

## Data sheet

**Connection line M12 X-coded, 2.0 m**  
**M12 plug straight - M12 plug angled**  
**8-pole, position of coding 225°**

Page 1/6

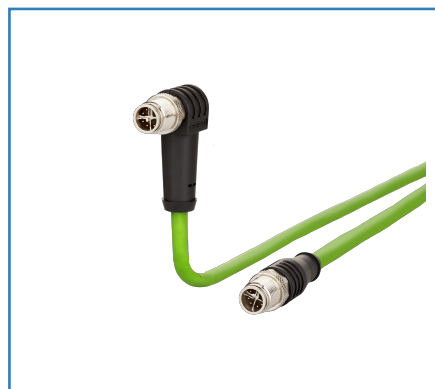
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142M2X1C020

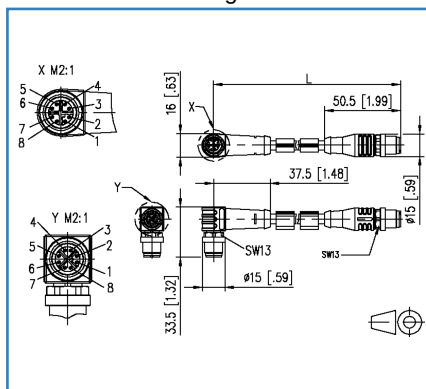
EAN 4251394609034

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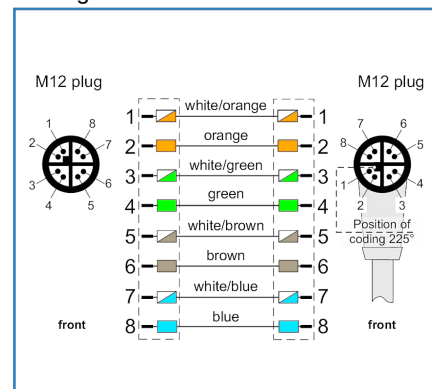
### Illustrations



Dimensional drawing



Wiring



See enlarged drawings at the end of document

### Product specification

- shielded M12-M12 Ethernet connection line
- Cat.6A, 8-pole, X-coded
- side 1: M12 connector, straight
- side 2: M12 connector, angled, position of coding 225°
- extrusion-coated cable on M12 connectors
- stranded wires 4x2xAWG26/7 PiMF
- overall shield tinned copper braid
- 1:1 pin assignment
- 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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Page 2/6

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## Technical Data

### General Data

#### Fields of application

Industrial Ethernet

#### Design

Ethernet-Connection line

#### Shielding

shielded

#### Transmission technology

Copper

#### Cable Type

S/FTP

#### Number of twisting elements

4

#### Twisting element

Pair

#### Wiring

1 - 1

#### Color coding fiber/ wire(s)

white/orange, orange, white/green, green, white/brown, brown, white/blue, blue

#### Color

green

#### Dimensions

##### Dimension - Interface 1 (L x W x H)

48.50 x 19.00 x 21.50 mm

##### Dimension - Interface 1 (L x W x H)

1.909 x 0.748 x 0.846 in.

##### Dimension - Interface 2 (L x W x H)

50.50 x 15.00 x 15.00 mm

##### Dimension - Interface 2 (L x W x H)

1.988 x 0.591 x 0.591 in.

#### Cable length (m)

2.00 m

#### Labeling option

identification label carrier

### Transmission characteristics

#### Category (ISO)

6<sub>A</sub>

### Connections/interfaces

#### Connector technology interface 1

M12-plug

#### Connector technology interface 2

M12-plug

#### Coding interface 1

X-coded

#### Coding interface 2

X-coded

#### Number of positions/contacts interface 1

8

#### Number of positions/contacts interface 2

8

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

##### Conductor cross section, stranded wire

AWG 26/7

##### Conductor cross section, stranded wire

0.141 mm<sup>2</sup>

##### Conductor diameter, stranded wire (bare copper)

0.483 mm

##### Conductor diameter, stranded wire (bare copper)

0.019 in.



## Data sheet

Page 3/6

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### Connections/interfaces

Cable sheath diameter (min. - max.)

Cable sheath diameter 6.40 mm

Cable sheath diameter 0.236 in.

### Electrical characteristics

Current carrying capacity 0.5 A

Insulation resistance min. 100 MOhm

### Mechanical characteristics

Maximum operating bending radius 64 mm

Maximum operating bending radius 2.52 in.

Maximum installation load 32 mm

Maximum installation load 1.26 in.

Shielding braid coverage 70 %

### Materials and material properties

Material - Conductor Cu (copper)

Material - Conductor Insulation Polyethylen

Material - Cable jacket PUR

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)

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)



# P | Cabling

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Page 4/6

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#### Materials and material properties

|                  |     |
|------------------|-----|
| 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 | IPX5, IPX7 when plugged in |
| Pollution degree interface 1         | 2                          |
| Pollution degree interface 2         | 2                          |

#### Approvals

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

#### The product meets the following standards

|                                                                                      |                    |
|--------------------------------------------------------------------------------------|--------------------|
| Connectors for electronic equipment                                                  |                    |
| Free and fixed connectors                                                            | IEC 60603-7-51     |
| circular connector                                                                   | DIN EN 61076-2-109 |
| Multi-element metallic cables used in analogue and digital communication and control | DIN EN 50288-4-2   |
| Test for vertical flame propagation for a single insulated wire or cable             | DIN EN 60332-1-2   |
| Measurement of smoke density of cables burning                                       | IEC 61034          |

#### Classifications

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



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Page 5/6

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#### Packing details

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



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Page 6/6

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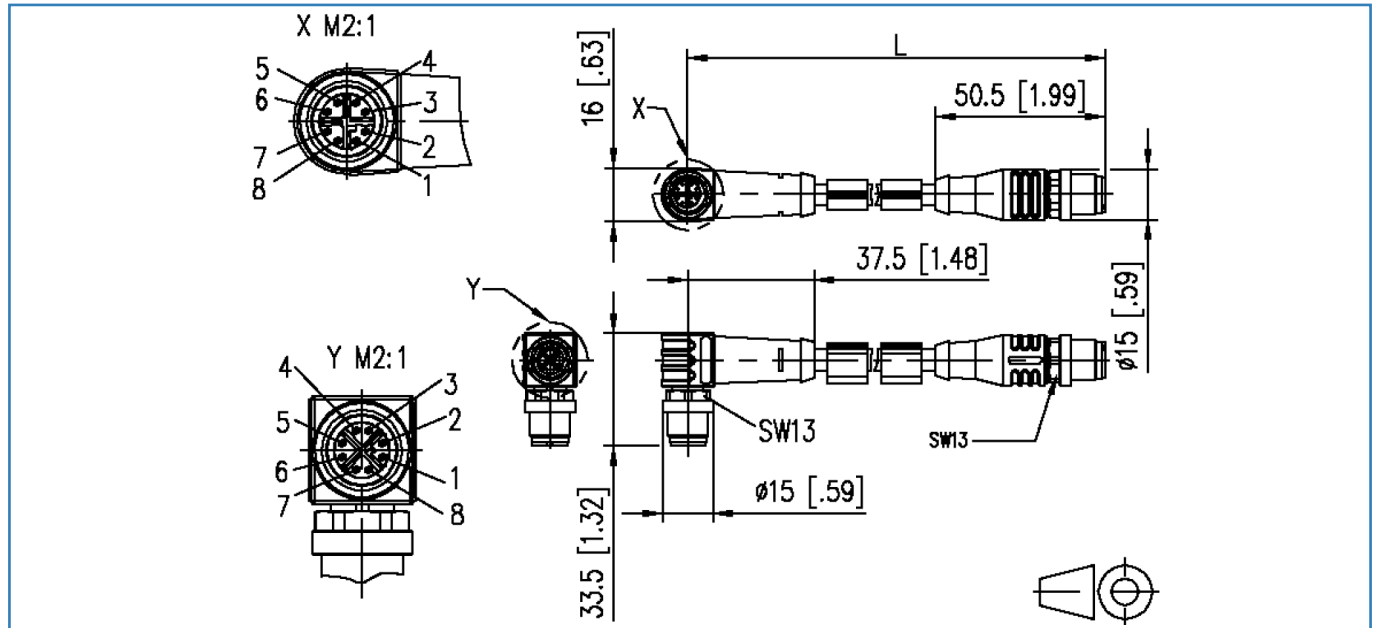
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## Illustrations

### Dimensional drawing



### Wiring

