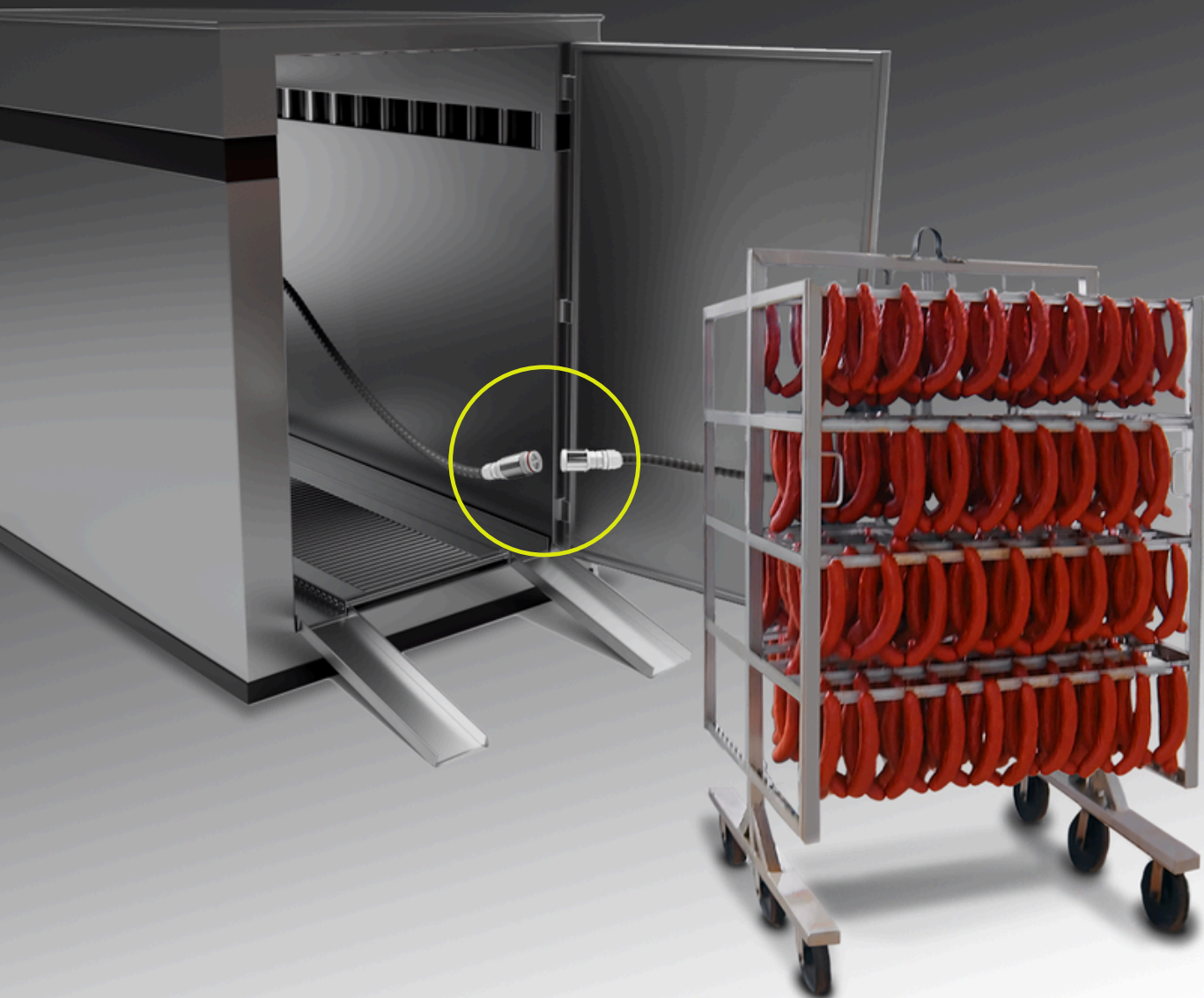


Magna-Plug

No More Broken Cables or Sensors
Magna-Plug Magnetic Connector



Significantly reduce production loss and downtime

The Magna-Plug is a magnetic connector which has been designed primarily to reduce cable and probe breakages in manufacturing processes, which translates for the customer in cost savings and reduced production interruptions.

Magna-Plug has two connectors: a male and a female. A female connector variant version is also available for panel mounting. The body of both connectors is made of food grade Teflon, which meets FDA specifications. An external stainless-steel ring gives it added stiffness. This magnetic connector comes with 6 pins that accommodate up to 18 caliber conductors.

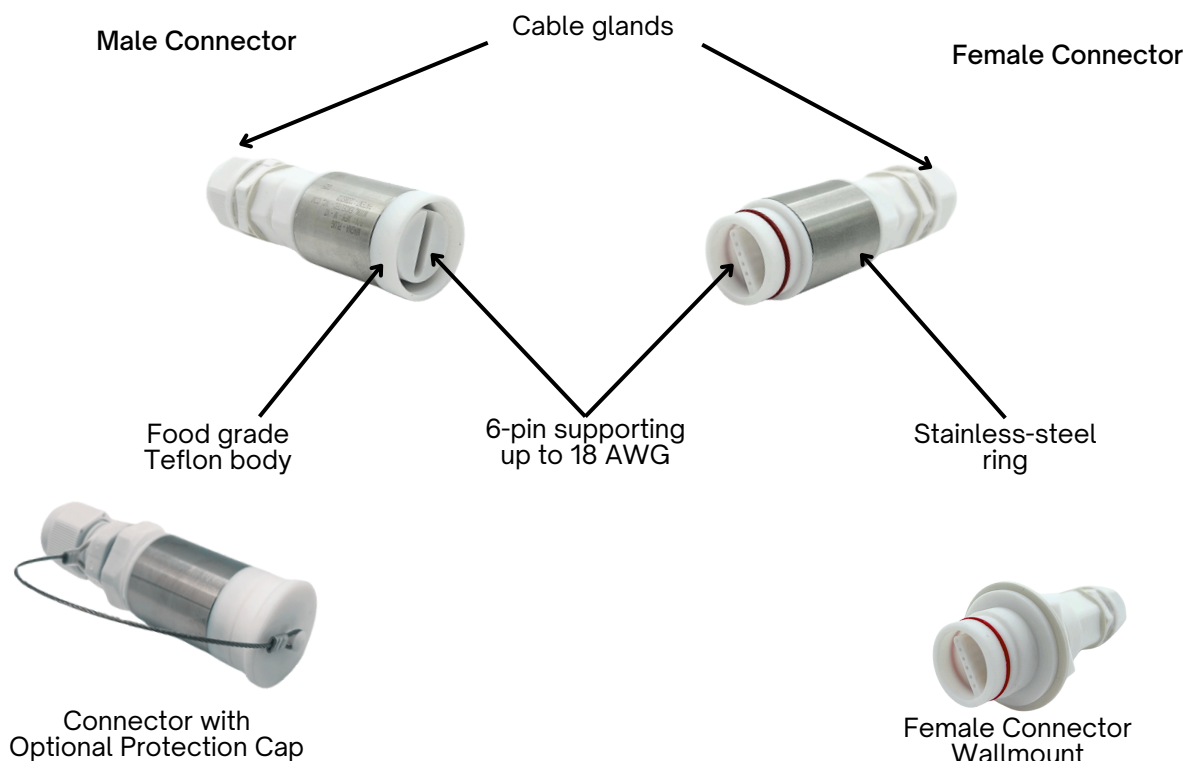
Cable glands outside the magnetic connector can adapt to different cable diameters. Magna-Plug is completely waterproof and submersible. It meets IP 67 specifications, but the key part of this magnetic connector is the magnet inside the connectors.

The force of the magnet is 10 pounds; enough to withstand armed or shielded cables in the process without disconnecting. The only way you can connect them is by the self-alignment magnets. The advantage of this feature, is that it can be easily disconnected. So, if, for example, an operator moves a food shelf in which the connector is used for a temperature probe, or if manufacturing equipment is moved and the cable is pulled, connectors will be disconnected without damage and without interruption due to damaged cables or sensors.

The same applies for the panel mount connector. The only difference is that this version can be mounted with a bracket to a panel.

Magna-Plug can be used for any application for low voltage of 48 VDC or less, and signals such as 4 to 20 mA. An optional protection caps is also offered to provide the connectors with extra protection when disconnected.

Magna-Plug Components



Operating Principle

- When stress or pull is applied to the cable, Magna-Plug disconnects without damaging the cable or equipment.
- Reconnection is easy, fast and foolproof. As Magna-Plugs are put closer together, the magnets automatically align and instantly make the connection on the same pins every time. It is impossible to reverse the polarity of the connections.



Typical applications



Thermocouples
& RDT's



Pressure
Transmitters



Levels
Transmitters



Flow
Transmitters



Proximity
Sensors



Ethernet
Cables



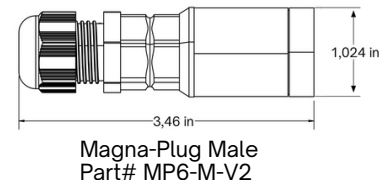
M12
Connectors

Materials Properties

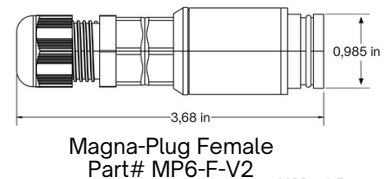
Food-Grade Teflon	Stainless-Steel 316 SS	Neodimium Iron Boron Magnets
<ul style="list-style-type: none"> Synthetic Nontoxic Fluorocarbon-based polymer Low coefficient of friction Excellent electrical properties High chemical resistance Stability in wide temperature ranges 	<ul style="list-style-type: none"> Superior resistance to corrosion (+200 times) High tensile strength Very durable Temperature resistant Low-maintenance (long lasting) Attractive appearance Environmentally friendly (recyclable) 	<ul style="list-style-type: none"> Maximum operating temperature: 230°C / 446°F Minimum operating temperature: -138°C / -216°F Minimal changes of magnetic properties in high temperatures High energy density Good corrosion resistance High resistance to demagnetization

Specifications

- Environmental**
- Rating: IP67 / NEMA 6 (when mated)
 - Dust & waterproof
 - Max. operating temperature: 260°C / 500°F
 - Min. op temp: -40°C / -40°F



- Mechanical**
- Material: Food-grade Teflon (White)
 - Shell: Stainless Steel
 - Pins: Gold plated (x6)
 - Retention force: 10 pounds in total
 - Connection type: Self-mating, self-alignment
 - Mating Cycles: 1000



- Electrical**
- Voltage: 48 V DC Max
 - Amperage: 5 A
 - Contacts: up to 18 AWG

