

Data sheet

Connection line M12 X-coded, 2.0 m
M12 plug straight - M12 plug angled
8-pole, position of coding 45°

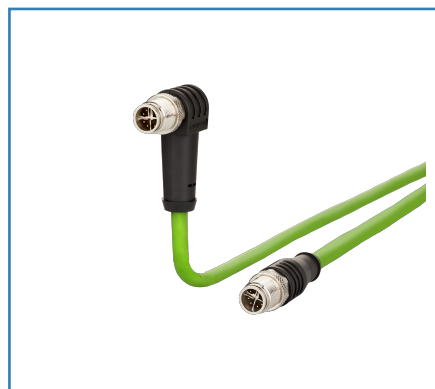
P/N

142M2X1A020

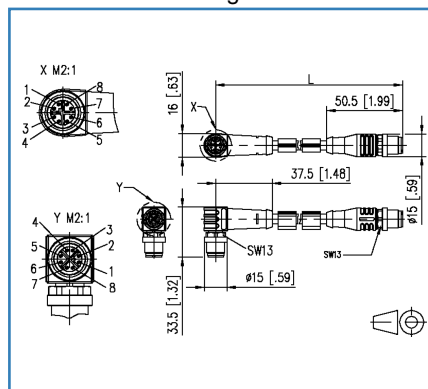
EAN 4251394608914

2018-01-03

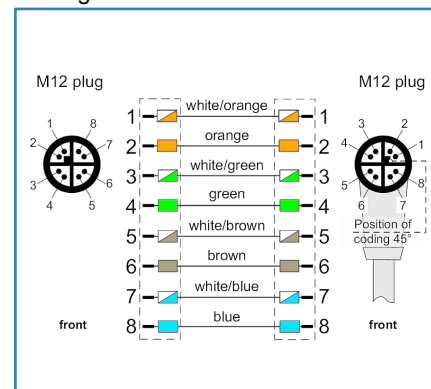
Illustrations



Dimensional drawing



Wiring



See enlarged drawings at the end of document

Product specification

- shielded M12-M12 Ethernet connection line
- Cat.6_A, 8-pole, X-coded
- side 1: M12 connector, straight
- side 2: M12 connector, angled, position of coding 45°
- extrusion-coated cable on M12 connectors
- stranded wires 4x2xAWG26/7 PiMF
- overall shield tinned copper braid
- 1:1 pin assignment
- green cable, PUR
- variants: 1.0 m, 2.0 m, 5.0 m, 10.0 m
- other cable lengths on request

Data sheet

Page 2/6

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Technical Data

General Data

Fields of application	Industrial Ethernet
Design	Ethernet-Connection line
Shielding	shielded
Transmission technology	Copper
Cable Type	S/FTP
Number of twisting elements	4
Twisting element	Pair
Wiring	1 - 1
Color coding fiber/ wire(s)	white/orange, orange, white/green, green, white/brown, brown, white/blue, blue
Color	green
Dimensions	
Dimension - Interface 1 (L x W x H)	48.50 x 19.00 x 21.50 mm
Dimension - Interface 1 (L x W x H)	1.909 x 0.748 x 0.846 in.
Dimension - Interface 2 (L x W x H)	50.50 x 15.00 x 15.00 mm
Dimension - Interface 2 (L x W x H)	1.988 x 0.591 x 0.591 in.
Cable length (m)	2.00 m
Labeling option	identification label carrier

Transmission characteristics

Category (ISO)	6 _A
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Connections/interfaces

Connector technology interface 1	M12-plug
Connector technology interface 2	M12-plug
Coding interface 1	X-coded
Coding interface 2	X-coded
Number of positions/contacts interface 1	8
Number of positions/contacts interface 2	8
Termination data, stranded wire (min. - max.)	
Conductor cross section, stranded wire	AWG 26/7
Conductor cross section, stranded wire	0.141 mm ²
Conductor diameter, stranded wire (bare copper)	0.483 mm
Conductor diameter, stranded wire (bare copper)	0.019 in.



Data sheet

Page 3/6

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Connections/interfaces

Cable sheath diameter (min. - max.)

Cable sheath diameter 6.40 mm

Cable sheath diameter 0.236 in.

Electrical characteristics

Current carrying capacity 0.5 A

Insulation resistance min. 100 MOhm

Mechanical characteristics

Maximum operating bending radius 64 mm

Maximum operating bending radius 2.52 in.

Maximum installation load 32 mm

Maximum installation load 1.26 in.

Shielding braid coverage 70 %

Materials and material properties

Material - Conductor Cu (copper)

Material - Conductor Insulation Polyethylen

Material - Cable jacket PUR

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)

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)



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Page 4/6

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Materials and material properties

Flame retardancy	yes
Halogen free	yes
Oil resistance	yes
UV-resistance	yes

Environmental conditions

Temperature (min. - max.)	
Temperature - Operating °C	-30 - 90 °C
Temperature - Operating °F	-22 - 194 °F
Particulate ingress interface 1	IP6X when plugged in
Liquid ingress/immersion interface 1	IPX5, IPX7 when plugged in
Pollution degree interface 1	2
Pollution degree interface 2	2

Approvals

RoHS	compliant
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The product meets the following standards

Connectors for electronic equipment	
Free and fixed connectors	IEC 60603-7-51
circular connector	DIN EN 61076-2-109
Multi-element metallic cables used in analogue and digital communication and control	DIN EN 50288-4-2
Test for vertical flame propagation for a single insulated wire or cable	DIN EN 60332-1-2
Measurement of smoke density of cables burning	IEC 61034

Classifications

ETIM 5.0	EC002599
ETIM 6.0	EC002599



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Page 5/6

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Packing details

Type of packaging	1 pc(s) / plastic bag
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Page 6/6

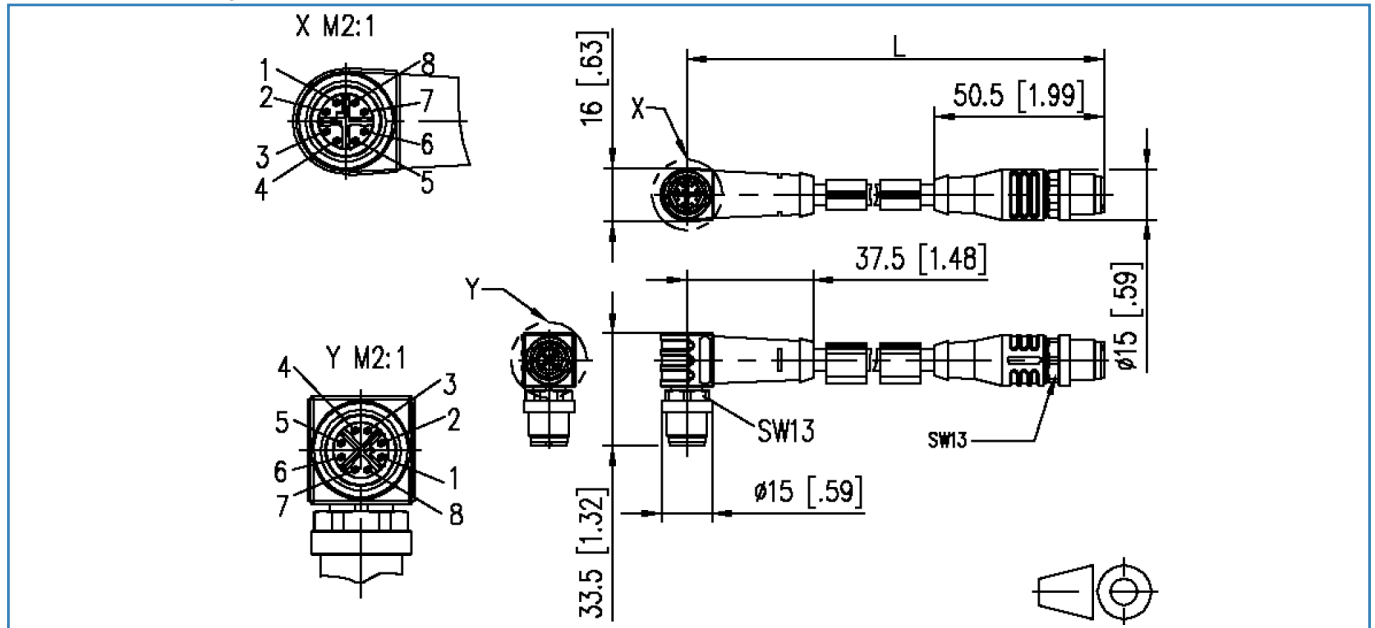
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