

NBC-M12MRD/ 1,0-93P/R4AQ - Network cable



1417981

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Network cable, Ethernet CAT5 CAT5 (100 Mbps), 4-position, PVC, water blue RAL 5021, Plug angled M12, coding: D / IP67, on Plug straight RJ45 Push Pull / IP67, cable length: 1 m

As shown in the illustration but with an angled plug

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 1417981 |
| Packing unit | 1 pc |
| Minimum order quantity | 25 pc |
| Product key | AF1CJI |
| GTIN | 4055626200477 |
| Weight per piece (including packing) | 73.23 g |
| Weight per piece (excluding packing) | 73.23 g |
| Country of origin | PL |

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Technical data

Product properties

| | |
|---------------------|-------------------------|
| Product type | Data cable preassembled |
| Number of positions | 4 |
| Number of slots | 1 |
| Shielded | yes |
| Coding | D |

Insulation characteristics

| | |
|---------------------|---|
| Degree of pollution | 3 |
|---------------------|---|

Interfaces

| | |
|----------------------|--------------------------------|
| Bus system | Ethernet |
| Signal type/category | Ethernet CAT5 (IEC 11801:2002) |

Signaling

| | |
|------------------------|----|
| Status display | no |
| Status display present | no |

Electrical properties

| | |
|---|-----------------------|
| Nominal voltage U_N | 48 V AC |
| | 60 V DC |
| Transmission characteristics (category) | CAT5 (IEC 11801:2002) |

Material specifications

| | |
|--|----|
| Flammability rating according to UL 94 | V2 |
|--|----|

Connector

Connection 1

| | |
|-----------------------------|---|
| Type | Plug angled M12 / IP67 |
| Number of positions | 4 |
| Coding type | D (Data) |
| Handle color | black |
| Material | CuZn (Contact) |
| | Ni/Au (Contact surface) |
| | PA (Contact carrier) |
| | TPU, hardly inflammable, self-extinguishing (Grip body) |
| | Zinc die-cast, nickel-plated (Screw connection) |
| Insertion/withdrawal cycles | ≥ 100 |
| Insulation resistance | ≥ 100 MΩ |
| Tightening torque | 0.4 Nm |
| Degree of protection | IP67 |

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Connection 2

| | |
|-----------------------------|--|
| Type | Plug straight RJ45 Push Pull / IP67 |
| Number of positions | 4 (8) |
| Locking type | Push Pull |
| Handle color | black |
| Material | CuSn (Contact) Ni/Au (Contact surface) PC (Contact carrier) PA GF (Housing) |
| Insertion/withdrawal cycles | ≥ 750 |
| Degree of protection | IP67 |

Cable/line

| | |
|--------------|-----|
| Cable length | 1 m |
|--------------|-----|

Ethernet [93P]

| | |
|---------------------------------|--|
| UL AWM Style | 2654 (90 °C / 300 V) |
| Number of positions | 4 |
| Shielded | yes |
| Cable type | Ethernet [93P] |
| Conductor structure | 2x2xAWG26/7, SF/UTP |
| Signal runtime | 0.4 ns/m |
| Signal speed | 0.6 c |
| Conductor structure signal line | 7x 0.16 mm |
| AWG signal line | 26 |
| Conductor cross-section | 2x 2x 0.14 mm ² |
| Wire diameter incl. insulation | 0.98 mm ±0.05 mm |
| External cable diameter | 6.40 mm ±0.2 mm |
| Outer sheath, material | PVC |
| External sheath, color | water blue RAL 5021 |
| Conductor material | Bare Cu litz wires |
| Material wire insulation | PP |
| Single wire, color | white/orange-orange, white/green-green |
| Thickness, outer sheath | ≥ 1.00 mm |
| Twisted pairs | 2 cores to the pair |
| Type of pair shielding | Aluminum-lined polyester foil |
| Overall twist | Two pairs with two fillers to the core |
| Optical shield covering | 85 % |
| Max. conductor resistance | ≤ 140 Ω/km |
| Insulation resistance | > 5 GΩ*km |
| Wave impedance | 100 Ω ±5 % (at 100 MHz) |
| Working capacitance | < 56 nF |
| Nominal voltage, cable | ≤ 300 V AC ≤ 450 V DC |

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| | |
|---|--|
| Test voltage Core/Core | 2500 V DC |
| Smallest bending radius, movable installation | 25 mm |
| Tensile strength | ≤ 40 N |
| Shield attenuation | 32.00 dB (up to 100 MHz) |
| Flame resistance | According to VW-1 |
| Resistance to oil | in accordance with DIN EN 60811-2-1 |
| Other resistance | Resistant to cleaning agents/disinfectants (According to ECOLAB F&E/P3-E No. 40-1) |
| Ambient temperature (operation) | -40 °C ... 90 °C |
| Ambient temperature (installation) | 0 °C ... 50 °C |

Environmental and real-life conditions

Ambient conditions

| | |
|---|--|
| Ambient temperature (operation) (male connector/female connector) | -25 °C ... 85 °C (M12 connector) |
| | -25 °C ... 60 °C (cable, fixed installation) |
| Ambient temperature (operation) | -5 °C ... 50 °C (Cable, flexible installation) |

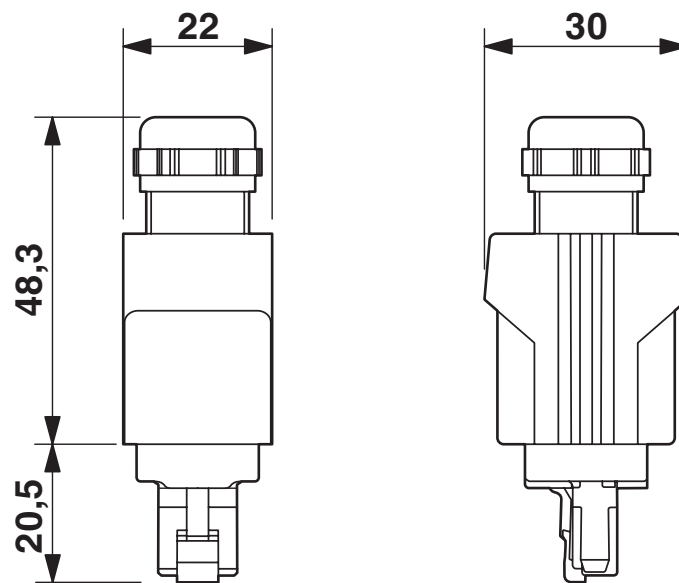
Standards and regulations

M12

| | |
|--------------------------|-----------------|
| Standard designation | M12 connector |
| Standards/specifications | IEC 61076-2-101 |

Drawings

Dimensional drawing



RJ45 Push-Pull connector, IP67

Schematic diagram



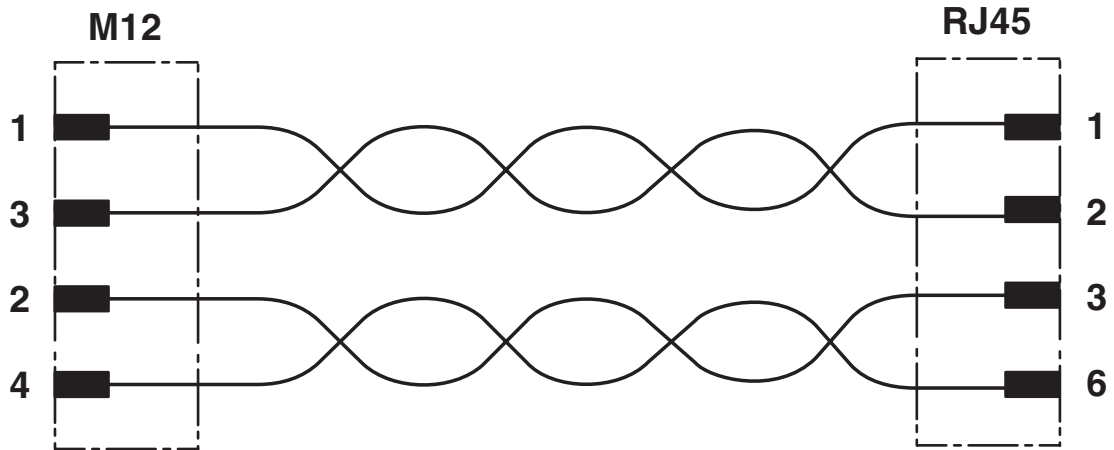
Pin assignment M12 male connector, 4-pos., D-coded, male side

Schematic diagram



Connector pin assignment plug RJ45

Circuit diagram



Contact assignment of the M12 and RJ45 plug

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Classifications

ECLASS

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

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