

NBC-M12MSD/ 0,5-93E/M12MSD CO - Network cable



1401599

<https://www.phoenixcontact.com/us/products/1401599>

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Network cable, Ethernet, 4-position, PUR halogen-free, water blue RAL 5021, shielded, Plug straight M12, coding: D, on Plug straight M12, coding: D, cable length: 0.5 m

Commercial data

| | |
|--------------------------------------|--------------------------------|
| Item number | 1401599 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Note | Made to order (non-returnable) |
| Sales key | BF04 |
| Product key | AF1CJI |
| GTIN | 4046356566667 |
| Weight per piece (including packing) | 60 g |
| Weight per piece (excluding packing) | 59.2 g |
| Customs tariff number | 85444210 |
| Country of origin | PL |

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Technical data

Product properties

| | |
|---------------------|-------------------------|
| Product type | Data cable preassembled |
| Number of positions | 4 |
| Shielded | yes |

Insulation characteristics

| | |
|----------------------|----|
| Overvoltage category | II |
| Degree of pollution | 3 |

Interfaces

| | |
|----------------------|----------|
| Bus system | Ethernet |
| Signal type/category | Ethernet |

Electrical properties

| | |
|-----------------------|----------|
| Insulation resistance | ≥ 100 MΩ |
| Nominal voltage U_N | 48 V AC |
| | 60 V DC |
| Nominal current I_N | 4 A |

Mechanical properties

Mechanical data

| | |
|-----------------------------|-------|
| Insertion/withdrawal cycles | ≥ 100 |
|-----------------------------|-------|

Material specifications

| | |
|--|-----|
| Flammability rating according to UL 94 | V0 |
| Seal material | NBR |
| | NBR |

Connector

Connection 1

| | |
|-------------|---|
| Type | Plug straight M12 |
| Coding type | D (Data) |
| Material | CuZn (Contact) |
| | Ni/Au (Contact surface) |
| | PA (Contact carrier) |
| | TPU, hardly inflammable, self-extinguishing (Grip body) |
| | Zinc die-cast, nickel-plated (Screw connection) |

Connection 2

| | |
|-------------|-------------------|
| Type | Plug straight M12 |
| Coding type | D (Data) |
| | CuZn (Contact) |

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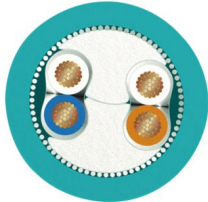
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| | |
|----------|---|
| Material | Ni/Au (Contact surface) |
| | PA (Contact carrier) |
| | TPU, hardly inflammable, self-extinguishing (Grip body) |
| | Zinc die-cast, nickel-plated (Screw connection) |

Cable/line

| | |
|--------------|-------|
| Cable length | 0.5 m |
|--------------|-------|

Ethernet [930]

| | |
|---|--|
| Dimensional drawing |  |
| Cable weight | 54 kg/km |
| Number of positions | 4 |
| Shielded | yes |
| Cable type | Ethernet [930] |
| Signal runtime | 46 ns/m |
| Signal speed | 0.72 c |
| Conductor structure signal line | 7x 0.20 mm |
| AWG signal line | 24 |
| Conductor cross-section | 0.25 mm ² |
| Wire diameter incl. insulation | 1.4 mm |
| External cable diameter | 8 mm |
| Outer sheath, material | PUR |
| External sheath, color | water blue RAL 5021 |
| Conductor material | Bare Cu litz wires |
| Material wire insulation | Cell PE |
| Single wire, color | white-green, white-orange |
| Twisted pairs | 2 cores to the pair |
| Type of pair shielding | Aluminum-lined polyester foil |
| Overall twist | 2 cores with 2 fillers to the core |
| Optical shield covering | 65 % |
| Max. conductor resistance | 84 mΩ/m |
| Insulation resistance | 5 GΩ*km |
| Wave impedance | 100 Ω ±5 % |
| Working capacitance | 42.5 pF |
| Nominal voltage, cable | 125 V |
| Test voltage | 1000 V |
| Smallest bending radius, fixed installation | min. 40 mm |

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| | |
|---|---|
| Smallest bending radius, movable installation | min. 40 mm |
| Shield attenuation | 60.00 dB (up to 1000 MHz) |
| Ambient temperature (operation) | -20 °C ... 70 °C (cable, fixed installation) |
| | 0 °C ... 50 °C (Cable, flexible installation) |

Environmental and real-life conditions

Ambient conditions

| | |
|---------------------------------|---|
| Degree of protection | IP65 |
| | IP67 |
| | IP65/IP67/IP69K |
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket) |
| | -20 °C ... 70 °C (cable, fixed installation) |
| | 0 °C ... 50 °C (Cable, flexible installation) |

Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Schematic diagram



Pin assignment M12 male connector, 4-pos., D-coded, male side

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Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-13.0 | 27060307 |
| ECLASS-15.0 | 27060307 |

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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