

# P | Cabling

## Data sheet

**M12 Sensor/actuator cable, A-coded, X.X m,  
M12 plug angled - free line end,  
shielded, 5-pole, PVC-C**

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P/N  
**142MMAD0XXX**

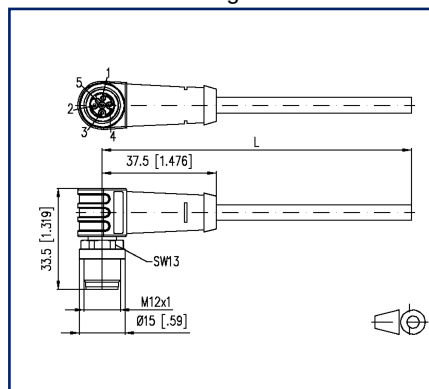
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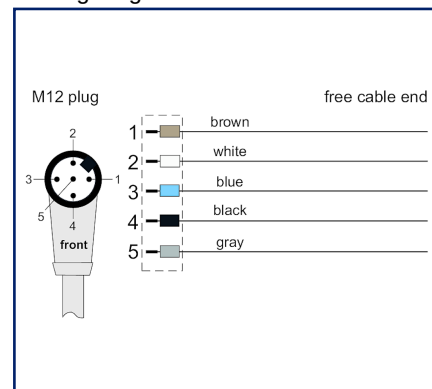
## Illustrations



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

- all available variants can be created with the configurator



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## Technical Data

| General Data                                  |                                               |
|-----------------------------------------------|-----------------------------------------------|
| Fields of application                         | Industrial Ethernet                           |
| Design                                        | Sensor/actuator connection cable M12, A-coded |
| Shielding                                     | shielded                                      |
| Transmission technology                       | Copper                                        |
| Color coding fiber/ wire(s)                   | brown, white, blue, black, gray               |
| Color                                         | gray                                          |
| Dimensions                                    |                                               |
| Dimension - Interface 1 (L x W x H)           | 33.5 mm x 37.5 mm x 15 mm                     |
| Dimension - Interface 1 (L x W x H)           | 1.319 in. x 1.476 in. x 0.591 in.             |
| Labeling option                               | identification label carrier                  |
| Connections/interfaces                        |                                               |
| Connector technology interface 1              | M12-plug angled                               |
| 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 mm²                                      |
| Stranded wire structure                       | 19x0.15mm                                     |
| Cable sheath diameter (min. - max.)           |                                               |
| Cable sheath diameter                         | 5.5 mm                                        |
| Cable sheath diameter                         | 0.216 in.                                     |
| Electrical characteristics                    |                                               |
| Current carrying capacity                     | 4 A at 40 °C                                  |
| Rated voltage                                 | 60 V                                          |
| Insulation resistance                         | min. 100 MOhm                                 |



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## Technical Data

### Mechanical data

|                                  |          |
|----------------------------------|----------|
| Life - Number of mating cycles   | min. 100 |
| Maximum operating bending radius | 55 mm    |
| Alternating bending radius       | 55 mm    |

### Materials and material properties

|                                         |                   |
|-----------------------------------------|-------------------|
| Material - Conductor                    | Cu (copper)       |
| Material - Conductor Insulation         | PVC               |
| Material - Cable jacket                 | PVC               |
| Material - Body interface 1             | Plastics          |
| 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                                |

### Approvals

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



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## Technical Data

### 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 |

### Packing details

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



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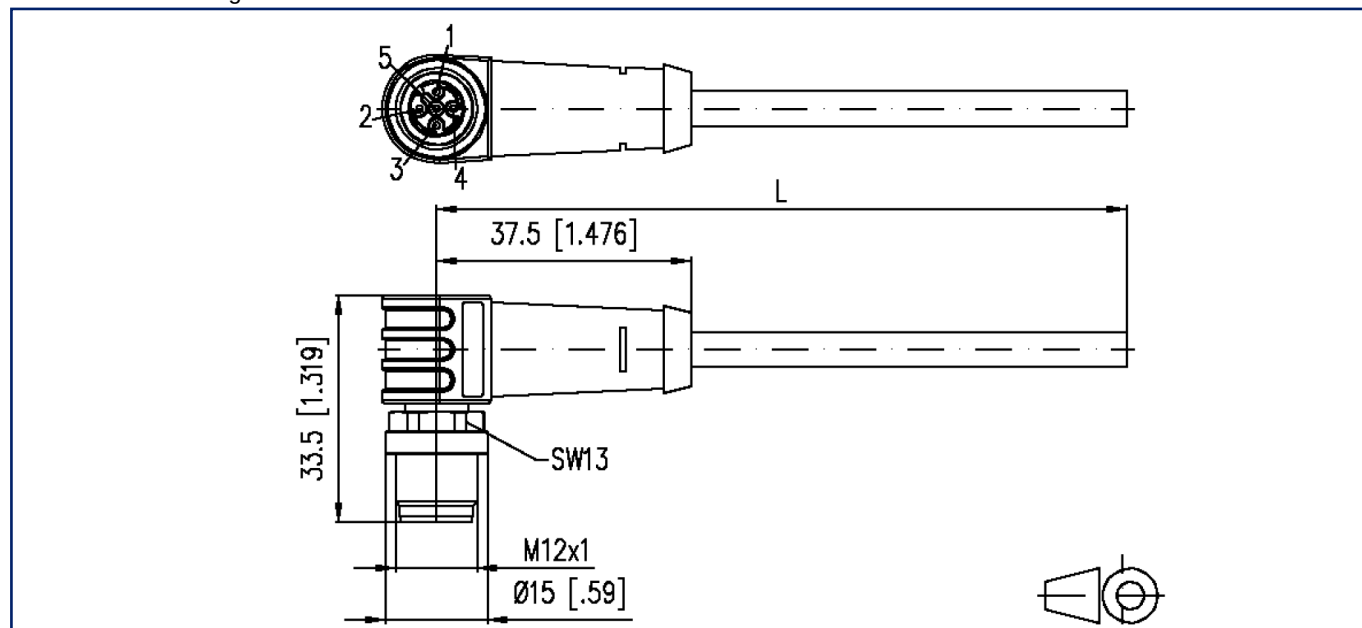
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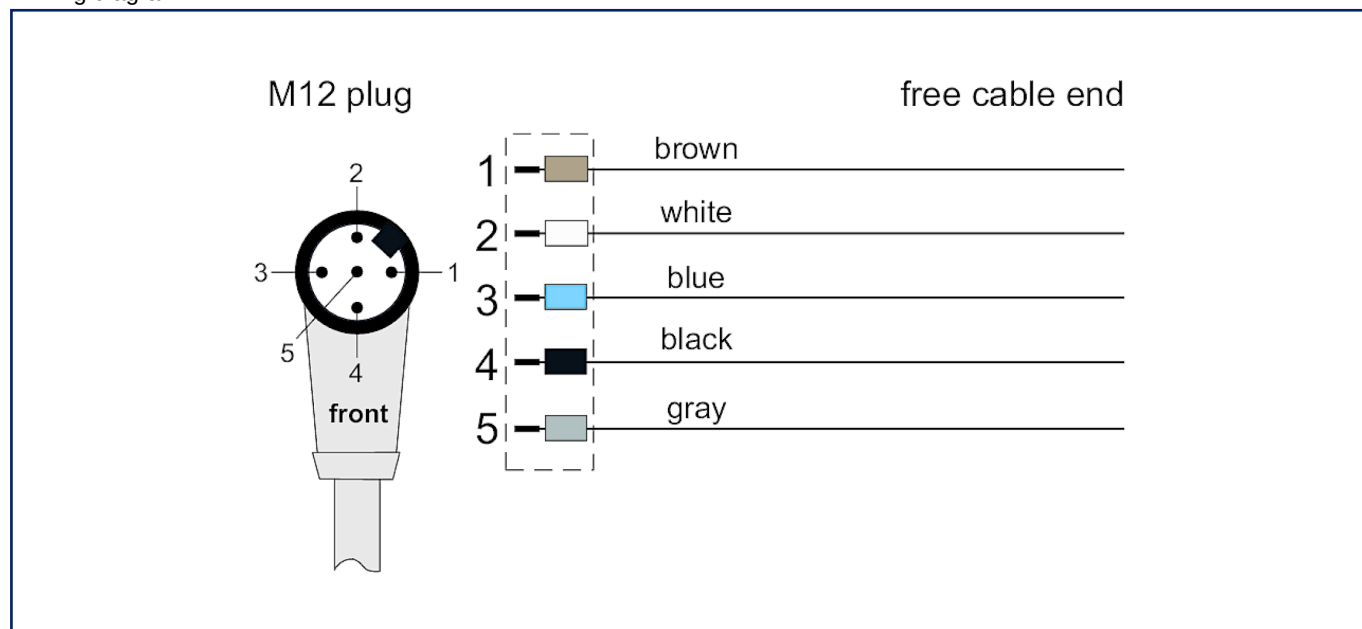
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## Illustrations

### Dimensional drawing



### Wiring diagram



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Principle diagram

