# M8 / M12 CONNECTOR SYSTEM

## EVERY CONNECTION COUNTS

# TE CONNECTIVITY'S M8 / M12

Connector System for machine industrial automation and control applications provides a solution 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's broad product portfolio provides customers with shielded and unshielded cable assembly options in both Cat5e and Cat6A cable types. 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 ETHERNET PRODUCTS PLAY A VITAL ROLE IN FACTORY AUTOMATION.

TE's industrial Ethernet 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 equipment, 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.

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# M8/M12 CONNECTORS

TE's M8/M12 connectors continues to fill the ongoing needs for sensor connection in Industrial Machinery and Factory Automation. A connection standard for many years, these products also find applications outside of their traditional industries where a compact reliable connection system with environmental protection is required. TE's M8/M12 connector portfolio includes A, B, D, S, T, and X-coded (up to 10 Gigabit) versions to serve various customer needs.

The connectors are also available in shielded and unshielded versions, to support Gigabyte Ethernet applications.

## M8/M12 – THE CODINGS

| | | |
|---|---|---|
| A-coding: | Actuator-sensor plug connections for DeviceNet, IO link and Profibus | |
| B-coding: | Fieldbus connections for Profibus and Interbus | |
| D-coding: | Industrial Ethernet, Profinet, Ethernet/IP and EtherCat | |
| S-coding: | Motor, Frequency-convertors, motor operated switches, PSUs for Power, 620 V, 12 A | |
| T-coding: | Fieldbus comp, passive distribution boxes, motors, PSUs for Power, 63 V, 12 A | |
| X-coding: | Cat6A, high-speed 10Gbit rugged industrial Ethernet applications IEC 61076-2-109 | |

Ambient temperature for M8:
-40 °C to 85 °C
Ambient temperature for M12:
-40 °C to 85 °C
Current rating:
4 and 5 pins: 4 A per pin
8 and 12 pins: 2 A per pin
IP rating: IP67/IP68

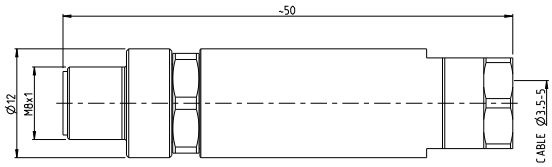
As specifications vary for different parts, please refer to your TE contact for detailed information.

Application Specifications for M8 M12 Connectors and Cable Assemblies:
114-32127
Product Specifications:
Connectors: 108-106140
X-coded: 108-137008

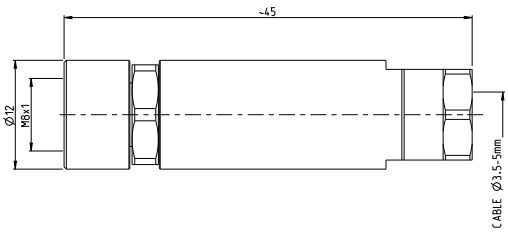
| Size | Pins | Rated | Maximum Current per pin | Polution grade |
|---|---|---|---|---|
| M8 | 3 | 60 V | 4 A | 3 |
| M8 | 4 | 30 V | 4 A | 3 |
| M12 | 3 | 250 V | 4 A | 3 |
| M12 | 4 | 250 V | 4 A | 3 |
| M12 | 5 | 125 V | 4 A | 3 |
| M12 | 8 | 60 V | 2 A | 3 |
| M12 | 12 | 30 V | 2 A | 3 |

# M8 Field Installable

## Male Series




## Female Series




All dimensions in mm.

| | | TE Part Number |
|---|---|---|
| **M8 Male Screw Connection, Straight** | | |
| 3-Pole | PG7 | 2120954-1 |
| 4-Pole | PG7 | 1-2120954-1 |

| **M8 Male Right Angle** | | |
|---|---|---|
| 3-Pole | PG7 | 2120955-1 |
| 4-Pole | PG7 | 1-2120955-1 |

| **M8 Male Panel, Solder, Front Mounting, M8 Fastening Thread** | | |
|---|---|---|
| 3-Pole | M8 | 2120958-1 |
| 4-Pole | M8 | 1-2120958-1 |

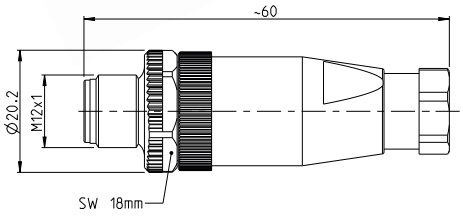
| | | TE Part Number |
|---|---|---|
| **M8 Female Screw Connection, Straight** | | |
| 3-Pole | PG7 | 2120956-1 |
| 4-Pole | PG7 | 1-2120956-1 |

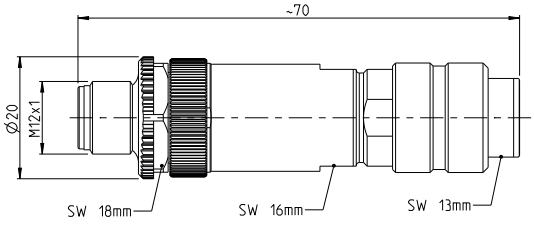
| **M8 Male Right Angle** | | |
|---|---|---|
| 3-Pole | PG7 | 2120957-1 |
| 4-Pole | PG7 | 1-2120957-1 |

| **M8 Male Panel, Solder, Front Mounting, M8 Fastening Thread** | | |
|---|---|---|
| 3-Pole | M8 | 2120959-1 |
| 4-Pole | M8 | 1-2120959-1 |

# M12 Straight Field Installable

## Male Series




All dimensions in mm.

| | | TE Part Number |
|---|---|---|
| **A coding – M12 Male Screw Connection, Straight** | | |
| 3-Pole | PG7 | 2-2271110-1 |
| | PG9 | 2-2271110-2 |
| 4-Pole | PG7 | 3-2271110-1 |
| | PG9 | 3-2271110-2 |
| 5-Pole | PG7 | 4-2271110-1 |
| | PG9 | 4-2271110-2 |
| 8-Pole | PG9 | 5-2271110-2 |
| 12-Pole | PG9 | 6-2271110-2 |

| | | |
|---|---|---|
| **B coding – M12 Male Screw Connection, Straight** | | |
| 4-Pole | PG7 | 3-2271112-1 |
| | PG9 | 3-2271112-2 |
| 5-Pole | PG7 | 4-2271112-1 |
| | PG9 | 4-2271112-2 |

| | | TE Part Number |
|---|---|---|
| **A coding – M12 Male Screw Connection, Straight, Shielded** | | |
| 4-Pole | PG7 | 3-2271111-2 |
| 5-Pole | PG7 | 4-2271111-2 |
| 8-Pole | PG7 | 5-2271111-2 |
| 12-Pole | PG9 | 6-2271111-2 |

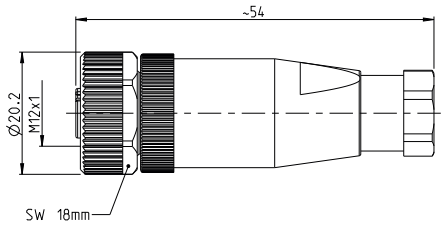
| | | |
|---|---|---|
| **B coding – M12 Male Screw Connection, Straight, Shielded** | | |
| 4-Pole | PG7 | 3-2271113-2 |
| 5-Pole | PG7 | 4-2271113-2 |

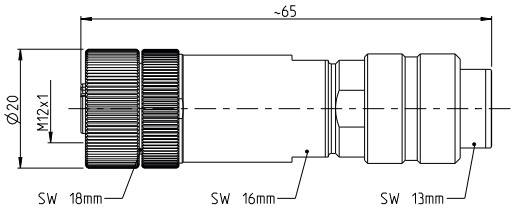
| | | |
|---|---|---|
| **D coding – M12 Male Screw Connection, Straight, Shielded** | | |
| 4-Pole | PG7 | 3-2271115-2 |

| | | |
|---|---|---|
| **S coding – M12 Male Screw Connection, Straight, Shielded** | | |
| 3-Pole | plus PE | 2120951-1 |

| | | |
|---|---|---|
| **T coding – M12 Male Screw Connection, Straight, Shielded** | | |
| 4-Pole | | 2120949-1 |

## Female Series




All dimensions in mm.

| | | TE Part Number |
|---|---|---|
| **A coding – M12 Female Screw Connection, Straight** | | |
| 3-Pole | PG7 | 2-2271116-1 |
| | PG9 | 2-2271116-2 |
| 4-Pole | PG7 | 3-2271116-1 |
| | PG9 | 3-2271116-2 |
| 5-Pole | PG7 | 4-2271116-1 |
| | PG9 | 4-2271116-2 |
| 8-Pole | PG9 | 5-2271116-2 |
| 12-Pole | PG9 | 6-2271116-2 |

| **B coding – M12 Female Screw Connection, Straight** | | |
|---|---|---|
| 4-Pole | PG7 | 3-2271118-1 |
| | PG9 | 3-2271118-2 |
| 5-Pole | PG7 | 4-2271118-1 |
| | PG9 | 4-2271118-2 |

| | | TE Part Number |
|---|---|---|
| **A coding – M12 Female Screw Connection, Straight, Shielded** | | |
| 4-Pole | PG9 | 3-2271117-2 |
| 5-Pole | PG9 | 4-2271117-2 |
| 8-Pole | PG9 | 5-2271117-2 |
| 12-Pole | PG9 | 6-2271117-2 |

| **B coding – M12 Female Screw Connection, Straight, Shielded** | | |
|---|---|---|
| 4-Pole | PG7 | 3-2271119-2 |
| 5-Pole | PG7 | 4-2271119-2 |

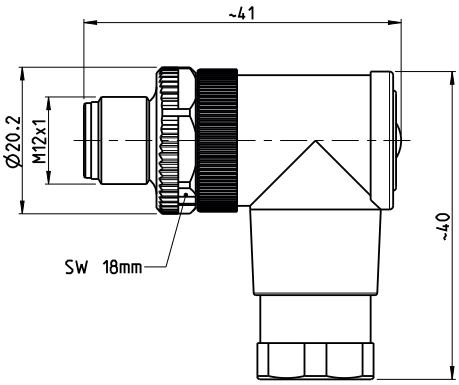
| **D coding – M12 Female Screw Connection, Straight, Shielded** | | |
|---|---|---|
| 4-Pole | PG7 | 3-2271121-2 |

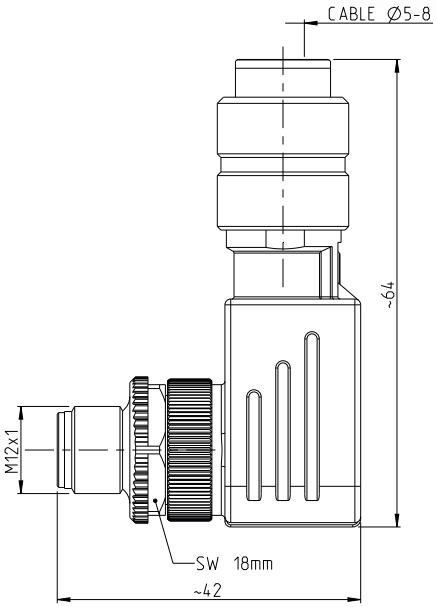
| **S coding – M12 Female Screw Connection, Straight, Shielded** | | |
|---|---|---|
| 3-Pole | plus PE | 2120950-1 |

| **T coding – M12 Female, Screw Connection, Straight, Shielded** | | |
|---|---|---|
| 4-Pole | | 2120948-1 |

# M12 Angled Field Installable

## Male Series




All dimensions in mm.

| | | TE Part Number |
|---|---|---|
| **A coding – M12 Male Screw Connection, Angled** | | |
| 3-Pole | PG7 | 2-2271122-1 |
| | PG9 | 2-2271122-2 |
| 4-Pole | PG7 | 3-2271122-1 |
| | PG9 | 3-2271122-2 |
| 5-Pole | PG7 | 4-2271122-1 |
| | PG9 | 4-2271122-2 |
| 8-Pole | PG9 | 5-2271122-2 |
| 12-Pole | PG9 | 6-2271122-2 |

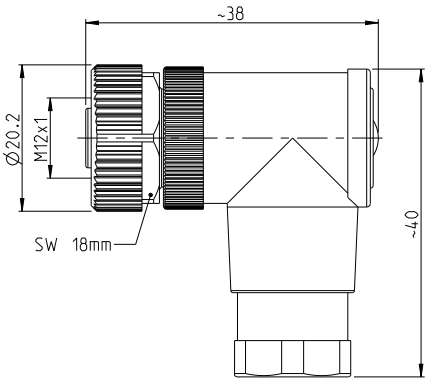
| **B coding – M12 Male Screw Connection, Angled** | | |
|---|---|---|
| 4-Pole | PG7 | 3-2271124-1 |
| | PG9 | 3-2271124-2 |
| 5-Pole | PG7 | 4-2271124-1 |
| | PG9 | 4-2271124-2 |

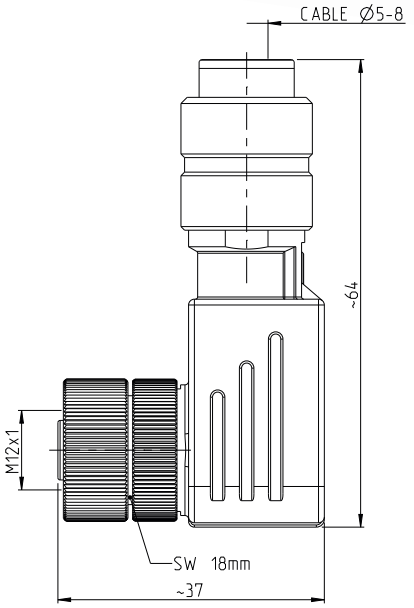
| | | TE Part Number |
|---|---|---|
| **A coding – M12 Male Screw Connection, Angled, Shielded** | | |
| 4-Pole | PG7 | 3-2271123-2 |
| 5-Pole | PG7 | 4-2271123-2 |
| 8-Pole | PG7 | 5-2271123-2 |
| 12-Pole | PG9 | 6-2271123-2 |

| **B coding – M12 Male Screw Connection, Angled, Shielded** | | |
|---|---|---|
| 4-Pole | PG7 | 3-2271125-2 |
| 5-Pole | PG7 | 4-2271125-2 |

| **D coding – M12 Male Screw Connection, Angled, Shielded** | | |
|---|---|---|
| 4-Pole | PG7 | 3-2271127-2 |
| | PG9 | 3-2271133-2 |

## Female Series




All dimensions in mm.

| | | TE Part Number |
|---|---|---|
| **A coding – M12 Female Screw Connection, Angled** | | |
| 3-Pole | PG7 | 2-2271128-1 |
| | PG9 | 2-2271128-2 |
| 4-Pole | PG7 | 3-2271128-1 |
| | PG9 | 3-2271128-2 |
| 5-Pole | PG7 | 4-2271128-1 |
| | PG9 | 4-2271128-2 |
| 8-Pole | PG9 | 5-2271128-2 |
| 12-Pole | PG9 | 6-2271128-2 |

| | | |
|---|---|---|
| **B coding – M12 Female Screw Connection, Angled** | | |
| 4-Pole | PG7 | 3-2271130-1 |
| | PG9 | 3-2271130-2 |
| 5-Pole | PG7 | 4-2271130-1 |
| | PG9 | 4-2271130-2 |

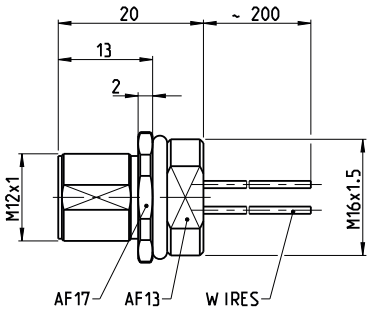
| | | TE Part Number |
|---|---|---|
| **A coding – M12 Female Screw Connection, Angled, Shielded** | | |
| 4-Pole | PG7 | 3-2271129-2 |
| 5-Pole | PG7 | 4-2271129-2 |
| 8-Pole | PG7 | 5-2271129-2 |
| 12-Pole | PG9 | 6-2271129-2 |

| | | |
|---|---|---|
| **B coding – M12 Female Screw Connection, Angled, Shielded** | | |
| 4-Pole | PG9 | 3-2271131-2 |
| 5-Pole | PG9 | 4-2271131-2 |

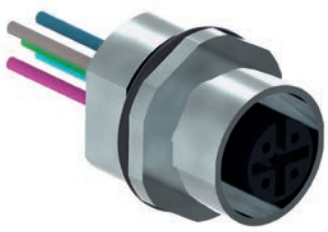
| | | |
|---|---|---|
| **D coding – M12 Female Screw Connection, Angled, Shielded** | | |
| 4-Pole | PG7 | 3-2271133-2 |

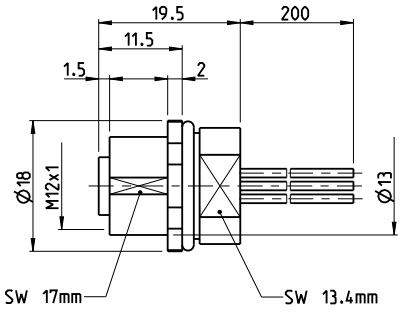
# M12 Panel Mount

## Male Series




## Female Series






All dimensions in mm.

| | | TE Part Number |
|---|---|---|
| **A coding<br>M12 Male, Front Mounting M16 x 1.5 with wires 0.25 200 mm** | | |
| 4-Pole | | 3-2271134-2 |
| 5-Pole | | 4-2271134-2 |
| 8-Pole | | 5-2271134-2 |
| 12-Pole | | 6-2271134-2 |

| | | TE Part Number |
|---|---|---|
| **A coding<br>M12 Female, Front Mounting M16 x 1.5 with wires 0.25 200 mm** | | |
| 4-Pole | | 3-2271137-2 |
| 5-Pole | | 4-2271137-2 |
| 8-Pole | | 5-2271137-2 |
| 12-Pole | | 6-2271137-2 |

| | | |
|---|---|---|
| **B coding<br>M12 Male, Front Mounting M16 x 1.5 with wires 0.25 200 mm** | | |
| 4-Pole | | 3-2271135-2 |
| 5-Pole | | 4-2271135-2 |

| | | |
|---|---|---|
| **B coding<br>M12 Female, Front Mounting M16 x 1.5 with wires 0.25 200 mm** | | |
| 4-Pole | | 3-2271138-2 |
| 5-Pole | | 4-2271138-2 |

| | | |
|---|---|---|
| **D coding<br>M12 Male, Front Mounting M16 x 1.5 with wires 0.25 200 mm** | | |
| 4-Pole | PG9 | 3-2271136-2 |

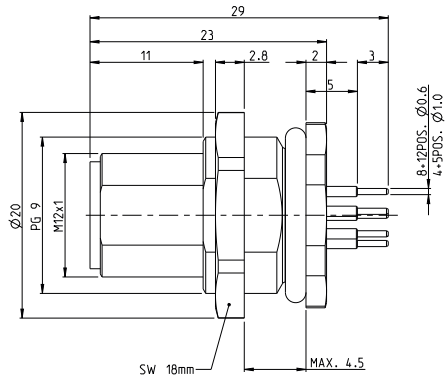
| | | |
|---|---|---|
| **D coding<br>M12 Female, Front Mounting M16 x 1.5 with wires 0.25 200 mm** | | |
| 4-Pole | | 3-2271139-2 |

| | | |
|---|---|---|
| **T coding<br>M12 Male, Front Mounting M20 x 1.5** | | |
| 4-Pole | | 2120947-1 |

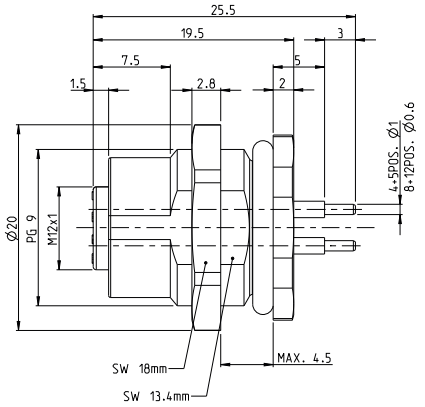
| | | |
|---|---|---|
| **T coding<br>M12 Female, Front Mounting M20 x 1.5** | | |
| 4-Pole | | 2120946-1 |

# M12 Panel Solder PCB Mount

## Male Series




## Female Series




All dimensions in mm.

| | | TE Part Number |
|---|---|---|
| **A coding<br>M12 Male, Rear Mounting M16 x 1.5, straight** | | |
| 4-Pole | PG9 | 3-2271140-2 |
| 5-Pole | PG9 | 4-2271140-2 |
| 8-Pole | PG9 | 5-2271140-2 |
| 12-Pole | PG9 | 6-2271140-2 |

| | | |
|---|---|---|
| **B coding<br>M12 Male, Rear Mounting M16 x 1.5, straight** | | |
| 4-Pole | PG9 | 3-2271141-2 |
| 5-Pole | PG9 | 4-2271141-2 |

| | | |
|---|---|---|
| **D coding<br>M12 Male, Rear Mounting M16 x 1.5, straight** | | |
| 4-Pole | PG9 | 3-2271142-2 |

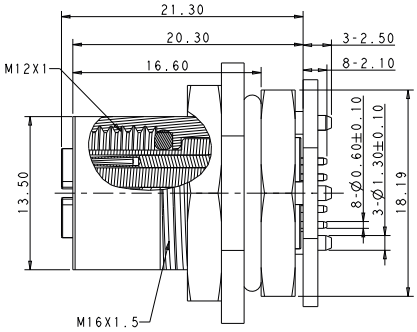
| | | TE Part Number |
|---|---|---|
| **A coding<br>M12 Female, Rear Mounting M16 x 1.5, straight** | | |
| 4-Pole | PG9 | 3-2271143-2 |
| 5-Pole | PG9 | 4-2271143-2 |
| 8-Pole | PG9 | 5-2271143-2 |
| 12-Pole | PG9 | 6-2271143-2 |

| | | |
|---|---|---|
| **B coding<br>M12 Female, Rear Mounting M16 x 1.5, straight** | | |
| 4-Pole | PG9 | 3-2271144-2 |
| 5-Pole | PG9 | 4-2271144-2 |

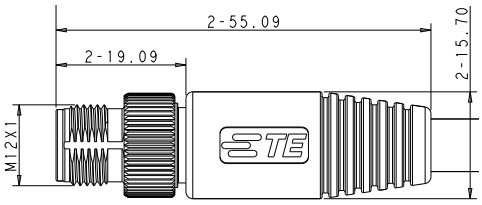
| | | |
|---|---|---|
| **D coding<br>M12 Female, Rear Mounting M16 x 1.5, straight** | | |
| 4-Pole | PG9 | 3-2271145-2 |

# M12 X-Coded Field Installable

## M12 X-Coded PCB Connector




## M12 Pin Connector Cable Assembly




All dimensions in mm.

| Description | TE Part Number |
|---|---|
| **M12 X-Coded PCB Connector** | |
| Female Panel Mount Solder PCB Connector | 2232331-1 |
| Female Panel Mount Solder Wire | 2271195-1 |
| Male Connector installable (IDC): 5.5 - 9 mm cable diameter | 2120952-1 |

| Length | TE Part Number |
|---|---|
| **M12 Pin Connector Cable Assembly** | |
| 1 m | 2241021-1 |
| 2 m | 2241021-2 |
| 3 m | 2241021-3 |
| 4 m | 2241021-4 |
| 5 m | 2241021-5 |
| 10 m | 2241021-6 |

# Connector Notes

# 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

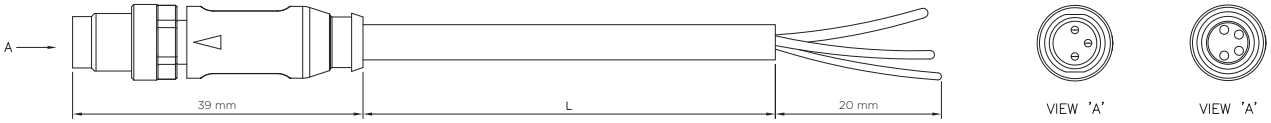
IP Rating:
IP65/67

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

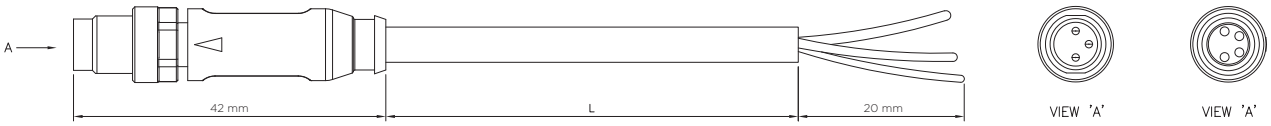
# M8 Cable Assemblies

## M8 Series Male

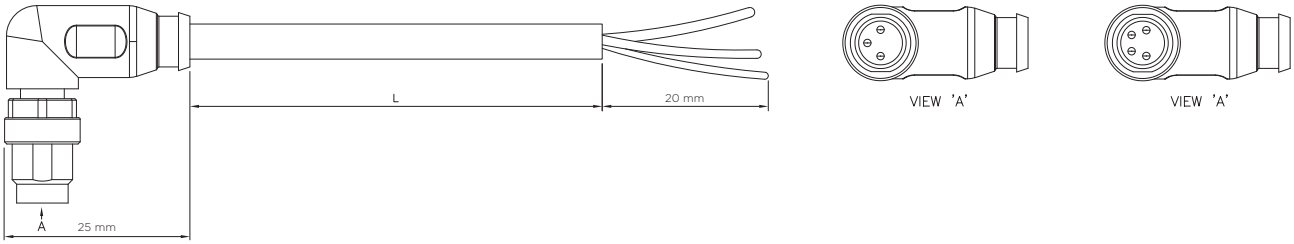
| TE Part Number | Description | Available In |
|---|---|---|
| 2273000 | M8 x 1.0 Straight plug Pigtail | 3 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |
| 2273002 | M8 x 1.0 Straight plug Pigtail | 4 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |



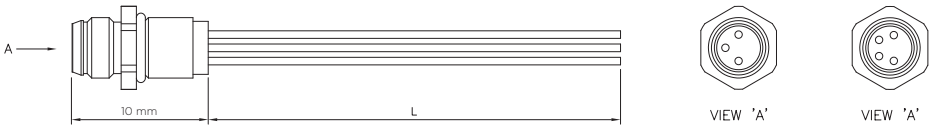

| TE Part Number | Description | Available In |
|---|---|---|
| 2273004 | M8 x 1.0 Straight plug Pigtail Shielded | 3 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |
| 2273006 | M8 x 1.0 Straight plug Pigtail | 4 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |




| TE Part Number | Description | Available In |
|---|---|---|
| 2273008 | M8 x 1.0 Angled plug Pigtail | 3 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |
| 2273010 | M8 x 1.0 Angled plug Pigtail | 4 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |



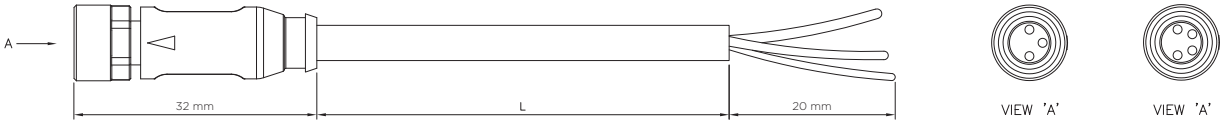

| TE Part Number | Description | Available In |
|---|---|---|
| 2273014 | M8 Male Panel Mount Rear | 3 positions Panel Mount, Lengths: 0.2 m |
| 2273230 | M8 Male Panel Mount Rear | 4 positions Panel Mount, Length: 0.2 m |



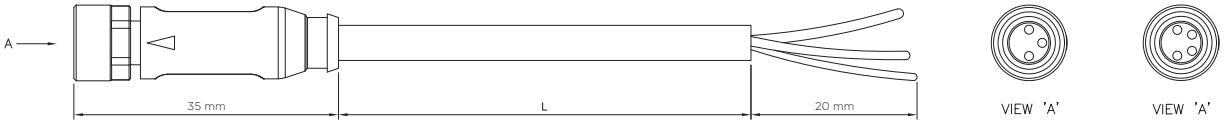
# M8 Cable Assemblies

## M8 Series Female

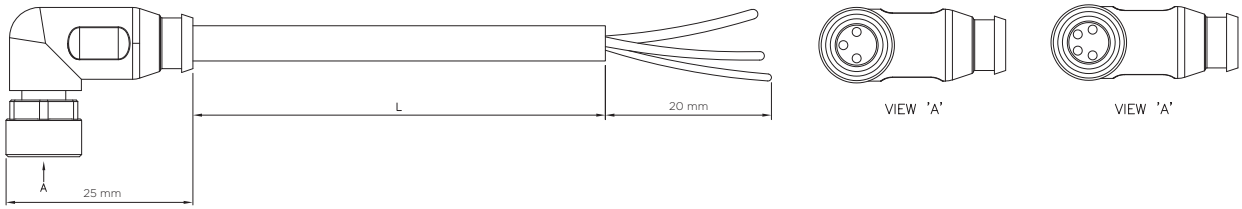
| TE Part Number | Description | Available In |
|---|---|---|
| 2273001 | M8 x 1.0 Straight socket Pigtail | 3 and 4 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |



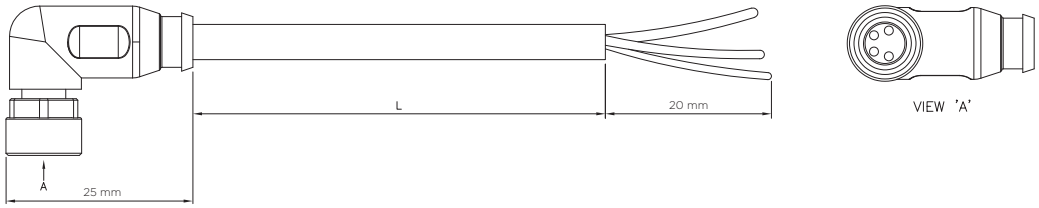

| TE Part Number | Description | Available In |
|---|---|---|
| 2273005 | M8 x 1.0 Straight socket Pigtail Shielded | 3 and 4 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |



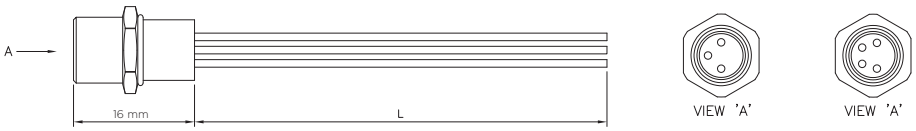

| TE Part Number | Description | Available In |
|---|---|---|
| 2273009 | M8 x 1.0 Angled socket Pigtail | 3 and 4 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |




| TE Part Number | Description | Available In |
|---|---|---|
| 2273012 | M8 x 1.0 Angled socket Pigtail LED | 4 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |



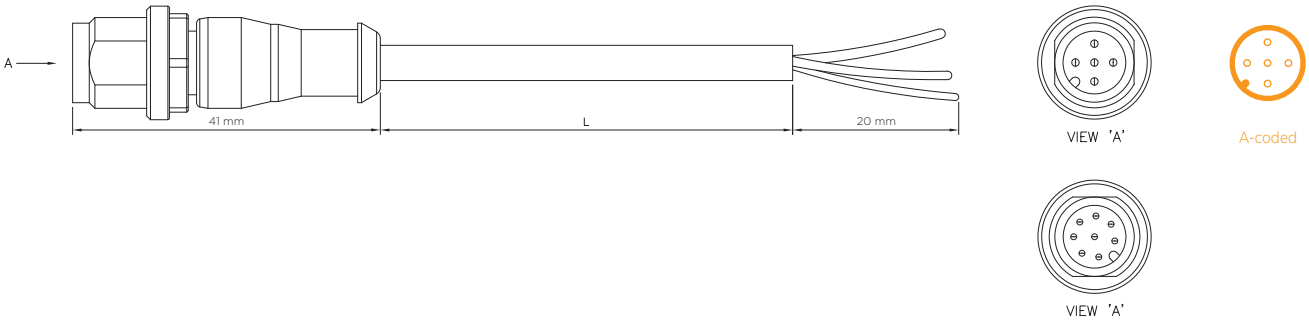

| TE Part Number | Description | Available In |
|---|---|---|
| 2273013 | M8 Female Panel Mount Rear | 3 positions Panel Mount, Length: 0.2 m |
| 2273015 | M8 Female Panel Mount Rear | 4 positions Panel Mount, Length: 0.2 m |



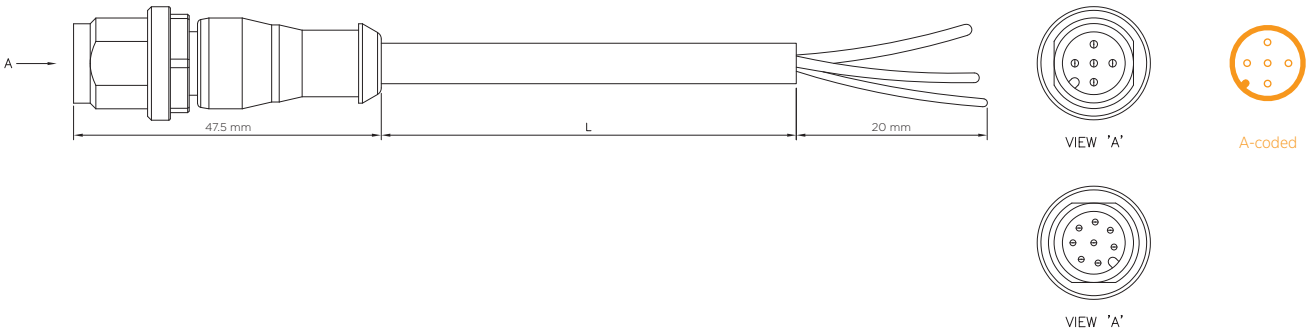
# M12 Cable Assemblies

## M12 Series Male Straight

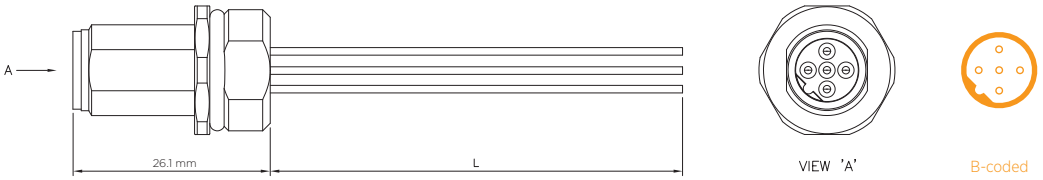
| TE Part Number | Description | Available In |
|---|---|---|
| 2273022 | M12 x 1.0 Straight plug Pigtail Unshielded | 3 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |
| 2273028 | M12 x 1.0 Straight plug Pigtail Unshielded | 4 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |
| 2273034 | M12 x 1.0 Straight plug Pigtail Unshielded | 5 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |
| 2273040 | M12 x 1.0 Straight plug Pigtail Unshielded | 8 positions PUR, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |




| TE Part Number | Description | Available In |
|---|---|---|
| 2273042 | M12 x 1.0 Straight plug Pigtail Shielded | 3 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |
| 2273044 | M12 x 1.0 Straight plug Pigtail Shielded | 4 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |
| 2273046 | M12 x 1.0 Straight plug Pigtail Shielded | 5 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |
| 2273048 | M12 x 1.0 Straight plug Pigtail Shielded | 8 positions PUR, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |



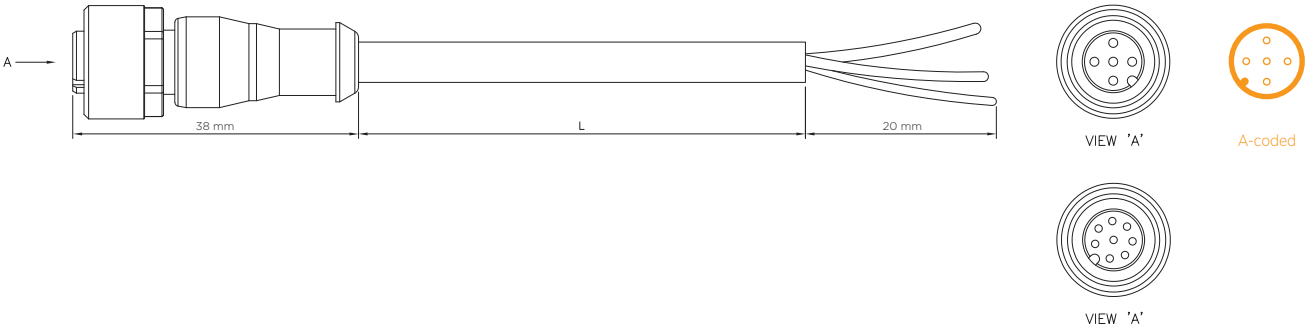

| TE Part Number | Description | Available In |
|---|---|---|
| 2273051 | M12 Male Panel Mount Rear | 4 positions PVC, Lengths: 0.2 m |
| 2273052 | M12 Male Panel Mount Rear | 5 positions PVC, Length: 0.2 m |



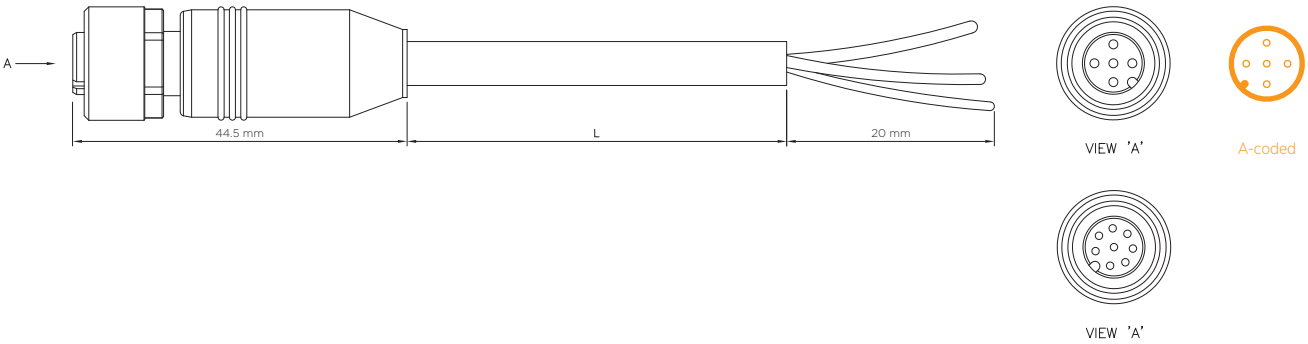
# M12 Cable Assemblies

## M12 Series Female Straight

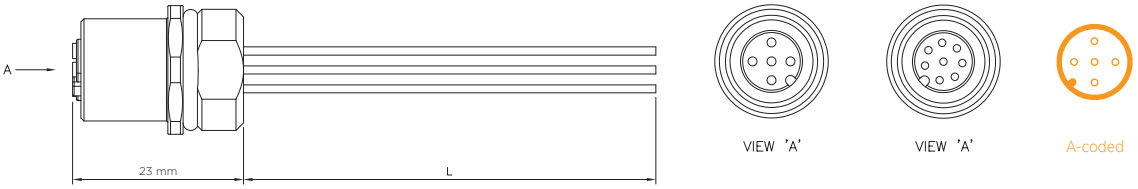
| TE Part Number | Description | Available In |
|---|---|---|
| 2273023 | M12 x 1.0 Straight socket Pigtail Unshielded | 3 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |
| 2273029 | M12 x 1.0 Straight socket Pigtail Unshielded | 4 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |
| 2273035 | M12 x 1.0 Straight socket Pigtail Unshielded | 5 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |
| 2273041 | M12 x 1.0 Straight socket Pigtail Unshielded | 8 positions PUR, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |




| TE Part Number | Description | Available In |
|---|---|---|
| 2273043 | M12 x 1.0 Straight socket Pigtail Shielded | 3 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |
| 2273045 | M12 x 1.0 Straight socket Pigtail Shielded | 4 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |
| 2273047 | M12 x 1.0 Straight socket Pigtail Shielded | 5 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |
| 2273049 | M12 x 1.0 Straight socket Pigtail Shielded | 8 positions PUR, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |

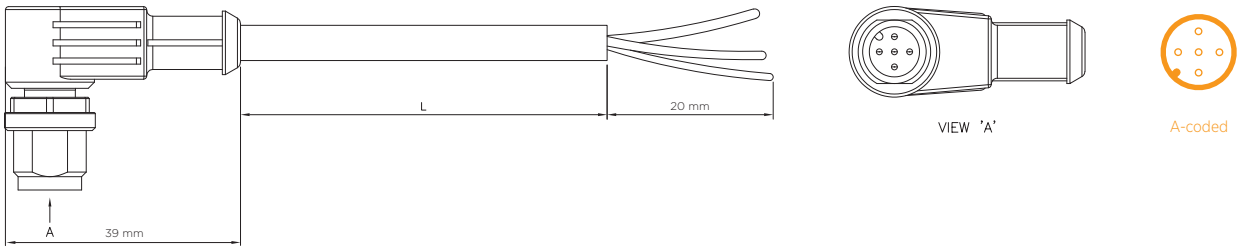



| TE Part Number | Description | Available In |
|---|---|---|
| 2273054 | M12 Female Panel Mount Rear | 4 positions PUR, Length: 0.2 m |
| 2273055 | M12 Female Panel Mount Rear | 5 positions PUR, Length: 0.2 m |

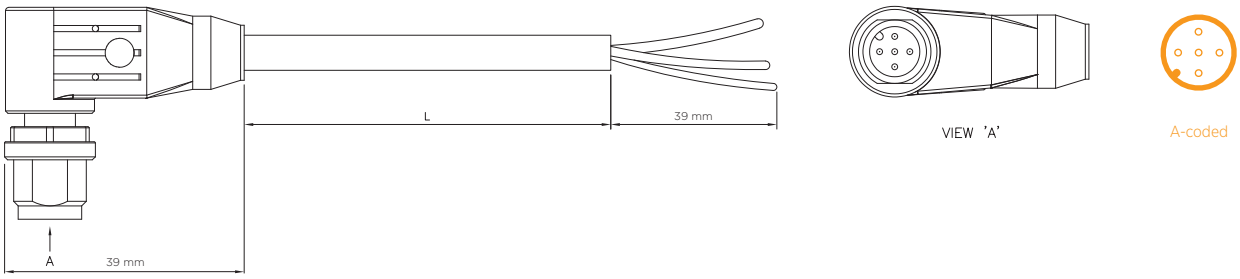


## M12 Series Male Angled

| TE Part Number | Description | Available In |
|---|---|---|
| 2273076 | M12 x 1.0 Angled plug Pigtail Unshielded | 3 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |
| 2273082 | M12 x 1.0 Angled plug Pigtail Unshielded | 4 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |
| 2273088 | M12 x 1.0 Angled plug Pigtail Unshielded | 5 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |
| 2273094 | M12 x 1.0 Angled plug Pigtail Unshielded | 8 positions PUR, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |



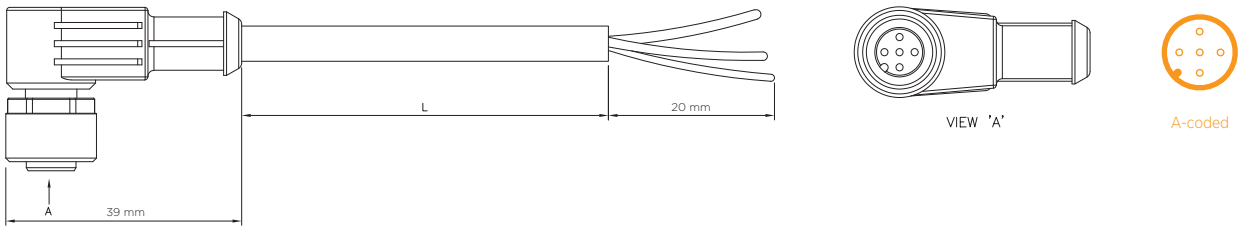

| TE Part Number | Description | Available In |
|---|---|---|
| 2273096 | M12 x 1.0 Angled plug Pigtail Shielded | 3 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |
| 2273098 | M12 x 1.0 Angled plug Pigtail Shielded | 4 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |
| 2273100 | M12 x 1.0 Angled plug Pigtail Shielded | 5 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |
| 2273102 | M12 x 1.0 Angled plug Pigtail Shielded | 8 positions PUR, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |



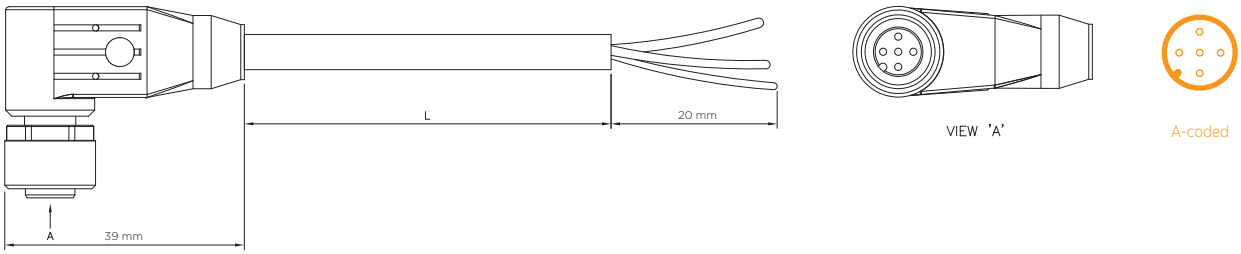
# M12 Cable Assemblies

## M12 Series Female Angled

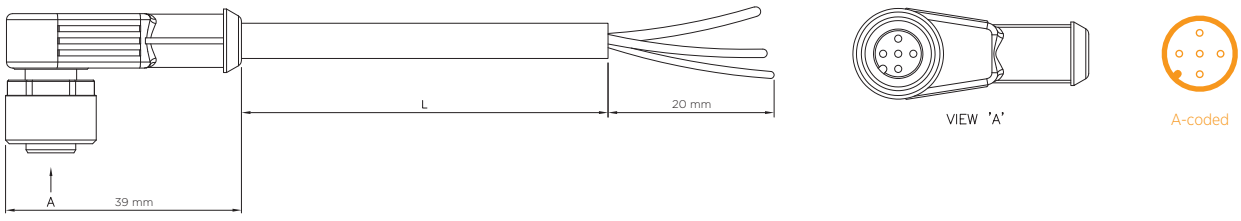
| TE Part Number | Description | Available In |
|---|---|---|
| 2273077 | M12 x 1.0 Angled socket Pigtail Unshielded | 3 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |
| 2273083 | M12 x 1.0 Angled socket Pigtail Unshielded | 4 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |
| 2273089 | M12 x 1.0 Angled socket Pigtail Unshielded | 5 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |
| 2273095 | M12 x 1.0 Angled socket Pigtail Unshielded | 8 positions PUR, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |




| TE Part Number | Description | Available In |
|---|---|---|
| 2273097 | M12 x 1.0 Straight socket Pigtail Shielded | 3 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |
| 2273099 | M12 x 1.0 Straight socket Pigtail Shielded | 4 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |
| 2273101 | M12 x 1.0 Straight socket Pigtail Shielded | 5 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |
| 2273103 | M12 x 1.0 Straight socket Pigtail Shielded | 8 positions PUR, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |

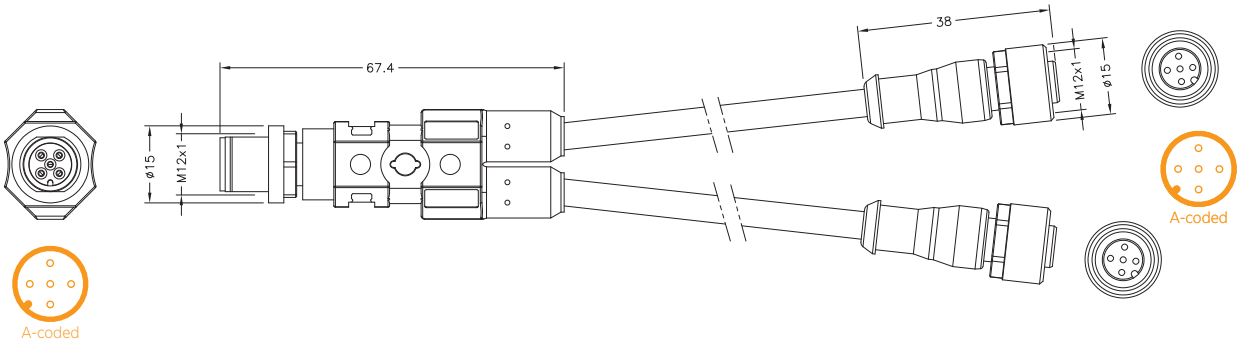



| TE Part Number | Description | Available In |
|---|---|---|
| 2273104 | M12 x 1.0 Straight socket Pigtail Shielded LED | 4 positions PUR, 2 LED, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |
| 2273105 | M12 x 1.0 Straight socket Pigtail Shielded LED | 4 positions PUR or PVC, 3 LED, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m |



## M12 Series Male to Female Y-cables

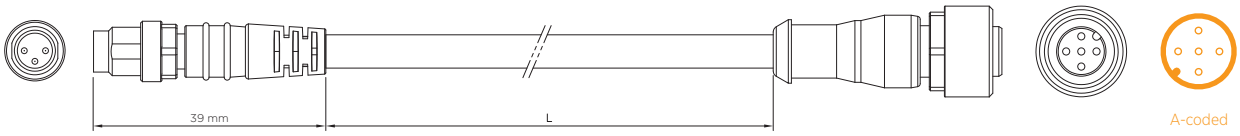
| TE Part Number | Description | Available In |
|---|---|---|
| 2273107 | M12 Y conn Male to 2 x M12 Female A | 4 positions PUR or PVC, Lengths: 0.3 m / 0.6 m / 1.0 m / 1.5 m / 2.0 m |




# M8 to M12 Cable Assemblies

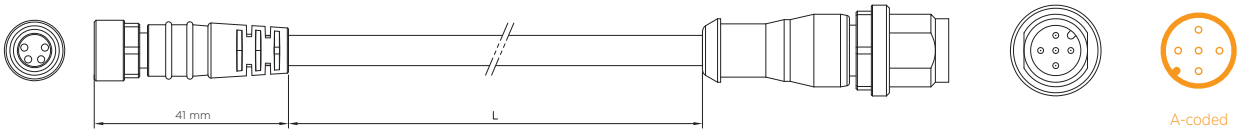
## M8 Male to M12 Female Series

| TE Part Number | Description | Available In |
|---|---|---|
| 2273108 | M8 Straight plug to<br>M12 Straight socket Unshielded | 3 positions PUR or PVC, Lengths: 0.3 m / 0.6 m / 1.0 m / 1.5 m / 2.0 m |
| 2273109 | M8 Strght plug to<br>M12 Straight socket Unshielded | 4 positions PUR or PVC, Lengths: 0.3 m / 0.6 m / 1.0 m / 1.5 m / 2.0 m |




## M8 Female to M12 Male Series

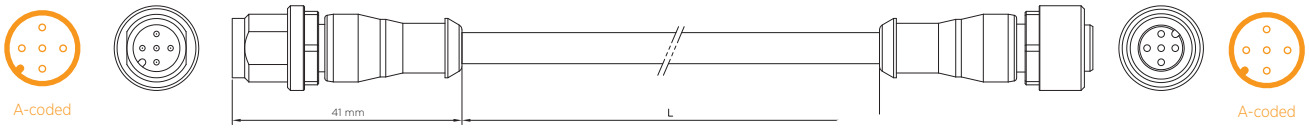
| TE Part Number | Description | Available In |
|---|---|---|
| 2273110 | M8 Straight socket to<br>M12 Straight plug Unshielded | 3 positions PUR or PVC, Lengths: 0.3 m / 0.6 m / 1.0 m / 1.5 m / 2.0 m |
| 2273111 | M8 Straight socket to<br>M12 Straight plug Unshielded | 4 positions PUR or PVC, Lengths: 0.3 m / 0.6 m / 1.0 m / 1.5 m / 2.0 m |



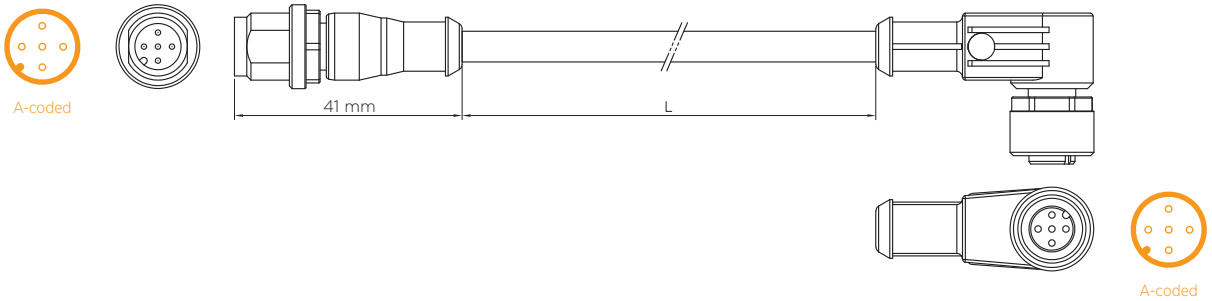
# M12 to M12 Cable Assemblies

## M12 Male to M12 Female Series

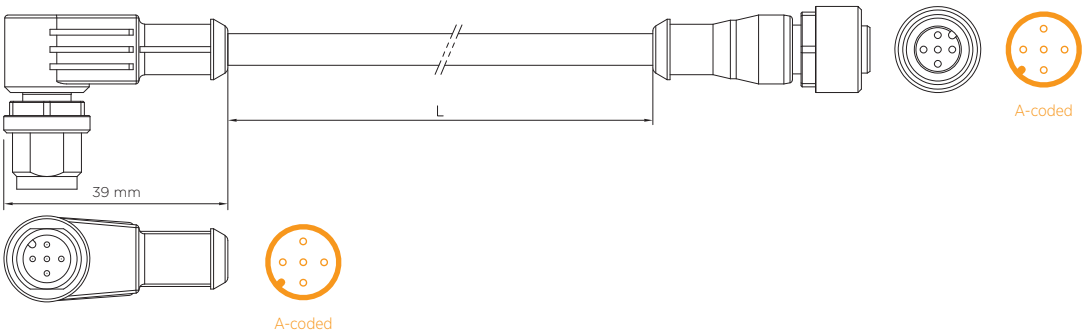
| TE Part Number | Description | Available In |
|---|---|---|
| 2273112 | M12 Straight plug to<br>M12 Straight socket Unshielded | 3 positions PUR or PVC, Lengths: 0.3 m / 0.6 m / 1.0 m / 1.5 m / 2.0 m |
| 2273113 | M12 Straight plug to<br>M12 Straight socket Unshielded | 4 positions PUR or PVC, Lengths: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




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



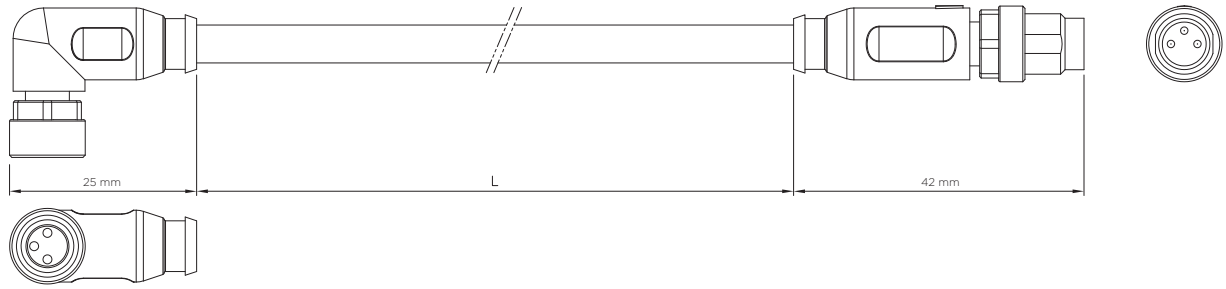

| TE Part Number | Description | Available In |
|---|---|---|
| 2273120 | M12 Angled plug to<br>M12 Straight socket Unshielded | 3 positions PUR or PVC, Lengths: 0.3 m / 0.6 m / 1.0 m / 1.5 m / 2.0 m |
| 2273121 | M12 Angled plug to<br>M12 Straight socket Unshielded | 4 positions PUR or PVC, Lengths: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



# M8 to M8 Cable Assemblies

## M8 Female to M8 Male Series LED

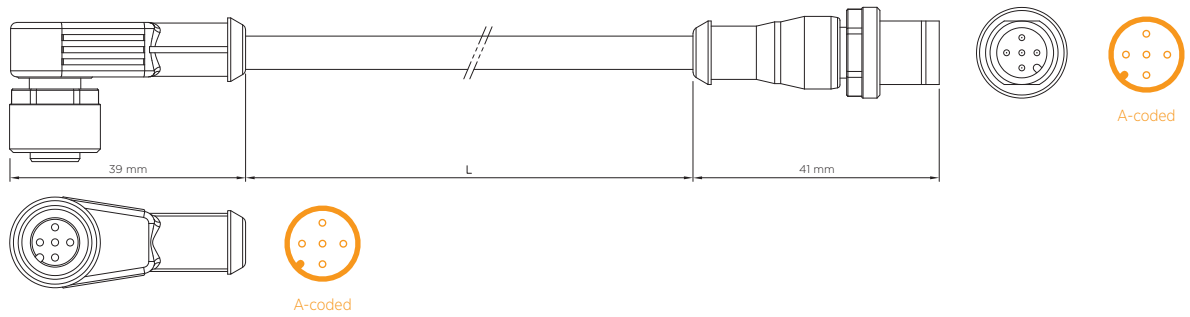
| TE Part Number | Description | Available In |
|---|---|---|
| 2273124 | M8 Angled socket to M8 Straight plug 2 LED | 3 positions PUR, PVC, PUR/PVC and Welding Spark resistant<br>Lengths: 0.3 m / 0.6 m / 1.0 m / 1.5 m / 2.0 m |



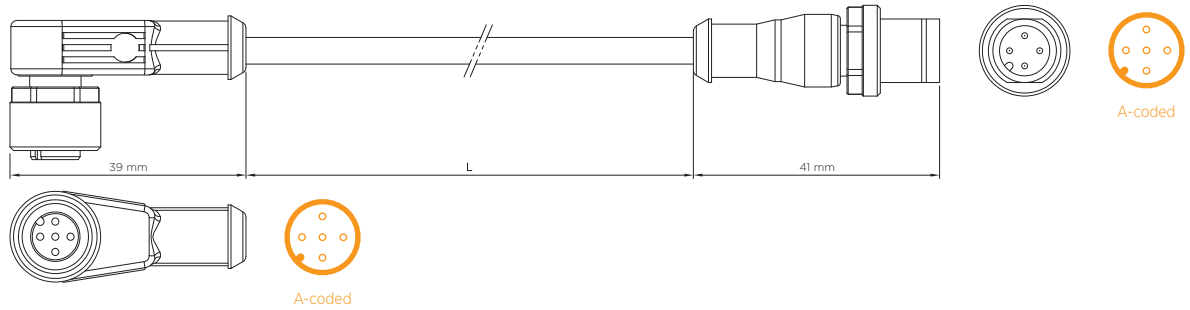

# M12 to M12 Cable Assemblies

## M12 Female to M12 Male Series LED

| TE Part Number | Description | Available In |
|---|---|---|
| 2273125 | M12 Angled socket to M12 Straight plug 2 LED | 3 positions PUR, PVC, PUR/PVC and Welding Spark resistant<br>Lengths: 0.3 m / 0.6 m / 1.0 m / 1.5 m / 2.0 m |




| TE Part Number | Description | Available In |
|---|---|---|
| 2273126 | M12 Angled socket to M12 Straight plug 3 LED | 4 positions PUR, PVC, PUR/PVC and Welding Spark resistant<br>Lengths: 0.3 m / 0.6 m / 1.0 m / 1.5 m / 2.0 m |
| 2273127 | M12 Angled socket to M12 Straight plug 3 LED | 5 positions PUR or PVC, PUR/PVC and Welding Spark resistant<br>Lengths: 0.3 m / 0.6 m / 1.0 m / 1.5 m / 2.0 m |



# Cable Assembly Notes

# I/O MODULES

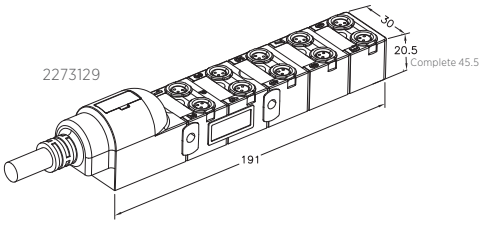
Complementary to the M8/M12 cable assemblies and connectors, TE offers compact I/O modules for Industrial applications. The I/O modules are well accepted in the Industrial Automation industry and the concept of TE's I/O modules is simple, efficient and cost effective.

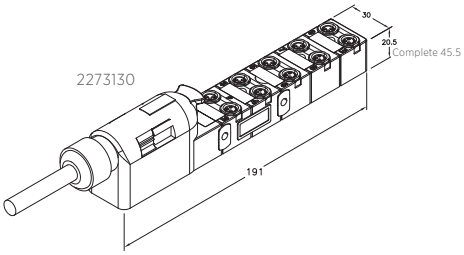
| | |
|---|---|
| Standard (IEC): | IEC 61076-2-104 for all M8 series and IEC 61076-2-101 for all M12 series |
| Ambient temperature: | -25°C to +85°C for the connectors (for cable assemblies please refer to specific drawings) |
| Connector Contacts: | Current rating per contact is 4 A |
| Shielding: Yes/No | Refer to drawing |
| Suitable Cable Diameter: | Refer to drawing |
| IP Rating: | IP65/67 |
| Sensor Type: | PNP |

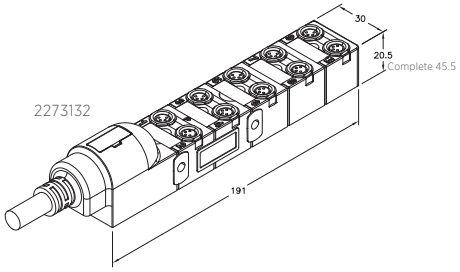
# M8 – With Cables

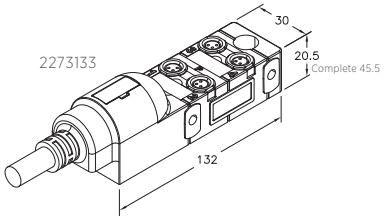
## M8 Series

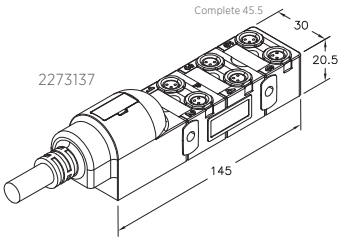
| Description | Positions | TE Part Number |
|---|---|---|
| PUR cable 3.0 m | 3pos 10way | 2273129-1 |
| PUR cable 5.0 m | 3pos 10way | 2273129-2 |
| PUR cable 10.0 m | 3pos 10way | 2273129-3 |
| PUR cable 15.0 m | 3pos 10way | 2273129-4 |
| PUR/PVC cable 3.0 m | 3pos 10way | 2-2273129-1 |
| PUR/PVC cable 10.0 m | 3pos 10way | 2-2273129-2 |
| PUR cable 5.0 m | 3pos 10way | 2273130-1 |
| PUR cable 3.0 m | 4pos 10way | 2273132-1 |
| PUR cable 10.0 m | 4pos 10way | 2273132-2 |
| PUR/PVC cable 3.0 m | 4pos 10way | 1-2273132-1 |
| PUR/PVC cable 10.0 m | 4pos 10way | 1-2273132-2 |
| PUR cable 5.0 m | 3pos 4way | 2273133-1 |
| PUR cable 10.0 m | 3pos 4way | 2273133-2 |
| PUR/PVC cable 5.0 m | 3pos 4way | 1-2273133-1 |
| PUR/PVC cable 5.0 m | 3pos 6way | 2273137-1 |
| PUR cable 3.0 m | 3pos 6way | 2273138-1 |
| PUR cable 5.0 m | 3pos 6way | 2273138-2 |
| PUR/PVC cable 3.0 m | 3pos 8way | 2273142-1 |
| PUR/PVC cable 5.0 m | 3pos 8way | 2273142-2 |
| PUR/PVC cable 10.0 m | 3pos 8way | 2273142-3 |
| PUR cable 3.0 m | 3pos 8way | 1-2273142-1 |
| PUR cable 5.0 m | 3pos 8way | 1-2273142-2 |
| PUR cable 10.0 m | 3pos 8way | 1-2273142-3 |
| PUR cable 15.0 m | 3pos 8way | 1-2273142-4 |
| PUR cable 5.0 m | 3pos 8way | 2273144-1 |
| PUR cable 10.0 m | 3pos 8way | 2273144-2 |

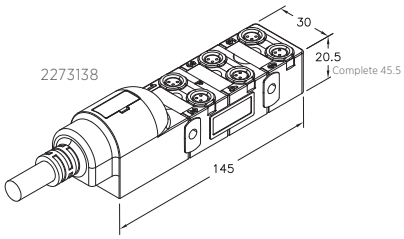


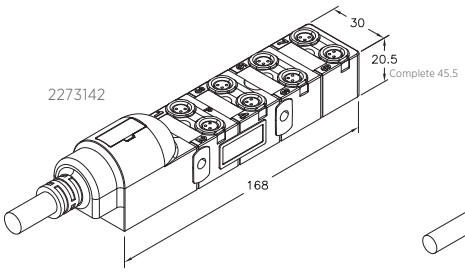



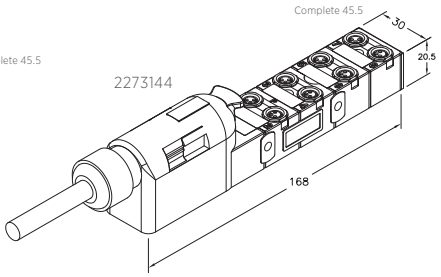



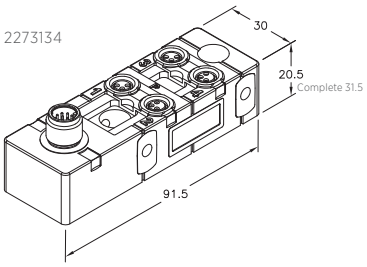



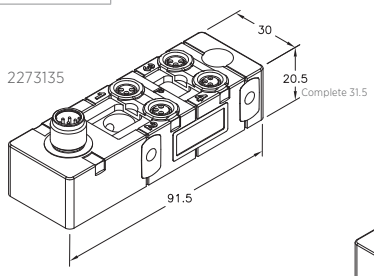

All dimensions in mm.

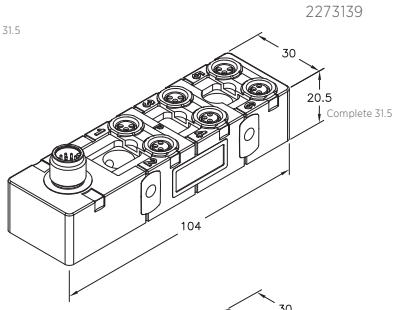
# M8 – With M12 Plug Connection

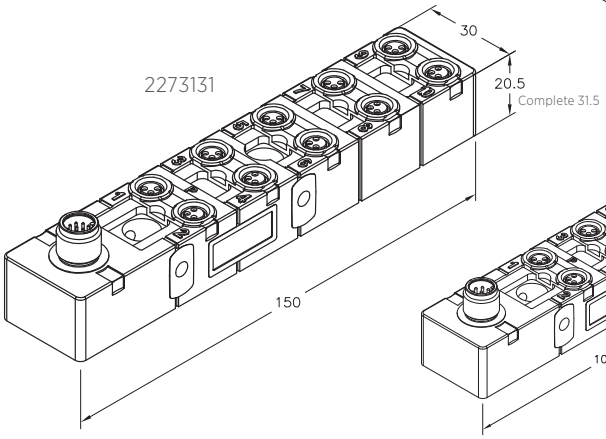
## M8 Series

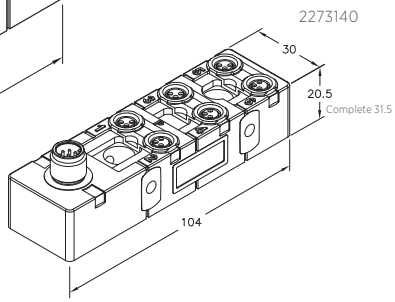
| Description | Positions | TE Part Number |
|---|---|---|
| Dist. box M8 3pos 10way M12 | 12 pos. conn | 2273131-1 |
| Dist. box M8 3pos 04way M12 | 12 pos.conn | 2273134-1 |
| Dist. box M8 3pos 04way M12 | 8 pos. conn | 2273135-1 |
| Dist. box M8 3pos 06way M12 | 12 pos. conn | 2273139-1 |
| Dist. box M8 3pos 06way M12 | 8 pos. conn | 2273140-1 |
| Dist. box M8 3pos 08way M12 | 12 pos. conn | 2273146-1 |

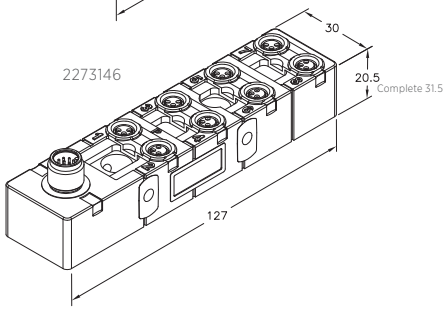


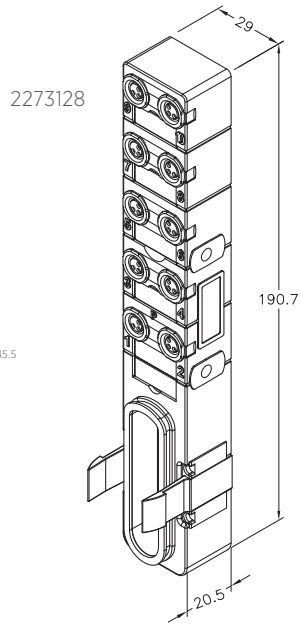



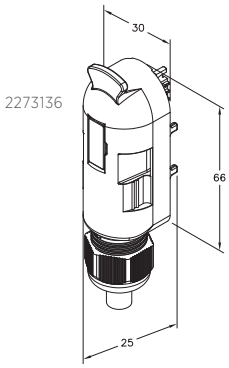



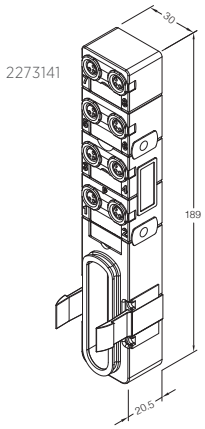

# M8 – For Homerun Connection

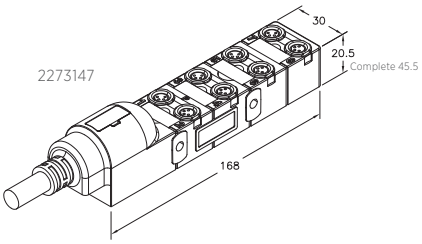
## M8 Series

| Description | Positions | TE Part Number |
|---|---|---|
| Distr box M8 3pos 10way PNP | 3pos 10way | 2273128-1 |
| Distr box M8 connection cap no cable | Nil | 2273136-1 |
| Inline or side mounting | 3pos 8way | 2273141-1 |
| PUR cable 3.0 m | 4pos 8way | 2273147-1 |



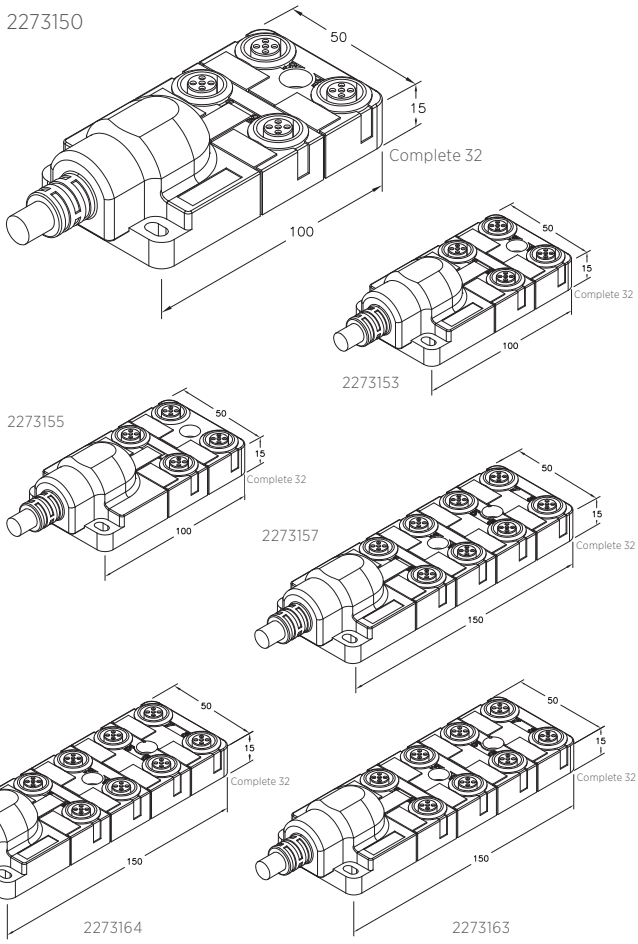




All dimensions in mm.

# M12 – With Cable

## M12 Series

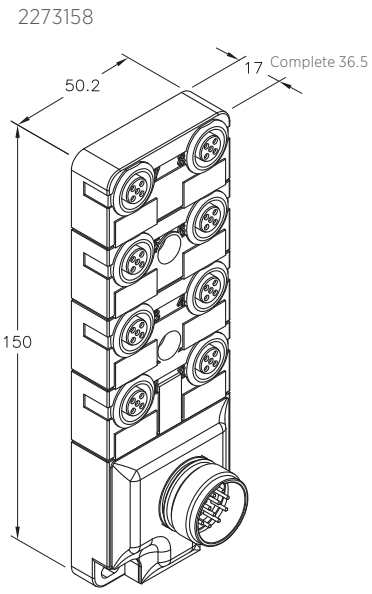
| Description | Positions | TE Part Number |
|---|---|---|
| PUR/PVC cable 5.0 m | 4pos 4way | 2273150-1 |
| PUR/PVC cable 10.0 m | 4pos 4way | 2273150-2 |
| PUR/PVC cable 5.0 m | 5pos 4way | 2273153-1 |
| PUR/PVC cable 10.0 m | 5pos 4way | 2273153-2 |
| With PUR/PV Homerun Cable 10.0 m | 5pos 4way | 2273155-1 |
| PUR/PVC cable 3.0 m | 4pos 8way | 2273157-1 |
| PUR/PVC cable 5.0 m | 4pos 8way | 2273157-2 |
| PUR/PVC cable 10.0 m | 4pos 8way | 2273157-3 |
| PUR/PVC cable 15.0 m | 4pos 8way | 2273157-4 |
| PUR/PVC cable 3.0 m | 5pos 8way | 2273163-1 |
| PUR/PVC cable 5.0 m | 5pos 8way | 2273163-2 |
| PUR/PVC cable 10.0 m | 5pos 8way | 2273163-3 |
| PUR/PVC cable 15.0 m | 5pos 8way | 2273163-4 |
| PUR/PVC cable 20.0 m | 5pos 8way | 2273163-5 |
| PUR cable 3.0 m | 5pos 8way | 1-2273163-1 |
| PUR cable 5.0 m | 5pos 8way | 1-2273163-2 |
| PUR cable 10.0 m | 5pos 8way | 1-2273163-3 |
| PUR cable 15.0 m | 5pos 8way | 1-2273163-4 |
| PUR cable 20.0 m | 5pos 8way | 1-2273163-5 |
| PUR/PVC cable 5.0 m | 5pos 8way | 2273164-1 |

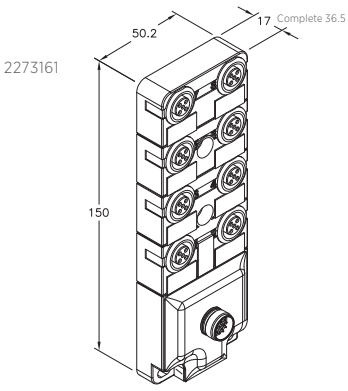


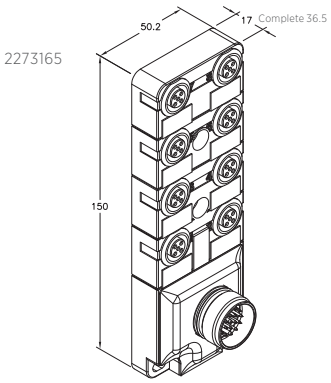

# M12 – With M12/M23 Plug Connection

## M12 Series

| Description | Positions | TE Part Number |
|---|---|---|
| Without homerun cable | 4pos 8way | 2273158-1 |
| Distr box M12 4-5pos 8way M12/12p PNP | 4-5pos 8way | 2273161-1 |
| Distr box M12 5pos 4way M23/19p PNP | 5pos 4way | 2273165-1 |



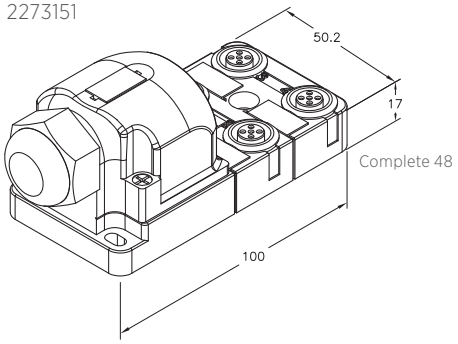



# M12 – No Cable/With Cable Gland

## M12 Series

| Description | Positions | TE Part Number |
|---|---|---|
| With plug cap | 4pos 4way | 2273151-1 |
| Without homerun cable | 5pos 4way | 2273152-1 |
| With plug cap | 5pos 4way | 2273154-1 |
| Without homerun cable | 4pos 8way | 2273156-1 |
| With plug cap | 4pos 8way | 2273159-1 |
| With plug cap | 4pos 8way | 2273160-1 |
| Without homerun cable | 5pos 8way | 2273162-1 |
| With plug cap | 5pos 8way | 2273166-1 |
| With plug cap | 5pos 8way | 2273167-1 |

2273151

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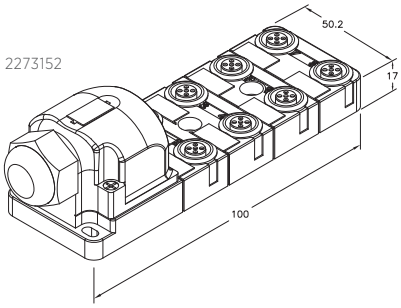


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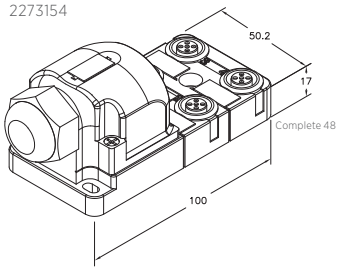


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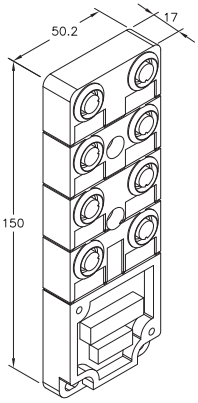


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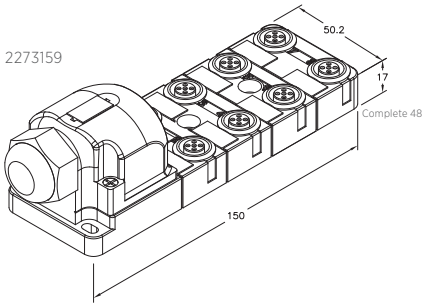


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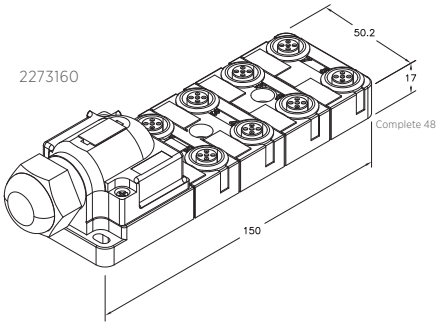


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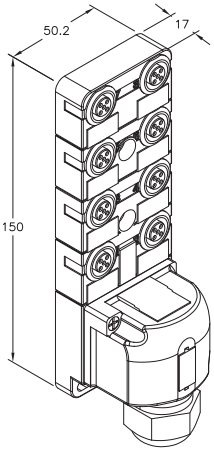


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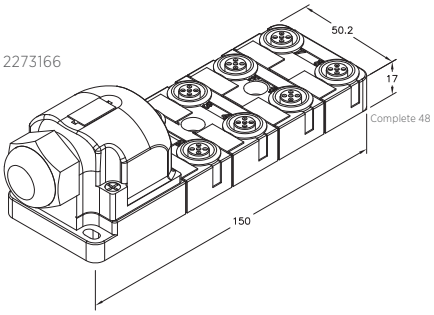


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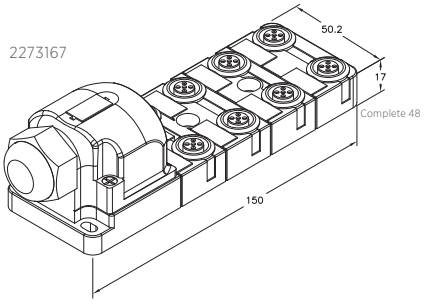
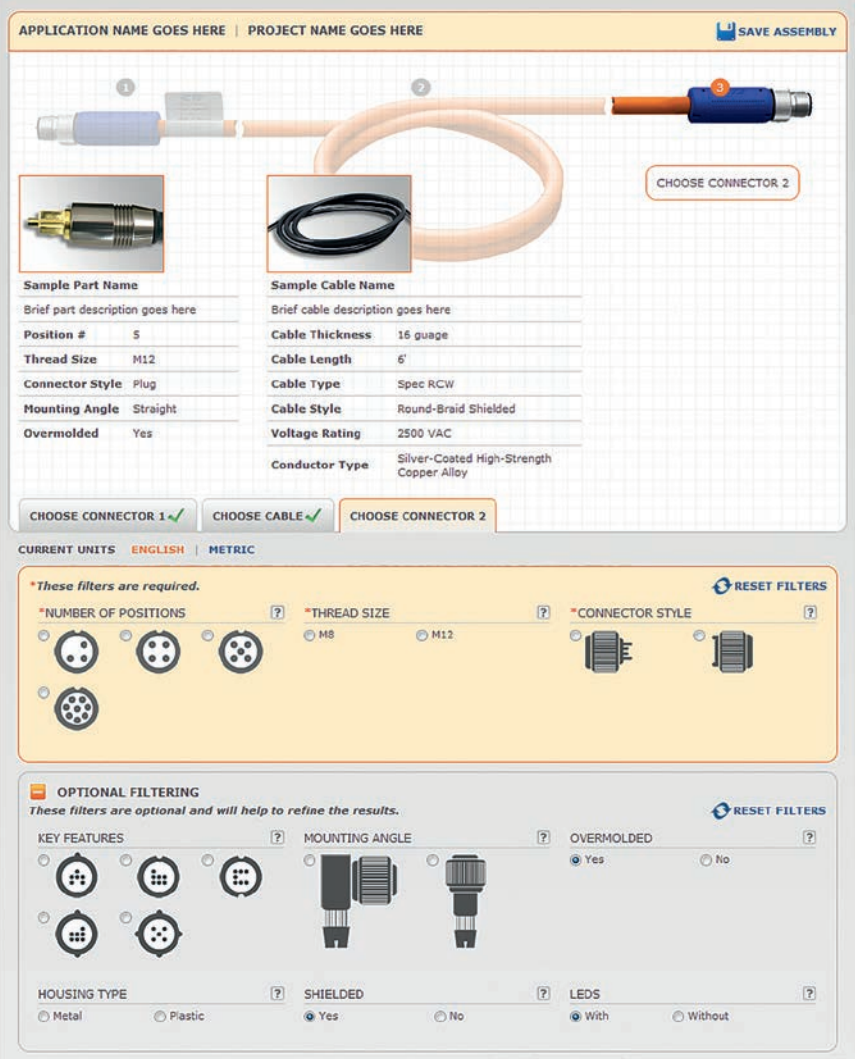



All dimensions in mm.

# I/O Module Notes

# Online Configurator




# WHAT YOU NEED, WHEN YOU NEED IT – WITH TE'S ONLINE CONFIGURATOR

## Easy to use

Getting the information you are looking for can be a long and tedious exercise. The TE configurator walks you through the different options, attributes and characteristics with a straightforward and easy to use navigation.

## Easy to choose

Product-selection made easy. With the TE configurator you choose – and get – exactly what you were looking for.

## Quick response

Selected what you were looking for? With a quick turn capability, immediate quotes and a fast delivery of your product is what TE is striving for.

## Your cable choice

Didn't find the cable specifications you were looking for? The TE configurator provides the ability for custom cable lengths.

## Your needs – your choice

Don't bother with long lists of specifications, data and information that you are not interested in. Build an M8/M12 solution that fits your needs and your application.

## Let’s connect

We make it easy to connect with our experts and are ready to provide all the support you need. Just call your local support number or visit www.te.com/industrial to chat with a Product Information Specialist.

## Technical Support

te.com/support-center

| | | | | | |
|---|---|---|---|---|---|
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| Austria | +43 1-9056-0 | India | +86 400-820-6015 | Russia | +74 95-790-790-2200 |
| Belgium | +31 73-6246999 | Ireland | +1 800-882-391 | Slovakia | +42 02-720-11102 |
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| China | +86 400-820-6015 | Japan | +044-844-8052 | South Africa | +97 150-457-0806 |
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| Denmark | +46 8-5072-5000 | Latvia | +37 2-6778-673 | Sweden | +46 8-5072-5000 |
| Estonia | +37 2677-8673 | Lithuania | +37 037426900 | Switzerland | +41 71-447-0447 |
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| France | +33 1-34-20-8686 | Netherlands | +31 73-6246999 | Turkey | +90 212-282-6053 |
| Germany | +49 6151-607-1999 | New Zealand | +86 400-820-6015 | United Kingdom | +44 0800-267666 |
| Greece | +97 1-4-347-0226 | Norway | +46 8-5072-5000 | United States of America | 800-522-6752 |
| Holland | +31 73-6246999 | Poland | +48 22-4576750 | | |

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# OCEAN CHIPS
## Океан Электроники
## Поставка электронных компонентов

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «**JONHON**», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «**FORSTAR**».

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Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

**«FORSTAR»** (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).

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