

# MAXIMUM SOLUTIONS

## Mill-Max Adds .100" Pitch Options to Its Maxnetic® Connector Lineup

*New space saving single and double row connector sets featuring magnetic retention for making quick, secure connections.*



Mill-Max Manufacturing Corp., the leading US manufacturer of machined interconnect components, today announced the introduction of new .100" (2.54 mm) pitch magnetic spring-loaded connectors. This expansion of the Maxnetic® product line delivers next-generation high reliability magnetic connectors designed for use in ever shrinking electronic devices and their applications.

### Addressing Critical Market Needs

Like all Mill-Max connectors, this addition to the Maxnetic® connector lineup is engineered for demanding applications across medical, industrial, military, and automated manufacturing sectors. With .100" (2.54 mm) pin-to-pin spacing and a low-profile stack height of just .430" (10.9 mm), these connectors combine magnetic mating, gold plated terminal pins, and robust mechanical and electrical performance to enable fast, reliable, stress-free connections in critical environments while minimizing space requirements.

Maxnetic® connectors incorporate spring-loaded and mating target pins to establish the electrical connection while the magnets pull and hold the connectors together; no aligning or plugging is required to mate the connectors. All connectors in the series are designed with polarized neodymium magnets and orientation features on the connector bodies to ensure self-alignment, and zero force mating. The maximum separation force for the mated connectors is 1.6 pounds (726 grams) for 2 positions while the minimum separation force for the 10 position connectors is .57 pounds (259 grams).

Magnetic connectors are utilized across a broad range of applications and industries where quick connections and disconnects are vital, such as:

- Medical cables, monitors and wearable diagnostic devices for secure but easily detachable connections, ensuring quick replacement or removal for cleaning or maintenance.
- Industrial robotics and automation equipment, enabling quick and easy linking of modules for assembly, disassembly and data collection
- Charging docks and stations for commercial, industrial and military use

Maxnetic® connectors are ideal for use in any setting where repeated mating and un-mating of cables and devices must be done effortlessly, especially in constrained or blind-mating applications. The magnetic force provides reliable retention without the need for external hardware and allows for emergency breakaway without damage to the connector or the equipment.

### Product Specifications

- Connector pitch: .100" (2.54 mm)
- Configurations: single row (2-10 positions); Double row (4-10 positions)
- Termination styles: Solder tail, solder cup (22 AWG max. wire)
- Contact resistance: ≤ 20 milliohms per pin
- Current rating: 5.2\* amps per pin
- Max. operating temperature: +80°C

A connector set consists of a spring-loaded connector and a target connector, one having a male insulator, the other a shrouded, female insulator. All connectors have mounting tabs† for convenient attachment to PCB's, panels, and other customer housings. See table below for part numbers and configuration descriptions.

Spring-loaded Connectors		Target Connectors	
Part Number	Description	Part Number	Description
<a href="#">872-22-0XX-00-012101</a>	Single row, male, solder cup	<a href="#">872-10-0XX-00-012000</a>	Single row, male, solder cup
<a href="#">872-22-0XX-10-012101</a>	Single row, male, solder tail	<a href="#">872-10-0XX-10-012000</a>	Single row, male, solder tail
<a href="#">873-22-0XX-00-012101</a>	Single row, female, solder cup	<a href="#">873-10-0XX-00-012000</a>	Single row, female, solder cup
<a href="#">873-22-0XX-10-012101</a>	Single row, female, solder tail	<a href="#">873-10-0XX-10-012000</a>	Single row, female, solder tail
<a href="#">874-22-0XX-00-012101</a>	Double row, male, solder cup	<a href="#">874-10-0XX-00-012000</a>	Double row, male, solder cup
<a href="#">874-22-0XX-10-012101</a>	Double row, male, solder tail	<a href="#">874-10-0XX-10-012000</a>	Double row, male, solder tail
<a href="#">875-22-0XX-00-012101</a>	Double row, female, solder cup	<a href="#">875-10-0XX-00-012000</a>	Double row, female, solder cup
<a href="#">875-22-0XX-10-012101</a>	Double row, female, solder tail	<a href="#">875-10-0XX-10-012000</a>	Double row, female, solder tail

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

† Connectors can be provided without mounting tabs upon request



## **About Mill-Max Manufacturing Corp.**

Mill-Max is the leading US manufacturer of machined interconnect components with a vertically integrated manufacturing facility headquartered in Oyster Bay, NY. Its full product line includes spring-loaded connectors, SIP, DIP, PGA and BGA sockets, board-to-board interconnects and pin headers, surface mount and custom products, PCB pins and receptacles, solder terminals, wrapost receptacles and terminals. The company's complete manufacturing facility includes engineering, tooling, primary and secondary machining, stamping, plating, injection molding, and assembly.

## **Contact Information**

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For technical specifications and additional information, visit: [www.mill-max.com/PR717](http://www.mill-max.com/PR717).

To discuss specific applications and requirements, contact Mill-Max technical services staff.

