, 50 or 60 Hz, or 220 VAC, 50 or 60 Hz
Printer Port — Serial Interface

For more information, request Catalog **82275**.

5-Ton Machine, Part Number 565433-4

This machine is used with special standard style applicators to apply splices and terminals requiring crimping forces greater than the maximum output of AMP-O-LECTRIC Termination Machines.

The machine is a modification of a Fixed Bed Gap mechanical clutch press manufactured by Benchmaster Products, Inc.

Specifications

Width — 29 [737]
Depth — 25.4 [645]
Height — 35.5 [902] without reel
Weight — Approximately 250 lb [113 kg]
Electrical — 120 VAC, 60 Hz, 6 A
Air — 90-100 psi [6.21-7.59 bar] when required for use with air-feed applicators

Carbon Brush Machine, Part Number 459248-2

This machine is a modified AMP-O-LECTRIC Model "K" Termination Machine equipped with a mechanism that compresses the spring and pulls the shunt wire through the spring over the terminal.

The machine can terminate shunt wires ranging from .812-4.78 [20.6-121] in length depending on the type of terminal used. It can accept springs with an inside diameter of .130-.427 [3.30-10.8]

Specifications

Width — 27 [68.6]
Depth — 27 [68.6]
Height — 28 [71.1] without reel
Weight — Approximately 250 lb [113 kg]
Electrical — 120 VAC, 60 Hz, 6 A
Air — 80-100 psi [5.51-6.89 bar]

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Application Tooling (Continued)

AMPOMATOR CLS IV+ Lead-Making Machines, 356500-1, -2

Fully-automatic machines that measure, cut, strip and terminate single leads. Microprocessor-controlled, and programmed and operated using an easy-to-follow, menu-driven touch-screen. Features include direct-drive terminating units with precision crimp height adjustment, fully programmable setups, wire runout and splice detection, and motorized pre-feed with wire straightener. Crimp Quality Monitoring is also available.

Specifications

Width — 159 [4 040]

Depth — 68 [1 730]

Height — 86 [2 185] with 24 [610] dia. reel

Weight — 2 000 lb [907 kg]

Electrical — 220 VAC, 50 or 60 Hz, single phase, 25 A, with neutral and ground

Air — 90 psi [6.21 bar], 15 scfm [0.0071 m^3/s] sustained

Wire Range — 26-10 AWG [0.12-6 mm^2] stranded, 26-16 AWG [0.12-1.4 mm^2] solid

Lead Lengths — 3-90 [76.2-2 285], 90-1 000 [2 285-25 400] with long lead conveyors

For more information, request Catalog **124324**.

Applicators

End- and Side-Feed Heavy-Duty Miniature (HDM) Applicators

Tyco Electronics applicators are designed to exacting specifications to produce consistent, high-quality terminations.

HDM applicators are quickly interchangeable and easily repaired. They feature simple dial-in settings for adjusting crimp height for terminating different wire combinations within the designated CMA range.

These applicators are used with both bench machines and fully-automatic lead makers. They can also be used for crimp quality monitoring on systems equipped with the CQM G-Adapter. Call the Tooling Assistance Hotline at 1-800-722-1111 for further information.

Standard (STD) Applicators

Standard style applicators are generally used for long production runs using dedicated equipment, or when splicing a coil, for example, that needs to be positioned close to the crimping area in the applicator. The crimp height can be adjusted by raising or lowering the base mount.

Standard Style Applicator for Large CMA Splice, Part Number 566372-2

This applicator was designed specifically to apply AMP 5 000-16 000 CMA Splice, Part Number 63625-1. It features a highly-visible, close-up crimp area—less than 1 [25] from the front of the guard. You can easily splice multiple wires by simply rotating them down through the front of the guard into the crimp area.

It is an air-feed applicator, and can be used with AMP-O-LECTRIC Model K termination machine Part Number 1-471273-2 or 1-471273-3.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Part Number Index

Note: This index lists all cataloged parts by base no. only. Complete part nos. (with prefixes and/or suffixes) are shown on the page(s) indicated.

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Part Number Index (Continued)

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Part Number Index (Continued)

Part No.	Page
485079	21
505020	64
505033	29
505034	63
505038	56
626034	12
640007	14
640008	11
640009	15
640011	14
640012	15
640051	13
640052	13
640082	11
640102	14
640189	19
640204	10
640212	21
640216	15
640249	15
640253	14
640257	18
640260	25
640271	10
737060	68
925552	66
925553	67
925667	66
925856	67
926823	66
926824	66
926866	66
926867	67
926933	67
964156	46
1217012	63
1217070	57
1217074	57
1217104	56
1217142	56
1217160	12
1217185	56
1217330	14
1217384	47
1217440	65
1217507	62
1217510	61
1217569	65
1217698	62
1217881	64
1217967	27
1375622	29
1438246	29
1438254	30
1601503	38
1601504	38
1601507	35
1601511	37
1601513	37
1601514	35
1601520	34
1601528	36
1601529	36
1601531	36
1601532	36
1601538	42
1601539	42
1601540	42
1601542	38
1601545	38
1601546	38
1601547	38
1601548	37
1601549	37
1601550	34
1601551	34
1601553	34
1601555	38
1601559	42
1601560	42
1601562	38
1601564	38
1601566	37
1601569	37
1601571	37
1601572	34
1601573	34
1601575	33
1601577	33
1601578	33
1601580	38
1601582	38
1601583	38
1601584	38
1601586	37
1601587	35
1601588	35
1601591	35
1601593	33
1601596	38
1601597	37
1601599	37
1601600	37
1601601	35
1601603	35
1601604	42
1601606	42
1601607	41
1601608	41
1601610	38
1601611	38
1601612	38
1601614	37
1601617	37
1601618	37
1601619	37
1601620	35
1601623	35
1601625	35
1601628	35
1601629	35
1601630	35
1601631	35
1601632	33
1601633	33
1601635	38
1601637	42
1601639	41
1601640	37
1601642	36
1601644	42
1601646	42
1601647	42
1601649	38
1601650	37
1601651	37
1601652	37
1601654	37
1601655	35
1601656	35
1601658	35
1601660	35
1601661	35
1601664	35
1601665	35
1601667	35
1601668	35
1601669	34
1601675	42
1601677	41
1601678	41
1601680	36
1601681	36
1601682	36
1601683	42
1601687	37
1601689	36
1601691	36
1601693	36
1601694	36
1601695	36
1601705	41
1601706	41
1601707	41
1601709	36
1601710	36
1601711	36
1601712	36
1601716	42
1601717	41
1601718	41
1601719	41
1601721	37
1601722	37
1601723	37
1601726	36
1601729	36
1601730	36
1601731	36
1601733	36
1601750	41
1601754	36
1601755	36
1601761	41
1601764	36
1601765	36
1601766	36
1601768	34
1601769	33
1601771	33
1601793	42
1601794	41
1601795	38
1601797	34
1601798	34
1601800	42
1601807	34
1601808	37
1601809	37
1601810	37
1601811	35
1601814	41
1601818	35
1601819	35
1601820	35
1601823	41
1601824	41
1601825	38
1601827	37
1601828	35
1601829	35
1601832	42
1601833	41
1601835	41
1601837	37
1601841	36
1601842	41
1601844	42
1601845	42
1601846	41
1601847	41
1601848	41
1601852	36
1601853	33
1601857	41

Catalog 82227
Revised 8-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

tyco Electronics

Global Contacts

Americas

Argentina – Buenos Aires
Phone: +54-11-4733-2200
Fax: +54-11-4733-2250

Brasil – São Paulo
Phone: +55-11-3611-1311
Fax: +55-11-3611-0397

Canada – Markham
Phone: +905-475-6222
Fax: +905-474-5520
Product Information Center: (Technical Support)
Phone: +905-470-4425
Fax: +905-474-5525

Colombia – Bogota
Phone: +57-1-240-9396
Fax: +57-1-660-0206

Mexico – Mexico City
Phone: +52-55-5-729-0425
Fax: +52-55-5-398-1430

United States – Harrisburg, PA
Phone: +717-564-0100
Fax: +717-986-7575
Product Information Center: (Technical Support)
Phone: +800-522-6752
Fax: +717-986-7575

For Latin/South American Countries not shown
Phone: +57-1-240-9396
Fax: +57-1-660-0206

Asia/Pacific

Australia – Sydney
Phone: +61-2-9840-8200
Fax: +61-2-9899-5649
Product Information Center: (Technical Support)
Phone: +61-2-9554-2600
Fax: +61-2-9502-2556

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

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

Japan – Kawasaki, Kanagawa
Phone: +81-44-844-8079
Fax: +81-44-844-8733
Product Information Center: (Technical Support)
Phone: +81-44-844-8013
Fax: +81-44-812-3200
Raychem Products
Phone: +81-44-900-5102
Fax: +81-44-5025-5027

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

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

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

Shunde
Phone: +86-765-775-1368
Fax: +86-765-775-2823

Singapore – Singapore
Phone: +65-4820-311
Fax: +65-4821-012
Raychem Products
Phone: +65-4866-151
Fax: +65-6545-514

Taiwan – Taipei
Phone: +886-2-2664-9977
Fax: +886-2-2664-9900

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: +43-190-560-0
Fax: +43-190-560-1333

Belgium – Kessel-Lo
Phone: +32-16-352-300
Fax: +32-16-352-352

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 J
Phone: +45-70-15-52-00
Fax: +45-86-29-51-33

Egypt – Cairo
Phone: +20-2-417-76-47
Fax: +20-2-419-23-34

Estonia – Tallinn
Phone: +372-65-05-474
Fax: +372-65-05-470

Finland – Helsinki
Phone: +358-95-12-34-20
Fax: +358-95-12-34-250

France –
Cergy-Pontoise
Phone: +33-1-3420-8888
Fax: +33-1-3420-8600
Product Information Center: (Technical Support)
Phone: +33-1-3420-8943
Fax: +33-1-3420-8623

France
Tyco Electronics Export –
St Ouen L'Aumone
Phone: +33-1-3440-7200
Fax: +33-1-3440-7220 or
+33-1-3440-7230

Germany – Bensheim
Phone: +49-6251-133-0
Fax: +49-6251-133-1600
Product Information Center: (Technical Support)
Phone: +49-6251-133-1999
Fax: +49-6251-133-1988

Germany – Langen
Phone: +49-6103-709-0
Fax: +49-6103-709-1223

Germany – Speyer
Phone: +49-6232-30-0
Fax: +49-6232-30-2243

Germany
HTS Division – Neunkirchen
Phone: +49-2247-305-0
Fax: +49-2247-305-122

Great Britain –
Stanmore Middlesex
Phone: +44-181-954-2356
Fax: +44-181-954-6234
Product Information Center: (Technical Support)
Freephone GB: 0800-267-666
Phone: +44-141 810 8967…69
Fax: +44-141 810 8971
Great Britain – Dorcan, Swindon
Raychem Products
Phone: +44-1793-528171
Fax: +44-1793-572516

Greece – Athens
Phone: +30-1-9370-396/397
Fax: +30-1-9370-655

Hungary – Budapest
Phone: +36-1-289-1000
Fax: +36-1-289-1010

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

Israel – Yokneam
Phone: +972-4-959-0508
Fax: +972-4-959-0506

Italy – Collegno (Torino)
Phone: +39-011-4012-111
Fax: +39-011-4031-116

Lithuania – Vilnius
Phone: +370-5-21-31-402
Fax: +370-5-21-31-403

Netherlands – 's-Hertogenbosch
Phone: +31-73-6246-246
Fax: +31-73-6212-365
Product Information Center: (Technical Support)
Phone: +31-73-6246-999
Fax: +31-73-6246-998

Norway – Nesbru
Phone: +47-66-77-88-99
Fax: +47-66-77-88-55

Poland – Warsaw
Phone: +48-22-45-76-700
Fax: +48-22-45-76-720

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

Russia – Moscow
Phone: +7-095-926-55-06…09
Fax: +7-095-926-55-05

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

Scotland – Dundee
Madison Cable Products
Phone: +44-1382-508080
Fax: +44-1382-505060

Slovakia – Banská Bystrica
Phone: +421-48-415-20-11/12
Fax: +421-48-415-20-13

Slovenia – Ljubljana
Phone: +386-1561-3270
Fax: +386-1561-3240

South Africa – Port Elizabeth
Phone: +27-41-405-4500
Fax: +27-41-486-1314

Spain – Barcelona
Phone: +34-93-291-0330
Fax: +34-93-201-7879
Product Information Center: (Technical Support):
Phone: +34-93-291-0330
Fax: +34-93-200-3779

Sweden – Upplands Väsby
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…3
+90-212-282-5130/5430
Fax: +90-212-281-8184

Ukraine – Kiev
Phone: +38-044-238-6908
Fax: +38-044-568-5740

82227–10M–LUG–FP–8-04
Printed in the U.S.A.

tyco

Electronics

TYCO ELECTRONICS CORPORATION

AMP