

Data sheet

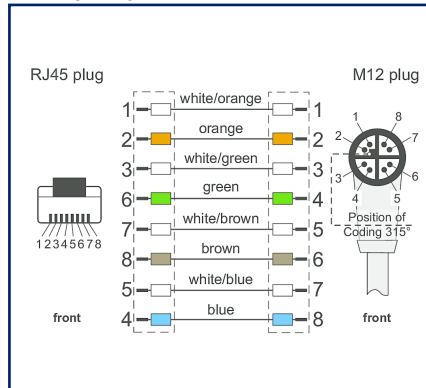
**Connection line M12, X-coded, 2.0 m, AWG 26/7, cat.7,
RJ45 plug straight - M12 plug angled,
position of coding 315°, 8-pole, PUR, green**

P/N
142M2X59020
EAN 4251394645414
2021/09/29

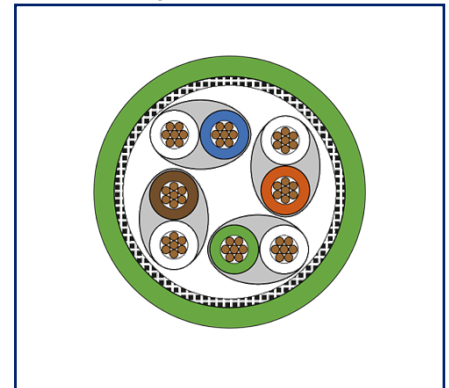
Illustrations



Wiring diagram



Principle diagram



See enlarged drawings at the end of document

Product specification

Shielded PUR-cable for industrial applications. The cable meets the UL-Style 20963 and the Cat.7 (electrical properties according to EN50288-4-2) requirements. Materials and a constructive setup allow for increased mechanical stresses (abrasion, bending, vibrations etc.) of the cable. Special features: UL-Style 20963, seawater resistant, recyclable, LABS free, RoHs compliant, acid and alkali resistant, UV resistant, hydrolysis proof, halogen free, oil resistant, high flexibility, no corrosive gases, microbes resistant, no fire propagation

- shielded M12 Ethernet cable
- coding: cat.6A, 8-pole, X-coded according to IEC 61076-2-101
- side 1: RJ45 plug, overmolded
- side 2: M12 plug angled, cable outlet at the bottom, coding at the top left 315°
- outer diameter sheath: (6.4 ± 0.2) mm
- material: PUR
- wire colors: 1 WHOG, 2 OG, 3 WHGN, 4 GN, 5 WHBN, 6 BN, 7 WHBU, 8 BU
- wire cross-section/strand construction: AWG26/7 4x2x0.14

P | Cabling

Data sheet

Page 2/6

**Connection line M12, X-coded, 2.0 m, AWG 26/7, cat.7,
RJ45 plug straight - M12 plug angled,
position of coding 315°, 8-pole, PUR, green**

P/N
142M2X59020
EAN 4251394645414
2021/09/29

Technical Data

General Data

Fields of application	Industrial Ethernet, Harsh environment
Design	Ethernet-Connection line
Shielding	shielded
Transmission technology	Copper
Cable Type	S/FTP
Number of twisting elements	4
Twisting element	Pair
Wiring	T568B
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)	45.5 mm x 13.3 mm x 13.6 mm
Dimension - Interface 1 (L x W x H)	1.791 in. x 0.524 in. x 0.535 in.
Dimension - Interface 2 (L x W x H)	33.5 mm x 15 mm x 45 mm
Dimension - Interface 2 (L x W x H)	1.319 in. x 0.591 in. x 1.772 in.
Cable length (m)	2 m
Cable length (ft)	6.56 ft
Labeling option	identification label carrier

Transmission characteristics

Category (ISO)	6 _A
----------------	----------------

Connections/interfaces

Connector technology interface 1	RJ45 plug
Connector technology interface 2	M12-plug
Coding interface 1	X-coded
Coding interface 2	X-coded
Number of positions/contacts interface 1	8P/8C
Number of positions/contacts interface 2	8

P | Cabling

Data sheet

Page 3/6

**Connection line M12, X-coded, 2.0 m, AWG 26/7, cat.7,
RJ45 plug straight - M12 plug angled,
position of coding 315°, 8-pole, PUR, green**

P/N
142M2X59020
EAN 4251394645414
2021/09/29

Technical Data

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.
Cable sheath diameter (min. - max.)	
Cable sheath diameter	6.4 mm
Cable sheath diameter	0.236 in.

Electrical characteristics

Current carrying capacity	0,5 A bei 40 °C
Insulation resistance	min. 100 MOhm

Mechanical data

Bending radius without load	min. 64 mm
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	Polyethylene
Material - Cable jacket	PUR
Material - Body interface 1	Plastics
Material - Body interface 2	Plastics
Material - Contact interface 1	CuZnPb (brass)
Material - Contact interface 2	CuZnPb (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 2	CuZnPb (brass)
Material - Union nut finish interface 2	Ni (nickel)



P | Cabling

Data sheet

Page 4/6

**Connection line M12, X-coded, 2.0 m, AWG 26/7, cat.7,
RJ45 plug straight - M12 plug angled,
position of coding 315°, 8-pole, PUR, green**

P/N
142M2X59020
EAN 4251394645414
2021/09/29

Technical Data

Materials and material properties

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
Oil resistance	yes
UV-resistance	yes
RoHS	compliant
REACH - substance (SVHC)	Lead / 7439-92-1

Environmental conditions

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

Approvals

CE	compliant
UL listed (file no.)	Approval pending

The product meets the following standards

Generic cabling systems	
General requirements	ISO/IEC 11801-1 DIN EN 50173-1
PROFINET	yes



P | Cabling

Data sheet

Page 5/6

**Connection line M12, X-coded, 2.0 m, AWG 26/7, cat.7,
RJ45 plug straight - M12 plug angled,
position of coding 315°, 8-pole, PUR, green**

P/N
142M2X59020
EAN 4251394645414
2021/09/29

Technical Data

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	IEC 60332-1-2
Measurement of smoke density of cables burning	IEC 61034
Determination of the halogen acid gas content	IEC 60754-1
Insulating and sheathing materials of cables and insulated wire - General test methods	DIN EN 60811-2-1
Copper and copper alloys - Drawn round copper wire for the production of electrical conductors	DIN EN 13602 Cu-ETP-A... DIN EN 13602 Cu-ETP-A...-B

Classifications

ETIM 5.0	EC002599
ETIM 6.0	EC002599
ETIM 7.0	EC002599
ETIM 8.0	EC002599

Packing details

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

P | Cabling

Data sheet

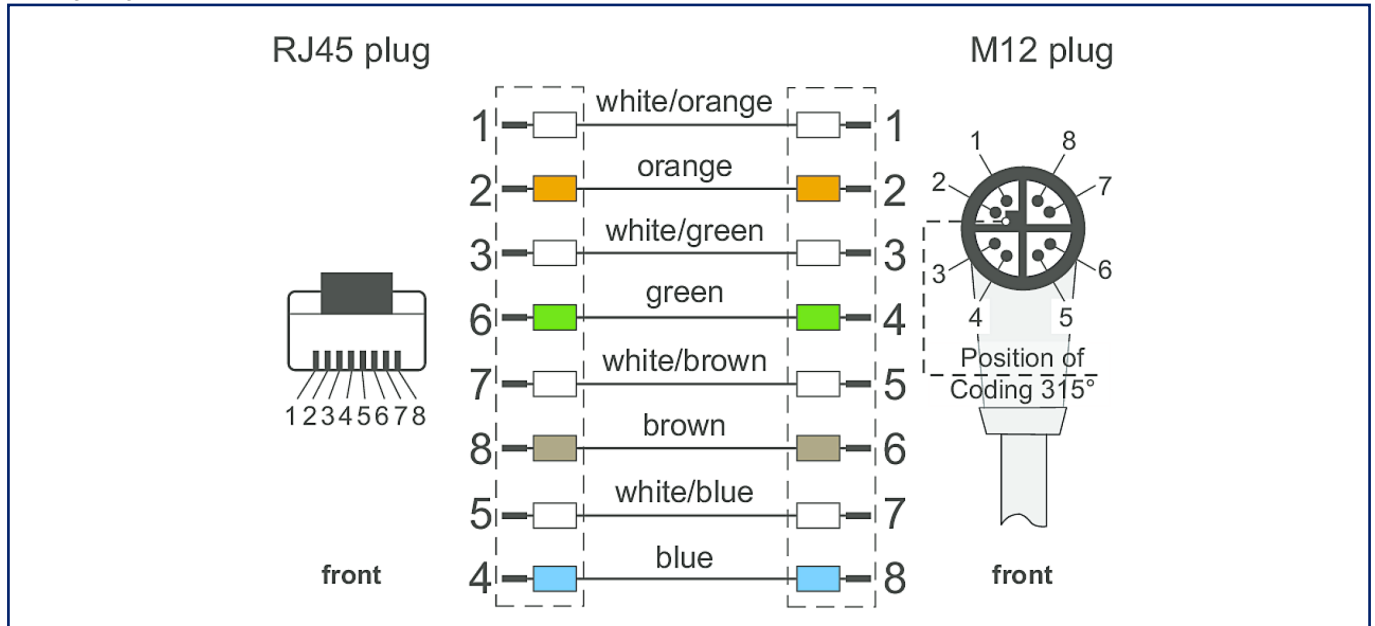
Page 6/6

**Connection line M12, X-coded, 2.0 m, AWG 26/7, cat.7,
RJ45 plug straight - M12 plug angled,
position of coding 315°, 8-pole, PUR, green**

P/N
142M2X59020
EAN 4251394645414
2021/09/29

Illustrations

Wiring diagram



Principle diagram

