SPE-T1-M8FSF/2,0-97B/M8FSF - Network cable

1217530

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Network cable, Single Pair Ethernet CAT A (10 Mbps), 2-position, PVC, black, shielded (Advanced Shielding Technology), Socket straight M8-SPE / IP67, on Socket straight M8-SPE / IP67, cable length: 2 m

Product description

Single Pair Ethernet M8 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
- Efficient: Device connectors for SMD, THR, and wave soldering processes enable automated processing
- Straightforward servicing: M8 connectors are compatible with IP20 connectors for SPE
- Safely shielded: patch cables with Advanced Shielding Technology

Commercial data

Item number	1217530
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF02
Product key	AF1BJI
GTIN	4063151298890
Weight per piece (including packing)	94.2 g
Weight per piece (excluding packing)	22.22 g
Customs tariff number	85444290
Country of origin	PL

Technical data

Product properties

Product type	Data cable preassembled
Application	Standard
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_N	72 V DC
Transmission medium	Copper
Transmission speed	up to 10 Mbps

Material specifications

Flammability rating according to UL 94	V0

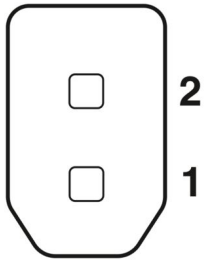
Connection data

Connection assignment

Contact | Color (signal designation) | Contact (optional)	1 | WH (RX/TX+) | 1
	2 | BU (RX/TX-) | 2

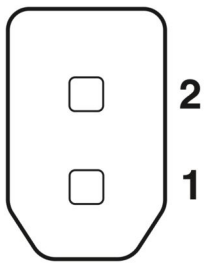
Connector

Connection 1

Dimensional drawing	

	Pin assignment, Single Pair Ethernet, 2 pos.
Type	M8 Socket, straight, 2-position, shielded (Advanced Shielding Technology), Keying: SPE, Single Pair Ethernet
Number of positions	2
Shielded	yes
Shielding	Advanced Shielding Technology
Signal type/category	Single Pair Ethernet CAT B (IEC 63171)
Insertion/withdrawal cycles	≥ 100
Insulation resistance	≥ 100 MΩ
Overvoltage category	II
Degree of pollution	3
Tightening torque	0.2 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
Degree of protection	IP65
	IP67
Ambient temperature (operation)	-25 °C ... 85 °C
Standard designation	M8 connector
Standards/regulations	IEC 63171-5

Connection 2

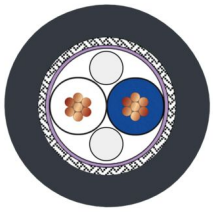
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Cable/line

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
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

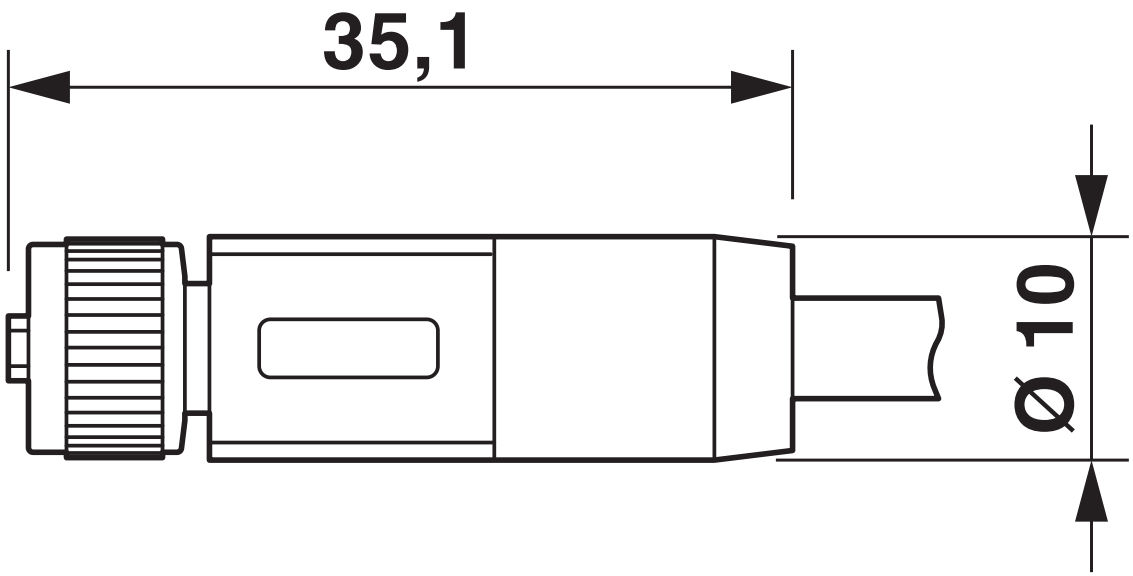
Standards and regulations

M8

Standard designation	M8 connector
Standards/specifications	IEC 63171-5
Note	T1-SPE

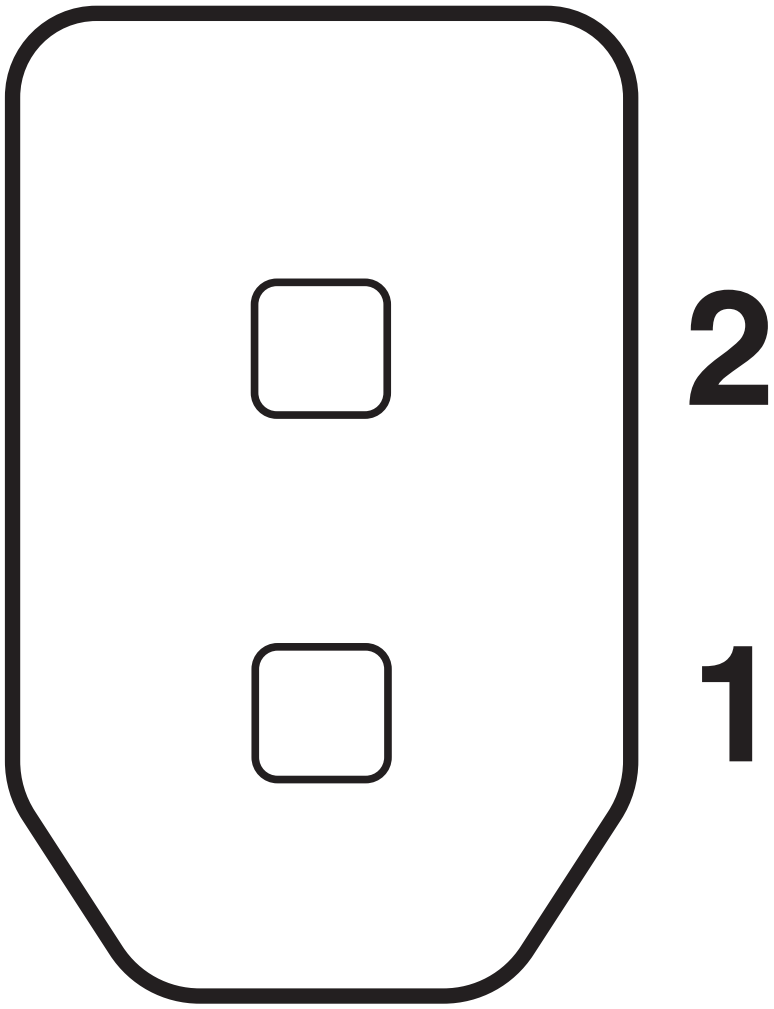
Drawings

Dimensional drawing



Socket M8 x 1, straight

Schematic diagram



Pin assignment, Single Pair Ethernet, 2 pos.

Classifications

ECLASS

ECLASS-13.0	27060307
ECLASS-15.0	27060307

ETIM

ETIM 10.0	EC002599

UNSPSC

UNSPSC 21.0	26121600

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%

EF3.1 Climate Change

CO2e kg	4.172 kg CO2e

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