

Data sheet

**Connection cable M12 plug straight - free line end
4-pole, D-coded 10.0 m**

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P/N

142M1D10100

EAN 4250184139430

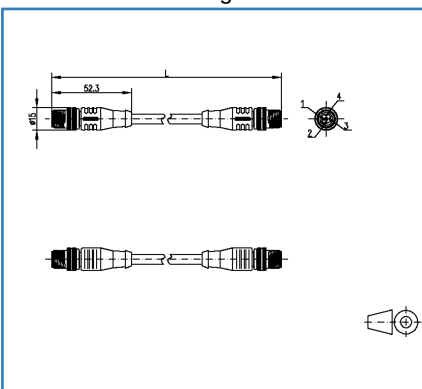
2019/01/08

Version: AX

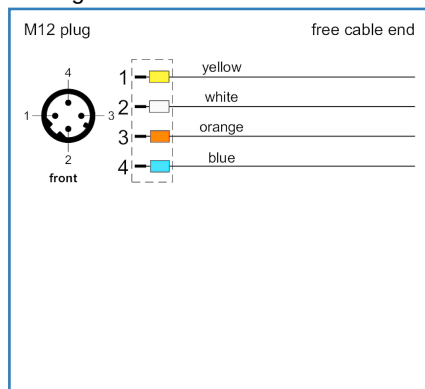
Illustrations



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)
- side 1: M12-plug, straight
- side 2: free line end
- extrusion-coated cable on M12 connector
- 2x2xAWG22/7, 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 line

Shielding

shielded

Transmission technology

Copper

Number of twisting elements

2

Twisting element

Pair

Color coding fiber/ wire(s)

yellow, white, orange, blue

Color

green

Dimensions

Dimension - Interface 1

52.3 mm x 15 mm x 15 mm

Dimension - Interface 1

2.059 in. x 0.591 in. x 0.591 in.

Cable length (m)

10 m

Cable length (ft)

32.81 ft

Labeling option

identification label carrier

Transmission characteristics

Transmission rate up to 100 MBit (Fast Ethernet)

IEEE 802.3u

Connections/interfaces

Connector technology interface 1

M12-plug

Connector technology interface 2

M12-plug

Coding interface 1

D-coded

Coding interface 2

D-coded

Number of positions/contacts interface 1

4

Number of positions/contacts interface 2

4

Termination data, stranded wire (min. - max.)

Conductor cross section, stranded wire

22/7

Conductor diameter, stranded wire (bare copper)

0.75 mm

Conductor diameter, stranded wire (bare copper)

0.03 in.



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Connections/interfaces

Cable sheath diameter (min. - max.)

Cable sheath diameter 6.5 mm

Cable sheath diameter 0.236 in.

acceleration 4 m/s²

Electrical characteristics

Current carrying capacity 4

Rated voltage 250 V

UL rating (cable) 600 V

Through resistance max. 5 mOhm

Insulation resistance min. 100 mOhm

Mechanical characteristics

Bending radius without load min. 49 mm

Maximum operating bending radius 26 mm

Maximum operating bending radius 1.024 in.

Maximum installation load 52 mm

Maximum installation load 2.047 in.

Number of alternating bending cycles 3 million bending cycles

Alternating bending radius 100 mm

velocity 4 m/s

acceleration 4 m/s²

Shielding braid coverage 85 %

Installation method PROFINET type C

Materials and material properties

Material - Conductor Cu (copper)

Material - Cable jacket PUR

Material - Inner cable jacket FRNC, with an aluminized film

Material - Body interface 1 Plastics

Material - Body interface 2 Plastics

Material - Contact interface 1 CuZn (brass)

Material - Contact interface 2 CuZn (brass)

Material - Contact finish interface 1 Au (gold)

Material - Contact finish interface 2 Au (gold)



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Materials and material properties

Material - Contact carriers interface 1	Plastics
Material - Contact carriers interface 2	Plastics
Material - Union nut interface 1	CuZn (brass)
Material - Union nut interface 2	CuZn (brass)
Material - Union nut finish interface 1	Ni (nickel)
Material - Union nut finish interface 2	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 Â°C	-30 °C - 90 °C
Temperature - Operating Â°F	-22 °F - 194 °F
Particulate ingress interface 1	IP6X when plugged in
Liquid ingress/immersion interface 1	IPX7 when plugged in

The product meets the following standards

Generic cabling systems	
General requirements	DIN EN 50173-1
Profinet	yes
Common test methods for cables under fire conditions	
UNCE	R118
Test for vertical flame propagation for a single insulated wire or cable	IEC 60332-1-2
Measurement of smoke density of cables burning	DIN EN 61034



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Classifications

ETIM 5.0	EC002599
ETIM 6.0	EC002599

Packing details

Type of packaging	1 pc(s) / plastic bag
Packaging unit - Weight (gram)	659 g
Packaging unit - Weight (pound)	1.45 lb



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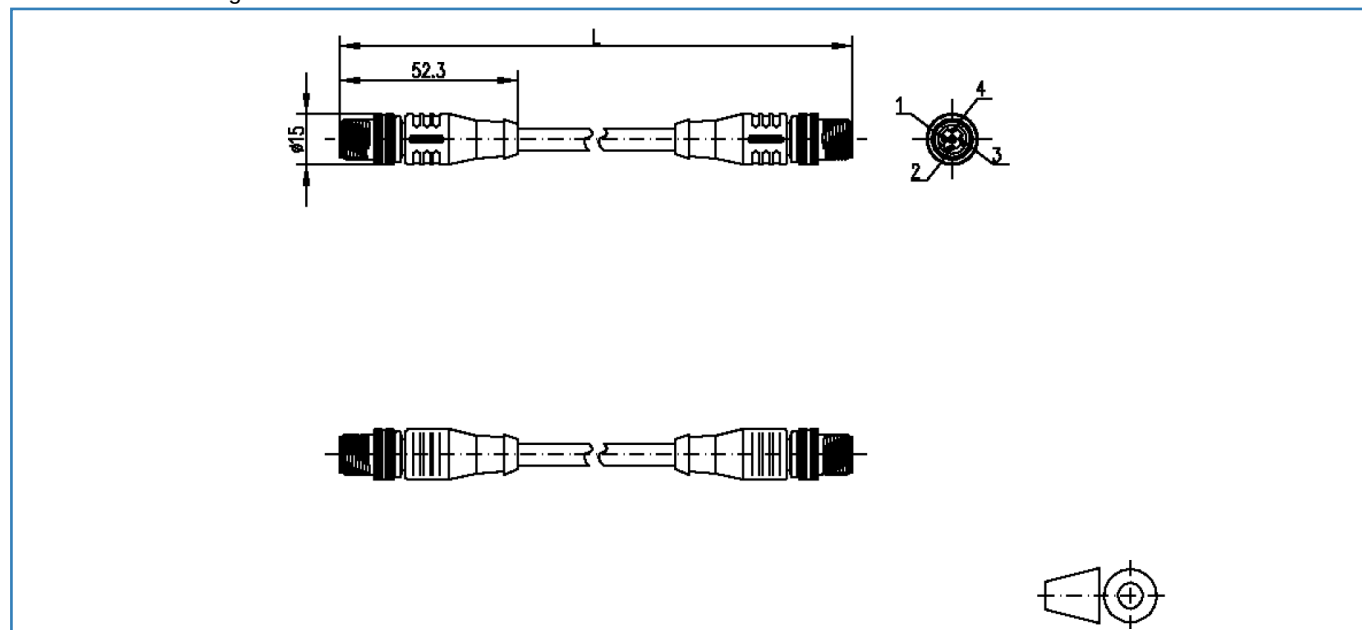
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