

## Data sheet

**Connection cable M12 X-coded, 2.0 m**  
**M12 plug angled - free line end**  
**8-pole, position of coding 315°**

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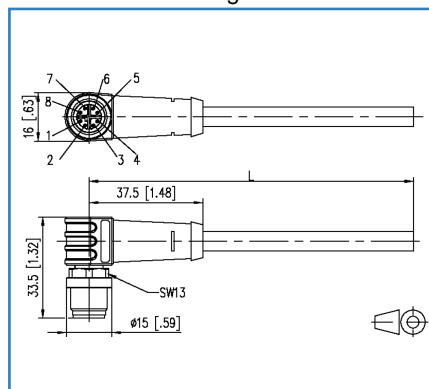
P/N  
**142M2X90020**  
 EAN 4250184174882

2018-13-02

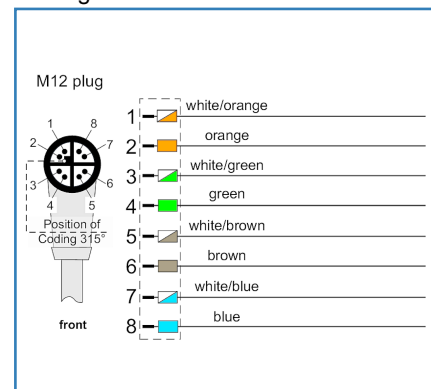
### Illustrations



Dimensional drawing



Wiring



See enlarged drawings at the end of document

### Product specification

- shielded M12 Ethernet connection cable
- Cat.6<sub>A</sub>, x-coded, 8-pole
- side 1: M12 connector, angled, position of coding 315°
- side 2: free line end
- M12 connector over molded
- stranded wires 4x2xAWG26/7
- overall shield tinned copper braid
- green cable, PUR
  
- standard variants: 1.0 m, 2.0 m, 5.0 m, 10.0 m
- other cable lengths on request



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## Technical Data

### General Data

Fields of application	Industrial Ethernet
Design	Ethernet-Connection cable
Shielding	shielded
Transmission technology	Copper
Cable Type	S/FTP
Number of twisting elements	4
Twisting element	Pair
Color coding fiber/ wire(s)	white/orange, orange, white/green, green, white/brown, brown, white/blue, blue
Color	green
Dimensions	
Dimension - Interface 1 (L x W x H)	33.50 x 15.00 x 44.50 mm
Dimension - Interface 1 (L x W x H)	1.319 x 0.591 x 1.752 in.
Cable length (m)	2.00 m
Labeling option	identification label carrier

### Transmission characteristics

Category (ISO)	7
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### Connections/interfaces

Connector technology interface 1	M12-plug
Coding interface 1	X-coded
Number of positions/contacts interface 1	8
Termination data, stranded wire (min. - max.)	
Conductor cross section, stranded wire	AWG 26/7
Conductor cross section, stranded wire	0.141 mm <sup>2</sup>
Conductor diameter, stranded wire (bare copper)	0.483 mm
Conductor diameter, stranded wire (bare copper)	0.019 in.
Cable sheath diameter (min. - max.)	
Cable sheath diameter	6.40 mm
Cable sheath diameter	0.236 in.



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### Electrical characteristics

Current carrying capacity	0.5 A
Insulation resistance	min. 100 MOhm

### Mechanical characteristics

Maximum operating bending radius	64 mm
Maximum operating bending radius	2.52 in.
Maximum installation load	32 mm
Maximum installation load	1.26 in.
Shielding braid coverage	70 %

### Materials and material properties

Material - Conductor	Cu (copper)
Material - Conductor Insulation	Polyethylen
Material - Cable jacket	PUR
Material - Body interface 1	Plastics
Material - Contact interface 1	CuZn (brass)
Material - Contact finish interface 1	Au (gold)
Material - Contact carriers interface 1	Plastics
Material - Union nut interface 1	CuZn (brass)
Material - Union nut finish interface 1	Ni (nickel)
Material - Pair shield	plastic film
Material - Pair shield finish	Al (Aluminium)
Material - Main shield	Cu (copper) braid
Material - Main shield finish	Sn (tin)
Flame retardancy	yes
Halogen free	yes
Oil resistance	yes
UV-resistance	yes

### Environmental conditions

Temperature (min. - max.)	
Temperature - Operating °C	-30 - 90 °C
Temperature - Operating °F	-22 - 194 °F
Particulate ingress interface 1	IP6X when plugged in
Liquid ingress/immersion interface 1	IPX5, IPX7 when plugged in



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#### Environmental conditions

Pollution degree interface 1 3

#### Approvals

RoHS compliant

#### The product meets the following standards

Connectors for electronic equipment

Free and fixed connectors IEC 60603-7-51

circular connector DIN EN 61076-2-109

Multi-element metallic cables used in analogue and digital communication and control DIN EN 50288-4-2

Test for vertical flame propagation for a single insulated wire or cable DIN EN 60332-1-2

Measurement of smoke density of cables burning IEC 61034

#### Classifications

ETIM 5.0 EC002599

ETIM 6.0 EC002599

#### Packing details

Type of packaging 1 pc(s) / plastic bag



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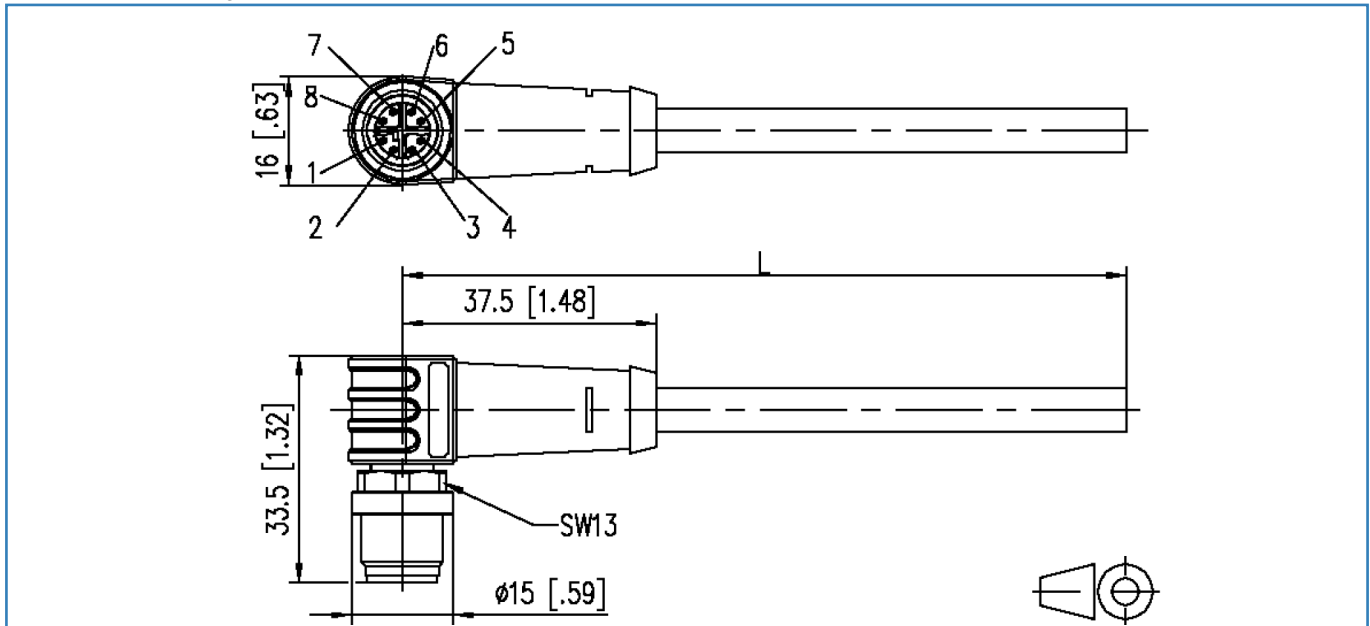
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