

Network cable - NBC-MS/ 1,0-94B/FS SCO - 1407463

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Network cable, Ethernet CAT5 (0.1 Gbps), Ethernet CAT5e (0.1 Gbps), 8-position, PUR, water blue RAL 5021, shielded, Plug Straight M12 SPEEDCON / IP67, Coding: A, on Socket Straight M12 SPEEDCON / IP67, Coding: A, Cable length: 1 m



Key commercial data

| | |
|----------------------|----------|
| Packing unit | 1 pc |
| Custom tariff number | 85444210 |
| Country of origin | Poland |

Technical data

Dimensions

| | |
|-----------------|-----|
| Length of cable | 1 m |
|-----------------|-----|

Ambient conditions

| | |
|----------------------|------|
| Degree of protection | IP65 |
| | IP67 |

General data

| | |
|-----------------------|--|
| Rated current at 40°C | 2 A |
| Rated voltage | 30 V |
| Number of positions | 8 |
| Signal type/category | Ethernet CAT5 (IEC 11801:2002), 0.1 Gbps |
| | Ethernet CAT5e (TIA 568B:2001), 0.1 Gbps |
| Standards/regulations | M12 connector IEC 61076-2-101 |

Characteristics head 1

| | |
|--|-----------------------------------|
| Head type | Plug Straight M12 SPEEDCON / IP67 |
| No. of positions (pin connector pattern) | 8 |
| Coding | A (Standard) |

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Technical data

Characteristics head 1

| | |
|---------------------------------|--|
| Color | black |
| Material (component) | CuZn (Contact) |
| | Ni/Au (Contact surface) |
| | TPU GF (Contact carriers) |
| | TPU, hardly inflammable, self-extinguishing (Grip) |
| | Zinc die-cast, nickel-plated (Screw connection) |
| Contact resistance | ≤ 5 mΩ |
| Insulation resistance | ≥ 100 MΩ |
| Insertion/withdrawal cycles | ≥ 100 |
| Torque | 0.4 Nm |
| Ambient temperature (operation) | -25 °C ... 90 °C |

Characteristics head 2

| | |
|--|--|
| Head type | Socket Straight M12 SPEEDCON / IP67 |
| No. of positions (pin connector pattern) | 8 |
| Coding | A (Standard) |
| Color | black |
| Material (component) | CuZn (Contact) |
| | Ni/Au (Contact surface) |
| | TPU GF (Contact carriers) |
| | TPU, hardly inflammable, self-extinguishing (Grip) |
| | Zinc die-cast, nickel-plated (Screw connection) |
| Contact resistance | ≤ 5 mΩ |
| Insulation resistance | ≥ 100 MΩ |
| Insertion/withdrawal cycles | ≥ 100 |
| Torque | 0.4 Nm |
| Ambient temperature (operation) | -25 °C ... 90 °C |

Cable

| | |
|---------------------------------|--|
| Cable type | Ethernet, flexible, CAT5e |
| Cable type (abbreviation) | 94B |
| UL AWM style | 20963 (80°C/30 V) |
| Signal type/category | Ethernet CAT5 (IEC 11801:2002), 0.1 Gbps |
| | Ethernet CAT5e (TIA 568B:2001), 0.1 Gbps |
| Cable structure | 4x2xAWG26/7; SF/UTP |
| Conductor cross section | 4x 2x 0.14 mm ² |
| AWG signal line | 26 |
| Conductor structure signal line | 7x 0.16 mm |

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Technical data

Cable

| | |
|---|--|
| Core diameter including insulation | 0.98 mm |
| Thickness, insulation | 0.25 mm |
| Wire colors | white/blue-blue, white/orange-orange, white/green-green, white/brown-brown |
| Twisted pairs | 2 cores to the pair |
| Overall twist | 4 pairs |
| Shielding | Aluminum-coated foil, tinned copper braided shield |
| Optical shield covering | 70 % |
| External sheath, color | water blue RAL 5021 |
| Outer sheath thickness | 1 mm |
| External cable diameter D | 6.4 mm ±0.2 mm |
| Smallest bending radius, fixed installation | 25.6 mm |
| Smallest bending radius, movable installation | 51.2 mm |
| Tensile strength short-term/long-term | ≤ 100 N |
| Cable weight | 47 kg/km |
| Outer sheath, material | PUR |
| Material conductor insulation | PE |
| Conductor material | Bare Cu litz wires |
| Insulation resistance | ≥ 500 MΩ*km |
| Loop resistance | ≤ 290 Ω (per kilometer) |
| Working capacitance | 48 nF (At 1 kHz) |
| Wave impedance | 100 Ω ±5 Ω (at 100 MHz) |
| Signal runtime | 5.3 ns/m |
| Coupling resistance | ≤ 100.00 mΩ/m (At 10 MHz) |
| Nominal voltage, cable | ≤ 100 V |
| | 300 V (Outer cable sheath) |
| Test voltage Core/Core | 700 V (50 Hz, 1 min.) |
| Test voltage Core/Shield | 700 V (50 Hz, 1 min.) |
| Flame resistance | IEC 60332-1-2 |
| Halogen-free | According to IEC 60754-1 |
| Resistance to oil | in accordance with DIN EN 60811-2-1 |
| Ambient temperature (operation) | -40 °C ... 80 °C (cable, fixed installation) |
| | -20 °C ... 80 °C (cable, flexible installation) |
| Ambient temperature (installation) | -20 °C ... 80 °C |
| Ambient temperature (storage/transport) | -20 °C ... 80 °C |

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Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 4.0 | 27060306 |
| eCl@ss 4.1 | 27060306 |
| eCl@ss 5.0 | 27061801 |
| eCl@ss 5.1 | 27061801 |
| eCl@ss 6.0 | 27061801 |
| eCl@ss 7.0 | 27061801 |
| eCl@ss 8.0 | 27061801 |

ETIM

| | |
|----------|----------|
| ETIM 3.0 | EC001855 |
| ETIM 4.0 | EC001855 |
| ETIM 5.0 | EC001855 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 31251501 |
| UNSPSC 7.0901 | 31251501 |
| UNSPSC 11 | 31251501 |
| UNSPSC 12.01 | 31251501 |
| UNSPSC 13.2 | 31251501 |

Approvals

Approvals

Approvals

UL Listed

Ex Approvals

Approvals submitted

Approval details

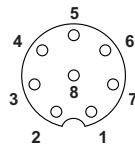
Network cable - NBC-MS/ 1,0-94B/FS SCO - 1407463

Approvals

| | |
|--------------------------------|-------|
| UL Listed | |
| Nominal current I _N | 0.5 A |
| Nominal voltage U _N | 60 V |

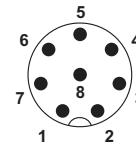
Drawings

Schematic diagram



Pin assignment M12 socket, 8-pos., A-coded, view female side

Schematic diagram



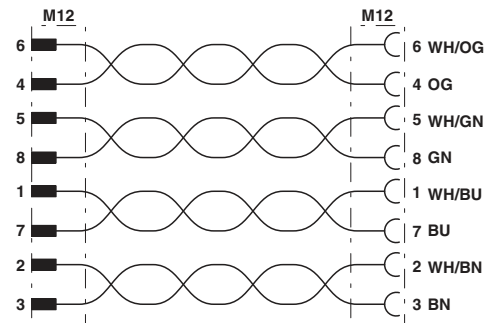
Pin assignment M12 plug, 8-pos., A-coded, view plug side

Cable cross section



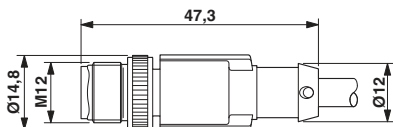
Ethernet, flexible, CAT5e [94B]

Circuit diagram



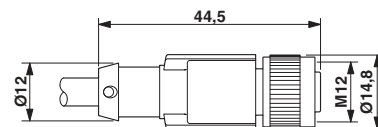
Contact assignment of the M12 connector and the M12 socket

Dimensioned drawing



Plug, M12 x 1, straight, shielded

Dimensioned drawing



M12 x 1 socket, straight, shielded

