



M8/M12 CONNECTOR SYSTEM

TE CONNECTIVITY'S M8 / M12

Connector System for machine industrial automation and control applications provides a solution for the increasing needs of sensor connections that safely and reliably ensures the communication in industrial environments. This connector system also finds applications outside of its traditional industries where a compact reliable connection system with environmental protection is required. TE's solution includes an extensive connector range of PCB headers, cable assemblies and I/O boxes, and provides users with an interface that supports higher bandwidth needs - meeting the requirements of up to 10Gb/s.

TE Connectivity also offers shielded and un-shielded Cat5e and Cat6A cable assembly variants. A predefined offering in length of 1, 3, 5 and 10 meters covers a vast range of customer needs on the market. For rewiring on site a range of field serviceable connectors are provided, allowing versatile systems to be quickly and easily established. Additional styles are available on request including alternative mounting arrangements for panel mount connectors and double ended cable assemblies.



TE'S INDUSTRIAL COMMUNICATIONS PRODUCTS PLAY A VITAL ROLE IN FACTORY AUTOMATION.

TE's industrial Communications products are widespread throughout today's networked factories, and play a critical role in driving the efficiency of many manufacturing processes. Used extensively in material handling equip-

ment, our industrial communications solutions are also found throughout the automotive and food and beverage industries, as well as in the many manufacturing applications of industrial robots. With the development of smaller

industrial Ethernet products, TE's solutions are also ideal for vision systems, common in security equipment and mail sortation devices.

TE M8/M12 CONNECTOR SYSTEM – APPLICATIONS

MACHINERY



FACTORY AUTOMATION



TE's M8/M12 Connector System includes a broad range of straight, angled, LED and multi-position field installable and board connectors that are easily intermateable. Next to cable assemblies for Serial and Bus communication, TE also offers Industrial Ethernet patch cables with overmolded X-coded M12 connectors that are available for future proof applications with up to 10 Gb/s data transmission. Customized cable assemblies offer a solution for your specific needs in different lengths, temperatures or flexibility. When communication simply needs to work in industrial environments, TE's M8/M12 system and complete Industrial Communications portfolio offer proven reliability that meet industry standards. Whether it is for controllers and sensors or robotics and molding machines, the M8/M12 connector system offers you a solution that is time-saving, error-free and without the use of tools.

M8/M12 CABLE ASSEMBLIES

TE's M8/M12 cable assemblies are available as single-ended or double-ended and as straight or angled versions. Various cable types, colors and lengths offer a flexible design that can be used in combination with TE's male/female connectors and I/O Modules.

Standard (IEC):

IEC 61076-2-104 for all M8 series and
IEC 61076-2-101 for all M12 series

Operating temperature:

Connectors: -25°C to +85°C

Cables:

- PVC: -5°C to +80°C Flexible
-30°C to +80°C Fixed
- PUR: -25°C to +80°C (90°C max. 10.000h) Flexible
-40°C to +80°C (90°C max. 10.000h) Fixed

Connector Contacts:

Current rating per contact is 4 A

Shielding: Yes/No

Refer to drawing

Suitable Cable Diameter:

Refer to drawing

IP Rating:

IP65/67

Application Areas:

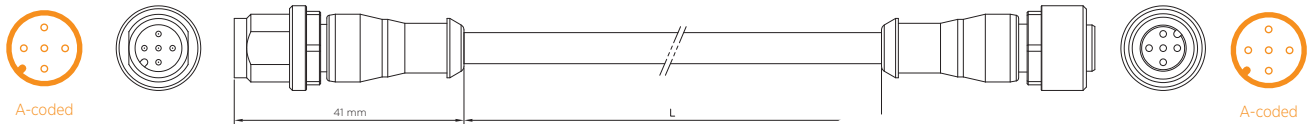
- PUR: For use in demanding environments with required resistance to oils, chemicals and abrasion
- PUR/PVC: For use assembly and production lines requiring higher cut, abrasion and chemical resistance
- PVC: For use in less demanding environments with required oil, chemical and lubricant resistance



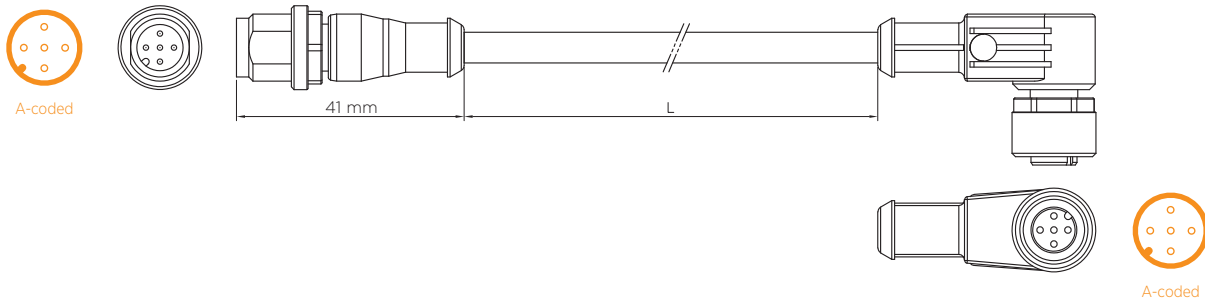
M12 to M12 Cable Assemblies

M12 Male to M12 Female Series

TE Part Number	Description	Available In
2273112	M12 Straight plug to M12 Straight socket Unshielded	3 positions PUR or PVC, Lengths: 0.3m / 0.6m / 1.0m / 1.5m / 2.0m
2273113	M12 Straight plug to M12 Straight socket Unshielded	4 positions PUR or PVC, Lengths: 0.3m / 0.6m / 1.0m / 1.5m / 2.0m
2273114	M12 Straight plug to M12 Straight socket Unshielded	5 positions PUR or PVC, Lengths: 0.3m / 0.6m / 1.0m / 1.5m / 2.0m
2273115	M12 Straight plug to M12 Straight socket Unshielded	8 positions PUR, Lengths: 0.3m / 0.6m / 1.0m / 1.5m / 2.0m



TE Part Number	Description	Available In
2273116	M12 Straight plug to M12 Angled socket Unshielded	3 positions PUR or PVC, Lengths: 0.3m / 0.6m / 1.0m / 1.5m / 2.0m
2273117	M12 Straight plug to M12 Angled socket Unshielded	4 positions PUR or PVC, Lengths: 0.3m / 0.6m / 1.0m / 1.5m / 2.0m
2273118	M12 Straight plug to M12 Angled socket Unshielded	5 positions PUR or PVC, Lengths: 0.3m / 0.6m / 1.0m / 1.5m / 2.0m



TE Part Number	Description	Available In
2273120	M12 Angled plug to M12 Straight socket Unshielded	3 positions PUR or PVC, Lengths: 0.3m / 0.6m / 1.0m / 1.5m / 2.0m
2273121	M12 Angled plug to M12 Straight socket Unshielded	4 positions PUR or PVC, Lengths: 0.3m / 0.6m / 1.0m / 1.5m / 2.0m
2273122	M12 Angled plug to M12 Straight socket Unshielded	5 positions PUR or PVC, Lengths: 0.3m / 0.6m / 1.0m / 1.5m / 2.0m

