

Data sheet

Connection cable M12 plug angled - free line end
4-pole, D-coded 2.0 m

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P/N

142M1D90020

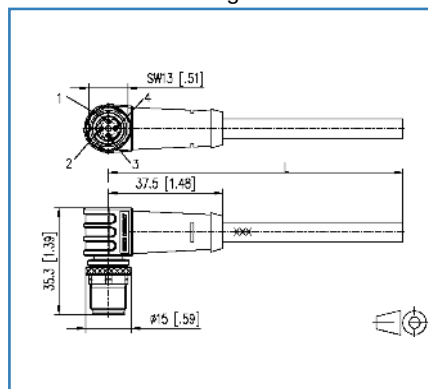
EAN 4250184174967

2018-09-01

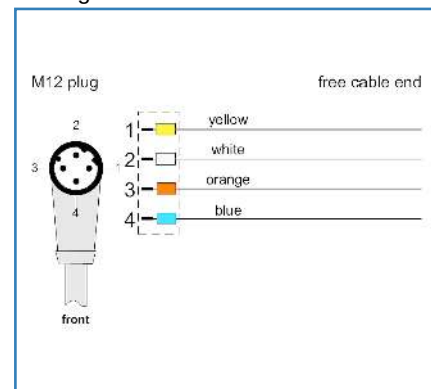
Illustrations



Dimensional drawing



Wiring



See enlarged drawings at the end of document

Product specification

- shielded M12 Ethernet connection cable
- Cat.5e, 4-pole, D-coded (IEC 61076-2-101)
- M12 connector, angled on free line end
- extrusion-coated cable on M12 connector
- 4x1xAWG22/7, tinned with plastic foil
- inner sheath FRNC, aluminum-coated plastic foil
- overall shield: tinned copper braid, approx. 85% covered
- Profinet (WS-GE-BL-OR) wiring
- green cable, PUR
- 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/FTQ
Number of twisting elements	2
Twisting element	Pair
Wiring	Profinet
Color coding fiber/ wire(s)	yellow, white, orange, blue
Color	green
Dimensions	
Dimension (L x W x H)	35.30 x 15.00 x 45.00 mm
Cable length (m)	2.00 m
Cable length (ft)	6.56 ft

Transmission characteristics

Category (ISO)	5e
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Connections/interfaces

Connector technology interface 1	Free line end
Connector technology interface 2	M12-plug
Coding interface 2	D-coded
Number of positions/contacts interface 2	4
Termination data, stranded wire (min. - max.)	
Conductor cross section, stranded wire	AWG 22/7
Conductor cross section, stranded wire	0.355 mm ²
Conductor diameter, stranded wire (bare copper)	0.762 mm
Conductor diameter, stranded wire (bare copper)	0.03 in.
Cable sheath diameter (min. - max.)	
Cable sheath diameter	6.50 mm
Cable sheath diameter	0.236 in.
acceleration	3 m/s ²



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Electrical characteristics

Current carrying capacity	max. 4 A
Through resistance	max. 5 mOhm
Insulation resistance	min. 100 MOhm

Mechanical characteristics

Bending radius without load	min. 49 mm
Shielding braid coverage	85 %

Materials and material properties

Material - Cable jacket	PUR
Material - Inner cable jacket	FRNC, with an aluminized film
Material - Body interface 2	Plastics
Material - Contact interface 2	CuZn (brass)
Material - Contact finish interface 2	Au (gold)
Material - Union nut interface 2	CuZn (brass)
Material - Union nut finish interface 2	Ni (nickel)
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 - Storage °C	-50 - 70 °C
Temperature - Storage °F	-58 - 158 °F
Temperature - Operating °C	-30 - 70 °C
Temperature - Operating °F	-22 - 158 °F
Temperature - Installation °C	-20 - 60 °C
Temperature - Installation °F	-4 - 140 °F
Particulate ingress interface 2	IP6X when plugged in
Liquid ingress/immersion interface 2	IPX7 when plugged in
Pollution degree interface 2	3



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Technical Data

Approvals

RoHS compliant

The product meets the following standards

Generic cabling systems

General requirements ISO/IEC 11801-1 | DIN EN 50173-1

Profinet yes

Connectors for electronic equipment

circular connector DIN EN 61076-2-101

Multi-element metallic cables used in analogue and digital communication and control DIN EN 50288-4-1

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

Measurement of smoke density of cables burning DIN EN 61034

Classifications

ETIM 5.0 EC002599

ETIM 6.0 EC002599

Packing details

Type of packaging 1 pc(s) / plastic bag



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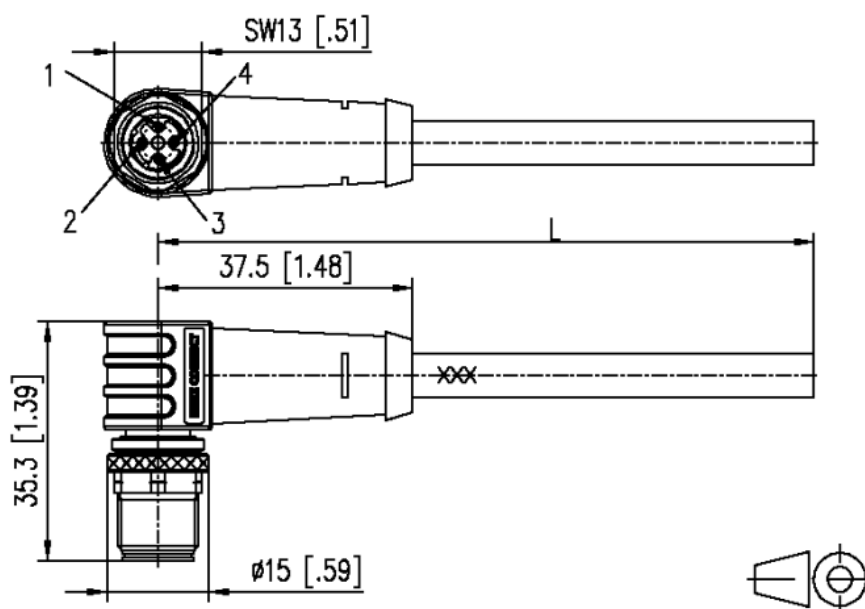
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Wiring

M12 plug

free cable end

