

# M8/M12 Connector System



EVERY CONNECTION COUNTS



# M8/M12 Connector System

TE Connectivity's M8/M12 Connector System provides one complete solution to safely and reliably ensure efficient communication in industrial environments and decrease downtime.



# M8/M12 Connector System



## ❖ One complete solution for your requirements

- Broad range of straight, angled, LED and multi-position **field installable and board connectors** that are easily intermateable.
- **X-coded** connectors support higher bandwidth needs of up to 10Gb/s.
- Customized **cable assemblies** offer a solution for your specific needs in different lengths, temperatures or flexibility
- **Passive distribution boxes** offer reduced cabling and increased ease of installation and maintenance



# M8/M12 Connector System

## ❖ One reliable system for your applications



- When communication **simply needs to work** in industrial environments, TE's M8/M12 system and complete Industrial Communications portfolio offer proven reliability that meet industry standards.
- Whether it is for controllers and sensors or robotics and molding machines, the M8/M12 connector system offers you a solution that is **time-saving, error-free and without the use of tools**.
- At TE Connectivity, we understand that different applications and industries have different requirements, and we assist our customers with the **broadest portfolio** to meet those needs.
- With TE's **broad cross-industry expertise**, we can offer customized solutions for your applications that you might not have thought about.



# M8/M12 Connector System

## ❖ One trusted partner for your satisfaction

- One of the leading companies in connectivity, TE offers short lead times and dedicated service through a broad distribution network.
- With our global footprint and local sales teams in all regions, TE is able to offer the support you expect, making it easy to do business with us.
- Easy-to-use – and easy-to-choose: At TE, you will find what you are looking for; and if you have any questions, our Technical experts are there for you – 24 hours a day.
- As one of the most innovative companies in the world, TE provides industry-leading products and technologies that help you solve your problems – now and in the future.



# M8/M12 – The Products

Field Installable  
Connectors



IO Boxes



Receptacles



Cable Assemblies



# M8/M12 – The Products

## 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

Note: Some exceptions are applicable



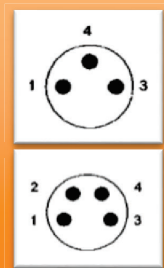
# M8/M12 – The codings

## M12

- 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 

## M8

A-coding



PER IEC 61076-2-101



## M8/M12 – The applications

### Switches

- M12 for Rugged Ethernet



### PLCs / Ethernet modules



# M8/M12 - The applications

## I/O boxes (Actuator, Collector)

- M8/M12 to connect to sensors and actuator



## Sensors

- Cameras, movement, proximity, level, motion, etc...



## Actuators

- Motor control (e.g. rotary), valves (solenoids), lights, etc...



# M8/M12 – Products to Network Protocols

A-coding



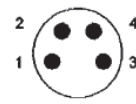
D-coding



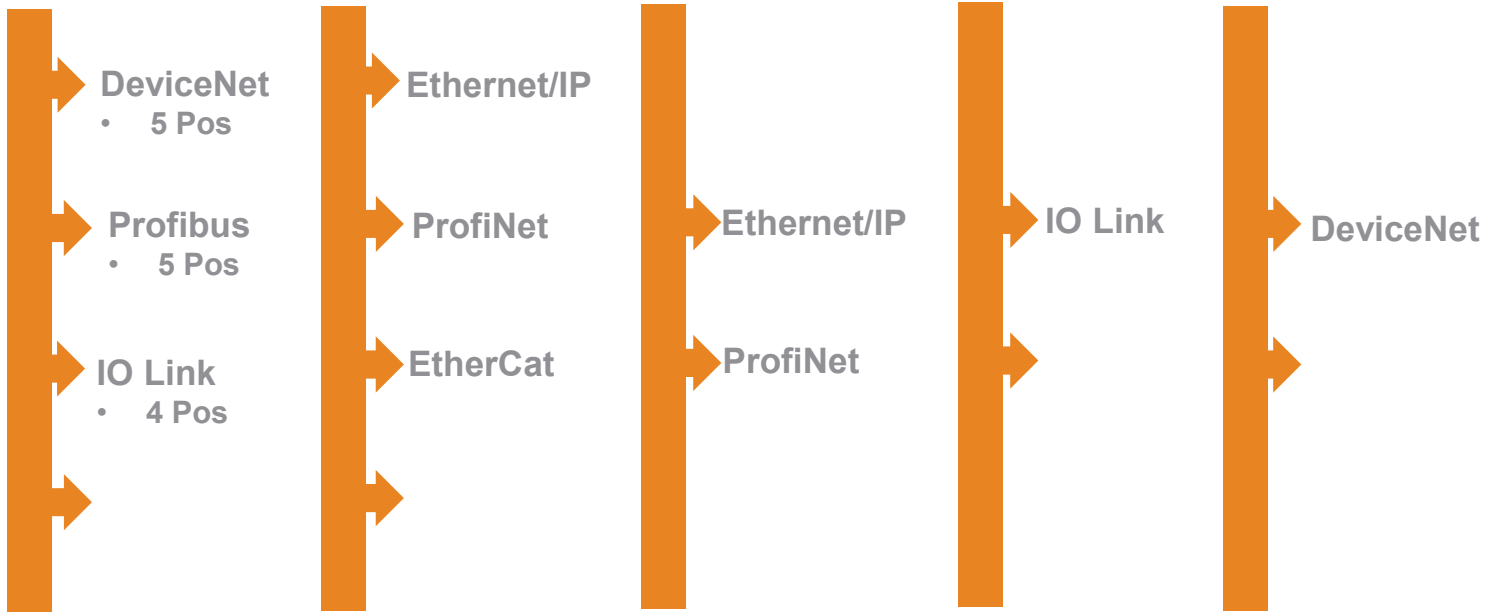
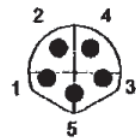
X-coding



A-coding




B-coding



# Find more at...

## M8/M12 homepage

te.com –  

- Product information
- Further documents
- Order samples

## M8/M12 catalog

- Complete overview of product portfolio
- Part numbers and drawings

## M8/M12 Product Flyer

- M8/12 at a glance
- Preferred part numbers

