

Data sheet

Connection line M12 plug straight - M12 plug angled 4-pole, D-coded 1.0 m

Page 1/6

P/N

142M1D19010

EAN 4250184175018

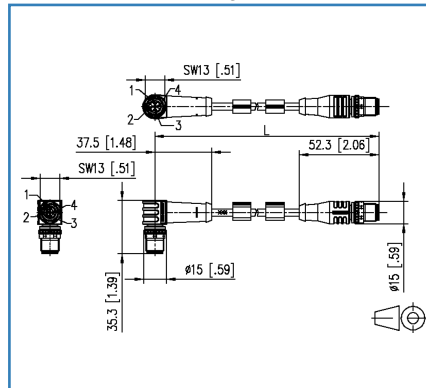
2019/01/08

Version: AT

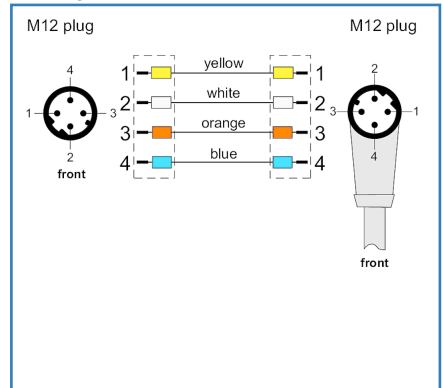
Illustrations



Dimensional drawing



Wiring



See enlarged drawings at the end of document

Product specification

- shielded M12 Ethernet connection line
 - Cat.5e, 4-pole, D-coded (IEC 61076-2-101)
 - side 1: M12-plug, straight
 - side 2: M12-plug, angled
 - 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



Data sheet

Page 2/6

Connection line M12 plug straight - M12 plug angled 4-pole, D-coded 1.0 m

P/N

142M1D19010

EAN 4250184175018

2019/01/08

Version: AT

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.

Dimension - Interface 2

35.3 mm x 15 mm x 45 mm

Dimension - Interface 2

1.39 in. x 0.591 in. x 1.772 in.

Cable length (m)

1 m

Cable length (ft)

3.28 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.



Connection line M12 plug straight - M12 plug angled 4-pole, D-coded 1.0 m

P/N
142M1D19010
EAN 4250184175018
2019/01/08
Version: AT

Technical Data

Connections/interfaces

Cable sheath diameter (min. - max.)	
Cable sheath diameter	6.5 mm
Cable sheath diameter	0.236 in.
acceleration	4 m/s ²

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/s ²
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)

Connection line M12 plug straight - M12 plug angled 4-pole, D-coded 1.0 m

P/N
142M1D19010
EAN 4250184175018
2019/01/08
Version: AT

Technical Data

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 Å°C	-30 °C - 90 °C
Temperature - Operating Å°F	-22 °F - 194 °F
Particulate ingress interface 1	IP6X when plugged in
Liquid ingress/immersion interface 1	IPX7 when plugged in
Particulate ingress interface 2	IP6X when plugged in
Liquid ingress/immersion interface 2	IPX7 when plugged in

The product meets the following standards

Generic cabling systems	
General requirements	DIN EN 50173-1
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



Data sheet

Page 5/6

Connection line M12 plug straight - M12 plug angled 4-pole, D-coded 1.0 m

P/N

142M1D19010

EAN 4250184175018

2019/01/08

Version: AT

Technical Data

Classifications

ETIM 5.0	EC002599
ETIM 6.0	EC002599

Packing details

Type of packaging	1 pc(s) / plastic bag
-------------------	-----------------------

P | Cabling

Data sheet

Page 6/6

Connection line M12 plug straight - M12 plug angled 4-pole, D-coded 1.0 m

P/N

142M1D19010

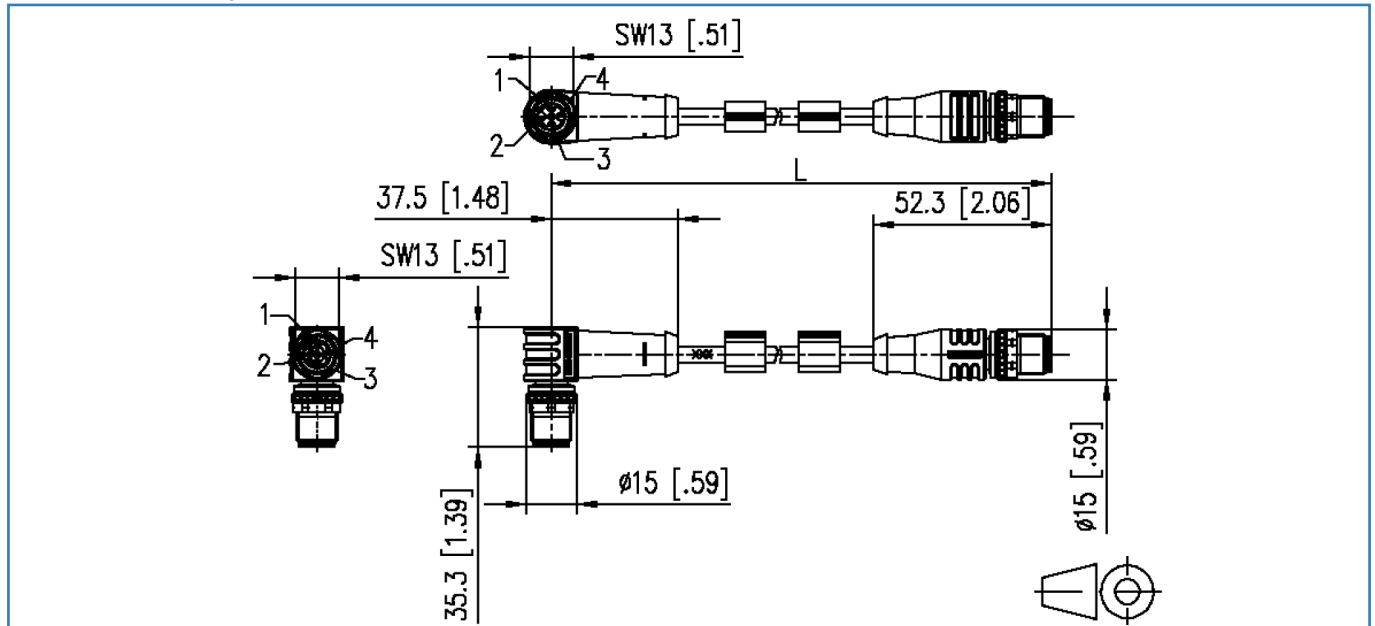
EAN 4250184175018

2019/01/08

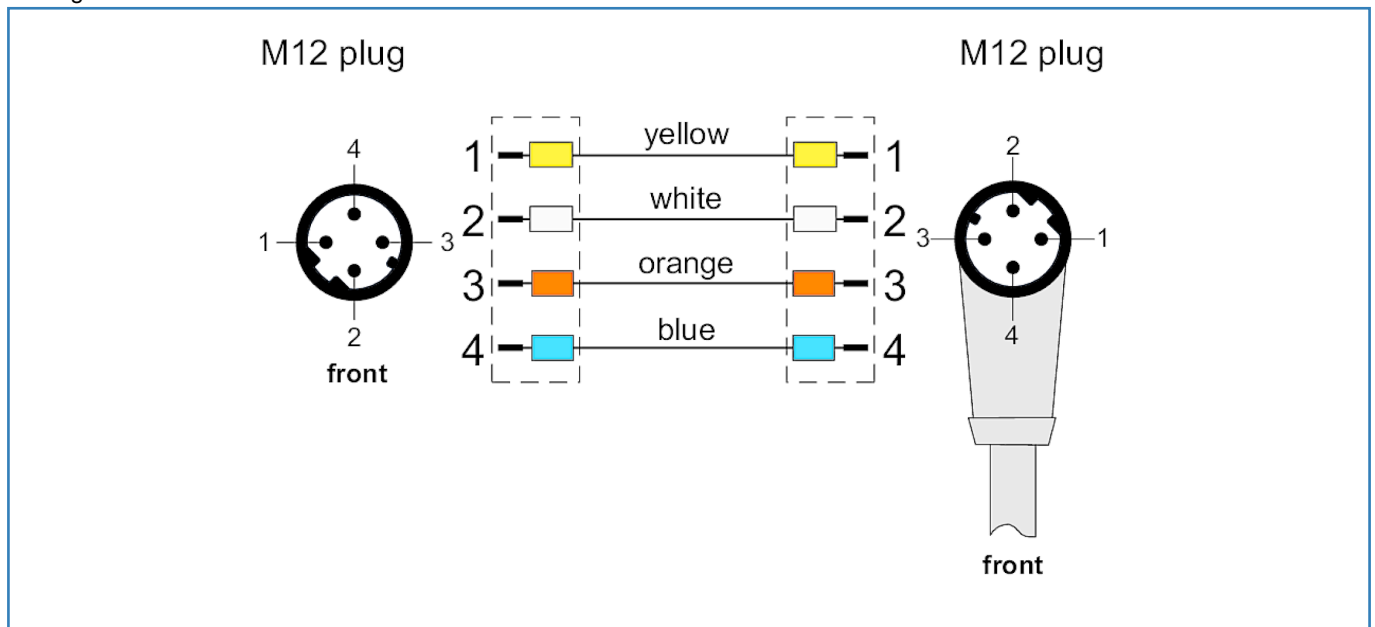
Version: AT

Illustrations

Dimensional drawing



Wiring



© 2019 METZ CONNECT - Technische Änderungen vorbehalten! Subject to modifications! Sous réserve de modifications techniques!

