

# Data sheet

## M12 Sensor/actuator cable, A-coded, M12 plug angled - free line end, unshielded, 4-pole, PVC

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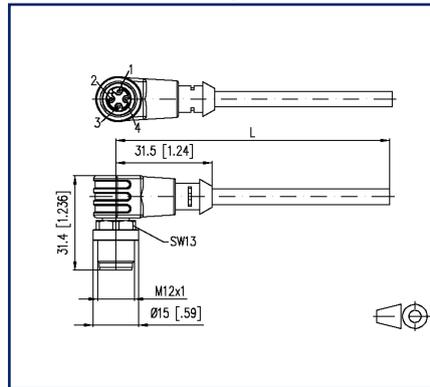
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142MIAD0XXX

2025/06/23  
Version: H

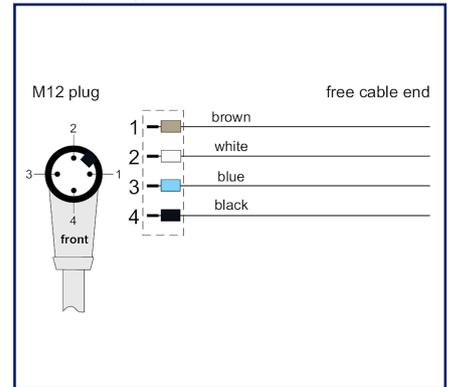
### Illustrations



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	unshielded
Transmission technology	Copper
Color coding fiber/ wire(s)	brown, white, blue, black
Color	gray
Dimensions	
Dimension - Interface 1 (L x W x H)	31.4 mm x 31.5 mm x 15 mm
Dimension - Interface 1 (L x W x H)	1.236 in. x 1.24 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	4
Termination data, stranded wire (min. - max.)	
Conductor cross section, stranded wire	AWG 22/19
Conductor cross section, stranded wire	0.34 mm <sup>2</sup>
Stranded wire structure	19x0.15mm
Cable sheath diameter (min. - max.)	
Cable sheath diameter	4.5 mm
Cable sheath diameter	0.177 in.

Electrical characteristics	
Current carrying capacity	4 A at 40 °C
Rated voltage	60 V DC
Insulation resistance	min. 100 MOhm

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**Technical Data**

**Mechanical data**

Life - Number of mating cycles	min. 100
Maximum operating bending radius	45 mm
Alternating bending radius	45 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
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)
Halogen free	yes
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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**Technical Data****Approvals**

UL listed (file no.) Approval pending

**Standards/Regulations**

Connectors for electronic equipment

circular connector DIN EN 61076-2-101

**Classifications**

ETIM 7.0 EC001855

ETIM 8.0 EC001855

**Packing details**

Type of packaging 1 pc(s) / plastic bag

**Application note**

This product is a standard product of METZ CONNECT. METZ CONNECT is not aware of the specific intended use of the goods by the Customer or any customers of the Customer. The Customer guarantees that it has fully and sufficiently tested the use of the goods and any product modifications, product changes or product enhancements with regard to the specific intended use in accordance with the state of the art or in any other way. At METZ CONNECT's request, the Customer shall submit and make available meaningful evidence (e.g. test and laboratory protocols, certifications, etc.).



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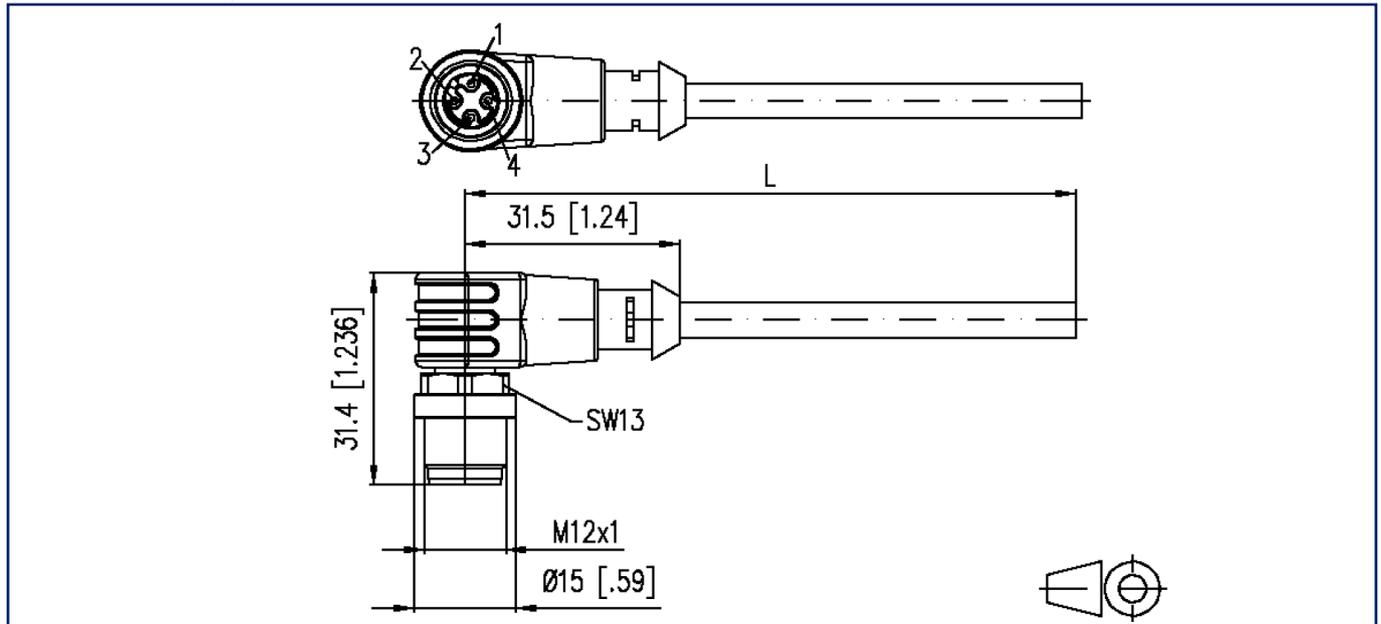
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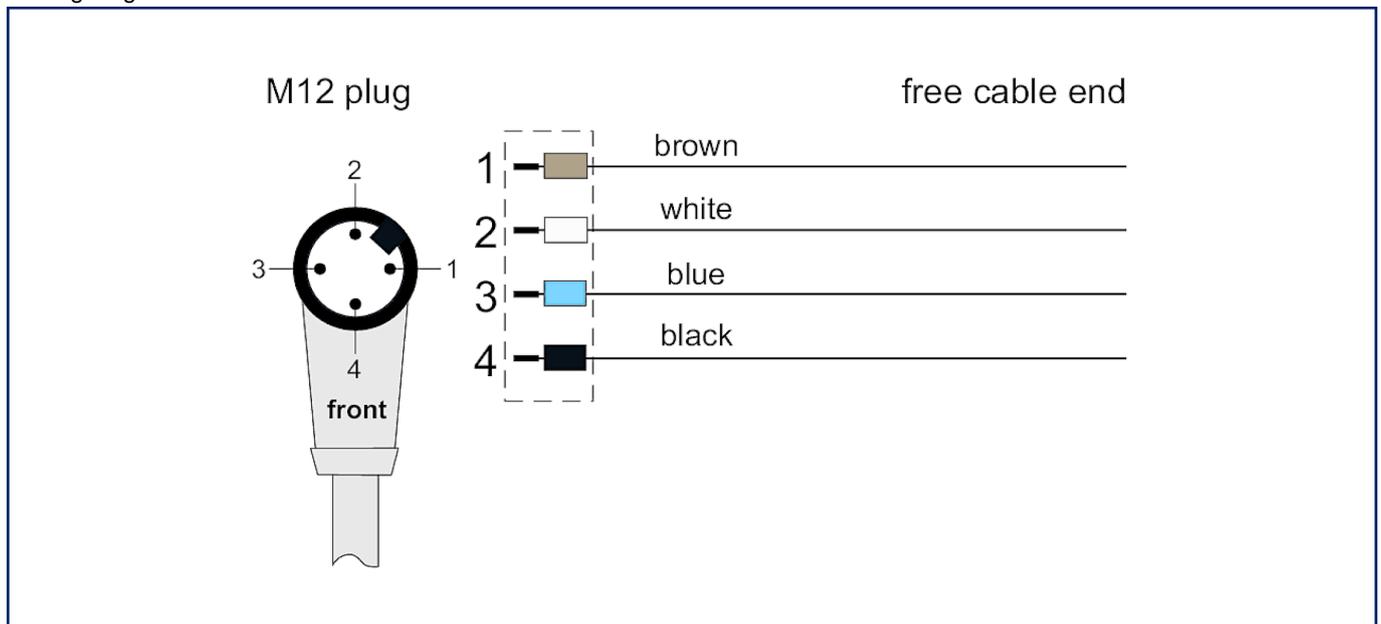
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**Illustrations**

Dimensional drawing



Wiring diagram



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Principle diagram

