

P | Cabling

Data sheet

**M12 Sensor/actuator cable, A-coded, 10.0 m,
M12 jack straight - free line end,
unshielded, 5-pole, PVC**

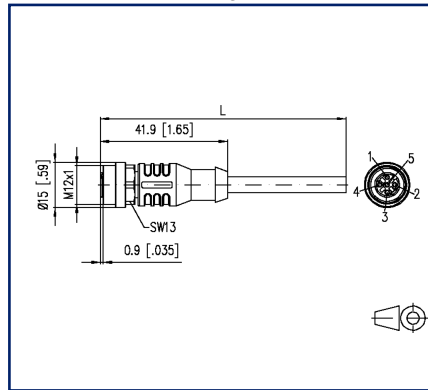
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P/N
142MJA20100
EAN **4251394647265**
2023/05/24
Version: G

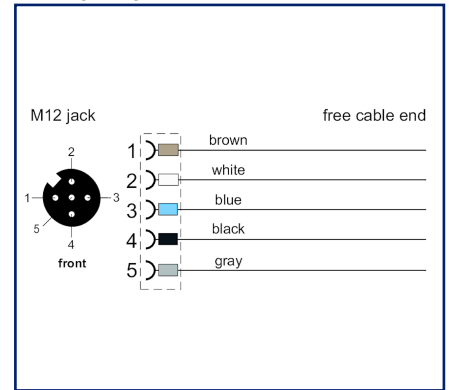
Illustrations



Dimensional drawing



Wiring diagram



See enlarged drawings at the end of document

Product specification

PVC-cable for measurement, control and sensor technology. Suitable for applications in dry areas on packaging machines, assembly and conveyor technology. High flexibility with unstressed movement (conditional drag chain application possible). Predestined for applications in food and beverage industry. Special features: seawater resistant, recyclable, LABS free, RoHs compliant, acid and alkali resistant, ozone resistant, UV resistant.

- 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 | Sensor/actuator connection cable M12, A-coded |
| Shielding | unshielded |
| Transmission technology | Copper |
| Color coding fiber/ wire(s) | brown, white, blue, black, gray |
| Color | gray |
| Dimensions | |
| Dimension - Interface 1 (L x W x H) | 41.9 mm x 15 mm x 15 mm |
| Dimension - Interface 1 (L x W x H) | 1.65 in. x 0.591 in. x 0.591 in. |
| Cable length (m) | 10 m |
| Cable length (ft) | 32.81 ft |
| Labeling option | identification label carrier |

Connections/interfaces

| | |
|---|----------------------|
| Connector technology interface 1 | M12-jack |
| Connector technology interface 2 | free line end |
| Coding interface 1 | A-coded |
| Number of positions/contacts interface 1 | 5 |
| Termination data, stranded wire (min. - max.) | |
| Conductor cross section, stranded wire | AWG 22/19 |
| Conductor cross section, stranded wire | 0.34 mm ² |
| Stranded wire structure | 19x0.15mm |
| Cable sheath diameter (min. - max.) | |
| Cable sheath diameter | 4.9 mm |
| Cable sheath diameter | 0.193 in. |

Electrical characteristics

| | |
|---------------------------|---------------|
| Current carrying capacity | 4 A at 40 °C |
| Rated voltage | 60 V |
| Insulation resistance | min. 100 MOhm |

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Mechanical data

| | |
|----------------------------------|----------|
| Life - Number of mating cycles | min. 100 |
| Maximum operating bending radius | 49 mm |
| Alternating bending radius | 49 mm |

Materials and material properties

| | |
|---|-------------------|
| Material - Conductor | Cu (copper) |
| Material - Conductor Insulation | PVC |
| Material - Cable jacket | PVC |
| Material - Body interface 1 | Plastics |
| Material - Protective housing interface 1 | FPM/FKM |
| Material - Contact interface 1 | CuSn (tin bronze) |
| Material - Contact finish interface 1 | Au (gold) |
| Material - Contact carriers interface 1 | Plastics |
| Material - Union nut interface 1 | CuZnPb (brass) |
| Material - Union nut finish interface 1 | Ni (nickel) |
| UV-resistance | yes |
| RoHS | compliant |

Environmental conditions

| | |
|--------------------------------------|----------------------------------|
| Temperature (min. - max.) | |
| Temperature - Operating °C | -25 °C - 80 °C |
| Temperature - Operating °F | -13 °F - 176 °F |
| Temperature - Installation °C | 0 °C - 80 °C |
| Temperature - Installation °F | 32 °F - 176 °F |
| Particulate ingress interface 1 | IP6X when plugged in |
| Liquid ingress/immersion interface 1 | IPX5, IPX7, IPX8 when plugged in |
| Pollution degree interface 1 | 3 |

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Approvals

| | |
|----------------------|------------------|
| UL listed (file no.) | Approval pending |
|----------------------|------------------|

Standards/Regulations

| | |
|-------------------------------------|--|
| Connectors for electronic equipment | |
|-------------------------------------|--|

| | |
|--------------------|--------------------|
| circular connector | DIN EN 61076-2-101 |
|--------------------|--------------------|

Classifications

| | |
|----------|----------|
| ETIM 5.0 | EC001855 |
| ETIM 6.0 | EC001855 |
| ETIM 7.0 | EC001855 |
| ETIM 8.0 | EC001855 |
| ETIM 9.0 | EC001855 |

Packing details

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



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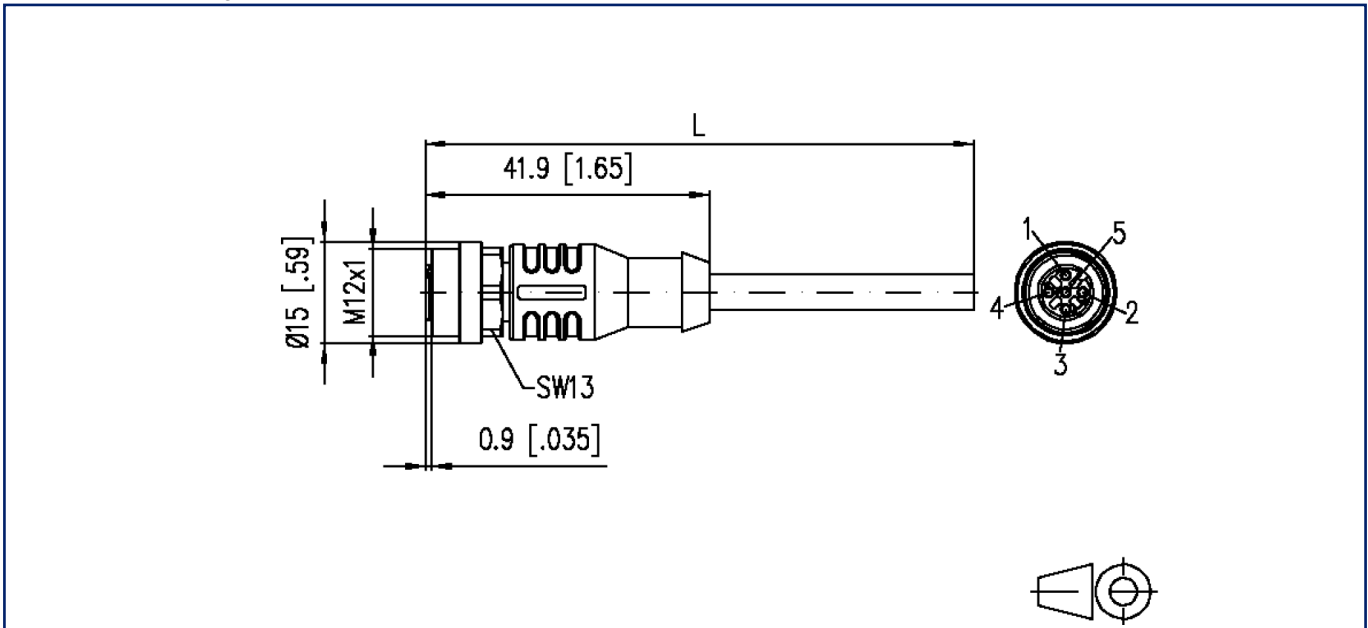
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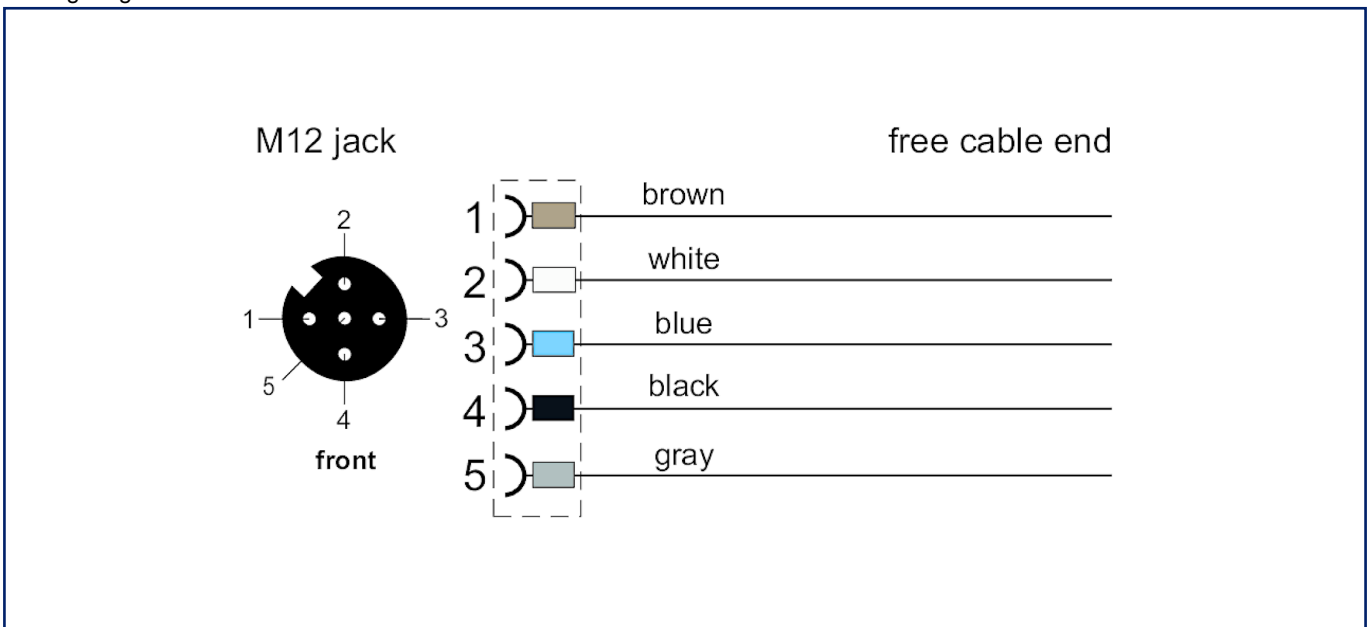
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Illustrations

Dimensional drawing



Wiring diagram



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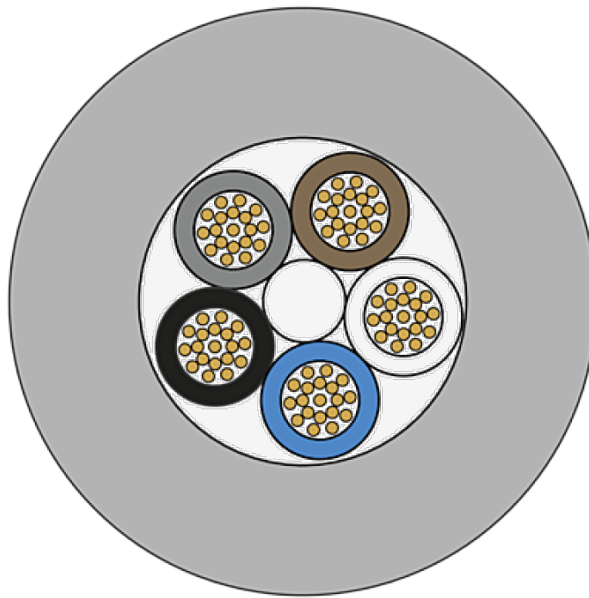
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Principle diagram



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