

P | Cabling

Data sheet

Page 1/7

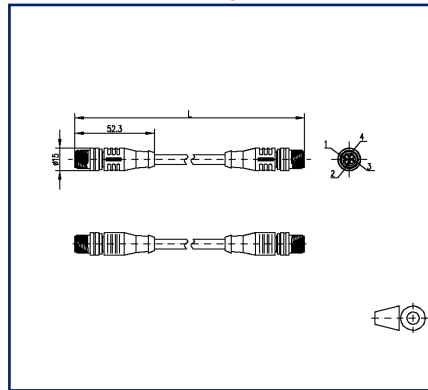
**Connection line M12, D-coded, 1.5 m, AWG 22/7, cat.5e,
 Â M12 plug straight - M12 plug straight,
 drag chain suitable, 4-pole, PUR, green**

P/N
142M1D11015
EAN 4251122194641
 2021/08/02
 Version: BI

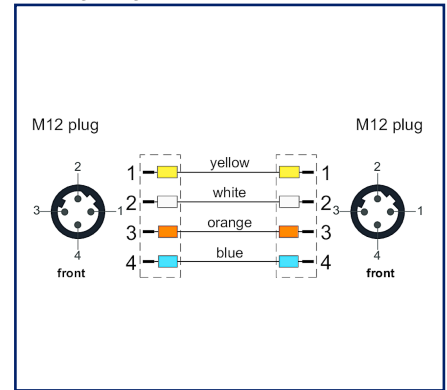
Illustrations



Dimensional drawing



Wiring diagram



See enlarged drawings at the end of document

Product specification

- shielded M12 Ethernet connection line
- drag chain suitable
- Cat.5e, 4-pole, D-coded to IEC 61076-2-101
- side 1: M12-plug, straight
- side 2: M12-plug, straight
- extrusion-coated cable on M12 connectors
- 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
- standard variants: 1.0 m, 2.0 m, 5.0 m, 10.0 m
- other cable lengths on request

P | Cabling

Data sheet

Page 2/7

**Connection line M12, D-coded, 1.5 m, AWG 22/7, cat.5e,
 Â M12 plug straight - M12 plug straight,
 drag chain suitable, 4-pole, PUR, green**

P/N
 142M1D11015
 EAN 4251122194641
 2021/08/02
 Version: BI

Technical Data

General Data

Fields of application

Industrial Ethernet

Design

Ethernet-Connection line

Shielding

shielded

Transmission technology

Copper

Cable Type

SF/FTP

Number of twisting elements

2

Twisting element

Pair

Wiring

PROFINET

Color coding fiber/ wire(s)

yellow, white, orange, blue

Color

green

Dimensions

Dimension - Interface 1 (L x W x H)

52.3 mm x 15 mm x 15 mm

Dimension - Interface 1 (L x W x H)

2.059 in. x 0.591 in. x 0.591 in.

Dimension - Interface 2 (L x W x H)

52.3 mm x 15 mm x 15 mm

Dimension - Interface 2 (L x W x H)

2.059 in. x 0.591 in. x 0.591 in.

Cable length (m)

1.5 m

Cable length (ft)

3.28 ft

Labeling option

identification label carrier

Transmission characteristics

Category (ISO)

5e

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

P | Cabling

Data sheet

Page 3/7

**Connection line M12, D-coded, 1.5 m, AWG 22/7, cat.5e,
 Â M12 plug straight - M12 plug straight,
 drag chain suitable, 4-pole, PUR, green**

P/N
 142M1D11015
 EAN 4251122194641
 2021/08/02
 Version: BI

Technical Data

Connections/interfaces

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

Conductor cross section, stranded wire	AWG 22/7
Conductor diameter, stranded wire (bare copper)	0.75 mm
Conductor diameter, stranded wire (bare copper)	0.03 in.

Cable sheath diameter (min. - max.)

Cable sheath diameter	6.5 mm
Cable sheath diameter	0.236 in.

Electrical characteristics

Current carrying capacity	4 A bei 40 °C
Rated voltage	60 V DC
UL rating (cable)	600 V
Insulation resistance	min. 100 MOhm

Mechanical data

Life - Number of mating cycles	min. 100
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 (mechanical resistance) at:	3 million bending cycles
Alternating bending radius	100 mm
velocity	4 m/s
acceleration	4 m/s ²
Shielding braid coverage	85 %
Installation method	PROFINET type C

Materials and material properties

Material - Conductor	Cu (copper)
Material - Conductor Insulation	Polyethylene
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	CuZnPb (brass)

P | Cabling

Data sheet

Page 4/7

**Connection line M12, D-coded, 1.5 m, AWG 22/7, cat.5e,
 Â M12 plug straight - M12 plug straight,
 drag chain suitable, 4-pole, PUR, green**

P/N
 142M1D11015
 EAN 4251122194641
 2021/08/02
 Version: BI

Technical Data

Materials and material properties

Material - Contact interface 2	CuZnPb (brass)
Material - Contact finish interface 1	Au (gold)
Material - Contact finish interface 2	Au (gold)
Material - Contact carriers interface 1	Plastics
Material - Contact carriers interface 2	Plastics
Material - Union nut interface 1	CuZnPb (brass)
Material - Union nut interface 2	CuZnPb (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	according to IEC 60332-1-2
Halogen free	yes
Oil resistance	yes
UV-resistance	yes
drag chain suitable	yes
RoHS	compliant
REACH - substance (SVHC)	Lead / 7439-92-1

Environmental conditions

Temperature (min. - max.)	
Temperature - Operating °C	-30 °C - 90 °C
Temperature - Operating °F	-22 °F - 194 °F
Particulate ingress interface 1	IP6X when plugged in
Liquid ingress/immersion interface 1	IPX5, IPX7, IPX8 when plugged in
Particulate ingress interface 2	IP6X when plugged in
Liquid ingress/immersion interface 2	IPX5, IPX7, IPX8 when plugged in
Pollution degree interface 1	3
Pollution degree interface 2	3

P | Cabling

Data sheet

Page 5/7

**Connection line M12, D-coded, 1.5 m, AWG 22/7, cat.5e,
 Â M12 plug straight - M12 plug straight,
 drag chain suitable, 4-pole, PUR, green**

P/N
142M1D11015
EAN 4251122194641
 2021/08/02
 Version: BI

Technical Data

Approvals	
CE	compliant
UL listed (file no.)	Approval pending

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 50288-2-1
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

Classifications	
ETIM 5.0	EC002599
ETIM 6.0	EC002599
ETIM 7.0	EC002599

Packing details

Type of packaging	1 pc(s) / plastic bag
Packaging unit - Weight (gram)	114 g
Packaging unit - Weight (pound)	0.25 lb

P | Cabling

Data sheet

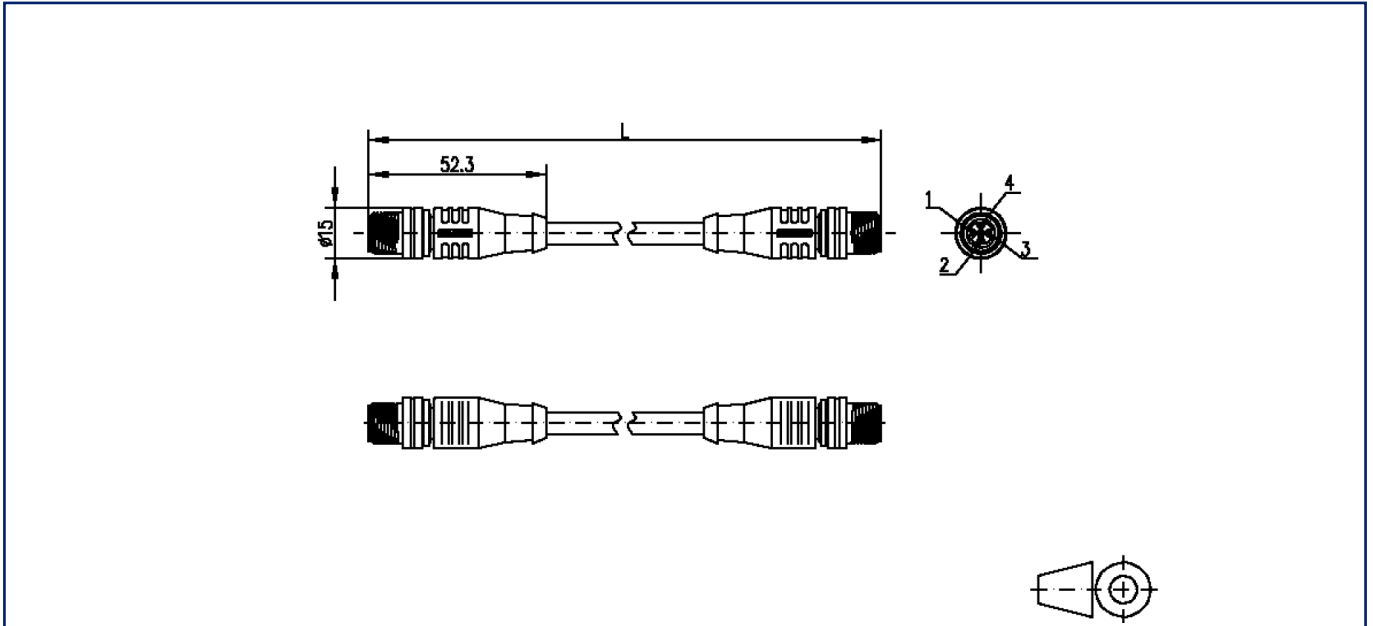
Page 6/7

**Connection line M12, D-coded, 1.5 m, AWG 22/7, cat.5e,
 Â M12 plug straight - M12 plug straight,
 drag chain suitable, 4-pole, PUR, green**

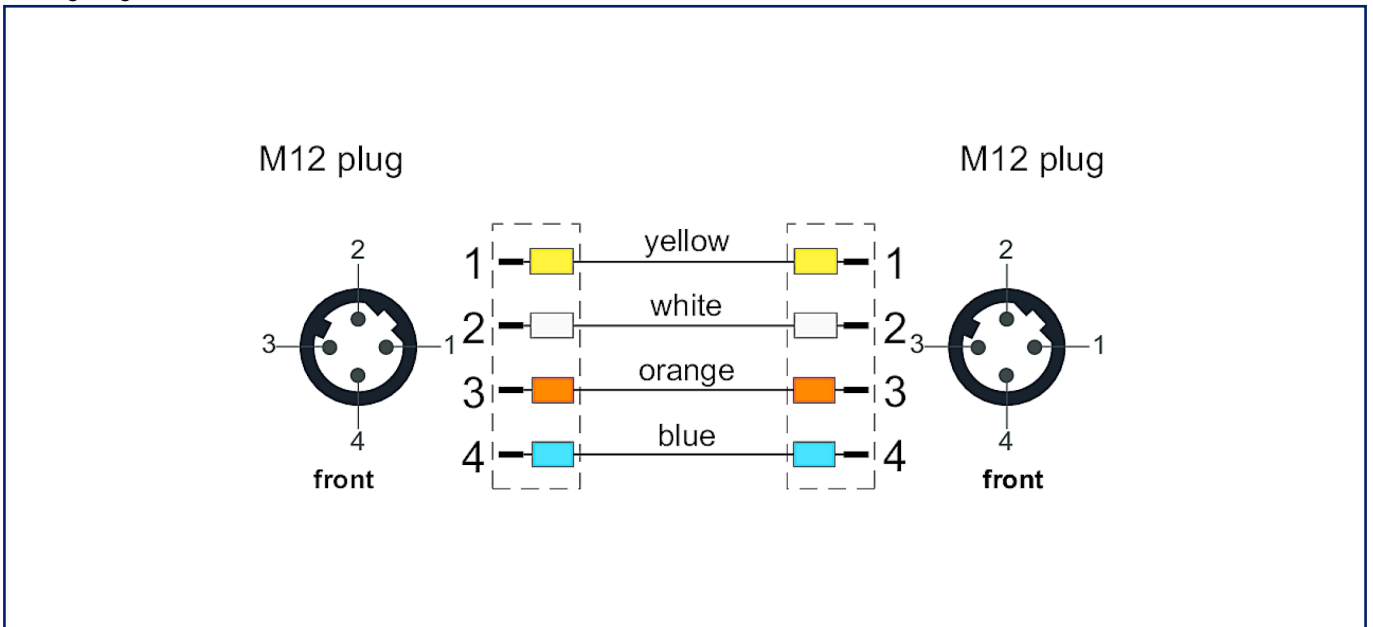
P/N
 142M1D11015
 EAN 4251122194641
 2021/08/02
 Version: BI

Illustrations

Dimensional drawing



Wiring diagram



P | Cabling

Data sheet

Page 7/7

**Connection line M12, D-coded, 1.5 m, AWG 22/7, cat.5e,
Â M12 plug straight - M12 plug straight,
drag chain suitable, 4-pole, PUR, green**

P/N
142M1D11015
EAN 4251122194641
2021/08/02
Version: BI

Illustrations

Principle diagram

