

Standard MAG-MATE Terminals

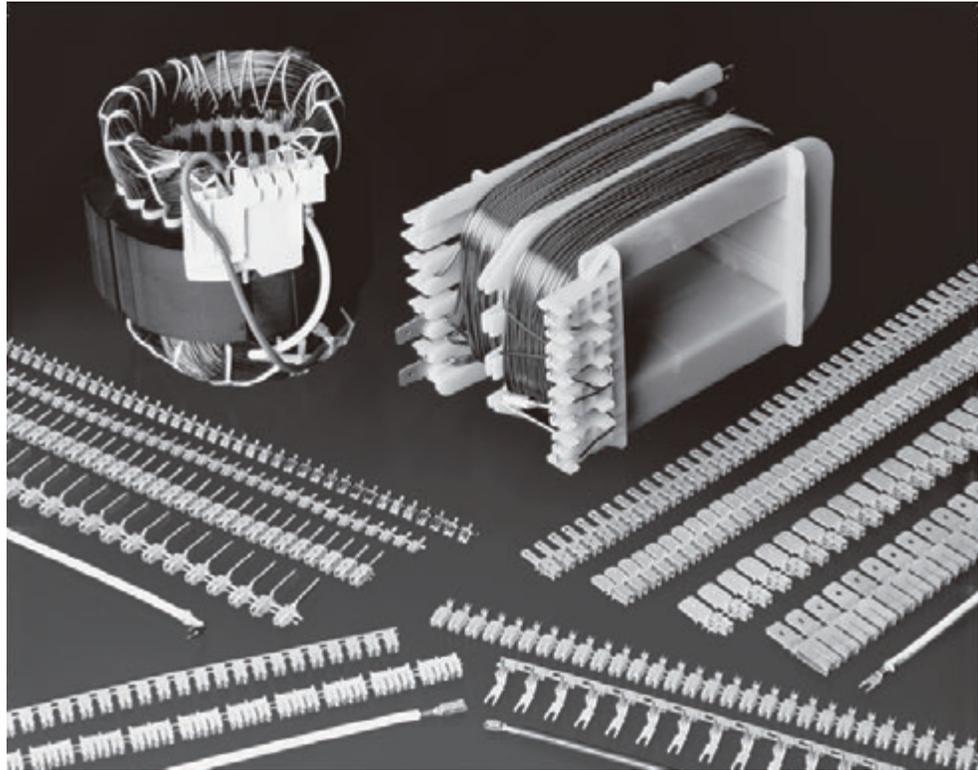
Product Facts

- Terminates film-insulated copper and aluminum magnet wire
- Eliminates need for pre-stripping conductors
- Eliminates need to post insulate termination
- Excess magnet wire is automatically trimmed during the termination process
- Simultaneously terminates two magnet wires of the same size in one terminal (for splicing or bi-filing)
- Various lead wire attachment options available
- Available in strip form for semi-automatic or fully automatic insertions
- Available in loose piece form for hand tool insertions
- Varnish resist tab terminals are available for special applications
- High speed, fully automated integrated systems provide uniform terminations reliably at the lowest possible applied cost
- Clean metal-to-metal interface produces stable, gas-tight electrical terminations free of oxides and other contaminants
- Recognized under the Component Recognition Program of Underwriters Laboratories Inc., File No. E13288, Vol. 1, Sec 29



Applications

- Motor windings and connections
- Coil connections
- Transformer windings and connections
- Bobbin connections
- Lighting ballasts
- Power supplies



TE offers a full selection of Standard MAG-MATE Insulation Displacement Crimp (IDC) terminals for magnet wire terminations.

MAG-MATE terminals are available in poke-in, poke-in tab, splice, crimp wire barrel, solder post, quick connect tab, pin and receptacle styles.

Standard MAG-MATE terminates magnet wire ranging from 34-12 AWG [0.16 -2.05 mm].

Each IDC slot size terminates a range of up to four consecutive magnet wire sizes.



Two magnet wires with the same diameter can be terminated in one terminal except as noted.

According to TE specifications MAG-MATE cavities are either integrated into coil bodies or specially designed cavity housings. The magnet wires are precisely positioned in the plastic cavity slots.

The MAG-MATE Inserter cuts the terminals from the strip and places the terminals over the magnet wire into the plastic cavities.

During this operation, small stripping shoulders in the IDC slot remove the film insulation from the magnet wire.

Wiping action between the wire and terminal removes oxides or other contaminants present on both the conductor and the terminal slot side walls, producing a clean, stable, gas-tight electrical termination.

Residual spring energy in the terminal causes the side walls of each IDC slot to function as opposing cantilever beams.

This constant pressure results in an intimate metal-to-metal interface, providing a reliable, long-term connection.

The MAG-MATE Inserter may be used as a semi-automatic bench machine or integrated into production lines for fully-automatic applications.

*Contact TE Engineering for guidance regarding aluminum

Standard MAG-MATE Terminals (Continued)

Standard MAG-MATE Interconnection System

How the System Operates

① Trim Blade

This part cuts off the excess magnet wire and the wire support at the front of the cavity.

② Insertion Finger

The insertion finger is part of the MAG-MATE Inserter. It pushes the terminal that was sheared from the carrier strip through the inserter "tube" into the positioned cavity.

③ Contact

Various wire attachments in three different sizes, .187, .300, .500 cavity height (see tables).

④ IDC Slot

In different sizes for magnet wire diameters from 34-12 AWG [0.16-2.05 mm]. Strain relief slots available for high vibration applications.

⑤ Stripping Shoulders

During the insertion process, these shoulders strip the film insulation from the magnet wire in four areas.

⑥ Locking Barbs

Terminal retention is secured in the cavity by four locking barbs.

⑦ Plastic Cavity

Integration of plastic cavities into final unit must be in accordance with TE Application Specifications. **Consulting TE is required for design in.**

⑧ Cavity Slot for Wire

The width has to be in accordance with the wire size (see Application Specification).

⑨ Magnet Wire

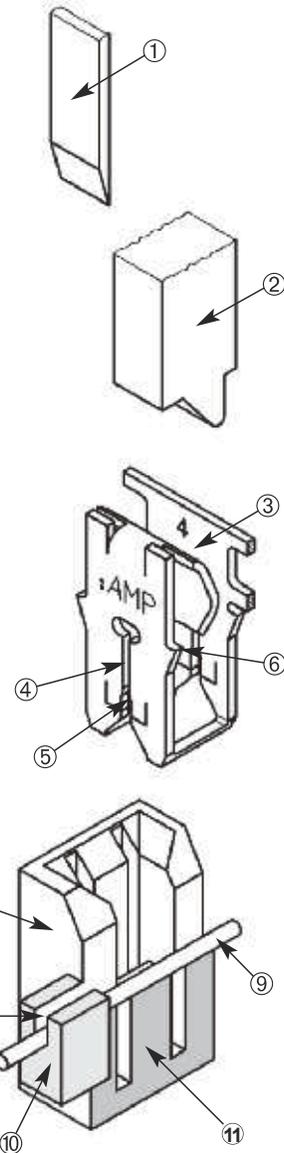
The magnet wire is positioned down into the plastic cavity slots.

⑩ Wire Support Block

The block supports the magnet wire during the cutting process. The magnet wire is cut flush to the cavity front side.

⑪ Support Anvil

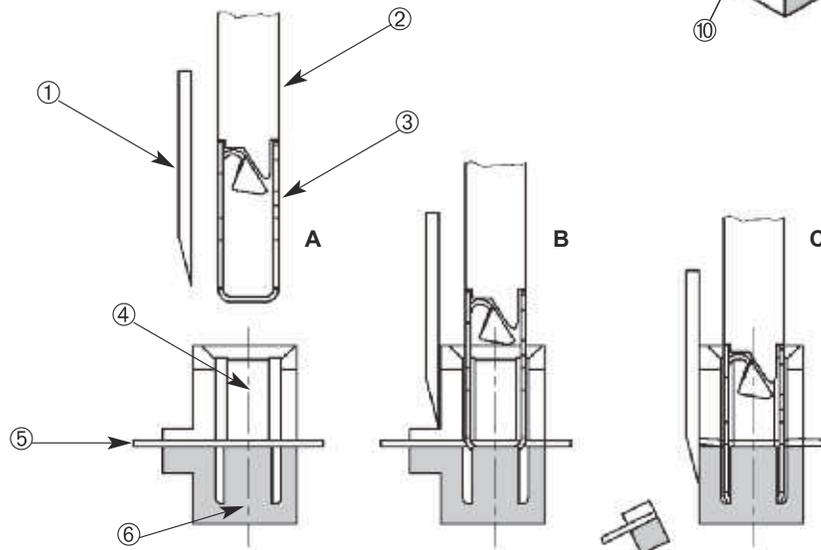
The anvil supports the wire during the insertion process.



Termination Sequence

- A = Prepare
- B = Insert
- C = Finish

- ① Trim Blade
- ② Insertion Finger
- ③ Poke-In Contact
- ④ Plastic Cavity
- ⑤ Magnet Wire
- ⑥ Support Anvil



Standard MAG-MATE Terminals (Continued)

Test Results

Standard and Slim Line

MAG-MATE products have been submitted to the following tests without significant millivolt increase:

Current Cycling—

480 cycles with each cycle consisting of 15 minutes "ON" followed by 15 minutes "OFF"

Thermal Shock—

25 cycles with each cycle consisting of 30 minutes at 125°C followed by 30 minutes at -65°C

Humidity—

Temperature Cycling

10 cycles between 25°C and 65°C at 95% RH

Heat Age—

33 days at 118°C

Mini MAG-MATE

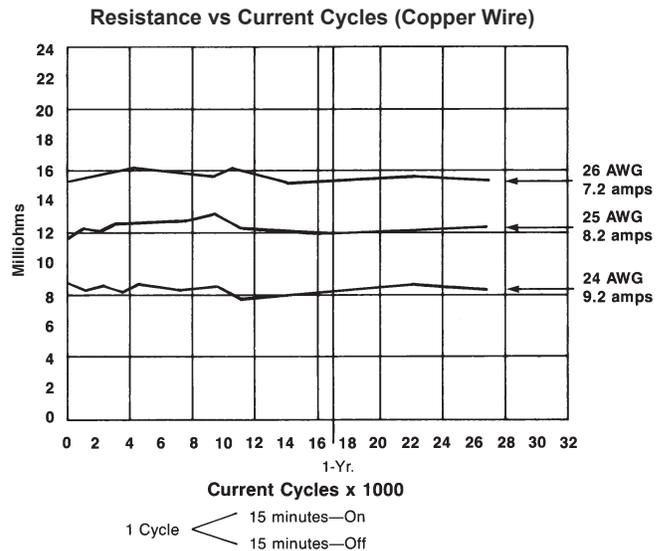
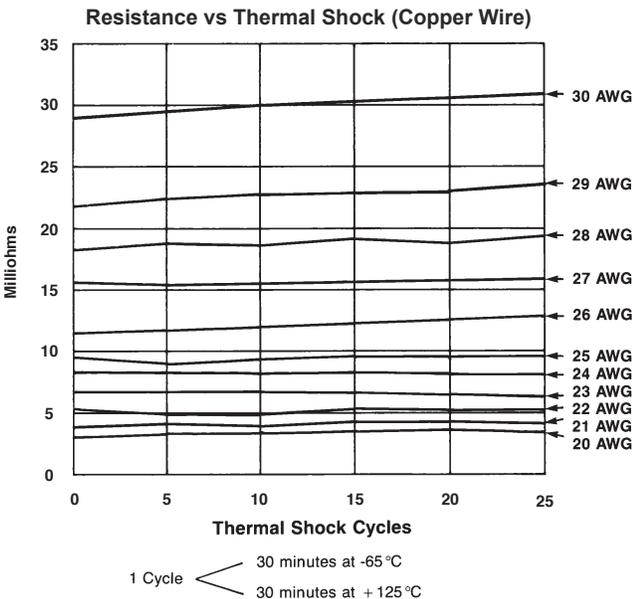
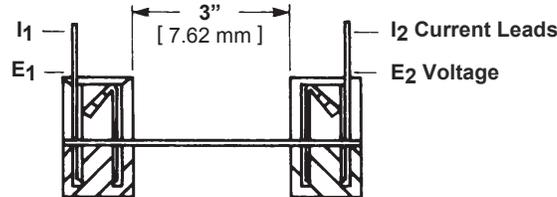
products have been submitted to the following tests in addition to those listed without significant millivolt increase:

Vibration—

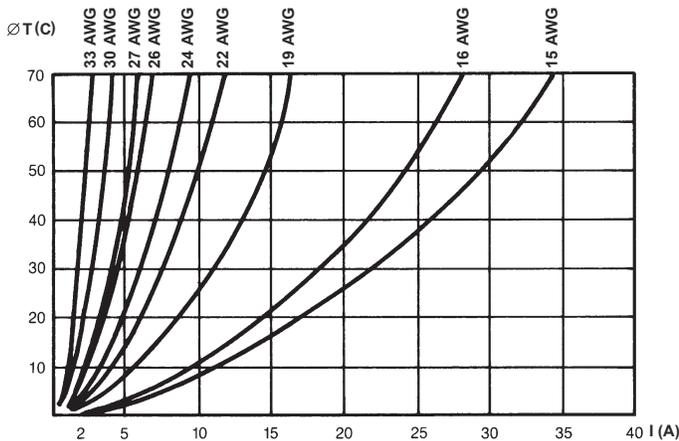
10-55-01- Hz traversed in 1 minute at .06 inches total excursion; 2 hours in each of 3 mutually perpendicular directions.

Industrial Gas with Chlorine—

1000 exposure to 200 ppb each of sulphur dioxide, nitrogen dioxide, hydrogen sulphide and 50 ppb chlorine.



Test Current produces 100°C Magnet Wire Operating Temperature



Current Rating Curves

The diagram shows the temperature rise of the contact, depending on the magnet wire size being applied.

Product Specifications

describe technical performance characteristics and verification tests. They are intended for the Design, Test and Quality Engineer.

- 108-2012 Standard .187 and .300 MAG-MATE Terminals
- 108-2053 Standard .500 Box MAG-MATE Terminals
- 108-1484 Slim Line MAG-MATE Terminals
- 108-2016 Mini MAG-MATE Terminals

Note: For all applications, TE recommends that samples of the magnet wire to be used be submitted for engineering evaluation.

Standard MAG-MATE Terminals

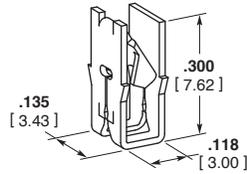
Standard MAG-MATE Terminals (Continued)

300 Box Poke-In Terminals

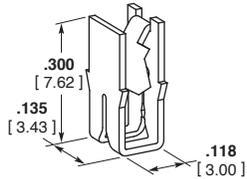
Material

Tin plated brass

Typical Cavity Size 2
(See page 23)



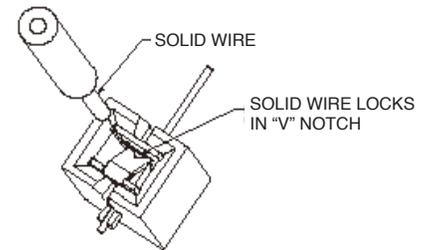
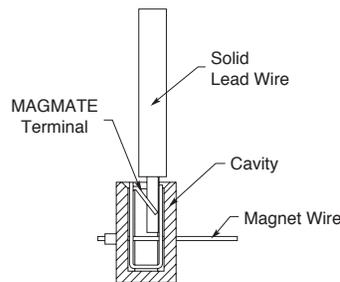
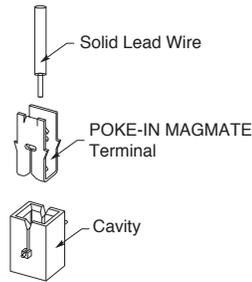
A



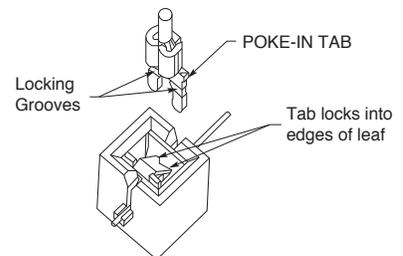
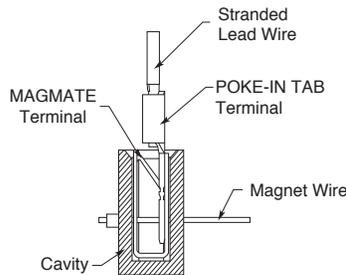
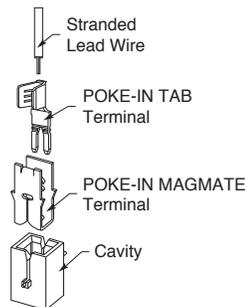
B

Type	Copper Magnet Wire Range ¹		Lead Wire Range ³		Mating ⁵ Tab	Stock Thickness	Strip Part Number*
	AWG	mm	AWG	mm ²			
A 300 Box Standard IDC Locking Poke-in	34-33	0.16-0.18	20-18	0.5-0.9	.135 x .020 3.40 x 0.50	.010 0.25	63662-1
	33-31	0.18-0.23	20-18	0.5-0.9	.135 x .020 3.40 x 0.50	.010 0.25	62431-1
	31-28	0.23-0.32	20-18	0.5-0.9	.135 x .020 3.40 x 0.50	.012 0.30	1217234-1
	30-27	0.25-0.36	20-18	0.5-0.9	.135 x .020 3.40 x 0.50	.012 0.30	62429-1
	27-23	0.36-0.57	20-18	0.5-0.9	.135 x .020 3.40 x 0.50	.016 0.41	62935-1
	25-22 ²	0.45-0.64	20-18	0.5-0.9	.135 x .020 3.40 x 0.50	.016 0.41	63658-1
	22-20 ²	0.64-0.81	20-18	0.5-0.9	.135 x .020 3.40 x 0.50	.016 0.41	62420-1
	20 ²	0.81	20-18	0.5-0.9	.135 x .020 3.40 x 0.50	.016 0.41	63591-1
	19-17 ²	0.91-1.15	20-18	0.5-0.9	.135 x .020 3.40 x 0.50	.016 0.41	62833-1
	B ⁴ 300 Box Standard IDC w/ Strain Relief Slot Locking Poke-in	30	0.25	20-18	0.5-0.9	.135 x .020 3.40 x 0.50	.012 0.30
29-28		0.29-0.32	20-18	0.5-0.9	.135 x .020 3.40 x 0.50	.012 0.30	1217011-1
28-26		0.32-0.40	20-18	0.5-0.9	.135 x .020 3.40 x 0.50	.012 0.30	1217368-1
27-23		0.36-0.57	20-18	0.5-0.9	.135 x .020 3.40 x 0.50	.016 0.41	63789-1

- 1 Two magnet wires may be terminated in the same terminal slot if diameters are equal.
- 2 Single magnet wire only; 22 AWG [0.64 mm] or larger unless otherwise noted.
- 3 Solid or overcoated stranded lead wire only. Product will also accept Poke-In Tab Terminal shown on page 7.
- 4 Strain relief slot for high vibration applications.
- 5 See page 7 for mating tab options.
- * Recognized under the Component Program of Underwriters Laboratories, Inc.

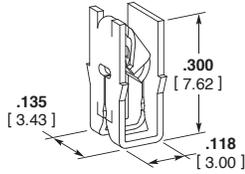


POKE-IN SYSTEM: SOLID WIRE CONNECTION

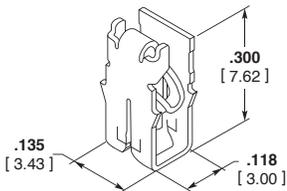


POKE-IN SYSTEM: STRANDED LEAD WIRE AND POKE-IN TAB CONNECTION

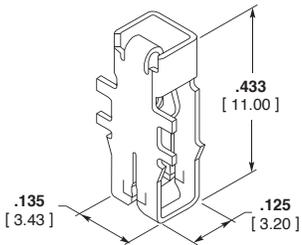
Standard MAG-MATE Terminals (Continued)



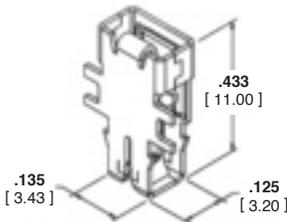
A



B



C



D

Type	Copper Magnet Wire Range ¹		Mating Tab ³	Stock Thickness	Strip Part Number*
	AWG	mm			
A 300 Box Standard IDC Non-Locking Poke-In MKI	35-32	0.14-0.20	.135 x .020 3.40 x 0.50	.010 0.25	969082-1
	33-30	0.18-0.265	.135 x .020 3.40 x 0.50	.010 0.25	926850-2
	30-26	0.265-0.40	.135 x .020 3.40 x 0.50	.013 0.32	926851-2
	26-21.5 ²	0.40-0.67	.135 x .020 3.40 x 0.50	.016 0.41	926852-2
	21.5-18.5 ²	0.67-0.95	.135 x .020 3.40 x 0.50	.016 0.41	928770-2
B 300 Box Standard IDC Non-Locking Poke-In MKII	19.5-17 ²	0.91-1.13	.135 x .020 3.40 x 0.50	.016 0.41	1-928771-4
	33-30	0.18-0.265	.135 x .020 3.40 x 0.50	.013 0.32	964337-2
	30-26	0.265-0.40	.135 x .020 3.40 x 0.50	.013 0.32	964338-2
	26-22 ²	0.40-0.63	.135 x .020 3.40 x 0.50	.013 0.32	964339-2
	22-19.5 ²	0.63-0.85	.135 x .020 3.40 x 0.50	.013 0.32	964340-2
C 433 Box Standard IDC with Receptacle for Tabs	19.5-17 ²	0.85-1.12	.135 x .020 3.40 x 0.50	.013 0.32	964341-2
	33-30	0.18-0.265	w/o Dimple Dimple	.013 0.32	1-964114-1 964114-1
	30-26	0.265-0.40	w/o Dimple Dimple	.013 0.32	1-964108-1 964108-1
	26-22	0.40-0.63	w/o Dimple Dimple	.013 0.32	1-928854-1 928854-1
	22-19.5 ²	0.63-0.85	w/o Dimple Dimple	.013 0.32	1-964106-1 964106-1
D 433 Box Standard IDC with Receptacle for Tabs	33-31	0.18-0.265	Dimple	.013 0.32	1740574-1
	26-23	0.40-0.57	w/o Dimple	.013 0.32	964252-1
	22.5 - 20 ²	0.60-0.80	w/o Dimple	.013 0.32	964110-1
	19-17 ²	0.90-1.13	w/o Dimple	.013 0.32	964111-1
	19-17 ¹	0.90-1.12	w/o Dimple	.013 0.32	1534234-1

¹ Two magnet wires may be terminated in the same terminal slot if diameters are equal.

² Single magnet wire only; 22 AWG [0.64 mm] or larger unless otherwise noted.

³ See page 7 for mating tab options.

* Recognized under the Component Program of Underwriters Laboratories, Inc.

Standard MAG-MATE Terminals (Continued)

300 Box Poke-In Terminals

(Continued)

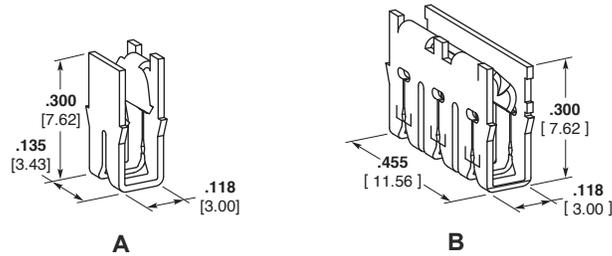
Material

Tin plated brass

Typical Cavity Size 2

(See page 23)

Note: Special cavity required for Tri-slot splice terminal. See Application Spec. 114-2046.



Type	Copper Magnet Wire Range ¹		Mating Tab ⁴	Stock Thickness	Strip Part Number
	AWG	mm			
A ³ 300 Box Standard IDC w/Strain Relief Slot Non-Locking Poke-In	27-26	0.36-0.40	.135 x .020 3.40 x 0.50	.016 0.41	1217691-1
	25.5-24	0.43-0.51	.135 x .020 3.40 x 0.50	.016 0.41	1217690-1
	23.5-22 ²	0.54-0.64	.135 x .020 3.40 x 0.50	.016 0.41	1217689-1
	21.5-20 ²	0.68-0.81	.135 x .020 3.40 x 0.50	.016 0.41	1217688-1
B 300 Box Standard IDC Non-Locking Poke-In	30-27	0.25-0.36	.135 x .020 3.40 x 0.50	.016 0.41	1217221-1
	27-23	0.36-0.57	.135 x .020 3.40 x 0.50	.016 0.41	63632-1
	23-20 ²	0.57-0.81	.135 x .020 3.40 x 0.50	.016 0.41	1217533-1
	19-17	0.91-1.15	.135 x .020 3.40 x 0.50	.016 0.41	1742347-1
	27-23 ² 19-17 ² 18 ²	0.36-0.57 0.91-1.15 0.8-0.9	.135 x .020 3.40 x 0.50	.016 0.41	63975-1

- 1 Two magnet wires may be terminated in the same terminal slot if diameters are equal.
 - 2 Single magnet wire only; 22 AWG [0.64 mm] or larger.
 - 3 Strain relief slot for high vibration applications.
 - 4 See page 7 for mating small tab options.
- * Recognized under the Component Program of Underwriters Laboratories, Inc.

500 Box Poke-In Terminals

Material

Tin plated brass

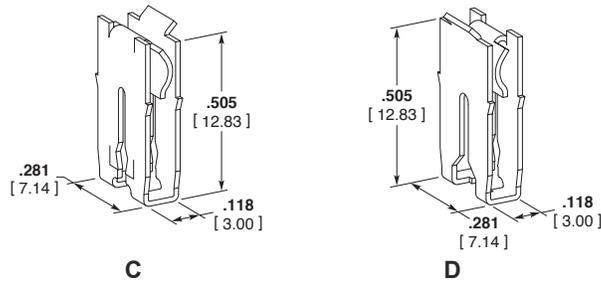
Typical Cavity Size 4

(See page 23)

Note: Mating poke-in tab

1217324-1

(See Type H, Page 7)



Type	Copper Magnet Wire Range ¹		Stock Thickness	Strip Part Number
	AWG	mm		
C 500 Box Standard IDC Non-Locking Poke-In	23-19.5	0.57-0.86	.016 0.41	1217069-1
	19-17	0.91-1.15	.016 0.41	1217068-1
	16-15	1.29-1.45	.016 0.41	1217067-1
D ³ 500 Box Standard IDC w/ Strain Relief Slot Non-Locking Poke-In	23-21.5	0.57-0.68	.016 0.41	1217358-1
	21-19.5	0.72-0.86	.016 0.41	1217357-1
	19-17	0.91-1.15	.016 0.41	1217356-1
	17-16	1.15-1.29	.016 0.41	1742203-1
	16-15	1.29-1.45	.016 0.41	1217355-1
	14-13 ²	1.61-1.83	.016 0.41	1217579-1

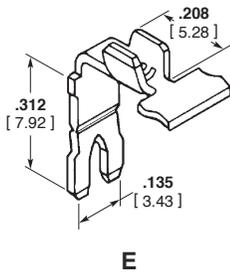
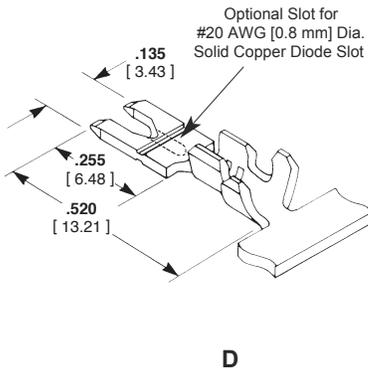
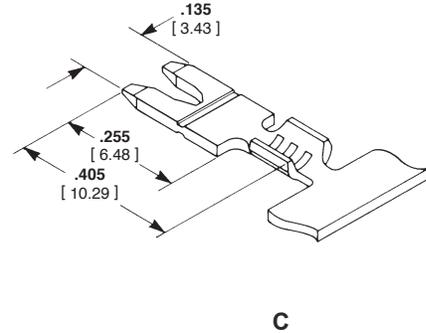
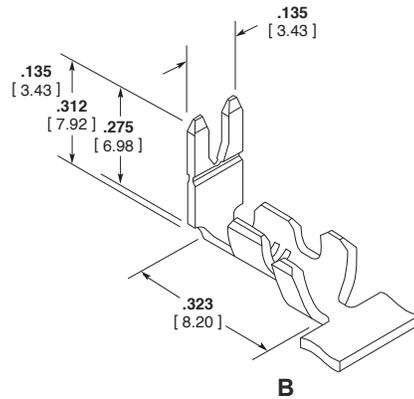
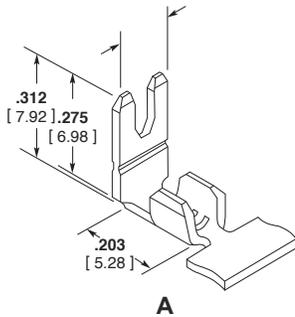
- 1 Two magnet wires may be terminated in the same terminal slot if diameters are equal.
- 2 Single magnet wire only.
- 3 Strain relief slot for high vibration applications.

Standard MAG-MATE Terminals (Continued)

Poke-In Tab Terminals

Material

Tin plated brass



Type	Lead Wire Size ¹		Ins. O.D.	Stock Thickness	Strip Part Number
	AWG	mm ²			
A 90° Up	22-18	0.3-0.9	—	.018	62895-1*
				0.46	63410-1
B 90° Up w/Ins. Sup.	24	0.2	.040-.060	.018	1742828-1
			1.02-1.52	0.46	
			.060-.100	.018	62896-1*
C Straight	18-14	0.8-2.0	1.52-2.54	0.46	63218-1
			.090-.140	.018	62897-1*
			2.29-3.56	0.46	
D Straight w/Ins. Sup.	22-18	0.3-0.9	—	.020	62897-1*
			0.51	63775-1	
	18-14	0.8-2.0	.060-.100	.020	62898-1*
			1.52-2.54	0.51	
	22-17	0.3-1.0	.090-.140	.020	63397-1
			2.29-3.56	0.51	
20-17	0.5-1.0	.118 MAX.	.018	281622-2 ²	
		3.00 MAX.	0.45	281623-2 ²	
E 90° Down	22-18	0.3-0.9	.118 MAX.	.018	964101-2 ³
			3.00 MAX.	0.45	964290-1 ⁴
E 90° Down	20-17	0.5-1.0	.063-.090	.018	63364-1
			1.60-2.30	0.45	1742125-1
E 90° Down	18-14	0.8-2.0	.063-.090	.018	
			1.60-2.30	0.45	

1 Stranded, fused stranded or solid lead wire.

2 Can be selectively bent inside applicator. With support flanges, can only be used in combination with modified cavity IA-84-5157

3 Can be selectively bent inside applicator, Non-locking

4 Can be selectively bent inside applicator. Non-locking; use with housing

* Recognized under the Component Program of Underwriters Laboratories, Inc.

Note: All tab terminals accept stranded, fused stranded or solid lead wire.

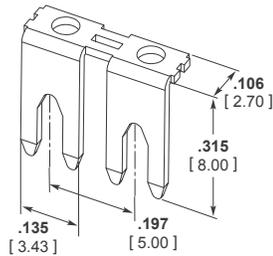
Standard MAG-MATE Terminals

Standard MAG-MATE Terminals (Continued)

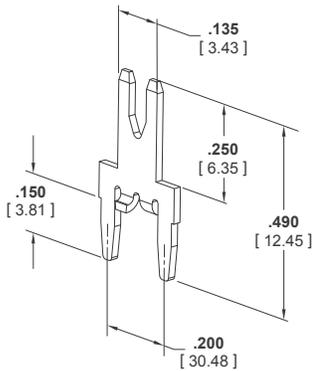
Poke-In Tab Terminals

Material

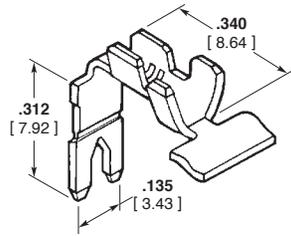
Tin plated brass
Pre-Tin plated brass



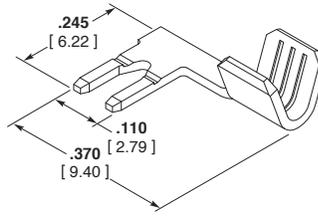
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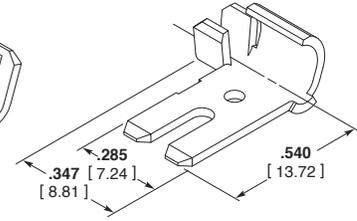
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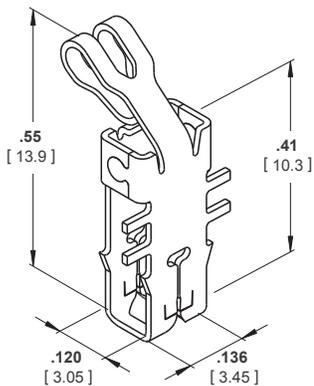
Type	Lead Wire Size ¹		Ins. O.D.	Stock Thickness	Strip Part Number
	AWG	mm ²			
F 90° Down w/Ins. Sup.	24-20	0.2-0.5	.048-.078 1.22-1.98	.020 0.51	1742410-1
	22-18	0.3-0.9	.060-.100 1.52-2.54	.020 0.51	1742211-1
	18-14	0.8-2.0	.090-.140 2.29-3.56	.020 0.51	63458-1
Flag - 300 Box only	20-16	0.5-1.4	—	.020 0.51	1217406-1
Flag - 500 Box only	18-14	0.8-2.0	.080-.120 2.03-3.05	.020 0.51	1217324-1
K Bridge Contact	—	—	—	.020 0.51	1987199-1
L PCB Contact	—	—	—	.020 0.51	1217041-1

Note: All tab terminals accept stranded, fused stranded or solid lead wire.

MAG-MATE Terminals with extended leaf-spring

Material

Pre-tinned copper alloy



M

Type	Copper Magnet Wire Range		Stock Thickness	Strip Part Number
	AWG	mm		
M Mag-Mate Terminal with extended Leaf-Spring	33-30	0.18-0.265	.013 0.32	1740603-1
	30-26	0.265-0.40	.013 0.32	1740698-2
	26.5-22.5	0.375-0.60	.013 0.32	1534110-1
	22.5-20	0.60-0.80	.013 0.32	969125-1*
	19.5-17	0.85-1.12	.013 0.32	1418686-1

*Single magnet wire

Note: Special cavity is required, contact TE connectivity for information.

Standard MAG-MATE Terminals (Continued)

300 Box Poke-In Terminals

Material

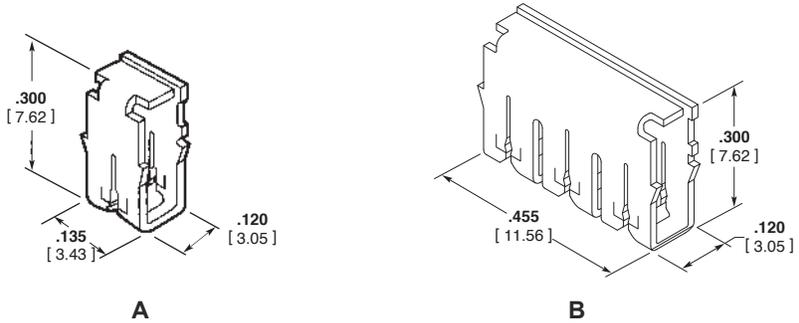
Tin plated brass

.300 [7.62] Series Box

Typical Cavity Size 2

(See page 23)

Note: Special cavity required for Tri-slot splice terminal. See application SPEC 114-2046



Type	Copper Magnet Wire Range ¹		Stock Thickness	Strip Part Number
	AWG	mm		
A 300 Box Standard IDC Splice	22-20	0.64-0.81	.016 0.41	1217973-1
	19-17	0.91-1.15	.020 0.51	1742159-1 ⁴
	28-24	0.32-0.51	.016 0.41	1217858-1
B 300 Box Standard IDC Tri-Slot Splice	23-20 ²	0.57-0.81	.016 0.41	1217853-1
	27-23	0.36-0.57		
	18 ⁴	0.8-0.9	.016 0.41	1217613-1
	19-17 ²	0.91-1.15		
	25-22 ³	0.45-0.64		
	18 ⁴	0.8-0.9	.016 0.41	1217209-1
	23.5-20 ²	0.54-0.81		

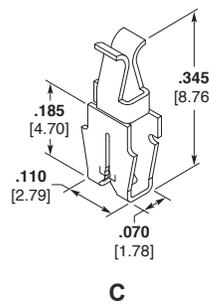
1 Two magnet wires may be terminated in the same terminal slot if diameters are equal.
 2 Single magnet wire only; 22 AWG [0.64 mm] or larger.
 3 Single solid or fused stranded lead wire only.
 4 Special cavity required for 1742159-1.

Tab Receptacle Terminals

Material

Tin plated phos. bronze

Note: Special cavity required. Contact TE Engineering for details.



Type	Copper Magnet Wire Range ¹		Mating Tab	Stock Thickness	Strip Part Number
	AWG	mm			
C 185 Box Standard IDC Tab Receptacle	32-31	0.20-0.23	.070 x .020 1.78 x 0.51	.010 0.25	1217538-1
	30-28	0.25-0.32	.070 x .020 1.78 x 0.51	.010 0.25	1217457-1
	29-28	0.29-0.32	.070 x .020 1.78 x 0.51	.010 0.25	1217458-1
	28-27	0.32-0.36	.070 x .020 1.78 x 0.51	.010 0.25	1742781-1

1 Two magnet wires may be terminated in the same slot if diameters are equal.

Standard MAG-MATE Terminals (Continued)

187 Box F-Crimp Terminals

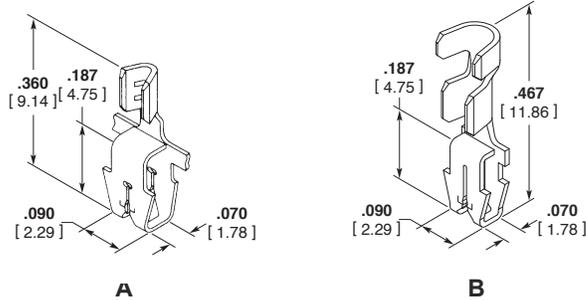
Material

Tin plated brass

.187 [4.75] Series Box

Typical Cavity Size 1

(See page 23)



Type	Copper Magnet Wire Range ¹		Lead Wire Range ³		Ins. O.D.	Stock Thickness	Strip Part Number
	AWG	mm	AWG	mm ²			
A 187 Box Standard IDC F-Crimp	33-31	0.18-0.23	26-22	0.12-0.3	—	.010 0.25	63039-1
	30-28	0.25-0.32	26-22	0.12-0.3	—	.012 0.30	63036-1
	27-25	0.36-0.46	26-22	0.12-0.3	—	.012 0.30	62609-1 ⁴
	26-24	0.40-0.51	22-18	0.3-1.0	—	.012 0.30	1217146-1
	24-22 ²	0.51-0.64	26-22	0.12-0.3	—	.012 0.30	62610-1 ⁴
B 187 Box F-Crimp w/Ins Sup.	27-25	0.36-0.46	22-18	0.3-1.0	.071-.088 1.80-2.23	.012 0.30	63856-1

- 1 Two magnet wires may be terminated in the same terminal slot if diameters are equal.
- 2 Single magnet wire only.
- 3 Stranded, fused stranded or solid lead wire.
- 4 Strip rereeled to feed through mini-applicator to crimp lead wire first, magnet wire termination is secondary operation.

300 Box F-Crimp Terminals

Material

Tin plated brass

.300 [7.62] Series Box

Typical Cavity Size 2, when

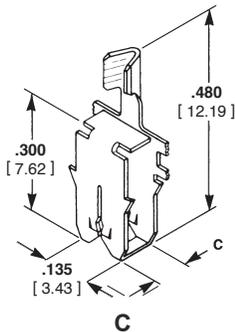
“C” dimension is .120 [3.05]

(See page 23)

Typical Cavity Size 6, when “C”

dimension is .070 [1.78]

(See page 23)



Type	Copper Magnet Wire Range ¹		Dim. C	Lead Wire Range ³		Stock Thickness	Strip Part Number
	AWG	mm		AWG	mm ²		
C 300 Box Standard IDC F-Crimp	33-31	0.18-0.23	.070 1.78	22-18	0.3-1.0	.012 0.30	63235-1
			.120 3.05	24-20	0.2-0.6	.012 0.30	63420-1
	31-28	0.23-0.32	.070 1.78	22-18	0.3-1.0	.012 0.30	63236-1
			.070 1.78	24-20	0.2-0.6	.012 0.30	1742614-1
	30-27	0.25-0.36	.120 3.05	24-20	0.2-0.6	.012 0.30	62992-1
	28-24	0.32-0.51	.120 3.05	24-20	0.2-0.6	.012 0.30	63641-1
	27-24	0.36-0.51	.070 1.78	22-18	0.3-1.0	.012 0.30	63237-1
	27-23	0.36-0.57	.120 3.05	24-20	0.2-0.6	.016 0.41	62459-1
	25-22	0.45-0.64	.070 1.78	22-18	0.3-1.0	.012 0.30	63690-1
	22-20 ²	0.64-0.81	.120 3.05	24-20	0.2-0.6	.016 0.41	62458-1
	19-17 ²	0.91-1.15	.120 3.05	22-18	0.3-1.0	.016 0.41	63504-1

- 1 Two magnet wires may be terminated in the same terminal slot if diameters are equal.
- 2 Single magnet wire only; 22 AWG [0.64 mm] or larger.
- 3 Stranded, fused stranded or solid lead wire.

Standard MAG-MATE Terminals (Continued)

300 Box Posted PCB Terminals

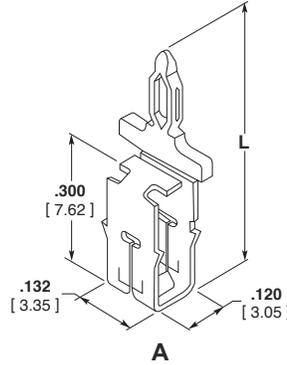
Multi-Spring Solderless Terminal

Material

Tin over Copper Alloy

Cavity Size

Application Spec.
114-74109 with 114-74109-5



Type	Copper Magnet Wire Range ¹		Dim L	Stock Thickness		Strip Part Number
	AWG	mm		Tab Section	Mag Wire Section	
A Multi-Spring Solderless PCB Tab Terminal	33-29.5	0.18-0.265	.583	.031	.013	1247000-2
			14.80	0.80	0.32	
	29.5-26	0.265-0.40	.583	.031	.013	1247001-2
			14.80	0.80	0.32	
	26-22.5	0.40-0.63	.583	.031	.013	1247002-2
14.80			0.80	0.32		
22.5-19.5 ²	0.63-0.85	.583	.031	.013	1247003-2	
		14.80	0.80	0.32		
19.5-17 ²	0.85-1.12	.583	.031	.013	1247004-2	
		14.80	0.80	0.32		

1 Two magnet wires may be terminated in the same terminal slot if diameters are equal.
2 Single magnet wire only. 22 awg [0.63 mm] and larger.

Note: PC Board hole size .057 [1.45].

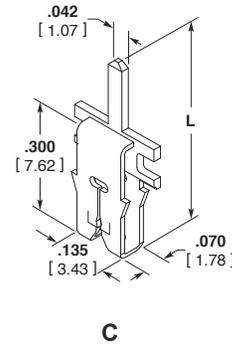
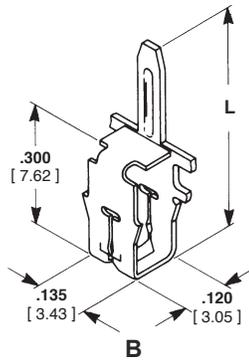
300 Box Posted PCB Terminals Solder Terminal

Material

Tin over copper plated brass

Typical Cavity Size

(See page 23)
Type C—Cavity Size 2
Type D—Cavity Size 6



Type	Copper Magnet Wire Range ¹		Dim. L	Stock Thickness		Strip Part Number
	AWG	mm		Tab Section	Mag Wire	
B 300 Box Standard IDC PCB Post	33-31	0.18-0.23	.540	.010	.010	63253-1
			13.72	0.25	0.25	
	31-28	0.23-0.32	.540	.010	.010	62928-1*
			13.72	0.25	0.25	
	29-26	0.29-0.40	.540	.012	.012	62958-1*
			13.72	0.30	0.30	
	27-23	0.36-0.57	.460	.016	.016	63659-1
11.68			0.41	0.41		
22-20 ²	0.64-0.81	.460	.016	.016	63660-1	
		11.68	0.41	0.41		
19-17 ²	0.91-1.15	.460	.016	.016	63661-1	
		11.68	0.41	0.41		
19-17 ²	0.91-1.15	.570	.016	.016	1742708-1	
		14.48	0.41	0.41		
C PCB Post Shallow Box	33-31	0.18-0.23	.475	.020	.012	1217302-1
			12.07	0.51	0.30	

1 Two magnet wires may be terminated in the same terminal slot if diameters are equal.

Note: PC Board hole size .050 [1.27].

2 Single magnet wire only.

* Recognized under the Component Program of Underwriters Laboratories, Inc.

Standard MAG-MATE Terminals (Continued)

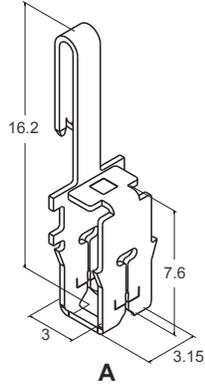
**MAG-MATE
Edge Leaf Terminal**

Material

Pre-tinned brass
Brass

Cavity

411-18517



	Copper Magnet Wire Range		Cavity Size	Stock Thickness	Strip Part Number
	AWG	mm			
A MAG-MATE Contact RAST 5D	33-30	0.18-0.265	2	.013 0.32	1394429-2
	30-26	0.265-0.40	2	.013 0.32	1394430-2
	26-22	0.40-0.63	2	.013 0.32	1394431-2
	22-20	0.63-0.80	2	.013 0.32	1394432-2
	20-17	0.85-1.12	2	.013 0.32	1394433-2

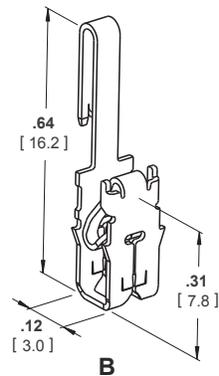
Note: Special cavity required. Contact TE Connectivity for information

Material

Unplated brass

Cavity

411-18517



Type	Copper Magnet Wire Range		Cavity Size	Stock Thickness	Strip Part Number
	AWG	mm			
B MAG-MATE Edge Leaf Contact	33-30	0.18-0.265	2	.013 0.32	1-1987143-1

Note: Special cavity required. Contact TE Connectivity for information

Standard MAG-MATE Terminals (Continued)

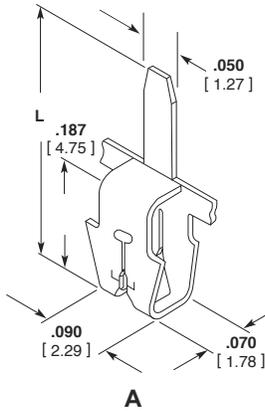
187 Box Posted PCB Terminals

Material

Tin plated brass

Typical Cavity Size 1

(See page 23)



A

Type	Copper Magnet Wire Range ¹		Dim. L	Stock Thickness		Strip Part Number
	AWG	mm				
A 185 Box Standard IDC PCB Post	33-31	0.18-0.23	.267	.010	63565-1	
			6.78	0.25		
	30-28	0.25-0.32	.330	.010	62938-1	
			8.38	0.25		
			.267	.012	63160-1	
			6.78	0.30		
27-25	0.36-0.46	.287	.012	63818-1		
		7.29	0.30			
24-22 ²	0.51-0.64	.330	.012	62430-1		
		8.38	0.30			
		.287	.012	63819-1		
		7.29	0.30			
		.330	.012	62439-1		
		8.38	0.30			

1 Two magnet wires may be terminated in the same terminal slot if diameters are equal.
2 Single magnet wire only.

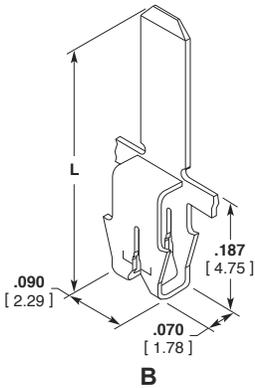
187 Box Tab Terminals

Material

Tin plated brass

Typical Cavity Size 1

(See page 23)



B

Type	Copper Magnet Wire Range ¹		Dim. L	Tab Size	Stock Thickness		Strip Part Number
	AWG	mm			Tab Section	Mag Wire	
	30-28	0.25-0.32	.432	.110 x .020	.020	.012	63702-1
			10.97	2.79 x 0.51	0.51	0.30	
	29-27	0.29-0.36	.432	.110 x .020	.020	.012	1217196-1
			10.97	2.79 x 0.51	0.51	0.30	
B 187 Box Standard IDC F-Crimp	30-28	0.25-0.32	.512	.110 x .020	.020	.012	160810-2
			13.00	2.79 x 0.51	0.51	0.30	
	27-25	0.25-0.32	.512	.110 x .020	.020	.012	160809-2
			13.00	2.79 x 0.51	0.51	0.30	
24-22	0.25-0.32	.512	.110 x .020	.020	.012	160897-2	
		13.00	2.79 x 0.51	0.51	0.30		
30	0.25	.550	.071 x .025	.025	.012	1217405-1	
		14.00	1.80 x 0.63	0.63	0.30		
29-27	0.29-0.36	.700	.059 x .032	.032	.012	1742605-1	
		17.78	1.50 x 0.81	0.81	0.30		
25-22 ²	0.46-0.64	.700	.059 x .032	.032	.012	1217013-1	
		17.78	1.50 x 0.81	0.81	0.30		

1 Two magnet wires may be terminated in the same terminal if diameters are equal.
2 Single magnet wire only.

Standard MAG-MATE Terminals (Continued)

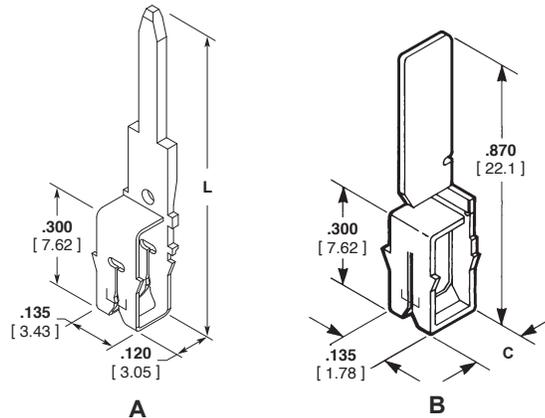
300 Box Tab Terminals

Material

Tin plated brass

Typical Cavity Size 2

(See page 23)



Type	Copper Magnet Wire Range ¹		Dim. L	Tab Size	Stock Thickness		Strip Part Number
	AWG	mm			Tab Section	Mag Wire	
A 300 Box Standard IDC Straight Tab	20	0.79	.750	.063 x .025	.025	.016	63965-1 ²
			19.05	1.60 x 0.63	0.63	0.41	
	31	0.23	.895	.063 x .025	.025	.016	1217595-1 ²
			22.73	1.60 x 0.63	0.63	0.41	
			.870	.062 x .032	.032	.010	63810-1
			22.10	1.57 x 0.81	0.81	0.25	

1 Two magnet wires may be terminated in the same terminal slot if diameters are equal.
2 Tinsel wire only.

Typical Cavity Size 2
when "C" dimension is .120[3.05]
(See page 23)
Typical Cavity Size 6
when "C" dimension is .070[1.78]
(See page 23)

Type	Copper Magnet Wire Range ¹		Dim. C	Tab Size	Stock Thickness		Strip Part Number
	AWG	mm			Tab Section	Mag Wire	
B 300 Box Standard IDC Twisted Tab	33-31	0.18-0.23	.070 1.78	.125 x .020 3.17 x 0.51	.020 0.51	.012 0.30	63806-1
	31-28	0.23-0.32	.070 1.78	.125 x .020 3.17 x 0.51	.020 0.51	.012 0.30	63807-1
	27-24	0.36-0.50	.070 1.78	.125 x .020 3.17 x 0.51	.020 0.51	.012 0.30	63808-1
	21 ²	0.72	.120 3.05	.118 x .030 3.00 x 0.76	.030 0.76	.016 0.41	63463-1
	19.5 ²	0.86	.120 3.05	.118 x .030 3.00 x 0.76	.030 0.76	.016 0.41	63216-1

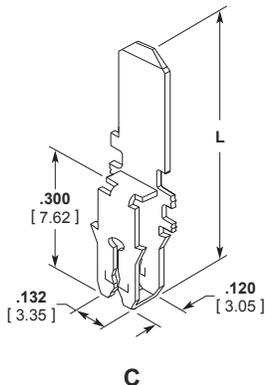
1 Two magnet wires may be terminated in the same terminal slot if diameters are equal.
2 Single magnet wire only.

Material

Tin plated brass

Typical Cavity Size 2

(See page 23)



Type	Copper Magnet Wire Range ¹		Dim. L	Tab Size	Stock Thickness		Strip Part Number
	AWG	mm			Tab Section	Mag Wire	
C 300 Box Standard IDC Timer Tab	33-31	0.18-0.23	.585 14.86	.118 x .020 3.00 x 0.51	.020 0.51	.010 0.25	1217746-1
	30 -28	0.25-0.32	.585 14.86	.118 x .020 3.00 x 0.51	.020 0.51	.010 0.25	1217745-1
	27-23	0.36-0.57	.585	.118 x .020	.020	.016	63973-1
			14.86	3.00 x 0.51	0.51	0.41	
	25-22 ²	0.45-0.64	.585	.118 x .020	.020	.016	1217596-1
			14.86	3.00 x 0.51	0.51	0.41	
	23.5-21.5 ²	0.54-0.68	.585 14.86	.118 x .020 3.00 x 0.51	.020 0.51	.016 0.41	1217593-1
	27-23	0.36-0.57	.775 19.68	.125 x .020 3.17 x 0.51	.020 0.51	.016 0.41	1742167-1
	23-20 ²	0.57-0.81	.775 19.68	.125 x .020 3.17 x 0.51	.020 0.51	.016 0.41	63899-1
	19-17 ²	0.91-1.15	.585 14.86	.118 x .020 3.00 x 0.51	.020 0.51	.016 0.41	63972-1
	18 Lead	1.02	.585 14.86	.118 x .020 3.00 x 0.51	.020 0.51	.016 0.41	63974-1

1 Two magnet wires may be terminated in the same terminal slot if diameters are equal.
2 Single magnet wire only; 22 AWG [0.64 mm] or larger.

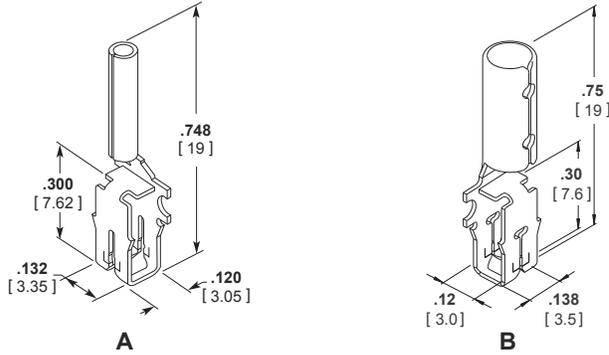
Standard MAG-MATE Terminals (Continued)

Pin Receptacle Terminals

Material

A: Tin plated brass
 B: Unplated brass

Typical Cavity Size 2
 (See page 23)



Standard MAG-MATE Terminals

Type	Copper Magnet Wire Range ¹		Mating Pin Dia.	Stock Thickness	Strip Part Number
	AWG	mm			
A Pin Receptacle	30-27	0.25-0.36	.079 2.00	.013 0.32	1394403-1
	26-23	0.40-0.57	.079 2.00	.013 0.32	1394475-1
	21-18 ²	0.72-1.00	.079 2.00	.013 0.32	1394476-1
	26-23	0.40-0.57	.150 3.80	.013 0.32	1394638-1
	21-18 ²	0.72-1.00	.150 3.80	.013 0.32	1394639-1
B Pin Receptacle	30-27	0.25-0.36	.150 3.80	.013 0.32	1740417-1
	26-23	0.40-0.57	.150 3.80	.013 0.32	1740418-1
	21-18 ³	0.72-1.00	.150 3.80	.013 0.32	1740419-1

1 Two magnet wires may be terminated in the same terminal slot if diameters are equal.
 2 Single magnet wire only; 20.5 AWG [0.76 mm] or larger.
 3 Single magnet wire only

Standard MAG-MATE Terminals (Continued)

Pin I/O Terminals

Material

Tin plated brass

.300 [7.62] Series Box

Styles A, B and C

Typical Cavity Size 2

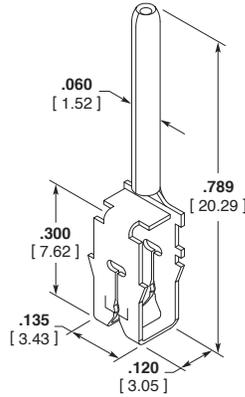
(See page 23)

.500 [12.7] Series Box

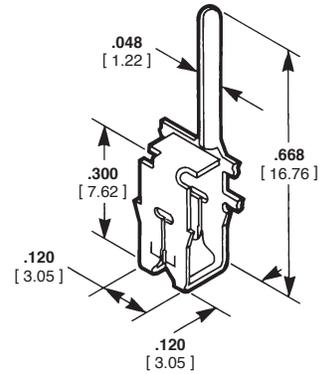
Style D

Typical Cavity Size 4

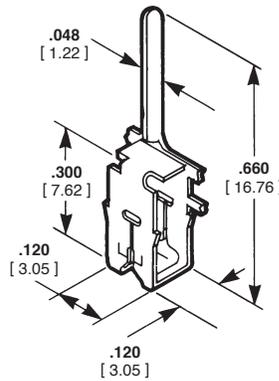
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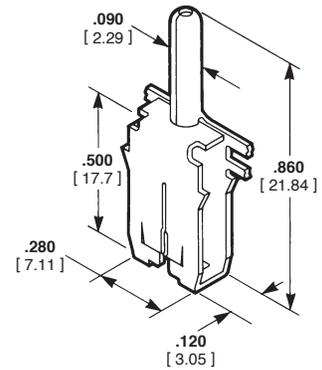
A



B



C



D

Type	Copper Magnet Wire Range ¹		Pin Dia.	Stock Thickness		Strip Part Number
	AWG	mm		I/O	Mag Wire	
A 300 Box Straight Pin	27-23	0.36-0.57	.060 1.52	.010 0.25	.010 0.25	63722-1
B 300 Box Offset Pin-R.H.	33-31	0.18-0.23	.048 1.22	.010 0.25	.010 0.25	63443-1
	33-31	0.18-0.23	.048 1.22	.010 0.25	.010 0.25	63444-1
C 300 Box Offset Pin-L.H.	31-28	0.23-0.32	.048 1.22	.010 0.25	.010 0.25	63569-1
	27-23	0.36-0.57	.048 1.22	.010 0.25	.016 0.25	63570-1
	25-22 ²	0.45-0.64	.048 1.22	.010 0.25	.016 0.41	63788-1
D 500 Box Straight Pin	27-23	0.86-1.15	.090 2.29	.016 0.41	.016 0.41	63278-1
	22-20	0.64-0.81	.090 2.29	.016 0.41	.016 0.41	63277-1

¹ Two magnet wires may be terminated in the same terminal slot if diameters are equal.

² Single magnet wire only; 22 AWG [0.64 mm] or larger.

Standard MAG-MATE Terminals (Continued)

110 Series
FASTON Tab Terminals

Material

Tin plated brass

Typical Cavity Size 2

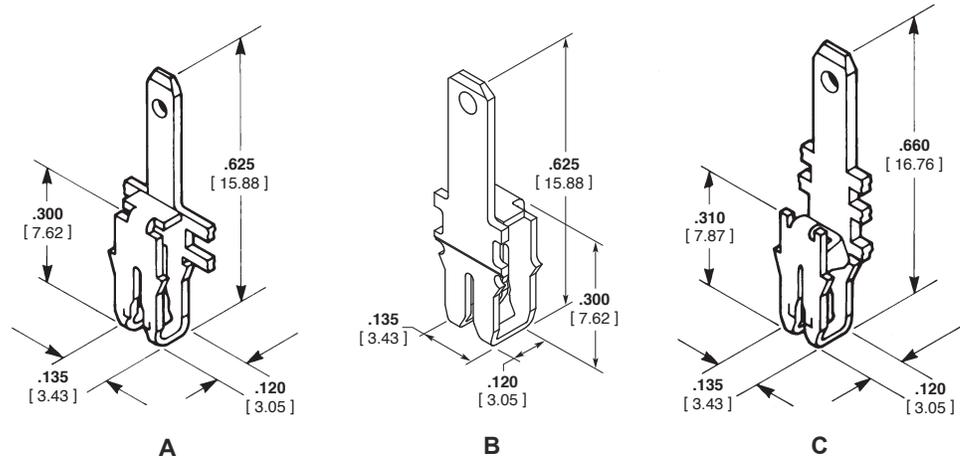
(See page 23)

Note: .110 [2.79] Tab Terminals

mate with compatible

FASTON receptacles.

Request Catalog 82004.



Type	Copper Magnet Wire Range ¹		Tab Size	Stock Thickness		Strip Part Number
	AWG	mm		Tab	Mag Wire	
A ⁴ 300 Box Standard IDC .110[2.79] FASTON Tab	30-27	0.25-0.36	.110 x .020 2.79 x 0.51	.020 0.51	.012 0.30	63777-1
	27-23	0.36-0.57	.110 x .020 2.79 x 0.51	.020 0.51	.016 0.41	63746-1
	23-20 ²	0.45-0.64	.110 x .020 2.79 x 0.51	.020 0.51	.016 0.41	63486-1
B ^{4,5} 300 Box Single IDC w/ Strain Relief Slot	19-17	0.91-1.15	.110 x .020 2.79 x 0.51	.020 0.51	.020 0.51	63145-1
	27-23	0.36-0.57	.110 x .020 2.79 x 0.51	.020 0.51	.016 0.41	63827-1
C ^{3,4} Poke-In Combination Tab	3.5-20 ²	0.54-0.81	.110 x .020 2.79 x 0.51	.020 0.51	.016 0.41	1217783-1
	28-24	0.32-0.51	.110 x .020 2.79 x 0.51	.020 0.51	.012 0.30	63062-1
	25-22 ²	0.45-0.64	.110 x .020 2.79 x 0.51	.020 0.51	.012 0.30	63063-2

1 Two magnet wires may be terminated in the same terminal slot if diameters are equal.

2 Single magnet wire only; 22 AWG [0.64 mm] or larger.

3 Poke-In feature accepts 20-18 AWG [0.5-0.8 mm²] Solid or overcoated stranded lead wire or 90° Poke-In tab.

4 After insertion into plastic cavity, tab portion must be bent over 45°-90° or potted in to prevent pullout when mating receptacle is disconnected.

5 Strain relief slot for high vibration applications.

Standard MAG-MATE Terminals (Continued)

**187 Series
FASTON Tab Terminals**

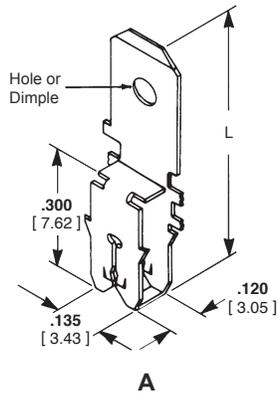
Material

Tin plated brass

Typical Cavity Size

(See page 23)

Type A—Cavity Size 2



A³
300 Box
Standard IDC
.187 [4.75]
FASTON
Tab

Type	Copper Magnet Wire Range ¹		Dim. L	Tab Feature	Tab Size	Stock Thickness		Strip Part Number
	AWG	mm				Tab Section	Mag. Wire Section	
33-31	0.18-0.23	.630 16.00	.630 16.00	Dimple	.187 x .020 4.75 x 0.51	.020 0.51	.010 0.25	62513-1*
				Hole	.187 x .020 4.75 x 0.51	.020 0.51	.012 0.30	63584-1
30-27	0.25-0.36	.630 16.00	.630 16.00	Dimple	.187 x .020 4.75 x 0.51	.020 0.51	.012 0.30	62512-1*
				Dimple	.187 x .032 4.75 x 0.81	.032 0.81	.012 0.30	62678-1†*
27-23	0.36-0.57	.630 16.00	.630 16.00	Dimple	.187 x .020 4.75 x 0.51	.020 0.51	.016 0.41	62514-1*
				Hole	.187 x .020 4.75 x 0.51	.020 0.51	.016 0.41	63664-1
23	0.57	.630 16.00	.630 16.00	—	.187 x .020 4.75 x 0.51	.020 0.51	.016 0.41	63776-1
				Hole	.187 x .020 4.75 x 0.51	.020 0.51	.016 0.41	63585-1
22-20 ²	0.64-0.81	.630 16.00	.630 16.00	Dimple	.187 x .020 4.75 x 0.51	.020 0.51	.016 0.41	62511-1*
				Hole	.187 x .020 4.75 x 0.51	.020 0.51	.016 0.41	63663-1
20-18 ²	0.81-1.02	.630 16.00	.630 16.00	Dimple	.187 x .032 4.75 x 0.81	.032 0.81	.016 0.41	1217065-1
				Hole	.187 x .032 4.75 x 0.81	.032 0.81	.016 0.41	1217128-1
19-17	0.91-1.15	.630 16.00	.630 16.00	Dimple	.187 x .020 4.75 x 0.51	.020 0.51	.020 0.51	62904-1 ⁴
				Hole	.187 x .020 4.75 x 0.51	.020 0.51	.020 0.51	63670-1
19-17	0.91-1.15	.630 16.00	.630 16.00	Dimple	.187 x .020 4.75 x 0.51	.020 0.51	.020 0.51	63273-1 ²
				Hole	.187 x .020 4.75 x 0.51	.020 0.51	.020 0.51	1742160-1 ¹
19-17	0.91-1.15	.630 16.00	.630 16.00	Dimple	.187 x .020 4.75 x 0.51	.020 0.51	.020 0.51	63665-1
				Hole	.187 x .020 4.75 x 0.51	.020 0.51	.020 0.51	63665-1

- 1 Two magnet wires may be terminated in the same terminal slot if diameters are equal.
- 2 Single magnet wire only.
- 3 After insertion into plastic cavity, tab portion must be bent over 45°-90° or potted in to prevent pullout when mating receptacle is disconnected.
- 4 Single bare copper wire only.
- * Recognized under the Component Program of Underwriters Laboratories, Inc.
- † These part numbers are available upon special request; contact TE Engineering for details.

**187 Series
Combination Poke-In
FASTON Terminals**

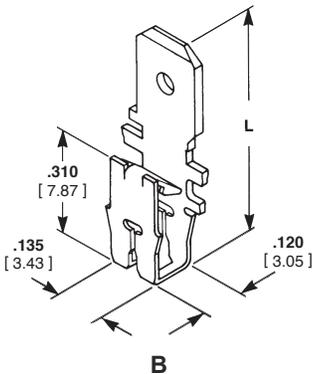
Material

Tin plated brass

Typical Cavity Size

(See page 23)

Type B—Cavity Size 2



B^{3,4}
Poke-In
Combination
Tab

Type	Copper Magnet Wire Range ¹		Dim. L	Tab Feature	Tab Size	Stock Thickness		Strip Part Number
	AWG	mm				Tab Section	Mag. Wire Section	
33-31	0.81-0.23	.630 16.00	.630 16.00	Hole	.187 x .020 4.75 x 0.51	.020 0.51	.010 0.25	63018-1
27-22 ²	0.35-0.63	.630 16.00	.630 16.00	Hole w/o Hole	.187 x .020 4.75 x 0.51	.020 0.51	.016 0.41	316300-4 2-316300-7
22-19 ²	0.64-0.89	.630 16.00	.630 16.00	Hole w/o Hole	.187 x .020 4.75 x 0.51	.020 0.51	.016 0.41	316300-5 2-316300-8
19-17 ²	0.90-1.15	.630 16.00	.630 16.00	Hole w/o Hole	.187 x .020 4.75 x 0.51	.020 0.51	.016 0.41	316300-6 2-316300-9
17-16 ²	1.20-1.30	.630 16.00	.630 16.00	Hole	.187 x .020 4.75 x 0.51	.020 0.51	.016 0.41	6-316300-7

- 1 Two magnet wires may be terminated in the same terminal slot if diameters are equal.
- 2 Single magnet wire only; 22 AWG [0.64 mm] or larger.
- 3 Poke-In feature accepts 20-18 AWG [0.5-0.8 mm²] solid, fused stranded lead wire or 90° poke-in tab terminal.
- 4 After insertion into plastic cavity, tab portion must be bent over 45°-90° or potted in to prevent pullout when mating receptacle is disconnected.

Note: 187 [4.75] Tab Terminals mate with compatible FASTON receptacles. Request Catalog 82004.

Chart continued on next page

Standard MAG-MATE Terminals (Continued)

187 Series
FASTON Tab Terminals

(Continued)

Material

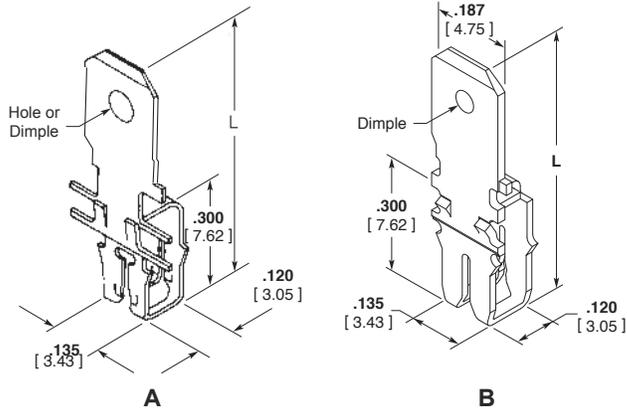
Tin plated brass

Typical Cavity Size

(See page 23)

Type A—Cavity Size 5

Type B—Cavity Size 5



Standard MAG-MATE
Terminals

Type	Copper Magnet Wire Range ¹		Dim. L	Tab Feature	Tab Size	Stock Thickness		Strip Part Number
	AWG	mm				Tab Section	Mag. Wire Section	
A 300 Box Standard IDC Narrow Body Latch Type	33-31	0.18-0.23	.630 16.00	Dimple	.187 x .020 4.75 x 0.51	.020 0.51	.010 0.25	63108-1†
	31-28	0.23-0.32	.630 16.00	Dimple	.187 x .020 4.75 x 0.51	.020 0.51	.010 0.25	62743-1†
	30-27	0.25-0.36	.630 16.00	Dimple	.187 x .020 4.75 x 0.51	.020 0.51	.012 0.30	63109-1†
	27-23	0.36-0.57	.630 16.00	Dimple	.187 x .020 4.75 x 0.51	.020 0.51	.016 0.41	63107-1
				Dimple	.187 x .020 4.75 x 0.51	.020 0.51	.016 0.41	1217493-1
	23-20 ²	0.57-0.81	.630 16.00	Dimple	.187 x .020 4.75 x 0.51	.020 0.51	.016 0.41	63340-1
	22-20 ²	0.64-0.81	.630 16.00	Dimple	.187 x .020 4.75 x 0.51	.020 0.51	.016 0.41	63429-1
	19-17 ²	0.91-1.15	.630 16.00	Dimple	.187 x .020 4.75 x 0.51	.020 0.51	.016 0.41	62888-1
				Hole	.187 x .020 4.75 x 0.51	.020 0.51	.016 0.41	63782-1
	18 lead ²	0.80-0.92 mm ²	.630 16.00	—	.187 x .020 4.75 x 0.51	.020 0.51	.016 0.41	1217592-1†
B ³ Narrow Body Latch Type w/ Strain Relief Slot	23.5-20 ²	0.54-0.81	.630 16.00	Dimple	.187 x .020 4.75 x 0.51	.020 0.51	.016 0.41	1217004-1

1 Two magnet wires may be terminated in the same terminal slot if diameters are equal.
 2 Single magnet wire only; 22 AWG [0.64 mm] or larger.
 3 Strain relief slot for high vibration applications.
 † These part numbers are available upon special request; contact TE Engineering for details.

Chart continued on next page

Standard MAG-MATE Terminals (Continued)

**187 Series
FASTON Tab Terminals**

(Continued)

Material

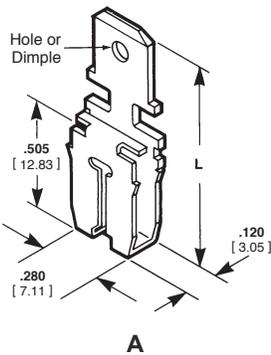
Tin plated brass

Typical Cavity Size

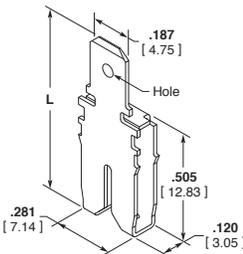
(See page 23)

Type A—Cavity Size 4

Type B—Cavity Size 4



A



B

Type	Copper Magnet Wire Range ¹		Dim. L	Tab Feature	Tab Size	Stock Thickness		Strip Part Number	
	AWG	mm				Tab Section	Mag. Wire Section		
A ³ 500 Box Standard IDC	22-20	0.64-0.81	.830 21.08	Hole	.187 x .020 4.75 x 0.51	.020 0.51	.020 0.51	1742819-1	
	19-17	0.91-1.15	.830 21.08	Hole	.187 x .020 4.75 x 0.51	.020 0.51	.020 0.51	1742820-1	
	17.5-16	1.09-1.29	.830 21.08	Hole	.187 x .020 4.75 x 0.51	.020 0.51	.020 0.51	63667-1	
				Hole	.187 x .020 4.75 x 0.51	.020 0.51	.020 0.51	63427-1	
				Hole	.187 x .032 4.75 x 0.81	.032 0.81	.020 0.51	1217075-1	
				Hole	.187 x .020 4.75 x 0.51	.020 0.51	.020 0.51	63666-1	
	16-15	1.29-1.45	.830 21.08	Hole	.187 x .020 4.75 x 0.51	.020 0.51	.020 0.51	63762-1	
				Dimple	.187 x .020 4.75 x 0.51	.020 0.51	.020 0.51	63353-1	
	14.5-13 ²	1.54-1.83	.830 21.08	Hole	.187 x .020 4.75 x 0.51	.020 0.51	.020 0.51	1217902-1	
	B ^{3,4} 500 Box Single IDC w/ Strain Relief Slot	27-23	0.36-0.57	.830 21.08	Hole	.187 x .020 4.75 x 0.51	.020 0.51	.020 0.51	1217042-1
		22-20	0.64-0.81	.830 21.08	Hole	.187 x .020 4.75 x 0.51	.020 0.51	.020 0.51	63983-1
					Hole	.187 x .032 4.75 x 0.81	.032 0.81	.020 0.51	1217339-1
19-17		0.91-1.15	.830 21.08	Hole	.187 x .020 4.75 x 0.51	.020 0.51	.020 0.51	63995-1	
				Hole	.187 x .032 4.75 x 0.81	.032 0.81	.020 0.51	1217090-1	
16-15	1.29-1.45	.830 21.08	Hole	.187 x .020 4.75 x 0.51	.020 0.51	.020 0.51	63996-1		

1 Two magnet wires may be terminated in the same terminal slot if diameters are equal.

2 Single magnet wire only.

3 After insertion into plastic cavity, tab portion must be bent over 45°-90° or potted in to prevent pullout when mating receptacle is disconnected.

4 Strain relief slot for high vibration applications.

Standard MAG-MATE Terminals (Continued)

250 Series
FASTON Tab Terminals

Material

Tin plated brass

Typical Cavity Size

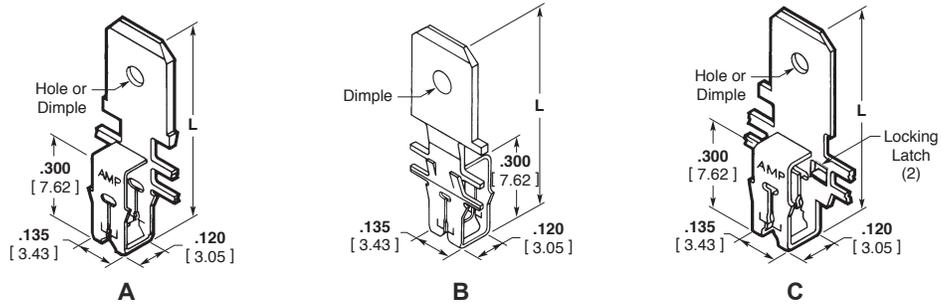
(See page 23)

Type A—Cavity Size 2

Type B—Cavity Size 5

Type C—Cavity Size 3

Note: .250 [6.35] tab terminals mate with compatible FASTON receptacles. Request Catalog 82004.



Type	Copper Magnet Wire Range ¹		Dim. L	Tab Feature	Tab Size	Stock Thickness		Strip Part Number
	AWG	mm				Tab Section	Mag. Wire Section	
A ³ 300 Box Standard IDC .250 [6.35] FASTON Tab	33-31	0.18-0.23	.750 19.05	Dimple	.250 x .032 6.35 x 0.81	.032 0.81	.010 0.25	62600-1*
	30-27	0.25-0.36	.750 19.05	Dimple	.250 x .032 6.35 x 0.81	.032 0.81	.012 0.30	62651-1*
	28-24	0.32-0.51	.750 19.05	Hole	.250 x .032 6.35 x 0.81	.032 0.81	.016 0.41	63607-1
	27-23	0.36-0.57	.750 19.05	Dimple	.250 x .032 6.35 x 0.81	.032 0.81	.016 0.41	62652-1*
	22-20	0.64-0.81	.750 19.05	Dimple	.250 x .032 6.35 x 0.81	.032 0.81	.016 0.41	1217924-1
B Narrow Body Latch Type	19-17	0.91-1.15	.750 19.05	Dimple	.250 x .032 6.35 x 0.81	.032 0.81	.020 0.51	1742398-1
	33-31	0.18-0.23 ¹	.750 19.05	Dimple	.250 x .032 6.35 x 0.81	.032 0.81	.010 0.25	63026-1
	30-27	0.25-0.36 ¹	.750 19.05	Dimple	.250 x .032 6.35 x 0.81	.032 0.81	.012 0.30	63027-1
	27-23	0.36-0.57	.750 19.05	Dimple	.250 x .032 6.35 x 0.81	.032 0.81	.016 0.41	1217860-1
	23-20 ²	0.57-0.81	.750 19.05	Dimple	.250 x .032 6.35 x 0.81	.032 0.81	.016 0.41	1217870-1
C Wide Body Latch Type	33-31	0.18-0.23	.750 19.05	Hole	.250 x .032 6.35 x 0.81	.032 0.81	.010 0.25	63309-1
	31-28	0.23-0.32	.750 19.05	Dimple	.250 x .032 6.35 x 0.81	.032 0.81	.012 0.30	63403-2
	30-28	0.25-0.32	.750 19.05	Hole	.250 x .032 6.35 x 0.81	.032 0.81	.012 0.30	1217152-1
	30-27	0.25-0.36	.750 19.05	Dimple Hole	.250 x .032 6.35 x 0.81	.032 0.81	.012 0.30	63132-1 63499-1
	27-23	0.36-0.57	.750 19.05	Hole Dimple	.250 x .032 6.35 x 0.81	.032 0.81	.016 0.41	63571-1 63128-1
	22-20 ²	0.64-0.81	.750 19.05	Dimple	.250 x .032 6.35 x 0.81	.032 0.81	.016 0.41	63601-2
	19-17 ²	0.91-1.15	.750 19.05	Hole	.250 x .032 6.35 x 0.81	.032 0.81	.016 0.41	63614-1

1 Two magnet wires may be terminated in the same terminal slot if diameters are equal.
 2 Single magnet wire only; 22 AWG [0.64 mm] or larger.
 3 After insertion into plastic holder, tab portion must be bent over 45°-90° or potted in to prevent pullout when mating receptacle is disconnected.

* Recognized under the Component Program of Underwriters Laboratories, Inc.

Standard MAG-MATE Terminals

Chart continued on next page

Standard MAG-MATE Terminals (Continued)

**250 Series
FASTON Tab Terminals**

(Continued)

Material

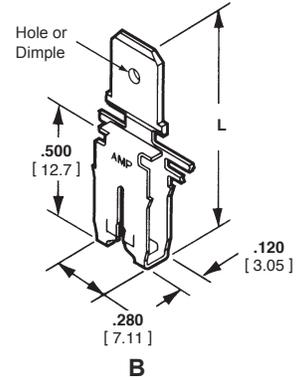
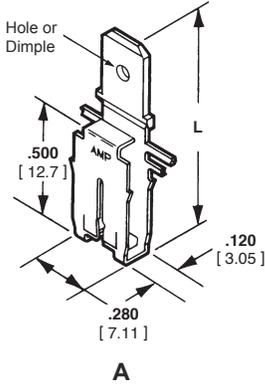
Tin plated brass

Typical Cavity Size

(See page 23)

Type A—Cavity Size 4

Type B—Cavity Size 4



Type	Copper Magnet Wire Range ¹		Dim. L	Tab Feature	Tab Size	Stock Thickness		Strip Part Number
	AWG	mm				Tab Section	Mag. Wire Section	
A ³ 500 Box Standard IDC Wide Neck	22-20	0.64-0.81	.952 24.18	Hole	.250 x .032 6.35 x 0.81	.032 0.81	.020 0.51	63495-1
	19-17	0.91-1.15	.952 24.18	Hole	.250 x .032 6.35 x 0.81	.032 0.81	.020 0.51	63464-3
	16-15	1.29-1.45	.952 24.18	Hole	.250 x .032 6.35 x 0.81	.032 0.81	.020 0.51	63459-2
	14-13 ²	1.61-1.83	.952 24.18	Dimple	.250 x .032 6.35 x 0.81	.032 0.81	.020 0.51	63460-1
				Hole	.250 x .032 6.35 x 0.81	.032 0.81	.020 0.51	63816-1
B ³ 500 Box Standard IDC Narrow Neck	22-20	0.64-0.81	.952 24.18	Dimple	.250 x .032 6.35 x 0.81	.032 0.81	.020 0.51	63155-1
	19-17	0.91-1.15	.952 24.18	Dimple	.250 x .032 6.35 x 0.81	.032 0.81	.020 0.51	62923-1
	16-15	1.29-1.45	.952 24.18	Dimple	.250 x .032 6.35 x 0.81	.032 0.81	.020 0.51	63064-1
	14-13 ²	1.61-1.83	.952 24.18	Dimple	.250 x .032 6.35 x 0.81	.032 0.81	.020 0.51	63465-1
	12 ²	2.05	.952 24.18	Dimple	.250 x .032 6.35 x 0.81	.032 0.81	.020 0.51	63425-1

¹ Two magnet wires may be terminated in the same terminal slot if diameters are equal.

² Single magnet wire only.

³ After insertion into plastic holder, tab portion must be bent over 45°-90° or potted in to prevent pullout when mating receptacle is disconnected.

Standard MAG-MATE Terminals (Continued)

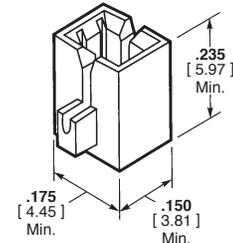
Typical Plastic Cavity

Illustrations shown are for reference only. They are not a purchased item. Manufacture only according to TE Specification.

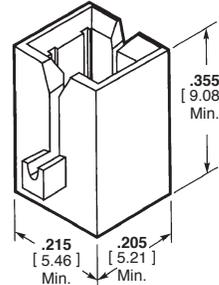
Technical Documents

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.

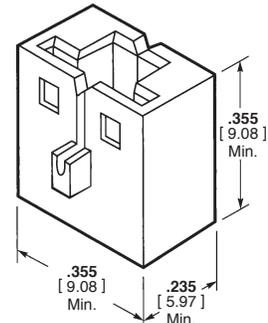
- 114-2050 —Poke-In Tab MAG-MATE Terminals
- 114-2069 —Standard MAG-MATE .187 [4.75] Box Height Terminals
- 114-2046 —Standard MAG-MATE .300 [7.62] Box Height Terminals
- 114-2066 —Standard MAG-MATE .500 [12.7] Box Height Terminals
- 114-2067 —Standard MAG-MATE .300 [7.62] Box Height Latch-In Terminals Narrow Body
- 114-2094 —Standard MAG-MATE .300 [7.62] Box Height Latch-In Terminals Wide Body



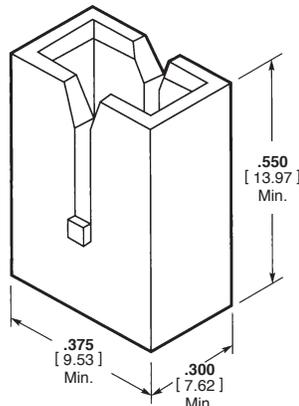
Cavity Size 1
 .187 [4.75] Box
 MAG-MATE
 (Application Spec. 114-2069)



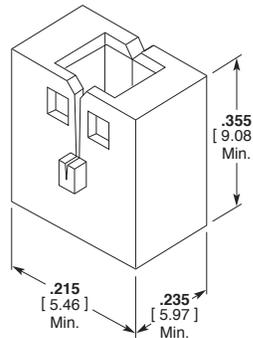
Cavity Size 2
 .300 [7.62] Box
 MAG-MATE
 (Application Spec. 114-2046)



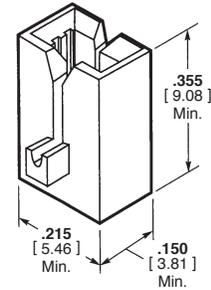
Cavity Size 3
 .300 [7.62] Box
 Latch-In MAG-MATE Wide Body
 (Application Spec. 114-2094)



Cavity Size 4
 .500 [12.70] Box
 MAG-MATE
 (Application Spec. 114-2066)



Cavity Size 5
 .300 [7.62] Box
 Latch-In MAG-MATE,
 Narrow Body
 (Application Spec. 114-2067)



Cavity Size 6
 .300 [7.62] Box
 MAG-MATE
 (Application Spec. 114-2046)

Note: The MAG-MATE typical plastic cavities shown above are for reference only. They are not a purchased item. Refer to appropriate TE application specification for details.

Plastic cavities, designed to TE specifications, may be molded as part of the coil bobbin or attached to a lamination stack in the area of the magnet wire coil. Each cavity is a rectangular box with two narrow slots on opposing walls and a plastic post or anvil extending upward from the bottom surface. During or after the winding process, the magnet wire is placed across the plastic cavities and into the slots, either manually or by coil winding equipment.

Unraveling is prevented by a slight friction fit, suitable bend or by wrapping the magnet wire around a tie-off post.

During insertion, two insulation displacing terminal slots strip the film insulation from the magnet wire producing a stable electrical termination.

The plastic anvil supports the magnet wire, helping to prevent it from being dragged down when the terminal is inserted.

Terminal retention is secured in the plastic cavities by either locking barbs or locking latches in addition to locking barbs for quick disconnect FASTON tab terminals.

Excess magnet wire is trimmed flush with the outside of the plastic cavity by a shear blade traveling with the terminal insertion ram.

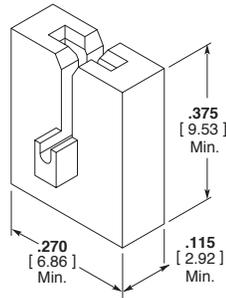
The sheared wire end can be tucked inside the plastic cavity, if necessary, by cutting the wire off before the terminal is fully seated allowing the terminal to drag the severed end of the wire into the pocket inside the cavity.

TE will provide design and mold engineering resources to manufacture any specifically designed MAG-MATE cavity housing.

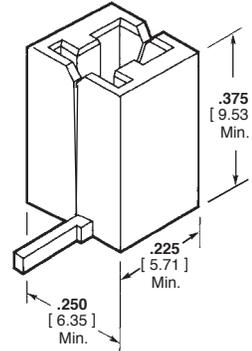
Standard MAG-MATE Terminals (Continued)

Typical Plastic Cavities

Illustrations shown are for reference only. They are not a purchased item. Manufacture only according to TE Specification.



Slim Line MAG - MATE
Reference Application
Spec. 114-2147



Mini MAG - MATE
Reference Application
Spec. 114-2047

**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.

114-2140—Slim Line
MAG-MATE
Terminals

**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.

114-2047—Mini MAG-MATE
Terminals