SPE-T1-M8FSF/2,0-99B/M8FSF - Network cable

1217320

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Network cable, Single Pair Ethernet CAT B (1 Gbps), 2-position halogen-free, 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	1217320
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF02
Product key	BF1BJI
GTIN	4063151299378
Weight per piece (including packing)	115.8 g
Weight per piece (excluding packing)	115.7 g
Customs tariff number	85444290
Country of origin	PL

Technical data

Product properties

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

Insulation characteristics

Overvoltage category	I

Interfaces

Bus system	Ethernet
Signal type/category	Single Pair Ethernet CAT B (ISO/IEC 63171), 1 Gbps

Signaling

Status display	No
Status display present	No

Electrical properties

Nominal voltage U_N	72 V DC
Transmission medium	Copper

Material specifications

Flammability rating according to UL 94	V0

Connection data

Pin assignment

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

Connector

Connection 1

Type	Socket straight M8-SPE / IP67
Shielded	yes
Insertion/withdrawal cycles	≤ 100
Degree of protection	IP67
Ambient temperature (operation)	-25 °C ... 85 °C

Connection 2

Type	Socket straight M8-SPE / IP67
Shielded	yes

Insertion/withdrawal cycles	≤ 100
Degree of protection	IP67
Ambient temperature (operation)	-25 °C ... 85 °C

Cable/line

Cable length	2 m

Single Pair Ethernet PUR flexible, green [99B]

Dimensional drawing	
Cable weight	42 kg/km
UL AWM Style	20233 (80°C/300 V)
Number of positions	2
Shielded	yes
Cable type	Single Pair Ethernet PUR flexible, green [99B]
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	1.8 mm
External cable diameter	5.8 mm ±0.3 mm
Outer sheath, material	PUR
External sheath, color	green
Conductor material	Bare Cu litz wires
Material wire insulation	Foamed PE
Single wire, color	white, blue
Thickness, outer sheath	0.8 mm
Twisted pairs	2 cores to the pair
Overall twist	1 pair with fillers twisted horizontally
Optical shield covering	90 %
Insulation resistance	≥ 5 GΩ*km
Loop resistance	≤ 120.00 Ω/km
Wave impedance	100 Ω ±5 Ω (at 100 MHz)
Cable capacity	48 nF/km
Nominal voltage, cable	≤ 100 V
Test voltage Core/Core	1000 V (50 Hz, 1 min.)
Test voltage Core/Shield	1000 V (50 Hz, 1 min.)
Minimum bending radius, fixed installation	4 x D

Minimum bending radius, flexible installation	8 x D
Smallest bending radius, fixed installation	24 mm
Smallest bending radius, movable installation	47 mm
Flame resistance	according to IEC 60332-1-2
Resistance to oil	in accordance with DIN EN 60811-404
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-25 °C ... 80 °C (Cable, flexible installation)
	-25 °C ... 80 °C (for installation)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65
	IP67

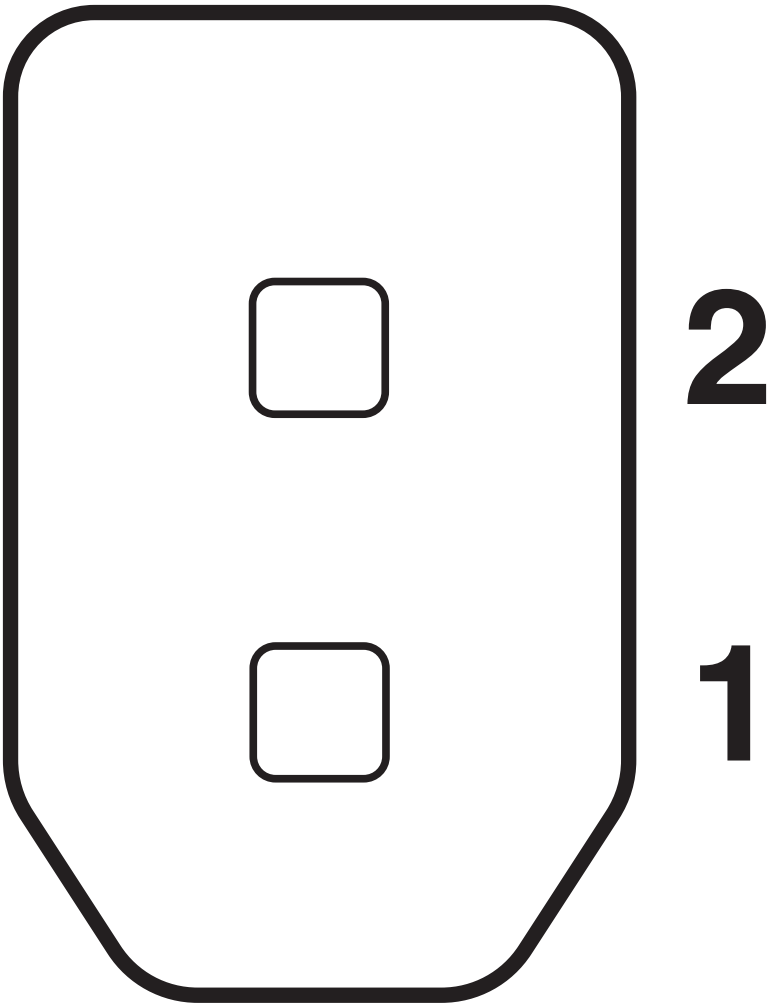
Standards and regulations

M8

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

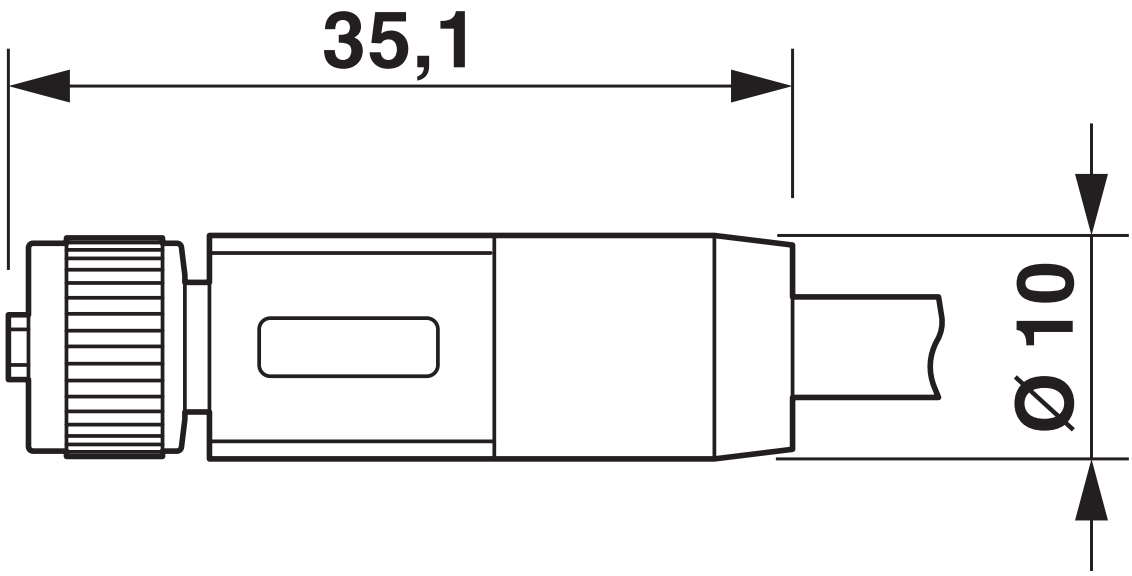
Drawings

Schematic diagram



Pin assignment, Single Pair Ethernet, 2 pos.

Dimensional drawing



M8FSF

Classifications

ECLASS

ECLASS-11.0	27060307
ECLASS-12.0	27060307
ECLASS-13.0	27060307

ETIM

ETIM 9.0	EC001855

UNSPSC

UNSPSC 21.0	26121600

Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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