

MAGNET WIRE PRODUCTS GLOBAL SOLUTIONS

QUICK REFERENCE GUIDE

TE Connectivity's (TE) Magnet wire is a copper (Cu) or aluminum (Al) wire coated with a very thin layer of insulation. Typical termination technologies used since magnet wire was first introduced are welding and soldering. While effective, these thermal processes can be difficult to control, they also need high temperatures that may damage the wire or components, and they require time-consuming mechanical or chemical processes to strip the magnet wire. High scrap ratio is consequently another problem.

MAG-MATE

MAG-MATE terminals are insulation displacement connection (IDC) terminals for magnet wire (copper and aluminum) terminations. They are available as poke-in, pokein tab, splice, crimp wire barrel, solder post, quick connect tab, Multispring, pin and receptacle styles.

SIAMEZE

SIAMEZE terminals are insulation displacement connection (IDC) terminals for interconnecting copper magnet wires, lead wires and other components. They are available as wire-to-wire, Lead Lok, quick disconnect tabs, posts, pin, and receptacle terminals.

AMPLIVAR

AMPLIVAR terminals and splices are crimp terminals specially designed to terminate magnet wires (both copper and aluminum), in combination with solid or stranded lead wire. They have machined, sharp-edged serrations inside their crimp barrels.

CLUSTER BLOCKS

Cluster blocks are fully insulated, one-piece housing connectors that allow quick electrical connection of sealed hermetic header pins on compressors. These connectors accept pins from one side, so reversing the polarity is prevented.

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SELECTION CRITERIA

Copper Wire*

AWG / mm	Mini MAG-MATE	MAG-MATE	SIAMEZE	CMA [mm2]	AMPLIVAR
52-30 / 0.0254 - 0.198	✔	-	-	100-22000 [0.05-9.45]	✔
34-12 / 0.160 - 2.05	-	✔	✔		✔

Aluminum Wire*

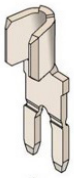
AWG / mm	Mini MAG-MATE	MAG-MATE	SIAMEZE	CMA [mm2]	AMPLIVAR
0.18 - 1.54mm	✔	-	-	400-22000 [0.26-9.45]	✔

Typical Available Interface*

Interface	Mini MAG-MATE	MAG-MATE	SIAMEZE	AMPLIVAR
RAST 2.5 - RAST 5	-	✔	-	-
FASTON	✔	✔	✔	✔
MATE-N-LOK	-	✔	✔	-
PCB	✔	✔	✔	-
press-fit / soldering	✔	✔	✔	-
Lead wire	✔	✔	✔	✔
Ring tongue	-	-	-	✔
IDC	✔	✔	✔	-
Crimp	-	-	-	✔

(*) For detailed / customized configurations, please contact TE engineering

MAG-MATE

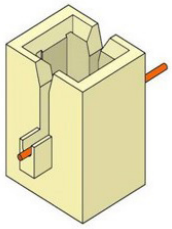


Poke-in tab terminal



Poke-in terminal

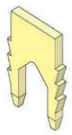
Up to 4 contact points for magnet wire



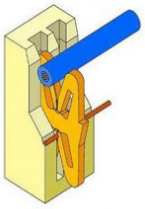
Up to 2 magnet wires of the same diameter

Cavities are either integrated into coil bodies or especially designed cavity housings.

SIAMEZE

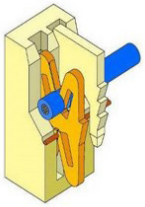


Lead Lok terminal with locking barbs providing lead wire retention



Lead wire (105°C PVC insulation)

2 contact points for magnet wire



Moving beam version connects a variety of diameters. **Compliant beam** version connects to magnet wires of the same diameter

AMPLIVAR

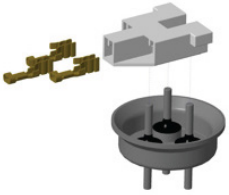


No need to prestrip or solder magnet wires.



Up to 3 magnet wires can be combined (both copper and aluminium magnet wire)

CLUSTER BLOCKS



Receptacles connect wire to hermetic pin header. Receptacles for lead wire or magnet wire. Impervious to refrigerants or available in GWT.

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SELECTION CRITERIA

Product Family	MAG-MATE	SIAMEZE	AMPLIVAR	Cluster Blocks
Dishwasher Motor	✔	✔	✔	-
Refrigerator Air Moving Fan	✔	✔	✔	-
Oven Door Latch Actuator	✔	✔	✔	-
Oscillating / Box / Ceiling Fans	✔	✔	✔	-
Hair Trimmers	✔	✔	✔	-
Vacuum Cleaner	✔	✔	✔	-
Compressor Fan Motors	✔	✔	✔	-
Refrigeration - Compressors	-	-	✔	✔
Washing Machine Motor	✔	-	-	-
Heating Circulating Pumps	✔	-	-	-
Microwave Oven Magnetron	-	✔	-	-
Small Water Pumps (Fish Tank)	-	✔	-	-
C-Frame Motors – Air Moving Fans	✔	-	-	-
Power Tools - Saws, Drills, etc	✔	-	-	-
Cruise Control Units	✔	-	✔	-
Ignition Coil – Coil on Plug	✔	-	✔	-
Ignition Coil – Coil Pack	✔	-	✔	-
Air Conditioner	✔	-	✔	-
EGR Valve	✔	-	✔	-
Air Management Valves	✔	-	✔	-
Transmission Control Unit	✔	-	✔	-
Fuel Pumps	✔	-	✔	-

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te.com/magnet-wire

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