



# 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 applica-

tions 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.

# CONTENTS

<b>CONNECTORS</b> .....	4
• M8 Field Installable .....	5
• M12 Straight Field Installable .....	6-7
• M12 Angled Field Installable .....	8-9
• M12 Panel Mount .....	10
• M12 Panel Solder PCB Mount .....	11
• M12 X-Coded Field Installable .....	12
• Connector Notes .....	13
<b>CABLE ASSEMBLIES</b> .....	14
• M8 Series Male .....	15
• M8 Series Female .....	16
• M12 Series Male Straight .....	17
• M12 Series Female Straight .....	18
• M12 Series Male Angled .....	19
• M12 Series Female Angled .....	20
• M12 Series Male to Female Y-cables .....	21
• M8 Male to M12 Female Series .....	21
• M8 Female to M12 Male Series .....	21
• M12 Male to M12 Female Series .....	22
• M8 Female to M8 Male Series LED .....	23
• M12 Female to M12 Male Series LED .....	23
• Cable Assembly Notes .....	24
<b>I/O MODULES</b> .....	25
• M8 - With Cable .....	26
• M8 - With M12 Plug Connection .....	27
• M8 - For Homerun Connection .....	27
• M12 - With Cable .....	28
• M12 - With M12/M23 Plug Connection .....	28
• M12 - No Cable/With Cable Gland .....	29
• I/O Module Notes .....	30
• Online Configurator .....	31



# 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		
<b>M8 Male Screw Connection, Straight</b>		
3-Pole	PG7	2120954-1
4-Pole	PG7	1-2120954-1

TE Part Number		
<b>M8 Male Right Angle</b>		
3-Pole	PG7	2120955-1
4-Pole	PG7	1-2120955-1

TE Part Number		
<b>M8 Male Panel, Solder, Front Mounting, M8 Fastening Thread</b>		
3-Pole	M8	2120958-1
4-Pole	M8	1-2120958-1

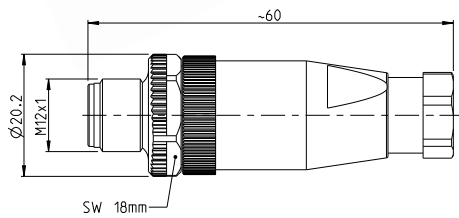
TE Part Number		
<b>M8 Female Screw Connection, Straight</b>		
3-Pole	PG7	2120956-1
4-Pole	PG7	1-2120956-1

TE Part Number		
<b>M8 Female Right Angle</b>		
3-Pole	PG7	2120957-1
4-Pole	PG7	1-2120957-1

TE Part Number		
<b>M8 Female Panel, Solder, Front Mounting, M8 Fastening Thread</b>		
3-Pole	M8	2120959-1
4-Pole	M8	1-2120959-1

# M12 Straight Field Installable

## Male Series



All dimensions in mm.

TE Part Number		
<b>A coding – M12 Male Screw Connection, Straight</b>		
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>B coding – M12 Male Screw Connection, Straight</b>		
4-Pole	PG7	3-2271112-1
	PG9	3-2271112-2
5-Pole	PG7	4-2271112-1
	PG9	4-2271112-2

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

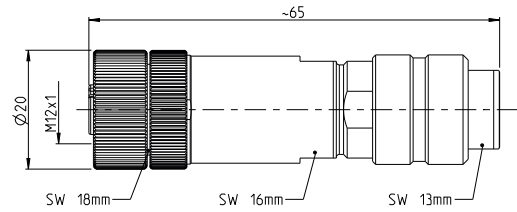
<b>B coding – M12 Male Screw Connection, Straight, Shielded</b>		
4-Pole	PG7	3-2271113-2
5-Pole	PG7	4-2271113-2

<b>D coding – M12 Male Screw Connection, Straight, Shielded</b>		
4-Pole	PG7	3-2271115-2

<b>S coding – M12 Male Screw Connection, Straight, Shielded</b>		
3-Pole	plus PE	2120951-1

<b>T coding – M12 Male Screw Connection, Straight, Shielded</b>		
4-Pole		2120949-1

## Female Series



All dimensions in mm.

TE Part Number		
<b>A coding – M12 Female Screw Connection, Straight</b>		
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		
<b>A coding – M12 Female Screw Connection, Straight, Shielded</b>		
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

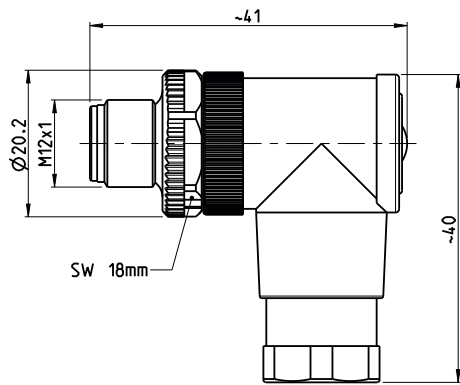
D coding – M12 Female Screw Connection, Straight, Shielded		
4-Pole	PG7	3-2271121-2

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		
<b>A coding – M12 Male Screw Connection, Angled</b>		
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>B coding – M12 Male Screw Connection, Angled</b>		
4-Pole	PG7	3-2271124-1
	PG9	3-2271124-2
5-Pole	PG7	4-2271124-1
	PG9	4-2271124-2

TE Part Number		
<b>A coding – M12 Male Screw Connection, Angled, Shielded</b>		
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>B coding – M12 Male Screw Connection, Angled, Shielded</b>		
4-Pole	PG7	3-2271125-2
5-Pole	PG7	4-2271125-2

<b>D coding – M12 Male Screw Connection, Angled, Shielded</b>		
4-Pole	PG7	3-2271127-2
	PG9	3-2271133-2



## Female Series



All dimensions in mm.

TE Part Number		
<b>A coding – M12 Female Screw Connection, Angled</b>		
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>B coding – M12 Female Screw Connection, Angled</b>		
4-Pole	PG7	3-2271130-1
	PG9	3-2271130-2
5-Pole	PG7	4-2271130-1
	PG9	4-2271130-2

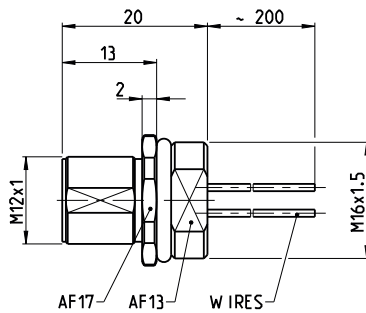
TE Part Number		
<b>A coding – M12 Female Screw Connection, Angled, Shielded</b>		
4-Pole	PG7	3-2271129-2
5-Pole	PG7	4-2271129-2
8-Pole	PG7	5-2271129-2
12-Pole	PG9	6-2271129-2

<b>B coding – M12 Female Screw Connection, Angled, Shielded</b>		
4-Pole	PG9	3-2271131-2
5-Pole	PG9	4-2271131-2

<b>D coding – M12 Female Screw Connection, Angled, Shielded</b>		
4-Pole	PG7	3-2271133-2

# M12 Panel Mount

## Male Series



## Female Series



All dimensions in mm.

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

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

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

<b>T coding</b>		
<b>M12 Male, Front Mounting M20 x 1.5</b>		
4-Pole		2120947-1

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

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

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

<b>T coding</b>		
<b>M12 Female, Front Mounting M20 x 1.5</b>		
4-Pole		2120946-1

# M12 Panel Solder PCB Mount

## Male Series



## Female Series



All dimensions in mm.

TE Part Number		
<b>A coding</b>		
<b>M12 Male, Rear Mounting M16 x 1.5, straight</b>		
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>B coding</b>		
<b>M12 Male, Rear Mounting M16 x 1.5, straight</b>		
4-Pole	PG9	3-2271141-2
5-Pole	PG9	4-2271141-2

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

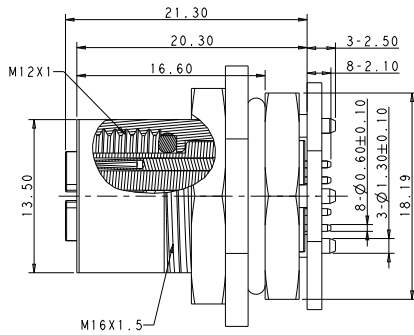
TE Part Number		
<b>A coding</b>		
<b>M12 Female, Rear Mounting M16 x 1.5, straight</b>		
4-Pole	PG9	3-2271143-2
5-Pole	PG9	4-2271143-2
8-Pole	PG9	5-2271143-2
12-Pole	PG9	6-2271143-2

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

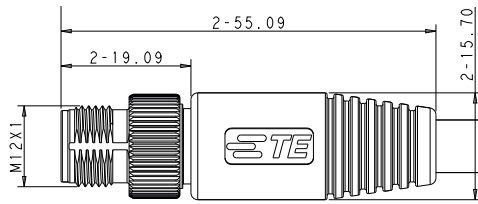
<b>D coding</b>		
<b>M12 Female, Rear Mounting M16 x 1.5, straight</b>		
4-Pole	PG9	3-2271145-2

# M12 X-Coded Field Installable

## M12 X-Coded PCB Connector



## M12 Pin Connector Cable Assembly



All dimensions in mm.

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

Length	TE Part Number
<b>M12 Pin Connector Cable Assembly</b>	
1m	2241021-1
2m	2241021-2
3m	2241021-3
4m	2241021-4
5m	2241021-5
10m	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, chemicals 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: 1.5m / 3.0m / 5.0m / 10.0m
2273002	M8 x 1.0 Straight plug Pigtail	4 positions PUR or PVC, Lengths: 1.5m / 3.0m / 5.0m / 10.0m



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



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



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



# M8 Cable Assemblies

## M8 Series Female

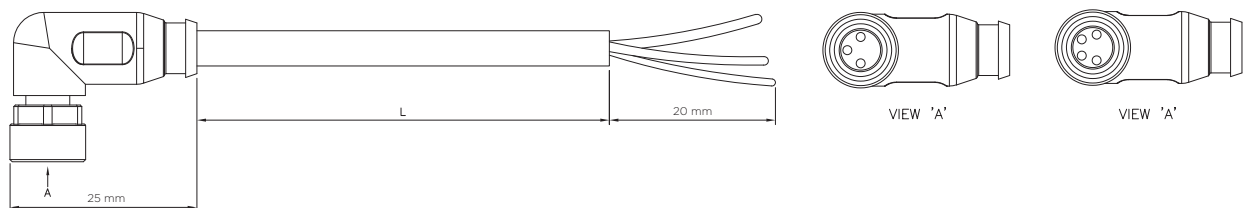
TE Part Number	Description	Available In
2273001	M8 x 1.0 Straight socket Pigtail	3 and 4 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m



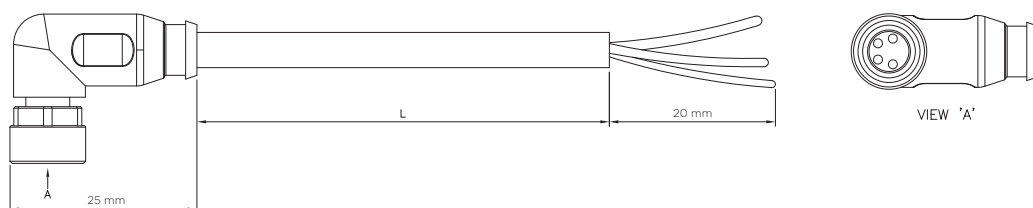
TE Part Number	Description	Available In
2273005	M8 x 1.0 Straight socket Pigtail Shielded	3 and 4 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m



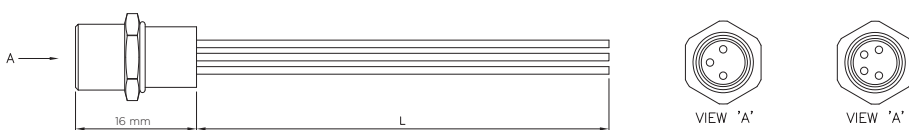
TE Part Number	Description	Available In
2273009	M8 x 1.0 Angled socket Pigtail	3 and 4 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m



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: 0.2m
2273015	M8 Female Panel Mount Rear	4 positions Panel Mount, Length: 0.2m





# 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



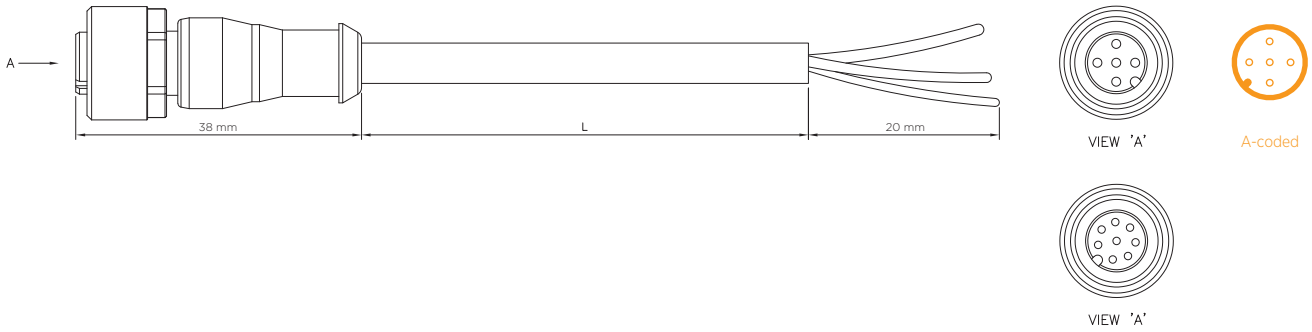
TE Part Number	Description	Available In
2273051	M12 Male Panel Mount Rear	4 positions PVC, Lengths: 0.2 m
2273052	M12 Male Panel Mount Rear	5 positions PVC, Length: 0.2 m



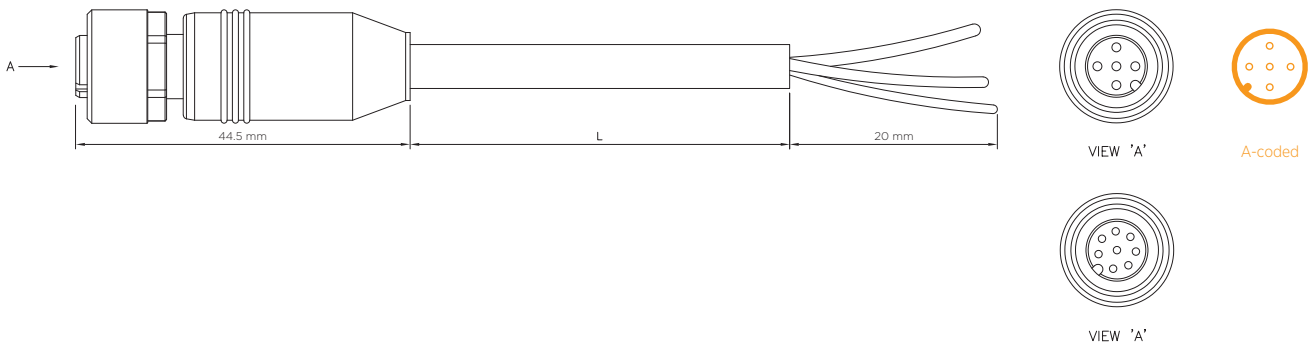
# M12 Cable Assemblies

## M12 Series Female Straight

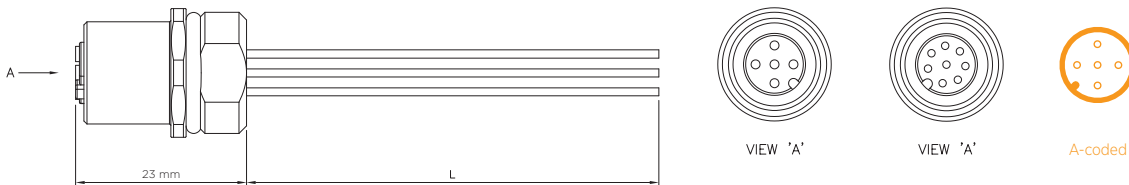
TE Part Number	Description	Available In
2273023	M12 x 1.0 Straight socket Pigtail Unshielded	3 positions PUR or PVC, Lengths: 1.5m / 3.0m / 5.0m / 10.0m
2273029	M12 x 1.0 Straight socket Pigtail Unshielded	4 positions PUR or PVC, Lengths: 1.5m / 3.0m / 5.0m / 10.0m
2273035	M12 x 1.0 Straight socket Pigtail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



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

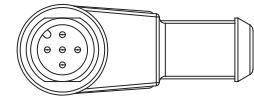


TE Part Number	Description	Available In
2273054	M12 Female Panel Mount Rear	4 positions PUR, Length: 0.2m
2273055	M12 Female Panel Mount Rear	5 positions PUR, Length: 0.2m



## 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: 1.5m / 3.0m / 5.0m / 10.0m
2273082	M12 x 1.0 Angled plug Pigtail Unshielded	4 positions PUR or PVC, Lengths: 1.5m / 3.0m / 5.0m / 10.0m
2273088	M12 x 1.0 Angled plug Pigtail Unshielded	5 positions PUR or PVC, Lengths: 1.5m / 3.0m / 5.0m / 10.0m
2273094	M12 x 1.0 Angled plug Pigtail Unshielded	8 positions PUR, Lengths: 1.5m / 3.0m / 5.0m / 10.0m

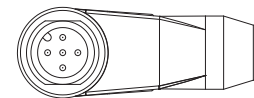


VIEW 'A'



A-coded

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



VIEW 'A'

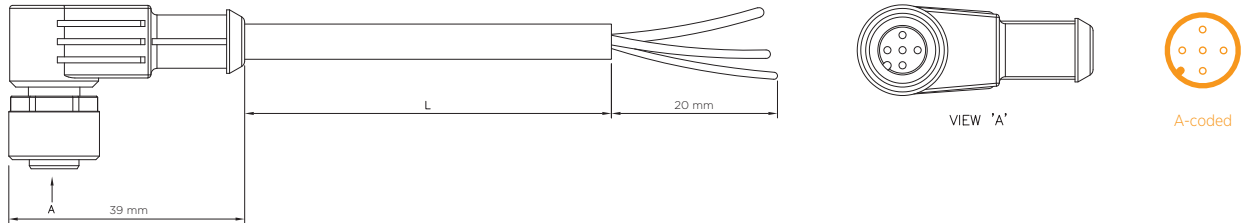


A-coded

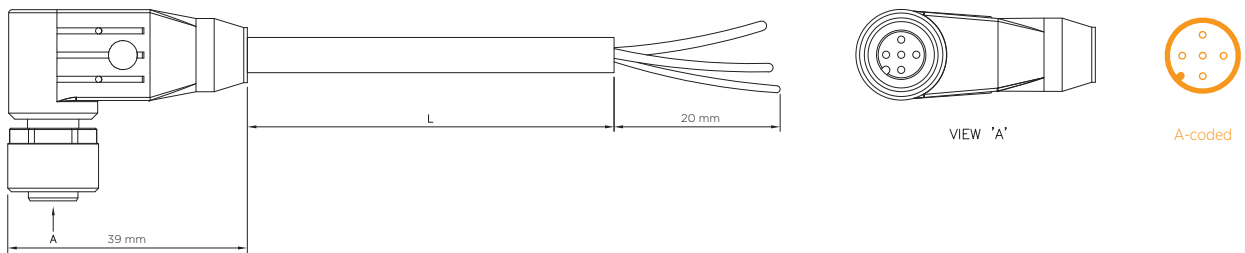
# M12 Cable Assemblies

## M12 Series Female Angled

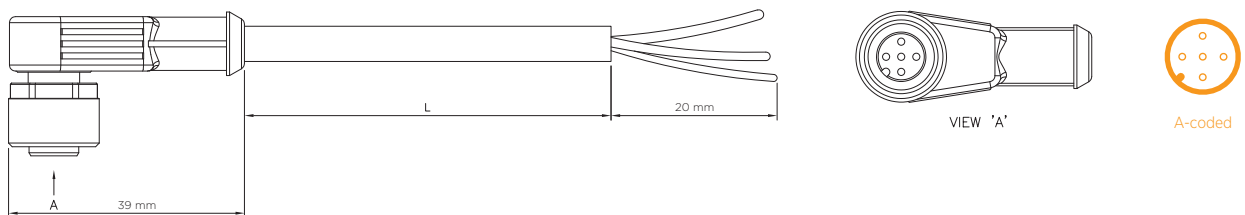
TE Part Number	Description	Available In
2273077	M12 x 1.0 Angled socket Pigtail Unshielded	3 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m
2273083	M12 x 1.0 Angled socket Pigtail Unshielded	4 positions PUR or PVC, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m
2273089	M12 x 1.0 Angled socket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

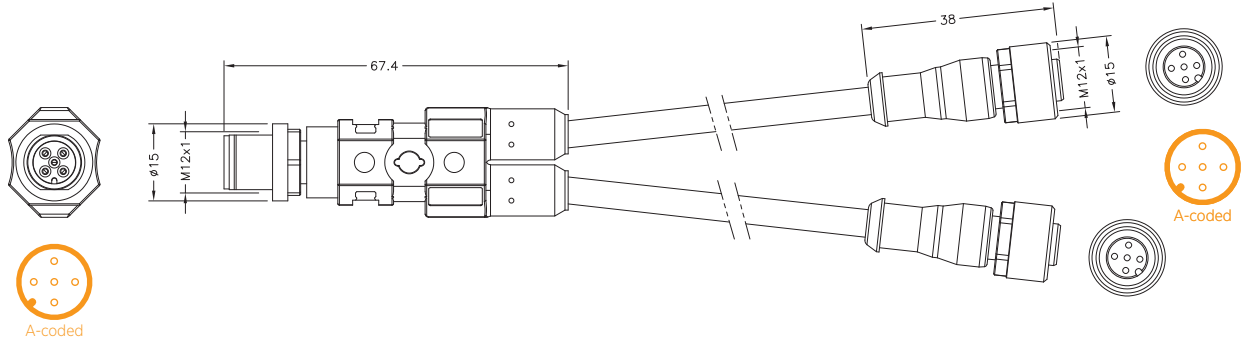


TE Part Number	Description	Available In
2273104	M12 x 1.0 Straight socket Pigtail Shielded LED	4 positions PUR, 2 LED, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m
2273105	M12 x 1.0 Straight socket Pigtail Shielded LED	4 positions PUR or PVC, 3 LED, Lengths: 1.5 m / 3.0 m / 5.0 m / 10.0 m



## 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

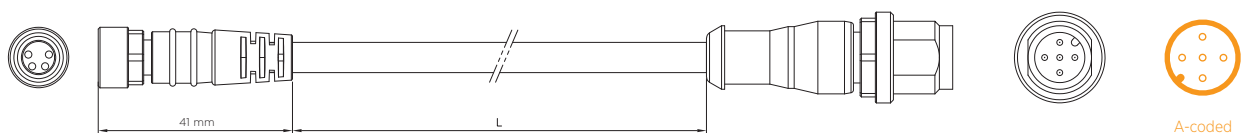
### M8 Male to M12 Female Series

TE Part Number	Description	Available In
2273108	M8 Straight plug to 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 Straight plug to 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

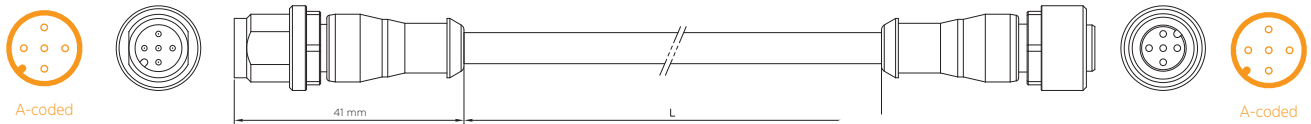
TE Part Number	Description	Available In
2273110	M8 Straight socket to M12 Straight plug Unshielded	3 positions PUR or PVC, Lengths: 0.3 m / 0.6 m / 1.0 m / 1.5 m / 2.0 m
2273111	M8 Straight socket to M12 Straight plug Unshielded	4 positions PUR or PVC, Lengths: 0.3 m / 0.6 m / 1.0 m / 1.5 m / 2.0 m



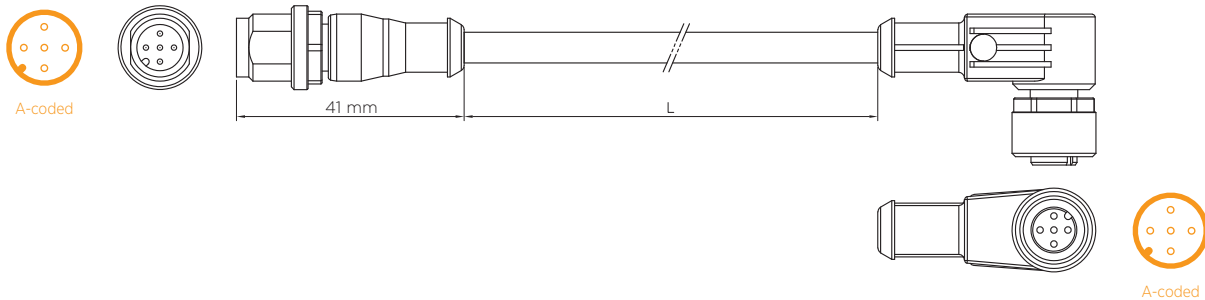
# M12 to M12 Cable Assemblies

## M12 Male to M12 Female Series

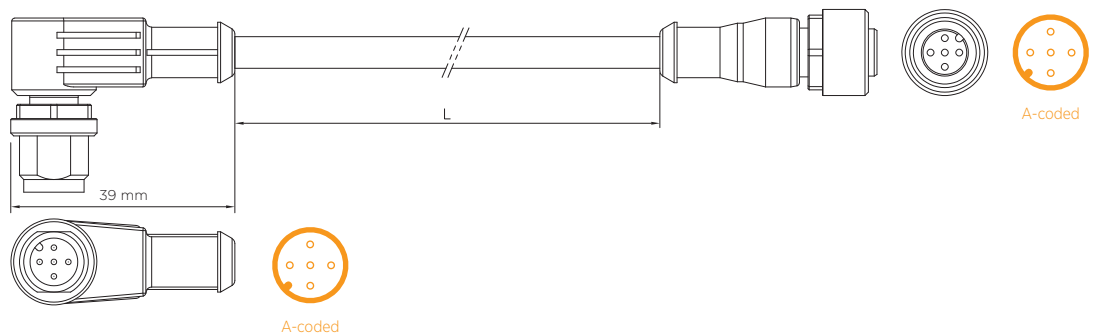
TE Part Number	Description	Available In
2273112	M12 Straight plug to M12 Straight socket Unshielded	3 positions PUR or PVC, Lengths: 0.3m / 0.6m / 1.0m / 1.5m / 2.0m
2273113	M12 Straight plug to M12 Straight socket Unshielded	4 positions PUR or PVC, Lengths: 0.3m / 0.6m / 1.0m / 1.5m / 2.0m
2273114	M12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



# M8 to M8 Cable Assemblies

## M8 Female to M8 Male Series LED

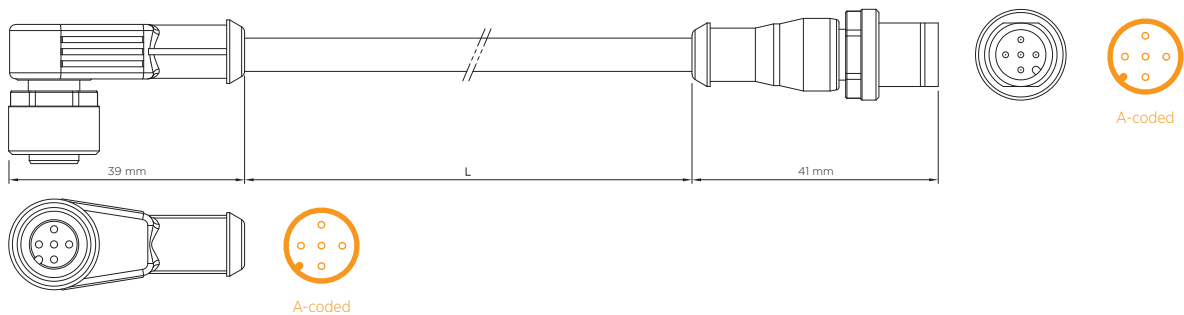
TE Part Number	Description	Available In
2273124	M8 Angled socket to M8 Straight plug 2 LED	3 positions PUR, PVC, PUR/PVC and Welding Spark resistant Lengths: 0.3m / 0.6m / 1.0m / 1.5m / 2.0m



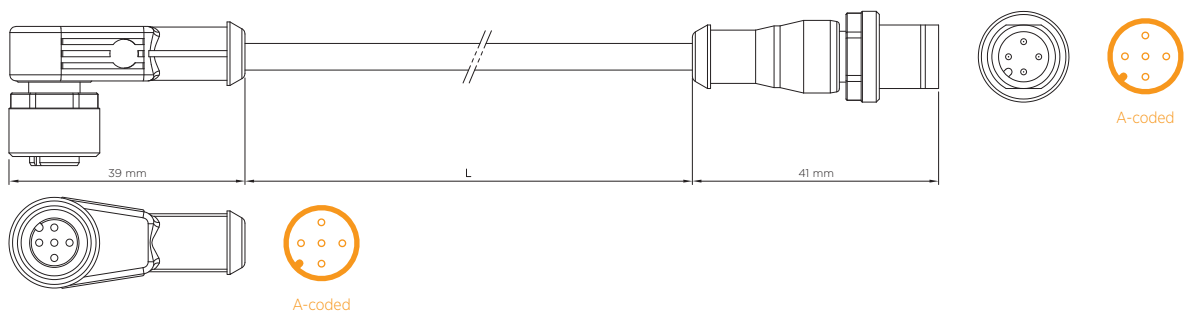
# M12 to M12 Cable Assemblies

## 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 Lengths: 0.3m / 0.6m / 1.0m / 1.5m / 2.0m



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 Lengths: 0.3m / 0.6m / 1.0m / 1.5m / 2.0m
2273127	M12 Angled socket to M12 Straight plug 3 LED	5 positions PUR or PVC, PUR/PVC and Welding Spark resistant Lengths: 0.3m / 0.6m / 1.0m / 1.5m / 2.0m



# Cable Assembly Notes

A large grid of graph paper for taking notes, consisting of 20 columns and 30 rows of small squares.



# 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

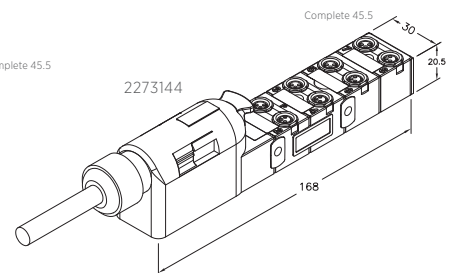
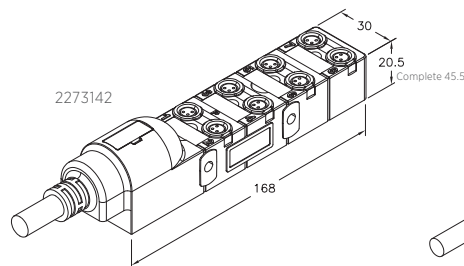
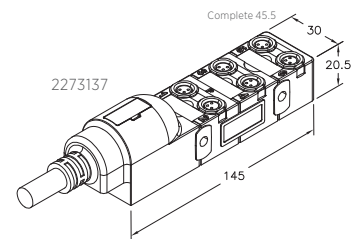
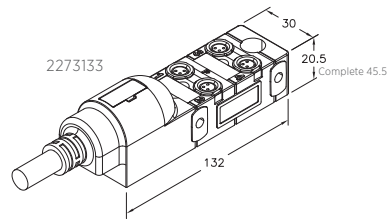
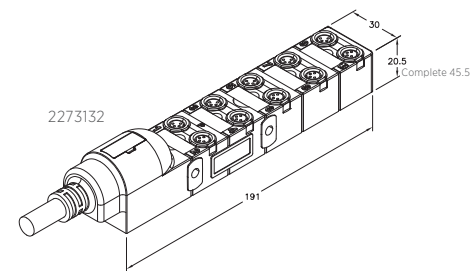
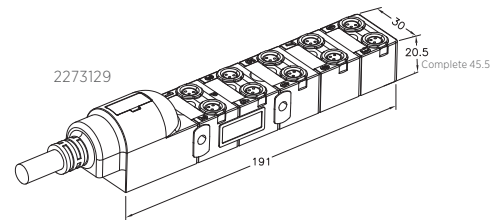


# M8 – With Cables

## 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

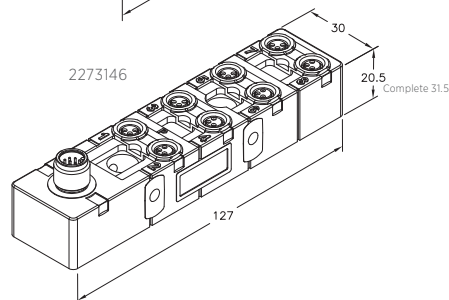
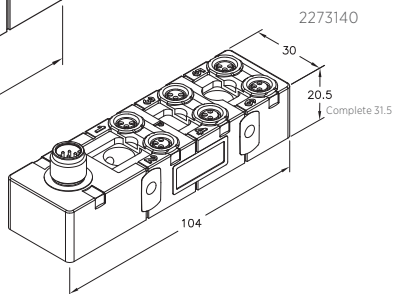
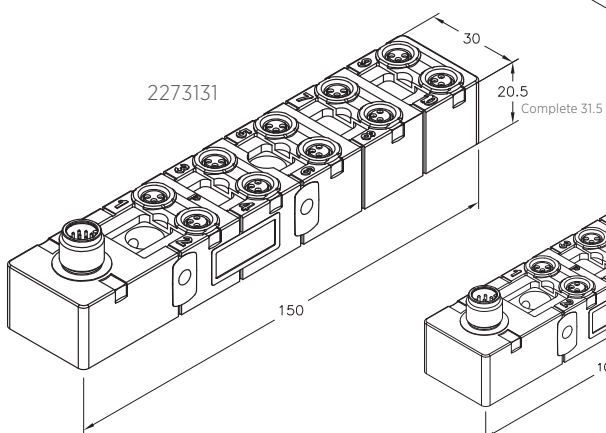
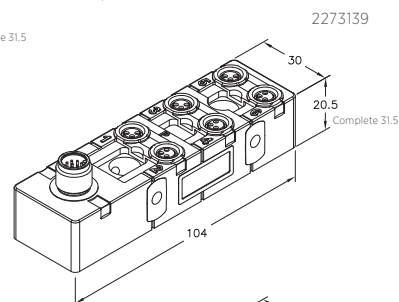
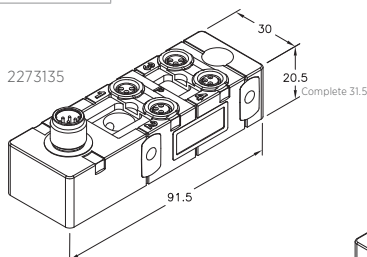
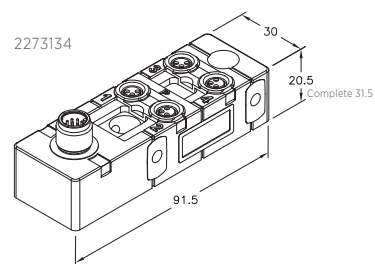


All dimensions in mm.

# M8 – With M12 Plug Connection

## M8 Series

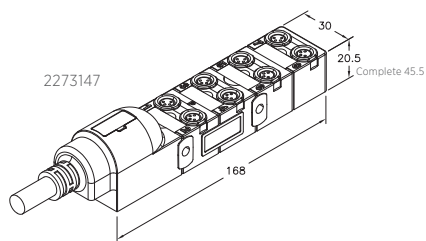
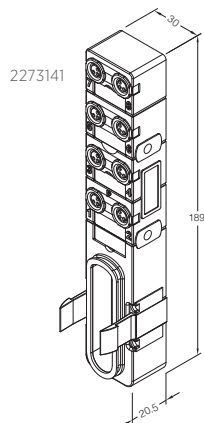
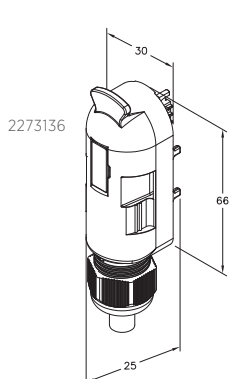
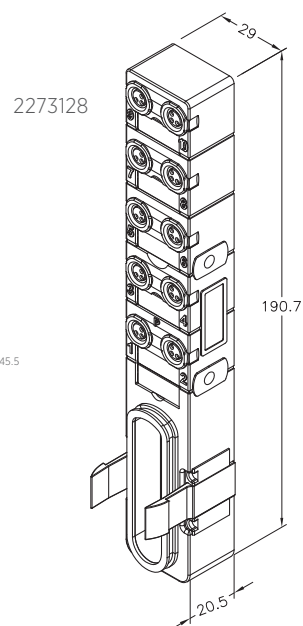
Description	Positions	TE Part Number
Dist. box M8 3pos 10way M12	12 pos. conn	2273131-1
Dist. box M8 3pos 04way M12	12 pos.conn	2273134-1
Dist. box M8 3pos 04way M12	8 pos. conn	2273135-1
Dist. box M8 3pos 06way M12	12 pos. conn	2273139-1
Dist. box M8 3pos 06way M12	8 pos. conn	2273140-1
Dist. box M8 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 3.0m	4pos 8way	2273147-1



All dimensions in mm.

# M12 - With Cable

## M12 Series

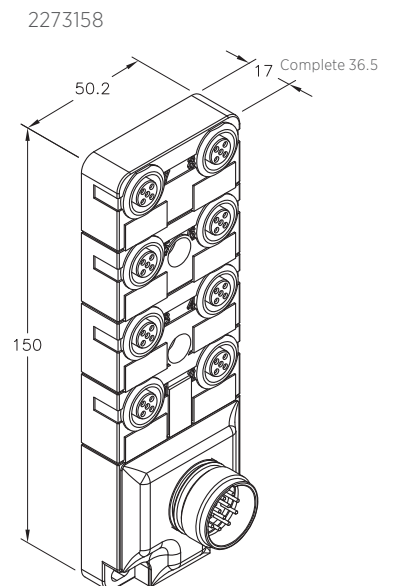
Description	Positions	TE Part Number
PUR/PVC cable 5.0 m	4pos 4way	2273150-1
PUR/PVC cable 10.0 m	4pos 4way	2273150-2
PUR/PVC cable 5.0 m	5pos 4way	2273153-1
PUR/PVC cable 10.0 m	5pos 4way	2273153-2
With PUR/PV Homerun Cable 10.0 m	5pos 4way	2273155-1
PUR/PVC cable 3.0 m	4pos 8way	2273157-1
PUR/PVC cable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

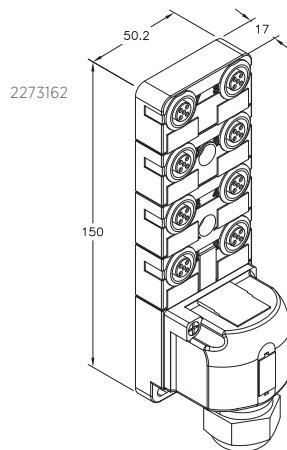
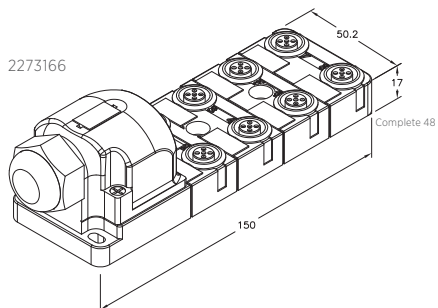
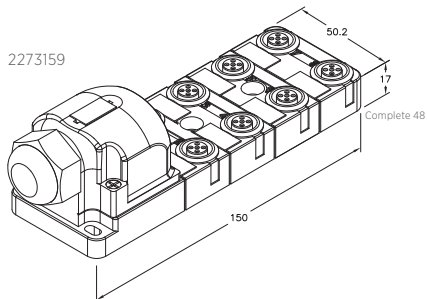
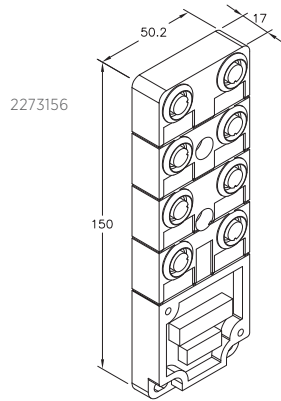
Description	Positions	TE Part Number
Without homerun cable	4pos 8way	2273158-1
Distr box M12 4-5pos 8way M12/12p PNP	4-5pos 8way	2273161-1
Distr box M12 5pos 4way M23/19p PNP	5pos 4way	2273165-1



# 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



All dimensions in mm.

# I/O Module Notes

A large grid of graph paper for taking notes, consisting of 20 columns and 30 rows of small squares.

# Online Configurator

APPLICATION NAME GOES HERE | PROJECT NAME GOES HERE SAVE ASSEMBLY

1 2 3

CHOOSE CONNECTOR 2

Sample Part Name	Sample Cable Name
Brief part description goes here	Brief cable description goes here
Position # 5	Cable Thickness 16 gauge
Thread Size M12	Cable Length 6'
Connector Style Plug	Cable Type Spec RCW
Mounting Angle Straight	Cable Style Round-Braid Shielded
Overmolded Yes	Voltage Rating 2500 VAC
	Conductor Type Silver-Coated High-Strength Copper Alloy

CHOOSE CONNECTOR 1 ✓ CHOOSE CABLE ✓ CHOOSE CONNECTOR 2

CURRENT UNITS **ENGLISH** | METRIC

**\*These filters are required.** RESET FILTERS

**\*NUMBER OF POSITIONS** ? **\*THREAD SIZE** ? **\*CONNECTOR STYLE** ?

**OPTIONAL FILTERING**  
*These filters are optional and will help to refine the results.* RESET FILTERS

**KEY FEATURES** ? **MOUNTING ANGLE** ? **OVERMOLDED** ?

**HOUSING TYPE** ? **SHIELDED** ? **LEDS** ?

## 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](http://www.te.com/industrial) to chat with a Product Information Specialist.

## Technical Support

[te.com/support-center](http://te.com/support-center)

Australia	+86 400-820-6015	Hungary	+36 1-2892040	Portugal	+34 91-6630420
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
Brazil	+55 11-2103-6000	Italy	+39 011-4012111	Slovenia	+38 615-602-132
China	+86 400-820-6015	Japan	+044-844-8052	South Africa	+97 150-457-0806
Czech Republic	+42 02-7201-1103	Korea	+02-3415-4607	Spain	+34 932-910-330
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
Finland	+46 8-5072-5000	Luxembourg	+31 73-6246999	Taiwan	+86 400-820-6015
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		

## te.com

© 2014 Tyco Electronics Corporation, a TE Connectivity Ltd. Company. All Rights Reserved. 1-1773701-8 IND WR 09/2014

TE Connectivity and the TE connectivity (logo) are trademarks of the TE Connectivity Ltd. family of companies. Other logos, product and Company names mentioned herein may be trademarks of their respective owners. While TE has made every reasonable effort to ensure the accuracy of the information in this brochure, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this brochure are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.



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**».



## JONHON

«**JONHON**» (основан в 1970 г.)

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).



Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: [ocean@oceanchips.ru](mailto:ocean@oceanchips.ru)

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А