


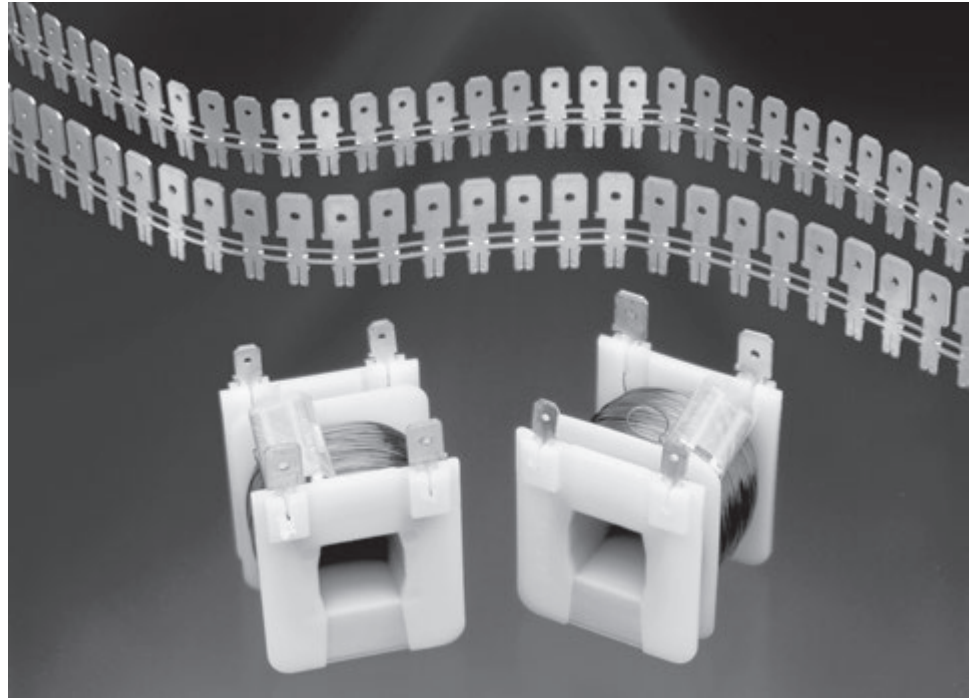
Slim Line MAG-MATE Terminals

Product Facts

- Terminates all magnet wire film insulations
- Eliminates need for pre-stripping conductors
- Eliminates need to post-insulate terminations
- Excess magnet wire is automatically trimmed during the termination process
- 187 and 250 Series Faston Tab and posted PCB Tab terminals available
- Terminates 33-17 AWG [0.18-1.15 mm] magnet wire
- Simultaneously terminates two magnet wires of the same size in one terminal from 33-23 AWG [0.18-0.57 mm]
- Available in strip form for semi-automatic or fully automatic insertions
- 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 

Applications

- Motor windings and connections
- Coil Connections
- Transformer windings and connections
- Bobbin connections
- Lighting Ballasts
- Power Supplies



TE offers a full selection of 187 and 250 Series Faston and posted PCB Slim Line MAG-MATE Tab insulation displacement (IDC) terminals for magnet wire terminations.

Slim Line MAG-MATE terminals with a single IDC slot terminate 33-17 AWG [0.18 to 1.15 mm].

Each IDC slot 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.

MAG-MATE cavities are either integrated into coil bodies or especially 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 terminals 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.

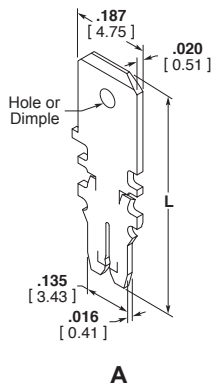
The MAG-MATE Inserter may be used as a semi-automatic bench machine or integrated in production lines for fully-automatic applications.

Slim Line MAG-MATE Terminals (Continued)

187 Series FASTON Tab Terminals

Material

Tin plated brass



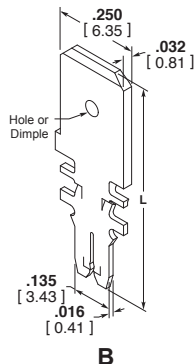
Type	Copper Magnet Wire Range ¹		Dim. L	Tab Feature	Tab Size	Stock Thickness		Strip Part Number
	AWG	mm				Tab Section	Mag. Wire Section	
A .187 [4.75] FASTON Tab	33-31	0.18-0.23	.630 16.00	Hole	.187 x .020	.020	.012	63710-2
				Dimple	4.75 x 0.51	.051	0.30	63738-2
	30-28	0.25-0.32	.630 16.00	Hole	.187 x .032	.032	.012	1217666-1
				Dimple	4.75 x 0.81	0.81	0.30	
	27-24	0.36-0.51	.630 16.00	Hole	.187 x .020	.020	.016	63711-2
				Dimple	4.75 x 0.51	0.51	0.30	63737-2
	23-20 ²	0.57-0.81	.760 19.31	Hole	.187 x .020	.020	.016	63712-2
				Plain	4.75 x 0.51	0.51	0.41	63736-2
	19-17 ²	0.91-1.15	.630 16.00	Hole	.187 x .020	.020	.016	1217497-1
				Dimple	4.75 x 0.51	0.51	0.41	

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] or larger.

250 Series FASTON Tab Terminals

Material

Tin plated brass



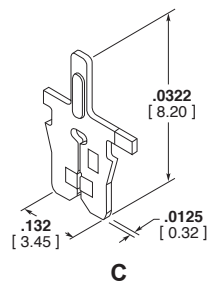
Type	Copper Magnet Wire Range ¹		Dim. L	Tab Feature	Tab Size	Stock Thickness		Strip Part Number
	AWG	mm				Tab Section	Mag. Wire Section	
B .250 [6.35] FASTON Tab	33-31	0.18-0.23	.752 19.10	Hole	.250 x .032	.032	.012	63716-2
				Dimple	6.35 x 0.81	0.81	0.30	63744-2
	30-28	0.25-0.32	.752 19.10	Hole	.250 x .032	.032	.012	63717-2
				Dimple	6.35 x 0.81	0.81	0.30	63743-2
	27-24	0.36-0.51	.752 19.10	Hole	.250 x .032	.032	.016	63718-2
				Dimple	6.35 x 0.81	0.81	0.41	63742-2
19-17 ²	0.91-1.15		.752 19.10	Hole	.250 x .032	.032	.016	63719-2
				Dimple	6.35 x 0.81	0.81	0.41	63741-2

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] or larger.

Posted PCB SOLDER Terminal

Material

Tin plated brass



Type	Copper Magnet Wire Range ¹		Dim. L	Tab Feature	Tab Size	Stock Thickness		Strip Part Number
	AWG	mm				Tab Section	Mag. Wire Section	
C .040 [1.00] PCB Tab	33.5-30	0.17-0.25	.323 8.20	Embossment	.040 x .024	.024	.013	1534684-1
					1.00 x 0.60	0.60	0.32	
	29.5-26	0.27-0.40	.323 8.20	Embossment	.040 x .024	.024	.013	1534685-1
					1.00 x 0.60	0.60	0.32	
	26-22	0.40-0.63	.323 8.20	Embossment	.040 x .024	.024	.013	1534686-1
22-20	0.63-0.81		.323 8.20	Embossment	.040 x .024	.024	.013	1740829-1
					1.00 x 0.60	0.60	0.32	
21.5-19.5	0.67-0.85		.323 8.20	Embossment	.040 x .024	.024	.013	1534687-1
					1.00 x 0.60	0.60	0.32	

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

Slim Line MAG-MATE Terminals (Continued)

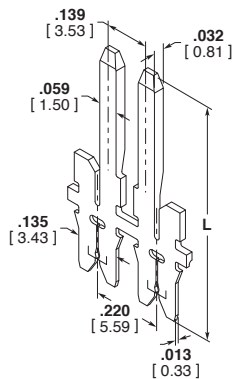
Offset Tab Terminals

Material

Tin Plated Brass

Applications where I/O Tab spacing must be less than IDC connection spacing

Example: automotive accessory coils



A

Type	Copper Magnet Wire Range ¹		Dim. L	Diode Size	Tab Size	Stock Thickness		Strip Part Number
	AWG	mm				Tab Section	Mag.Wire Section	
A Combination Diode Slot/Tab	33-31	0.18-0.23	.725 18.42	#20 0.8	.059 x .032 1.50 x 0.81	0.032 0.81	0.012 0.30	63888-1
	33-31	0.18-0.23	.725 18.42	#22.5 0.6	.059 x .032 1.50 x 0.81	0.032 0.81	0.012 0.30	63903-1

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

Posted PCB Terminals

Multi-Spring Solderless Terminal

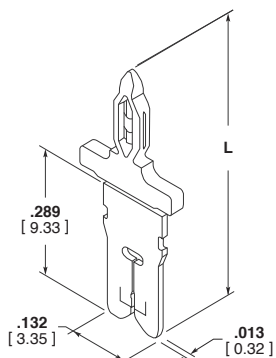
Material

Tin Plated Copper Alloy

Cavity Size

Application Spec.

Contact TE Engineering



B

Type	Copper Magnet Wire Range ¹		Dim. L	Stock Thickness		Strip Part Number
	AWG	mm		Tab Section	Mag.Wire Section	
B Multi-Spring Solderless PCB Tab Terminal	33-29.5	0.18-0.265	.583 14.80	.031 0.81	.013 0.32	2120743-2
	29.5-26	0.265-0.40	.583 14.80	.031 0.81	.013 0.32	2120744-2
	26-22.5	0.40-0.63	.583 14.80	.031 0.81	.013 0.32	2120745-2
	22.5-19.5 ²	0.63-0.85	.583 14.80	.031 0.81	.013 0.32	2120746-2
	19.5-17 ²	0.85-1.12	.583 14.80	.031 0.81	.013 0.32	2120747-2

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

² Single magnet wire only. 22 awg [0.63 mm] and larger.

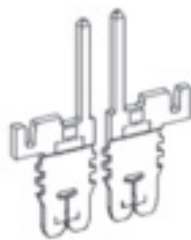
Note: PC Board hole size .057 [1.45]

Slim Line MAG-MATE Terminals (Continued)

Posted PCB Solder Terminals

Material

Unplated brass



A

Type	Copper Magnet Wire Range		Stock Thickness	Strip Part Number
	AWG	mm		
A MAG-MATE Terminal with MQS Pins	33-30	0.256-0.40	Varied thickness	1-1987222-1
	33 ¹	0.40-0.56 ¹	Varied thickness	1-1987223-1
	30-26	0.256-0.40	Varied thickness	1-1987224-1
	30-26 ¹	0.40-0.56 ¹	Varied thickness	1-1987224-1
	26-22	0.40-0.63	Varied thickness	1-1987225-1
	26-23 ¹	0.40-0.56 ¹	Varied thickness	1-1987225-1
	22-20	0.63-0.80	Varied thickness	1-1987226-1
	20-17	0.85-1.12	Varied thickness	1-1987226-1

¹ For double magnet wires