

Data sheet

Connection line M12, D-coded, 5.0 m
 Â M12 plug straight - M12 plug straight
 drag chain suitable, 4-pole, green

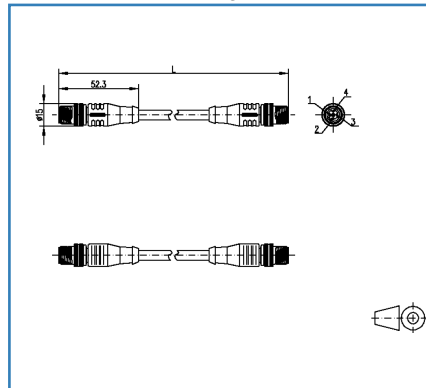
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P/N
 142M1D11050
 EAN 4250184139461
 2019/01/08
 Version: BB

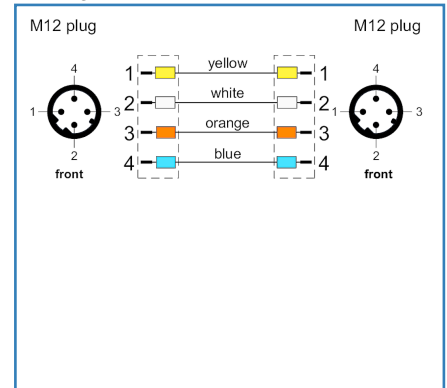
Illustrations



Dimensional drawing



Wiring



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

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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. |
| Dimension - Interface 2 | 52.3 mm x 15 mm x 15 mm |
| Dimension - Interface 2 | 2.059 in. x 0.591 in. x 0.591 in. |
| Cable length (m) | 5 m |
| Cable length (ft) | 16.4 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/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) |

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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 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 |

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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) | 363 g |
| Packaging unit - Weight (pound) | 0.8 lb |

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P | Cabling

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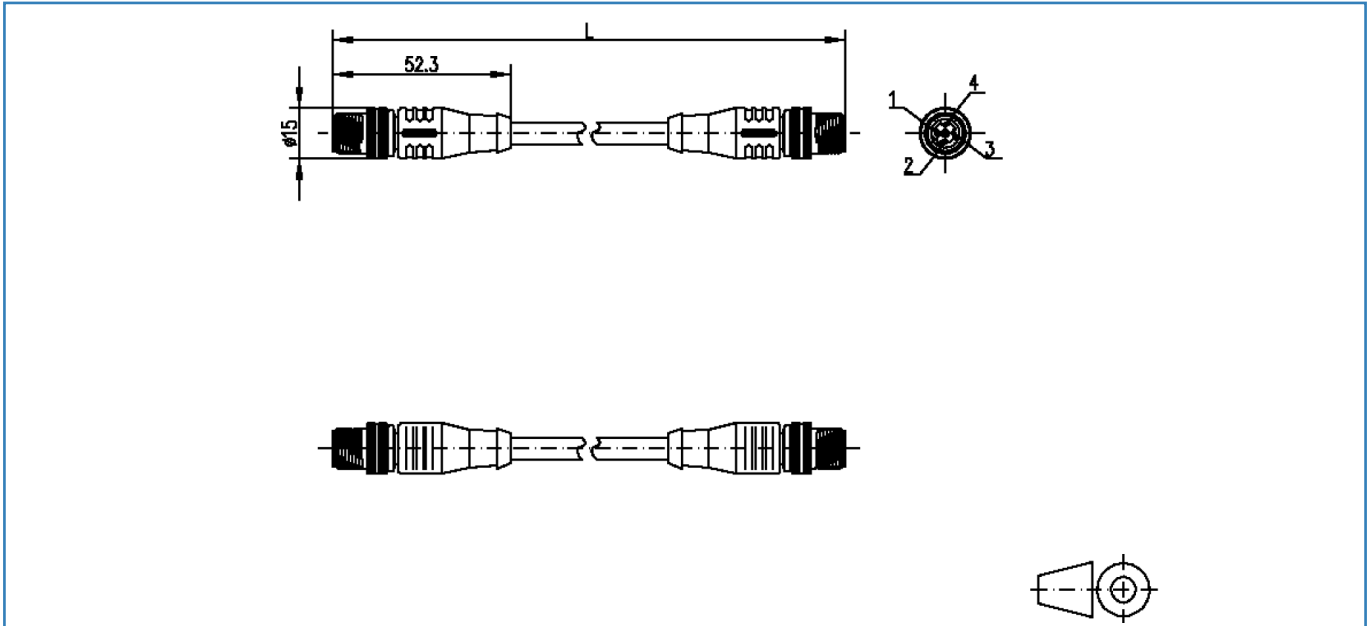
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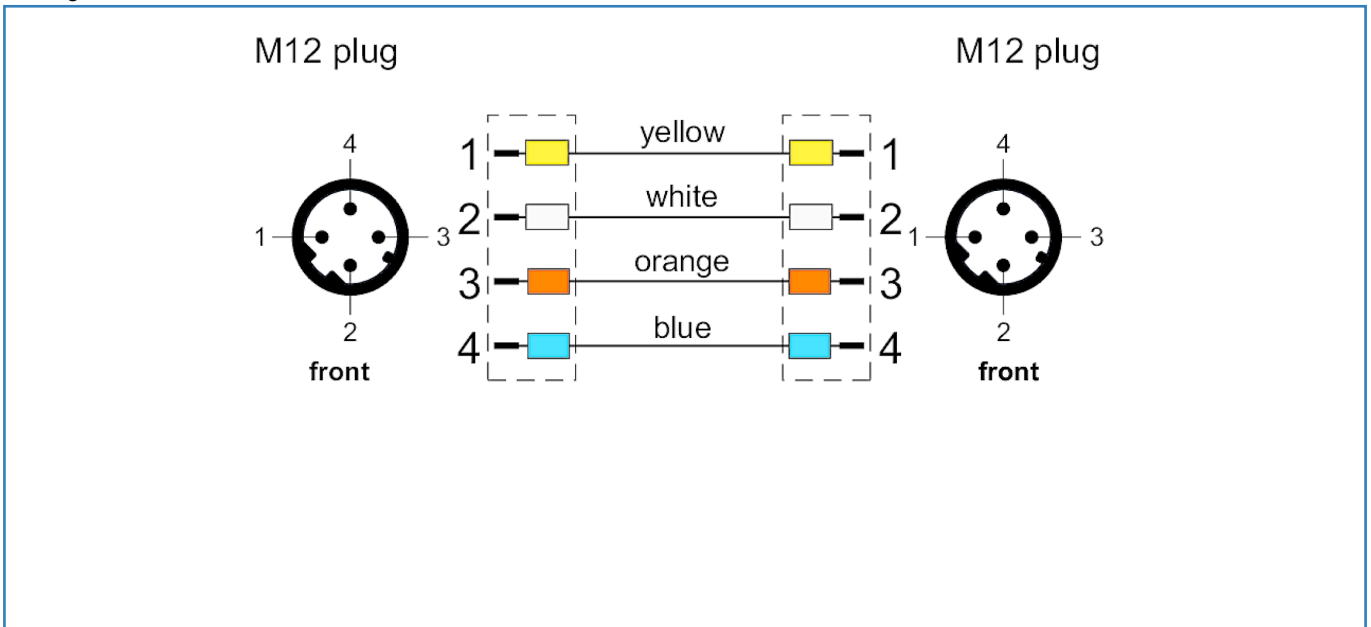
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Illustrations

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Wiring



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