General Information

Frequently Asked Questions

About M8 and M12 Connectors and Assemblies

What is an M8 / M12 Connector?

The M12 (also called a "micro" connector) and M8 (also called "nano" connector) are standard electrical connectors typically used as an interface for sensors (proximity switches, photo-optics, small limit switches, etc.). The M12 refers to the thread size of the mating screw collars.

What are the benefits of the M8 / M12 Connectors?

This connector features a small diameter and is designed for harsh environments. Molded cables are rated to IP 67 (temporary immersion) and field wired connectors are rated to IP 65 (wash down).

How are the M12 Connectors typically wired?

3 Wire Sensor (Single Output)

Male Front View

Female Front View



4 Wire Sensor (Double Output)

Male Front View

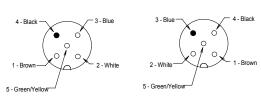
Female Front View



What is the usual color code for M12 assemblies?

Male Front View

Female Front View



How are the M8 Connectors typically wired?

3 Pole M8



4 Pole M8



What is the usual color code for M8 assemblies?

3 Pole M8



4 Pole M8



What are the benefits of using Distribution Boxes?

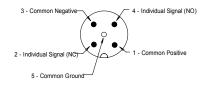
- Simplifies installation by operating up to 8 input or output points with one cable; cleans up cabling confusion and saves labor in cable routing.
- Offers common ground, negative and positive wires to further reduce labor in wiring.
- Modular plug in input and output cables provide easy installation, change out and maintenance.
- Compatible with standard M12 plug wiring schemes.

How do distribution boxes work?

Distribution Boxes are designed around the standard wiring used for the connectors. Common wiring (to each connector position) is provided for positive, negative and ground positions. Each connector has 2 individual wires available to transfer NO & NC position status for input devices or one wire can be used to provide separate power for output devices.

What is the wiring scheme used for distribution boxes?

Input Devices



Output Devices

