

Connector RJ45 / M12 to assemble

Function

For PROFINET networks it has become usual to use two kinds of faces (RJ45, M12). The most well known connector type RJ45 is available as IP20 solution for use in switchgear cabinets.

For IP 65/67 applications 4-pin M12 connectors with D coding are used. The PROFINET installation line (AWG22) can be connected to all other connectors.

All connectors used for PROFINET are shielded and laid out for rough industrial applications.

Technical data

- Transmission characteristic: RJ45 / 4 A - CAT 5e
RJ45 / 8 A - CAT 5e
M12 - CAT 5
- Pin configuration agree with PROFINET
- Geometry: RJ45 / M12
- Industrial protection: RJ45 - IP20
M12 - IP67
- Wire diameter: AWG 22 to 24 flexible
AWG 22 to 23 solid
- Wire insulation: max. 1,6 mm Ø
- Operating temperature: RJ45 -20 °C to +70 °C
M12 -25 °C to +85 °C
- Cable jacket diameter: RJ45/4A 6,5 mm to 6,9 mm
RJ45/8A 4,5 mm to 8,0 mm
M12 5,5 mm to 7,2 mm
- Connector cycle: RJ45/4A min. 750
RJ45/8A min. 1000
- Casing material: RJ45 cast metal
RJ45 plastic
M12 cast metal

Pin assignment

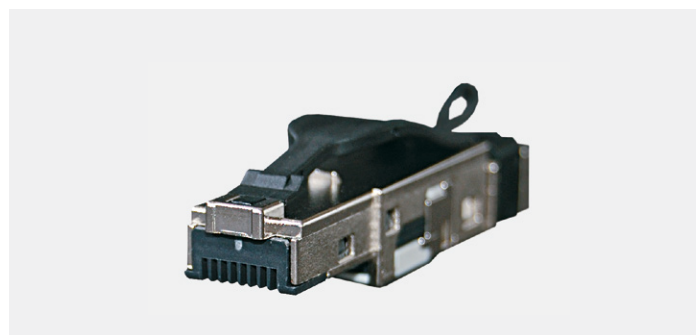
Signal	denotation	Wire colour	configuration	
			RJ45	M12
TD+	Transmission Data +	yellow	1	1
TD-	Transmission Data -	orange	2	3
RD+	Receive Data +	white	3	2
RD -	Receive Data -	blue	6	4

CE mark

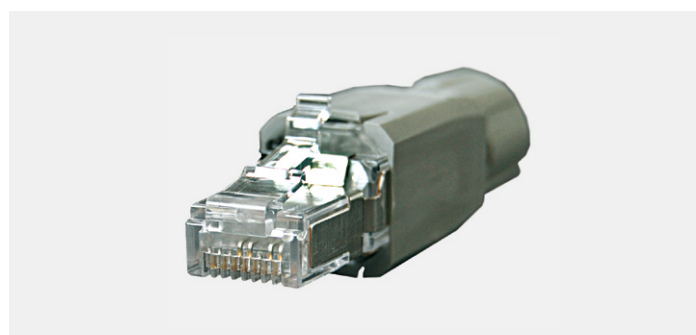
Plugs are passive components and are not subject to the CE mark system pursuant to EU Directives.

Ordering details

Ordering details	Art. No.
Connectors RJ45 metal	112030003
Connectors RJ45 plastic	112030004
Plug M12	112030002
Socket M12	112030001



Ethernet / PROFINET Connector RJ45 metal



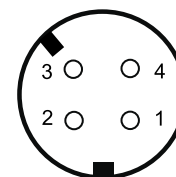
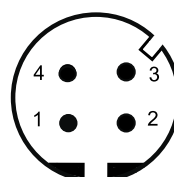
Ethernet Connector RJ45 plastic



Ethernet / PROFINET M12 circular connector Fast Connect

M12x1 connector

M12x1 socket



Pin assignment (see the left table)