

Data sheet

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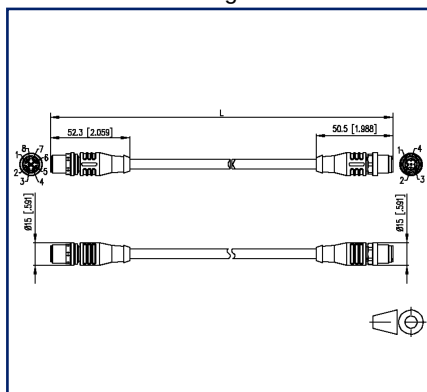
**M12 Industrial Ethernet cable, D-X Changer, 2.0 m,
M12 D plug straight - M12 X plug straight, PUR**

P/N
142M5Q11020
EAN 4251394616001
2026/09/04
Version: T

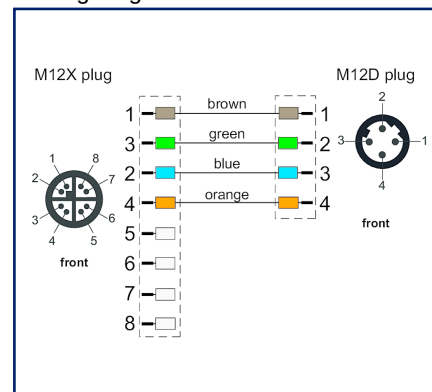
Illustrations



Dimensional drawing



Wiring diagram



See enlarged drawings at the end of document

Product specification

Shielded PUR cable for safe and industrial data transmission in automation and fieldbus technology. The cable meets the requirements of ULStyle 20963 and complies with Cat7 (electrical properties based on EN50288-4-2). Materials and design allow increased mechanical stress (abrasion, bending, vibration, etc.) of the cable. Special properties: UL style 20963, flame retardant, UV resistant, 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	Ethernet-Connection line
Shielding	shielded
Transmission technology	Copper
Cable Type	S/FTP
Number of twisting elements	2
Twisting element	Pair
Color coding fiber/ wire(s)	white, orange, white, green, white, brown, white, blue
Dimensions	
Dimension - Interface 1 (L x W x H)	52.3 mm x 15 mm x 15 mm
Dimension - Interface 1 (L x W x H)	2.059 in. x 0.591 in. x 0.591 in.
Dimension - Interface 2 (L x W x H)	50.5 mm x 15 mm x 15 mm
Dimension - Interface 2 (L x W x H)	1.988 in. x 0.591 in. x 0.591 in.
Cable length (m)	2 m
Cable length (ft)	6.56 ft
Weight	48 kg/km
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	D-coded
Coding interface 2	X-coded
Number of positions/contacts interface 1	4
Number of positions/contacts interface 2	8



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Connections/interfaces

Termination data, stranded wire (min. - max.)

Conductor cross section, stranded wire	AWG 26/7
Conductor diameter, stranded wire (bare copper)	0.48 mm
Conductor diameter, stranded wire (bare copper)	0.019 in.

Core diameter (min. - max.)

Core diameter (conductor with insulation)	0.98 mm
Core diameter (conductor with insulation)	0.039 in.

Cable sheath diameter (min. - max.)

Cable sheath diameter	6.4 mm
Cable sheath diameter	0.252 in.

Electrical characteristics

Current carrying capacity	0.5 A at 40 °C
Rated voltage	60 V DC
Insulation resistance	min. 100 MOhm

Mechanical data

Life - Number of mating cycles	min. 100
Bending radius without load	min. 32 mm
Maximum operating bending radius	65 mm
Maximum operating bending radius	2.559 in.
Maximum installation load	32 mm
Maximum installation load	1.26 in.
Shielding braid coverage	70 %

Materials and material properties

Cable

Material - Conductor	Cu (copper)
Material - Conductor Insulation	Foam-Skin Polyethylen
Material - Cable jacket	PUR
Flame retardancy	according to IEC 60332-1-2



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Materials and material properties

Interface 1

Material - Body interface 1	Plastics
Material - Contact interface 1	CuZnPb (brass)
Material - Contact finish interface 1	Au (gold)
Material - Contact carriers interface 1	Plastics

Interface 2

Material - Body interface 2	Plastics
Material - Contact interface 2	CuZnPb (brass)
Material - Contact finish interface 2	Au (gold)
Material - Contact carriers interface 2	Plastics

Material - Pair shield	plastic film
Material - Pair shield finish	Al (Aluminium)
Oil resistance	yes
RoHS	compliant

Environmental conditions

Temperature (min. - max.)

Temperature - Operating °C	-30 °C - 90 °C
Temperature - Operating °F	-22 °F - 194 °F

Particulate ingress interface 1	IP6X when plugged in
Liquid ingress/immersion interface 1	IPX5, IPX7, IPX8 when plugged in
Particulate ingress interface 2	IP6X when plugged in
Liquid ingress/immersion interface 2	IPX5, IPX7 when plugged in
Pollution degree interface 1	3
Pollution degree interface 2	2

Approvals

UL listed (file no.)



DUXR.E178484



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Standards/Regulations

Generic cabling systems

General requirements	ISO/IEC 11801-1 DIN EN 50173-1
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Multi-element metallic cables used in analogue and digital communication and control	DIN EN 50288-4-2
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Test for vertical flame propagation for a single insulated wire or cable	IEC 60332-1-2
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Measurement of smoke density of cables burning	DIN EN 61034
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Classifications

ETIM 7.0	EC002599
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ETIM 8.0	EC002599
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ETIM 9.0	EC002599
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ETIM 10.0	EC002599
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Packing details

Type of packaging	1 pc(s) / plastic bag
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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.



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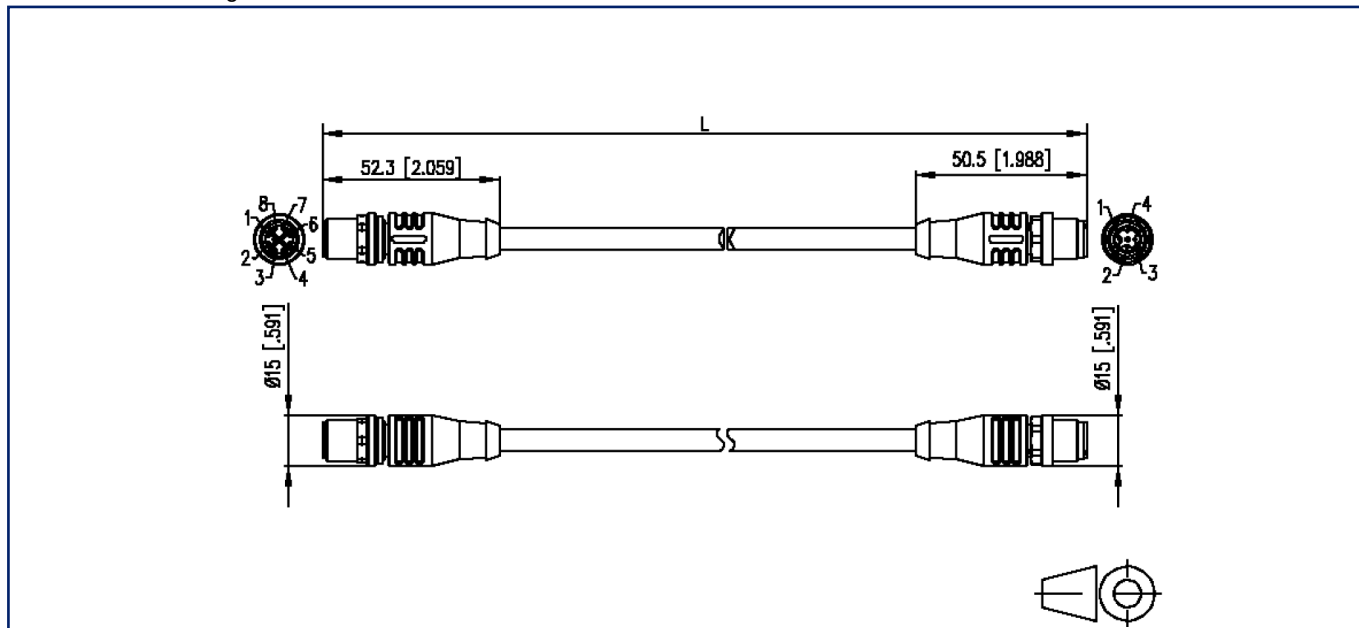
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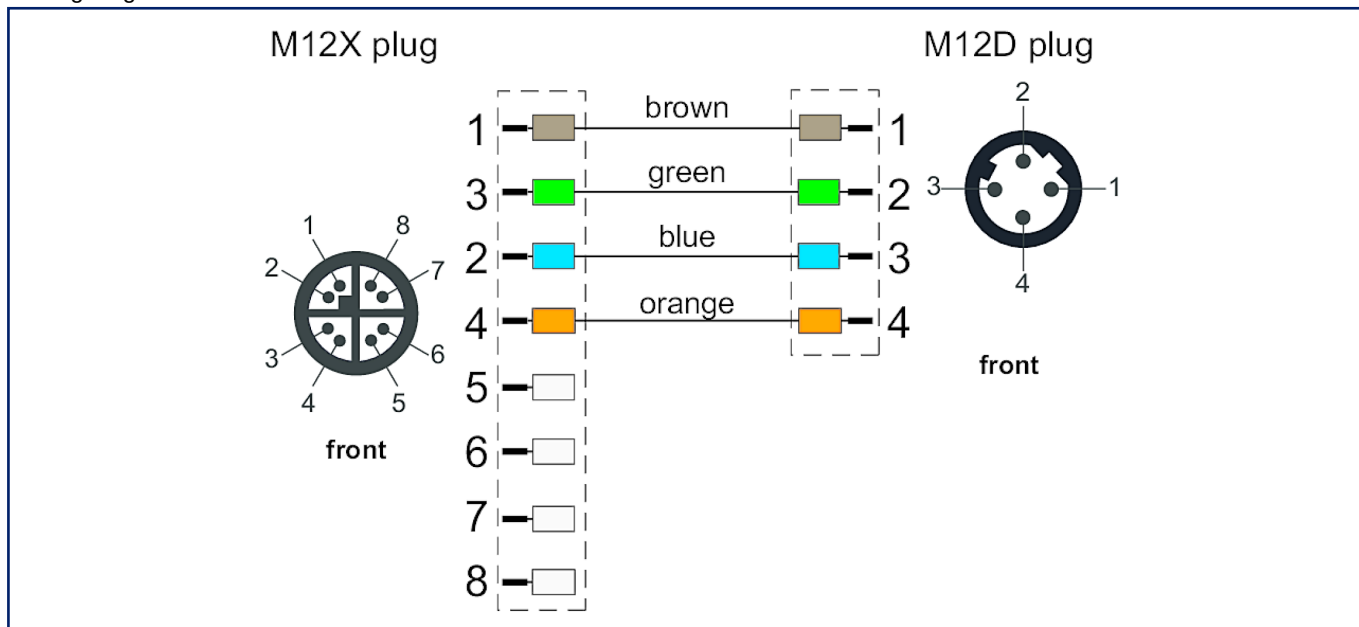
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Illustrations

Dimensional drawing



Wiring diagram



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Principle diagram

