

MAXIMUM SOLUTIONS

Mill-Max Expands its Maxnetic® Connector Lineup

New magnetic connectors addressing a range of interconnect requirements, including surface mount, through-hole, and wire termination options.



Mill-Max is proud to introduce new Maxnetic® connectors available in a variety of termination styles. These connectors provide designers flexibility in choosing the right magnetic connector combination for their interconnect needs.

Magnetic connectors are ideal for applications requiring connections to be made quickly and easily such as charging systems for communications equipment; cables, devices and wearables used in the medical industry; safety and robotic equipment found in industrial environments and any setting where repeated mating and un-mating of cables and devices must be done effortlessly. These types of connectors also have the ability to break away for emergency release without damage to the components or the equipment they are connected to. Magnetic connectors feature self-alignment, self-location, and zero force mating. They incorporate spring-loaded and mating target pins which establish the electrical connection as the magnetic force pulls and holds the connectors together, no aligning or plugging is required to mate the connectors and no hardware is needed to keep them mated.

We have expanded our Maxnetic® lineup to offer more options for connections and terminations including board-to-board, cable-to-board, and cable-to-cable choices. There are four new spring-loaded and three new target connectors; any of the spring-loaded can mate with any of the target connectors to create the interconnect framework required. As with most magnetic connectors, there is a male half and a female, or shrouded, half. Depending on the application, it may be desirable to have either the spring-loaded or target connector shrouded.

The termination and housing options for the spring-loaded connectors are: 879-22-00X-00-011101 (solder cup termination, shrouded); 879-22-00X-10-011101 (through-hole solder tail termination, shrouded); 879-22-00X-30-011101 (SMT termination, shrouded); 878-22-00X-00-011101 (solder cup termination, no shroud). The target connector options are: 878-20-00X-00-012000 (Solder-cup termination, no shroud); 878-20-00X-10-011000 (through-hole solder tail termination, no shroud); 879-20-00X-10-011000 (through-hole solder tail termination, shrouded). Other configurations can be accommodated, inquire with our technical support team to discuss your application. The connectors are single row, 2-6 positions, with a pin to pin spacing of 4 mm (.1575"). The spring-loaded connectors have a cycle life of up to 1,000,000 cycles, 25 milliohms contact resistance, and a *7.2 amp per pin current rating. All components of the spring-loaded and target connectors are gold plated and the solder cups can accept up to 16 AWG wire. The use of strong, long-lasting neodymium (NdFeB) magnets on both connectors provides 1.4 pounds (636 g) average separation force (1 pound (454 g) minimum) and enables the connectors to be pulled into alignment and connect with each other at up to .500" (12.7 mm) apart.

The connectors can be used for power or signal transmission and may be used in vertical or horizontal orientations. Optimal electrical and mechanical reliability is ensured using high-quality Mill-Max spring-loaded pins.

Contact our technical services staff to discuss your application and how we may be able to address your needs.

**Current rating is a de-rated value based on an individual pin in free air.*

For more information, please visit www.mill-max.com/PR710.