

# P | Cabling

## Data sheet

Connection line M12 D-coded 2.0 m

plug straight - RJ45 plug straight

drag chain suitable, capable of torsion, AWG 26, 4-pole, green

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P/N

142M4D15020

EAN 4250184172697

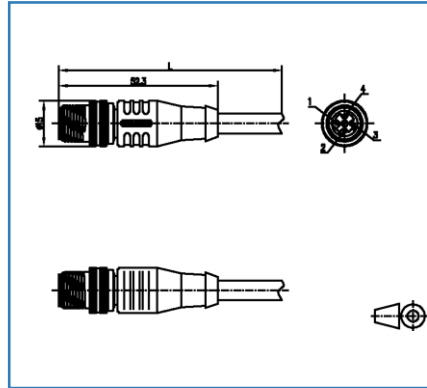
2020/08/24

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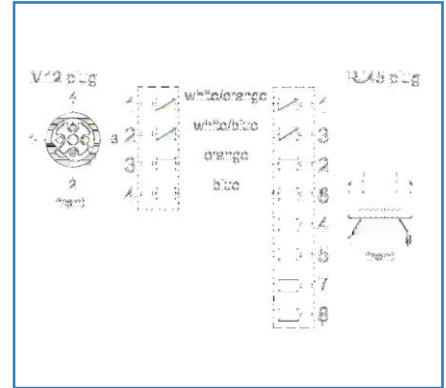
### Illustrations



Dimensional drawing



Wiring



See enlarged drawings at the end of document

### Product specification

- shielded M12 to RJ45 Ethernet connection line
- Cat.5e, 4-pole, D-coded (IEC 61076-2-101)
- side 1: M12 plug, straight
- side 2: RJ45 plug, straight
- extrusion-coated cable on M12 and RJ45 connector
- stranded wires 4x1xAWG26/19
- overall shield tinned copper braid
- pin assignment per Profinet
- green cable, PUR
  
- 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

Design	Ethernet-Connection line
Shielding	shielded
Transmission technology	Copper
Number of twisting elements	4
Twisting element	single core
Wiring	PROFINET
Color coding fiber/ wire(s)	white/orange, white/blue, orange, blue
Color	green
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)	45.5 mm x 13.3 mm x 13.6 mm
Dimension - Interface 2 (L x W x H)	1.791 in. x 0.524 in. x 0.535 in.
Cable length (m)	2 m
Cable length (ft)	6.56 ft
Weight	31 kg/km
Labeling option	identification label carrier

### Transmission characteristics

Category (ISO)	5e
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### Connections/interfaces

Connector technology interface 1	M12-plug
Connector technology interface 2	RJ45 plug
Coding interface 1	D-coded
Coding interface 2	D-coded
Number of positions/contacts interface 1	4
Number of positions/contacts interface 2	8P/4C
Termination data, stranded wire (min. - max.)	
Conductor cross section, stranded wire	AWG 26/19
Conductor diameter, stranded wire (bare copper)	0.5 mm
Conductor diameter, stranded wire (bare copper)	0.02 in.

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### Connections/interfaces

Cable sheath diameter (min. - max.)

Cable sheath diameter 4.8 mm

Cable sheath diameter 0.189 in.

### Electrical characteristics

Current carrying capacity 1 A bei 40 °C

Rated voltage 50 V

Insulation resistance min. 100 MOhm

### Mechanical data

Position/mounting of latch - standard installation position top

Torsion min. ± 30 °/m

Bending radius without load min. 36 mm

Maximum operating bending radius 19 mm

Maximum operating bending radius 0.748 in.

Maximum installation load 36 mm

Maximum installation load 1.417 in.

Number of alternating bending cycles 5 million bending cycles

Alternating bending radius 36 mm

velocity 180 m/s

acceleration 5 m/s<sup>2</sup>

Shielding braid coverage 85 %

### Materials and material properties

Material - Conductor Cu (copper)

Material - Conductor Insulation polypropylene

Material - Cable jacket PUR

Material - Body interface 1 Plastics

Material - Body interface 2 Plastics

Material - Contact interface 1 CuSn (tin bronze)

Material - Contact interface 2 CuSn (tin bronze)

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)

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Material - Union nut finish interface 1	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)
Flame retardancy	yes
Halogen free	yes
Silicone free	yes
Oil resistance	yes
UV-resistance	yes
drag chain suitable	yes
capable of torsion	yes
RoHS	compliant

### Environmental conditions

Temperature (min. - max.)	
Temperature - Operating °C	-30 °C - 70 °C
Temperature - Operating °F	-22 °F - 158 °F
Particulate ingress interface 1	IP6X when plugged in
Liquid ingress/immersion interface 1	IPX5, IPX7, IPX8 when plugged in
Particulate ingress interface 2	IP2X when plugged in
Liquid ingress/immersion interface 2	IPX0 when plugged in
Pollution degree interface 1	3
Pollution degree interface 2	1

### The product meets the following standards

PROFINET	yes
Connectors for electronic equipment	
circular connector	DIN EN 61076-2-101
Multi-element metallic cables used in analogue and digital communication an	DIN EN 50288-4-1
Test for vertical flame propagation for a single insulated wire or cable	IEC 60332-1-2
Measurement of smoke density of cables burning	DIN EN 61034

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### Classifications

ETIM 5.0	EC002599
ETIM 6.0	EC002599
ETIM 7.0	EC002599

### Packing details

Type of packaging	1 pc(s) / plastic bag
Packaging unit - Weight (gram)	108 g
Packaging unit - Weight (pound)	0.24 lb

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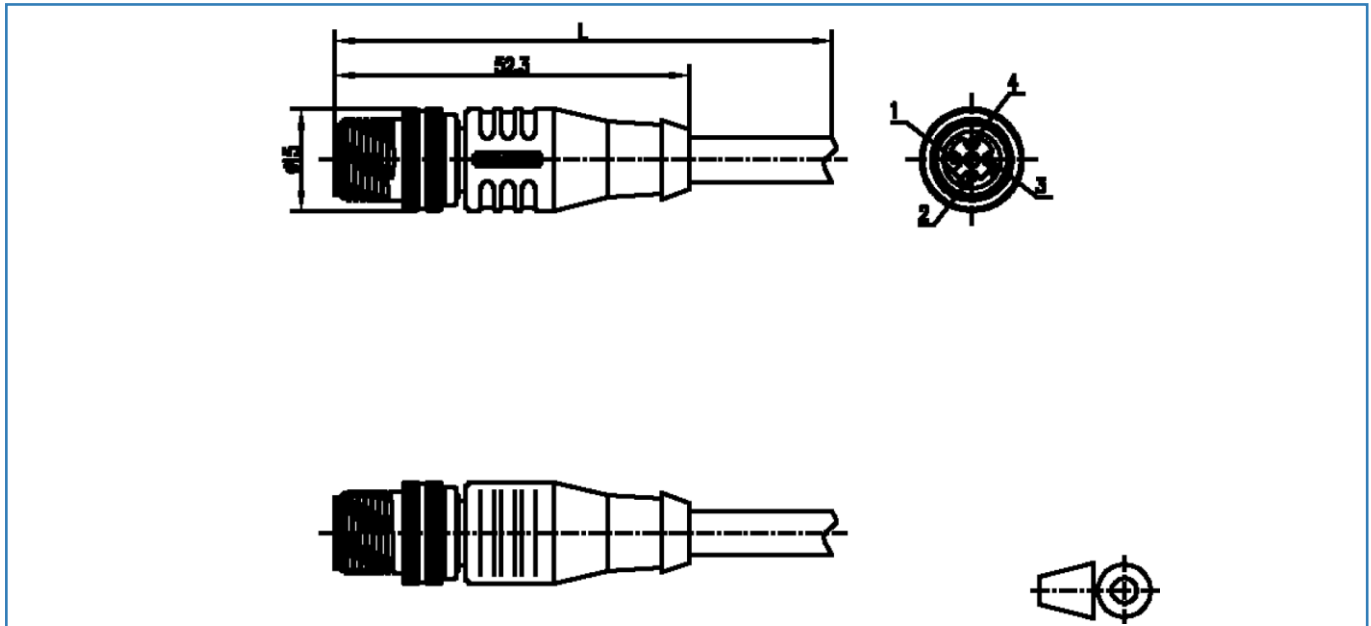
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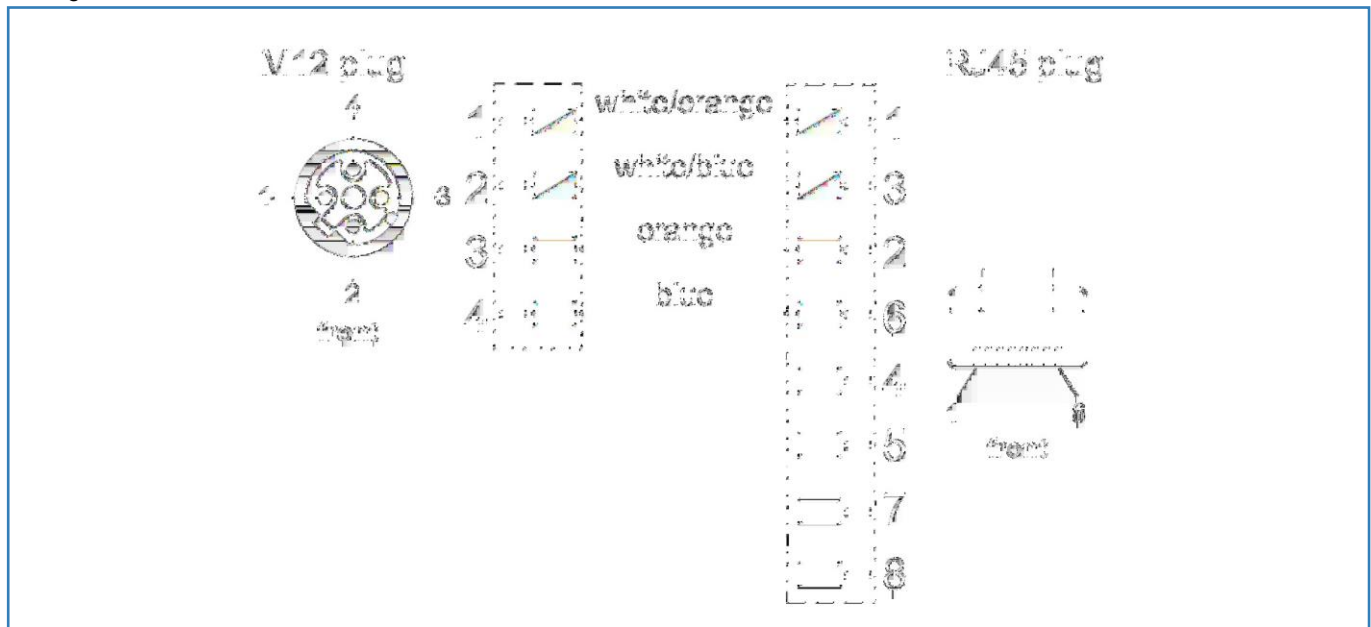
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## Illustrations

Dimensional drawing



Wiring



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 Weitere Dokumentation siehe / additional documentation see /  
 documentation supplémentaire voir [www.metz-connect.com](http://www.metz-connect.com)

