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Data sheet

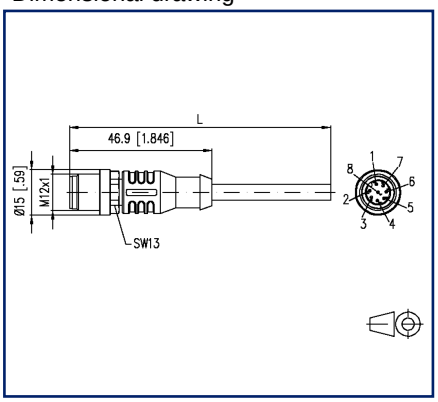
M12 Sensor/actuator cable, A-coded, 1.0 m, M12 plug straight - free line end, unshielded, 8-pole, PUR

P/N 142MEA10010
EAN 4251394646312
2022/03/14
Version: E

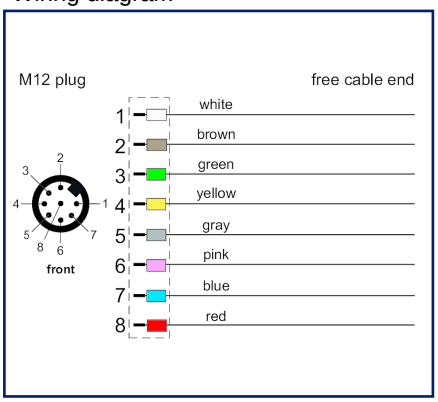
Illustrations



Dimensional drawing



Wiring diagram



See enlarged drawings at the end of document

Product specification

Flexible, silicone- and halogen-free control cable with high mechanical strength. The cable is resistant to chemicals, hydrolysis and microbes. The drag-chain application is possible at a bending radius of minimum 10xd. Due to its weld-field immunity, the cable is very well suited for the flexible application in robotics, machine tools and metal-cutting production. The cables meet the UL and CSA (UL10493/20549; cULus) requirements. Special features: flame retardant, seawater resistant, recyclable, LABS free, RoHs compliant, acid and alkali resistant, ozone resistant, UV resistant, hydrolysis proof, drag chain resistant, torsion resistant, welding sparks resistant, halogen free, silicone free, oil 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)	white, brown, green, yellow, gray, pink, blue, red
Color	black
Dimensions	
Dimension - Interface 1 (L x W x H)	46.9 mm x 15 mm x 15 mm
Dimension - Interface 1 (L x W x H)	1.846 in. x 0.591 in. x 0.591 in.
Cable length (m)	1 m
Cable length (ft)	3.28 ft
Labeling option	identification label carrier

Connections/interfaces	
Connector technology interface 1	M12-plug
Connector technology interface 2	free line end
Coding interface 1	A-coded
Number of positions/contacts interface 1	8
Termination data, stranded wire (min. - max.)	
Conductor cross section, stranded wire	AWG 24/32
Conductor cross section, stranded wire	0.25 mm²
Stranded wire structure	32x0.10mm
Cable sheath diameter (min. - max.)	
Cable sheath diameter	5.9 mm
Cable sheath diameter	0.232 in.

Electrical characteristics	
Current carrying capacity	2 A at 40 °C
Rated voltage	30 V
Insulation resistance	min. 100 MOhm

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Technical Data

Mechanical data	
Life - Number of mating cycles	min. 100
Torsion	+/-180°/m, >= 0.5 million cycles
Maximum operating bending radius	59 mm
Alternating bending radius	59 mm
acceleration	5 m/s²

Materials and material properties	
Material - Conductor	Cu (copper)
Material - Conductor Insulation	polypropylene
Material - Cable jacket	PUR
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)
Flame retardancy	yes
Halogen free	yes
Silicone free	no paint wetting interfering substances (LaBS) in the process chain
LaBS Note	subsequent contamination possible due to handling and possible storage in your company
Oil resistance	yes
UV-resistance	yes
drag chain suitable	yes
torsional	yes
RoHS	compliant
REACh	compliant
REACh - substance (SVHC)	Lead / 7439-92-1

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Environmental conditions	
Temperature (min. - max.)	
Temperature - Operating °C	-50 °C - 90 °C
Temperature - Operating °F	-58 °F - 194 °F
Temperature - Installation °C	-30 °C - 90 °C
Temperature - Installation °F	-22 °F - 194 °F
Temperature - drag chain °C	-25 °C - 60 °C
Temperature - drag chain °F	-13 °F - 140 °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	
CE	compliant
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

Packing details	
Type of packaging	1 pc(s) / plastic bag

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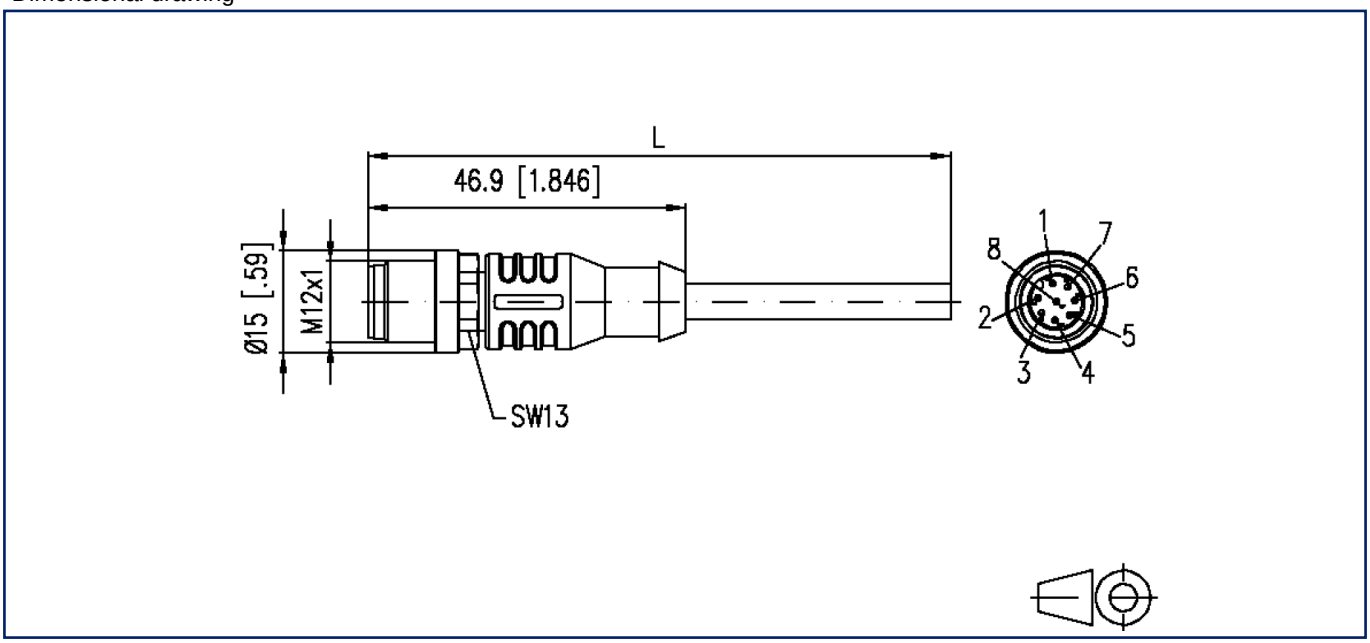
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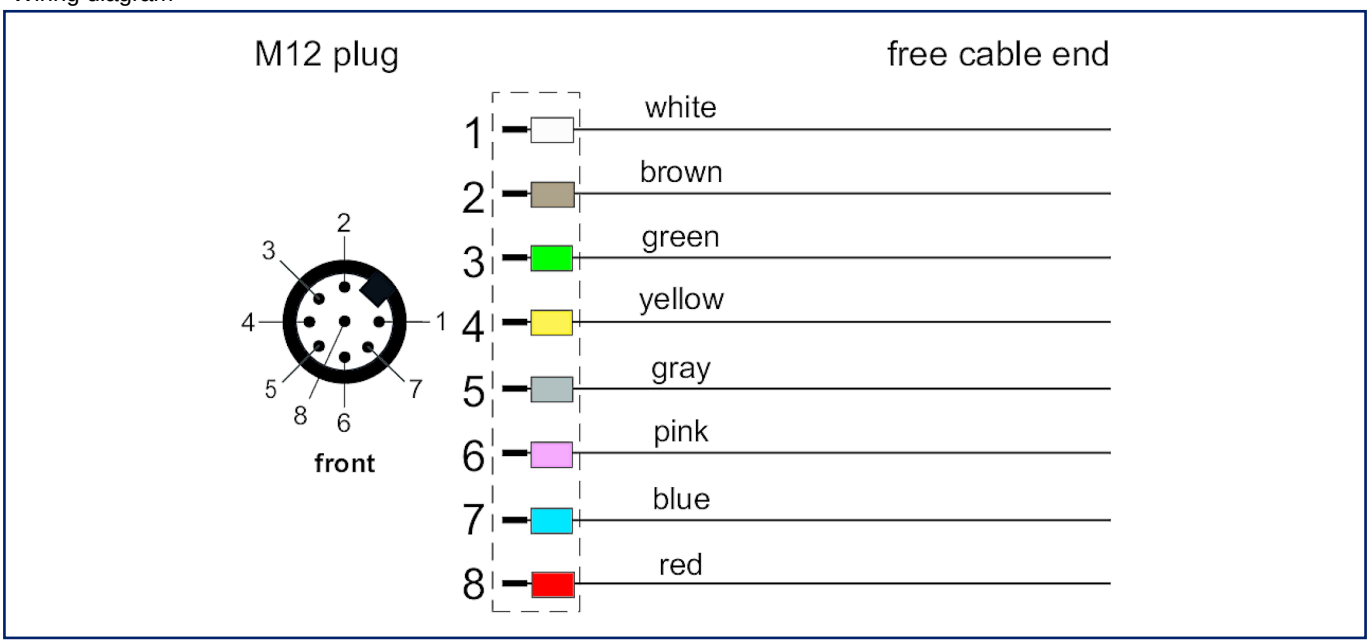
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Wiring diagram



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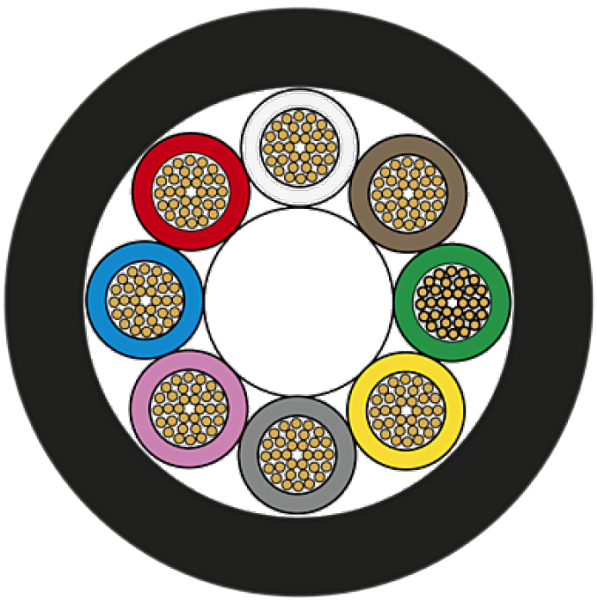
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Illustrations

Principle diagram



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