



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

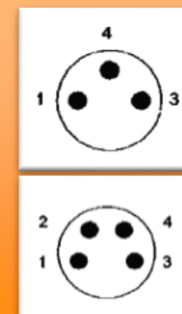


X-coding: Cat6A, high-speed 10Gbit rugged industrial Ethernet applications IEC 61076-2-109



M8

A-coding



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

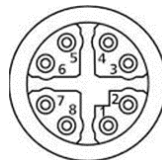
A-coding



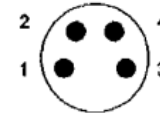
D-coding



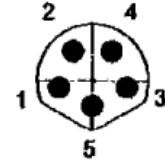
X-coding



A-coding



B-coding



DeviceNet
• 5 Pos

Profibus
• 5 Pos

IO Link
• 4 Pos

Ethernet/IP

ProfiNet

EtherCat

Ethernet/IP

ProfiNet

IO Link

DeviceNet

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

