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Network cable, Single Pair Ethernet CAT A (10 Mbps), 2-position, PVC, black, shielded (Advanced Shielding Technology), Socket straight M12-SPE / IP67, on Socket straight M12-SPE / IP67, cable length: 2 m

## Product description

Single Pair Ethernet M12 patch cable

## Your advantages

- Future-proof: standardized connectors in accordance with IEC 63171-5 (IP67)
- Easily integrated: Male and female versions for established inductive sensors and flying leads
- Straightforward servicing: M12 connectors are compatible with IP20 connectors for SPE
- Safely shielded: patch cables with Advanced Shielding Technology

## Commercial data

Item number	1364631
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF02
Product key	AF1BJI
GTIN	4063151711030
Weight per piece (including packing)	108.8 g
Weight per piece (excluding packing)	222 g
Customs tariff number	85444290
Country of origin	PL

1364631

<https://www.phoenixcontact.com/us/products/1364631>

## Technical data

### Product properties

Product type	Data cable preassembled
Application	Standard
Sensor type	Single Pair Ethernet
Number of positions	2
No. of cable outlets	1
Shielded	yes

### Insulation characteristics

Overvoltage category	I
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### Interfaces

Bus system	Ethernet
Signal type/category	Single Pair Ethernet CAT A (ISO/IEC 63171), 10 Mbps

### Signaling

Status display	no
Status display present	no

### Electrical properties

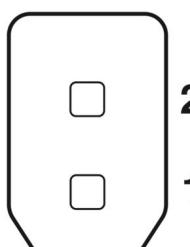
Nominal voltage $U_N$	72 V DC
Transmission medium	Copper
Transmission speed	up to 10 Mbps

### Material specifications

Flammability rating according to UL 94	V0
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### Connector

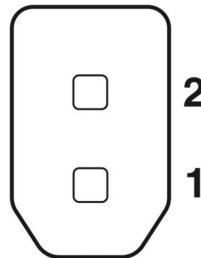
#### Connection 1

Dimensional drawing	 Pin assignment, Single Pair Ethernet, 2 pos.
Type	Socket, 2-position, shielded (Advanced Shielding Technology)
Number of positions	2
Shielded	yes

Shielding	Advanced Shielding Technology
Signal type/category	Single Pair Ethernet CAT B (ISO/IEC 63171), 1 Gbps
Overtoltage category	II
Degree of pollution	3
Tightening torque	0.4 Nm
Material Contact	Cu
Material Contact surface	Ni/Au
Material Contact carrier	PP
Material Screw connection	Die-cast zinc, nickel-plated
Material Grip body	TPU, hardly inflammable, self-extinguishing
Material Seal	FKM
Flammability rating according to UL 94	V0
Ambient temperature (operation)	-25 °C ... 85 °C
Standard designation	M12 connector
Standards/regulations	IEC 63171-5

## Connection 2

## Dimensional drawing



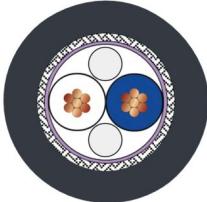
Pin assignment, Single Pair Ethernet, 2 pos.

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## Cable/line

Cable length	2 m
Single Pair Ethernet PUR flexible, black [97B]	
Dimensional drawing	
UL AWM Style	2095 (80°C/300 V)
Number of positions	2
Shielded	yes
Cable type	Single Pair Ethernet PUR flexible, black [97B]
Conductor structure	1 x 2 x AWG 22/7, S/FTP
Conductor structure signal line	7x
AWG signal line	22
Conductor cross section	2x 0.34 mm <sup>2</sup>
Wire diameter incl. insulation	1.65 mm
External cable diameter	5.10 mm ±0.2 mm
Outer sheath, material	PVC
External sheath, color	black
Conductor material	Tin-plated Cu litz wires
Material wire insulation	Foamed PE
Single wire, color	white, blue
Thickness, outer sheath	0.55 mm
Twisted pairs	2 cores to the pair
Overall twist	1 pair with fillers twisted horizontally
Optical shield covering	80 %
Max. conductor resistance	≤ 59.4 Ω/km
Insulation resistance	≥ 5 GΩ*km
Wave impedance	100 Ω ±15 Ω (at 20 MHz)
Nominal voltage, cable	300 V
Minimum bending radius, fixed installation	4 x D
Smallest bending radius, fixed installation	21 mm
Flame resistance	According to FT-2
Ambient temperature (operation)	-20 °C ... 80 °C (cable, fixed installation)

## Environmental and real-life conditions

Ambient conditions	
Degree of protection	IP65

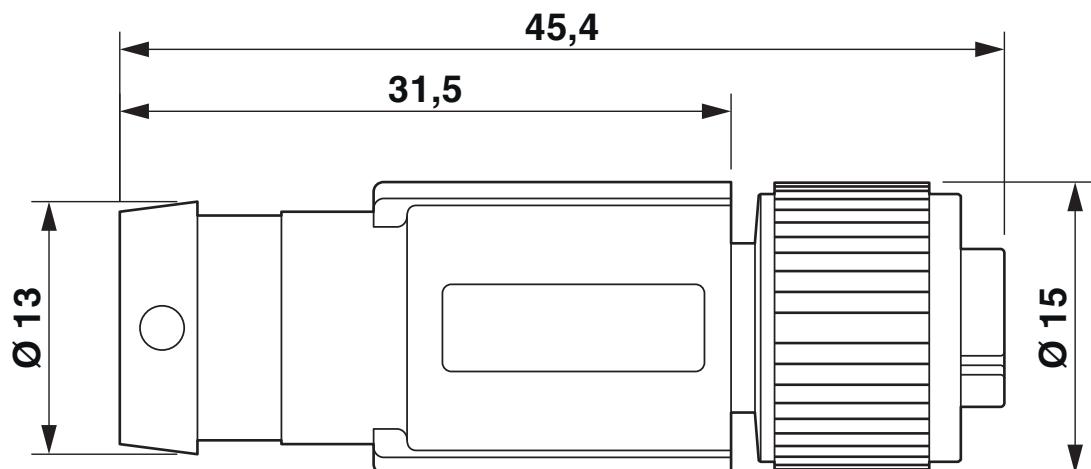
IP67

## Standards and regulations

Standard designation	M12 connector
Standards/specifications	IEC 63171-5
Note	T1-SPE

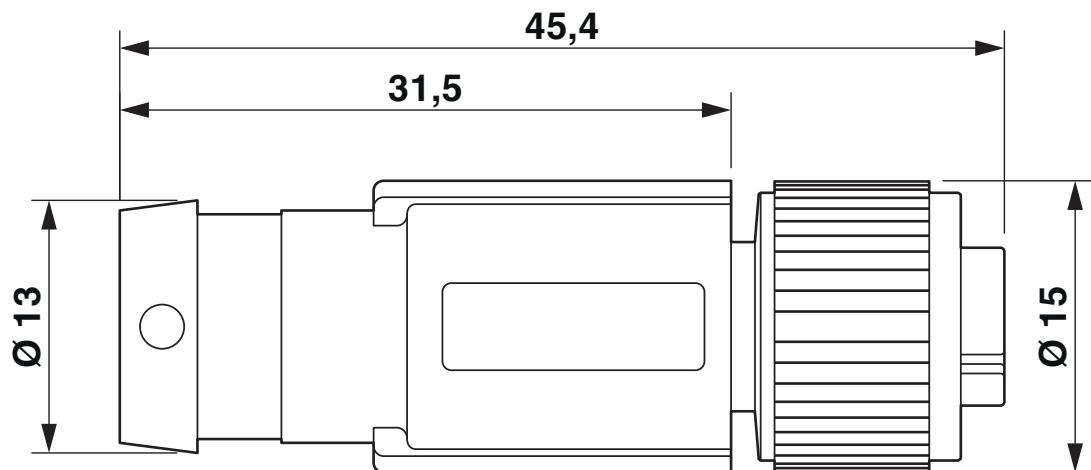
## Drawings

Dimensional drawing



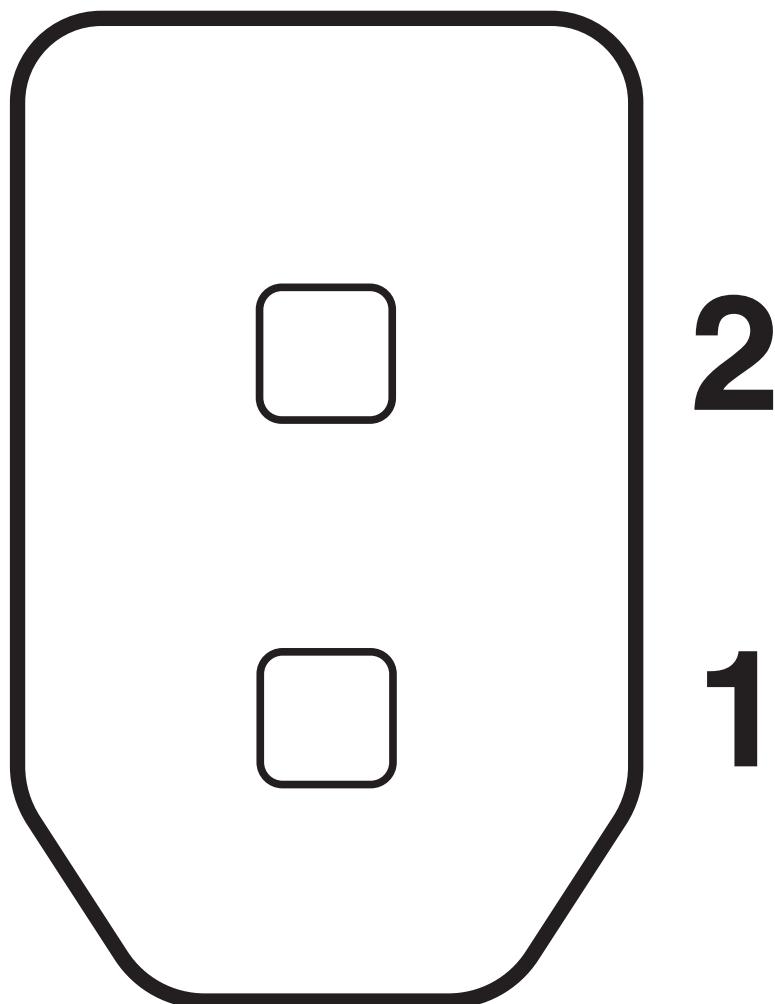
M12 x 1 socket, straight, shielded

Dimensional drawing



M12 x 1 socket, straight, shielded

Schematic diagram



Pin assignment, Single Pair Ethernet, 2 pos.

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## Classifications

### ECLASS

ECLASS-13.0	27060307
ECLASS-15.0	27060307

### ETIM

ETIM 9.0	EC001855
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### UNSPSC

UNSPSC 21.0	26121600
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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### China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

### EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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### EF3.0 Climate Change

CO2e kg	4.004 kg CO2e
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