

## Network cable - SPE-T1-M8MSM/2,0-99B/M8FSF - 1150575

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Network cable, Single Pair Ethernet CAT B (100 Mbps), 2-position, PUR halogen-free, green, shielded (Advanced Shielding Technology), Plug 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



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 063151 148003
GTIN	4063151148003
Weight per Piece (excluding packing)	115.600 g
Sales Key	BF1BJI

### Technical data

#### Dimensions

Length of cable	2 m
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#### Ambient conditions

Degree of protection	IP65
	IP67

#### General data

	72 V DC
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## Technical data

### General data

Number of positions	2
Signal type/category	Single Pair Ethernet CAT B (ISO/IEC 63171), 100 Mbps
Standards/regulations	M8 connector IEC 63171-5 T1-SPE
Flammability rating according to UL 94	V0
Overvoltage category	I
Transmission characteristics (category)	CAT B
Transmission speed	up to 100 Mbps

### Characteristics head 1

Head type	Plug straight M8-SPE / IP67
Shielded	yes
Insertion/withdrawal cycles	≤ 100
Ambient temperature (operation)	-25 °C ... 85 °C

### Characteristics head 2

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

### Pin assignment

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

### Standards and Regulations

Standards/specifications	M8 connector IEC 63171-5 T1-SPE
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### Cable

Cable type	Single Pair Ethernet PUR flexible, green
Cable type (abbreviation)	99B
UL AWM style	20233 (80°C/300 V)
Signal type/category	Single Pair Ethernet, 1 Gbps
Cable structure	1 x 2 x AWG 22/7, S/FTP
Conductor cross section	2x 0.34 mm <sup>2</sup>
AWG signal line	22
Conductor structure signal line	7x
Core diameter including insulation	1.8 mm
Wire colors	white, blue
Twisted pairs	2 cores to the pair
Overall twist	1 pair with fillers twisted horizontally
Shielding	Aluminum-coated foil, tinned copper braided shield
Optical shield covering	90 %
External sheath, color	green

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## Technical data

### Cable

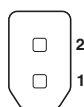
Outer sheath thickness	0.8 mm
External cable diameter D	5.8 mm ±0,3 mm
Minimum bending radius, fixed installation	4 x D
Minimum bending radius, flexible installation	8 x D
Cable weight	42 kg/km
Outer sheath, material	PUR
Material conductor insulation	Foamed PE
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 5 GΩ*km
Loop resistance	≤ 120.00 Ω/km
Cable capacity	48 nF/km
Wave impedance	100 Ω ±5 Ω (at 100 MHz)
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.)
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)
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Shielded	yes

### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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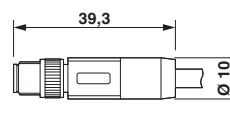
## Drawings

Schematic diagram



Pin assignment, Single Pair Ethernet, 2 pos.

Dimensional drawing

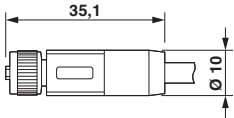


M8MSM

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Dimensional drawing

Cable cross section



M8FSF



Single Pair Ethernet PUR flexible, green [99B]

## Classifications

eCl@ss

eCl@ss 11.0	27060307
eCl@ss 9.0	27060308

ETIM

ETIM 7.0	EC001855
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