

1364629

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Network cable, Single Pair Ethernet CAT A (10 Mbps), 2-position, PVC, black, shielded (Advanced Shielding Technology), Plug straight M12-SPE / IP67, on Plug 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	1364629
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF02
Product key	AF1BJI
GTIN	4063151711498
Weight per piece (including packing)	108.6 g
Weight per piece (excluding packing)	222 g
Customs tariff number	85444290
Country of origin	PL



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## 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

#### 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 <sub>N</sub>	72 V DC
Transmission medium	Copper
Transmission speed	up to 10 Mbps

## Material specifications

·	
Flammability rating according to UL 94	V0

## Connector

#### Connection 1

Dimensional drawing	2 1 Pin assignment, Single Pair Ethernet, 2 pos.
Туре	Plug, 2-position, shielded (Advanced Shielding Technology)
Number of positions	2
Shielded	yes



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

#### Connection 2

Dimensional drawing	2 1 Pin assignment, Single Pair Ethernet, 2 pos.
Туре	Plug, 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
Overvoltage 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	VO
Ambient temperature (operation)	-25 °C 85 °C
Standard designation	M12 connector
Standards/regulations	IEC 63171-5



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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 mm²
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
nsulation resistance	≥ 5 GΩ*km
Vave 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



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	IP67			
Standards and regulations				
Standard designation	M12 connector			
Standards/specifications	IEC 63171-5			
Note	T1-SPE			

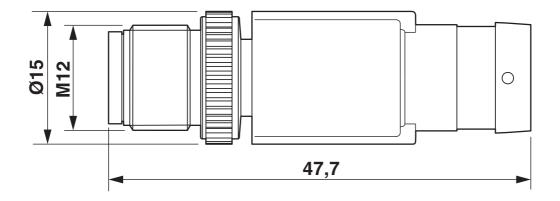


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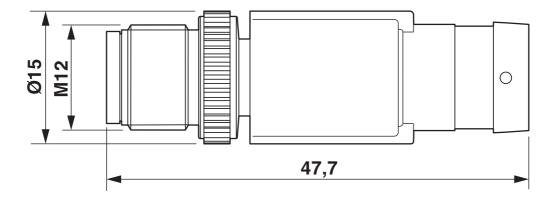
# Drawings

### Dimensional drawing



Plug, M12 x 1, straight, shielded

### Dimensional drawing



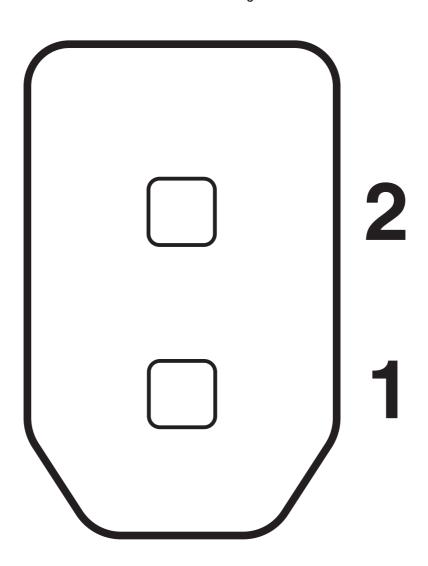
Plug, M12 x 1, straight, shielded



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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		
UNSPSC				

UNSPSC 21.0 26121600



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# Environmental product compliance

#### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions		
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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