

## Data sheet

### Connection line M12 plug straight - M12 plug angled 4-pole, D-coded 2.0 m

Page 1/6

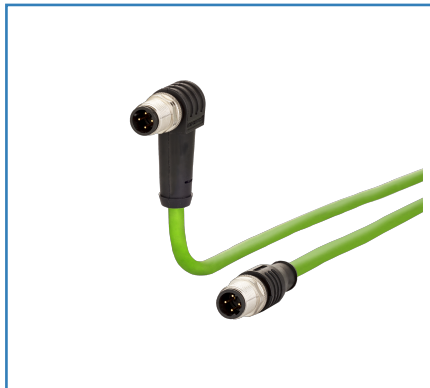
P/N

142M1D19020

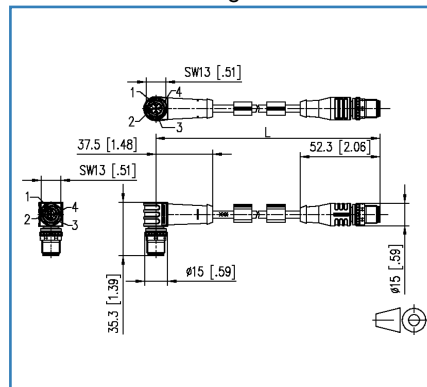
EAN 4250184175001

2018-13-02

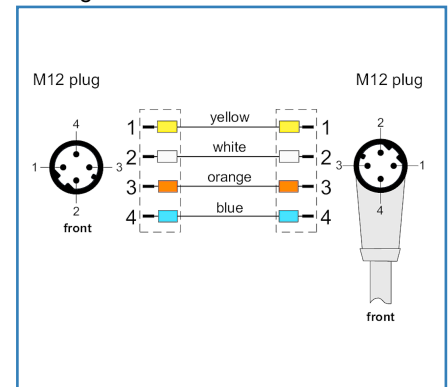
## Illustrations



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 2.0 m

P/N

142M1D19020

EAN 4250184175001

2018-13-02

## 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)

52.30 x 15.00 x 15.00 mm

Dimension - Interface 1 (L x W x H)

2.059 x 0.591 x 0.591 in.

Dimension - Interface 2 (L x W x H)

35.30 x 15.00 x 45.00 mm

Dimension - Interface 2 (L x W x H)

1.39 x 0.591 x 1.772 in.

Cable length (m)

2.00 m

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

data systems technology tool

Coding interface 2

data systems technology tool

Number of positions/contacts interface 1

4

Number of positions/contacts interface 2

4



## Data sheet

Page 3/6

# Connection line M12 plug straight - M12 plug angled 4-pole, D-coded 2.0 m

P/N

142M1D19020

EAN 4250184175001

2018-13-02

## 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 | 6.50 mm   |
| Cable sheath diameter | 0.236 in. |

### Electrical characteristics

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

### Mechanical characteristics

|                                  |           |
|----------------------------------|-----------|
| Life - Number of mating cycles   | min. 100  |
| Maximum operating bending radius | 26 mm     |
| Maximum operating bending radius | 1.024 in. |
| Maximum installation load        | 52 mm     |
| Maximum installation load        | 2.047 in. |
| Shielding braid coverage         | 85 %      |

### Materials and material properties

|   |                               |
|---|-------------------------------|
| Material - Conductor                    | Cu (copper)                   |
| Material - Conductor Insulation         | Polyethylen                   |
| 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)                     |
| Material - Contact carriers interface 1 | Plastics                      |
| Material - Contact carriers interface 2 | Plastics                      |
| Material - Union nut interface 1        | CuZn (brass)                  |



## Data sheet

Page 4/6

# Connection line M12 plug straight - M12 plug angled 4-pole, D-coded 2.0 m

P/N

142M1D19020

EAN 4250184175001

2018-13-02

## Technical Data

### Materials and material properties

|   |                   |
|---|-------------------|
| 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 °C           | -30 - 90 °C          |
| Temperature - Operating °F           | -22 - 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 |
| Pollution degree interface 1         | 3                    |
| Pollution degree interface 2         | 3                    |

### Approvals

|      |           |
|------|-----------|
| RoHS | compliant |
|------|-----------|

### The product meets the following standards

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

Data sheet

Page 5/6

## Connection line M12 plug straight - M12 plug angled 4-pole, D-coded 2.0 m

P/N

142M1D19020

EAN 4250184175001

2018-13-02

### Technical Data

#### Classifications

|          |          |
|----------|----------|
| ETIM 5.0 | EC002599 |
| ETIM 6.0 | EC002599 |

#### Packing details

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



Data sheet

Page 6/6

## Connection line M12 plug straight - M12 plug angled 4-pole, D-coded 2.0 m

P/N

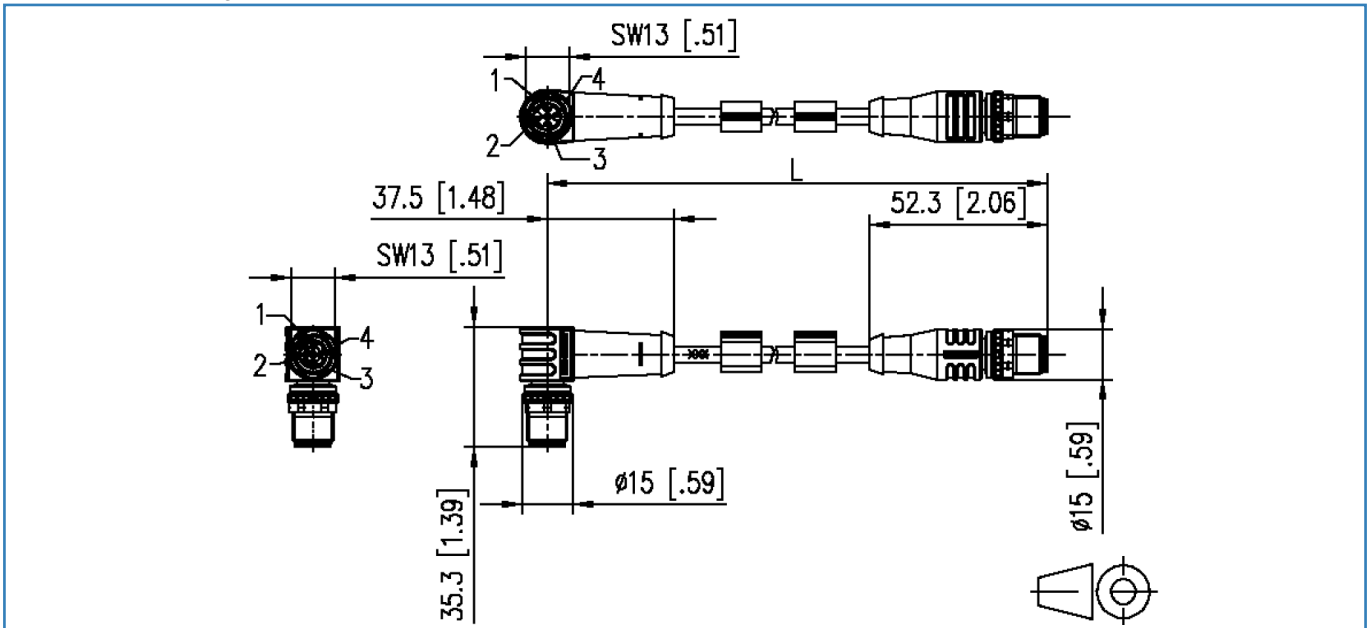
142M1D19020

EAN 4250184175001

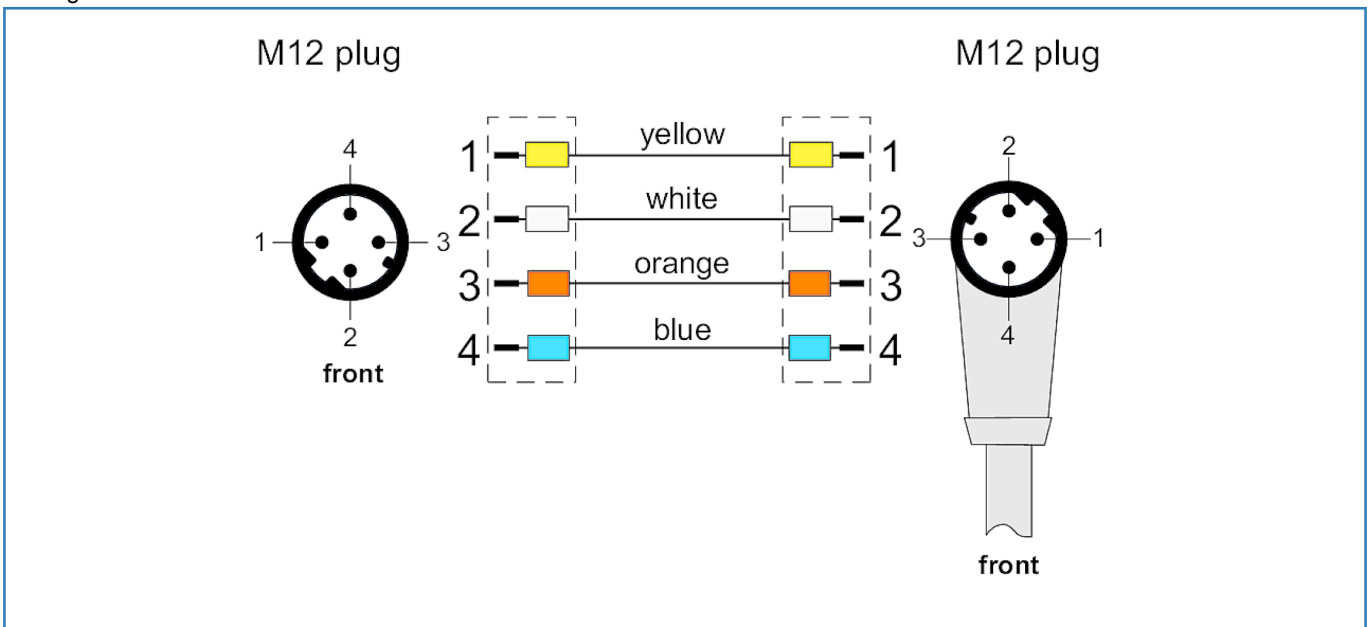
2018-13-02

### Illustrations

Dimensional drawing



Wiring



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Metz manufacturer](#):*

Other Similar products are found below :

[142M4D95050](#) [ASP0631006](#) [4898-454G](#) [4895-454G](#) [4887-454G](#) [4897-454G](#) [ASP0460622](#) [142M2X25005](#) [ASP0440222](#) [1108861321](#)  
[1108311319](#) [1108501319](#) [11089313](#) [834HTC-900ML](#) [130920-E](#) [150240C30610E](#) [110304412004](#) [1108831326](#) [150240C30310S](#) [135015-](#)  
[SSC-E](#) [1528SBGT19E](#) [1401110012KE](#) [142M2X15010](#) [11085813](#) [810-500](#) [810-50](#) [31336104](#) [ASP0430922](#) [SP06502VBNF](#) [31217103](#)  
[142M1D19020](#) [SR99S01VBNN0001](#) [31213102](#) [31251104](#) [AST0820406](#) [1108811319](#) [142M2XB5050](#) [834B-375ML](#) [841ER-1.17L](#)  
[31009105](#) [31020205](#) [31024102](#) [31027103](#) [31383106](#) [130922-03-E](#) [130924-E](#) [11027605](#) [1108841319](#) [1108341319](#) [15024AD206-E](#)