

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



1217320

<https://www.phoenixcontact.com/us/products/1217320>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Network cable, Single Pair Ethernet CAT B (1 Gbps), 2-position, PUR halogen-free, green, shielded (Aluminum-coated foil, tinned copper braided shield), 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 |

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



1217320

<https://www.phoenixcontact.com/us/products/1217320>

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 |

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



1217320

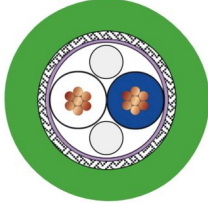
<https://www.phoenixcontact.com/us/products/1217320>

| | |
|---------------------------------|------------------|
| 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 mm ² |
| Wire diameter incl. insulation | 1.8 mm |
| External cable diameter | 5.80 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 | 0.80 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 | 1000.00 V (50 Hz, 1 min.) |
| Minimum bending radius, fixed installation | 4 x D |

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



1217320

<https://www.phoenixcontact.com/us/products/1217320>

| | |
|-----------------------------------------------|-------------------------------------------------|
| 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 |

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



1217320

<https://www.phoenixcontact.com/us/products/1217320>

Classifications

ECLASS

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

ETIM

| | |
|----------|----------|
| ETIM 9.0 | EC001855 |
|----------|----------|

UNSPSC

| | |
|-------------|----------|
| UNSPSC 21.0 | 26121600 |
|-------------|----------|

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



1217320

<https://www.phoenixcontact.com/us/products/1217320>

Environmental product compliance

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

Phoenix Contact 2024 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com