

M12 Signal Connectors and Cable Assemblies >

Delivering rugged, compact and flexible connectivity solutions, sealed M12 Signal Connectors and Cable Assemblies support efficient signal and low-power transmission for industrial sensor, actuator and network infrastructure applications. These products use the industry-standard M12 form factor and meet the IEC 61076-2-101 specification.



ADVANTAGES AND FEATURES

Provides consistent connectivity in harsh environments

Sealed, IP67-rated M12 connectors safeguard against moisture or dust ingress and are designed to withstand temporary immersion in water, ensuring stable performance in challenging conditions.

Enhances system design flexibility

A variety of connector and cable assembly configurations support various coding options and industrial protocols, streamlining system design while making industrial networks more scalable and upgradable.

Delivers high performance in a compact form factor

The design enhances efficiency and improves design flexibility by reducing the connector footprint.

IEC Specification	61076-2-101
Current	Up to 4.0A
Voltage	Up to 250V
Poles	2, 3, 4, 5, 8, 12
Ingress Protection Rating	IP67
Coding	A-code, B-code, C-code
Operating Temperatures	-30 to +85°C (with exceptions)

Improves long-term reliability

Precision-engineered M12 solutions are optimized for ruggedness and dependability, providing long-term value by minimizing maintenance work and system downtime.

Simplifies installation

M12 threaded connectors and M12 Push-Pull Ultra-Lock 2.0 connectors are designed for quick changes and reliable, secure mating, improving productivity by reducing both setup time and assembly errors.

MARKETS AND APPLICATIONS

Industrial Automation

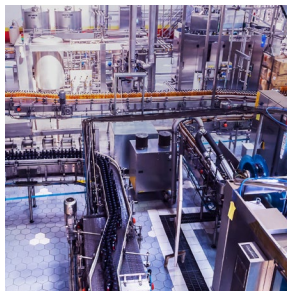
Actuators
Automated material-handling systems
Industrial devices
Food and beverage automation systems
Sensors

Automotive

Automotive manufacturing equipment
Smart warehousing

Commercial & Industrial Vehicles

Agricultural machinery
Harsh-environment connected systems
Heavy machinery
Mining, construction and forestry equipment



Food and Beverage
Automation Systems



Automotive Manufacturing
Equipment



Heavy Machinery

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SPECIFICATIONS

Reference Information

Packaging: Dependent on component
Designed in: Millimeters
RoHS: Compliant by exemption
Halogen Free: Varies by component
Mates With: M12 cordsets, receptacles and message passing interface (MPI) I/O blocks

Electrical

Voltage (max.):
2-, 3-, 4-pole—250V
5-pole—60V
8-, 12-pole—30V
Current (max.):
2-, 3-, 4-, 5-pole—4.0A
8-pole—2.0A
12-pole—1.5A

Mechanical

Coding: A-code, B-code, C-code (other coding options available for power and data applications)
Poles: 2, 3, 4, 5, 8, 12
Ingress Protection Rating: IP67
Durability (min.): 100 mating cycles

Physical

Coupling Nut: Brass, plastic, stainless steel
Insert: Plastic
Overmold: Plastic
O-Ring: FPM
Contact: Brass, copper alloy
Contact Plating: Gold over nickel
Operating Temperatures: -30 to +85°C
(with exceptions—depending on components used)