

## Network cable - NBC-MS/ 5,0-94B/MS SCO - 1407436

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Network cable, Ethernet CAT5 (1 Gbps), 8-position, PUR, water blue RAL 5021, shielded, Plug straight M12 SPEEDCON / IP67, Coding: A, on Plug straight M12 SPEEDCON / IP67, Coding: A, Cable length: 5 m



### Key Commercial Data

|                                      |          |
|--------------------------------------|----------|
| Packing unit                         | 1 pc     |
| Weight per Piece (excluding packing) | 280.0 g  |
| Custom tariff number                 | 85444210 |
| Country of origin                    | Poland   |

### Technical data

#### Dimensions

|                 |     |
|-----------------|-----|
| Length of cable | 5 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), 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)                      |

## Network cable - NBC-MS/ 5,0-94B/MS SCO - 1407436

### 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)    |
| Insulation resistance           | ≥ 100 MΩ   |
| Insertion/withdrawal cycles     | ≥ 100  |
| Torque                          | 0.4 Nm   |
| Ambient temperature (operation) | -25 °C ... 90 °C                                   |

#### Characteristics head 2

|  |  |
|--|--|
| Head type                                | Plug 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)    |
| Insulation resistance                    | ≥ 100 MΩ   |
| Insertion/withdrawal cycles              | ≥ 100  |
| Torque                                   | 0.4 Nm   |
| Ambient temperature (operation)          | -25 °C ... 90 °C                                   |

#### Standards and Regulations

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

#### Cable

|                                 |                                   |
|---------------------------------|-----------------------------------|
| Cable type                      | Ethernet, flexible, CAT5          |
| Cable type (abbreviation)       | 94B                               |
| UL AWM style                    | 20963 (80°C/30 V)                 |
| Signal type/category            | Ethernet CAT5 (IEC 11801), 1 Gbps |
| Cable structure                 | 4x2xAWG26/7; SF/UTP               |
| Conductor cross section         | 4x 2x 0.14 mm <sup>2</sup>        |
| AWG signal line                 | 26                                |
| Conductor structure signal line | 7x 0.16 mm                        |

## Network cable - NBC-MS/ 5,0-94B/MS SCO - 1407436

### Technical data

#### Cable

|   |  |
|---|--|
| Core diameter including insulation            | 0.96 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 for core   |
| Shielding                                     | Aluminum-coated foil, tinned copper braided shield                         |
| Optical shield covering                       | 70 %   |
| External sheath, color                        | water blue RAL 5021  |
| Outer sheath thickness                        | 1.05 mm  |
| External cable diameter D                     | 6.4 mm ±0.2 mm   |
| Minimum bending radius, fixed installation    | 4 x D  |
| Minimum bending radius, flexible installation | 8 x D  |
| Tensile strength short-term/long-term         | ≤ 100 N  |
| Cable weight                                  | 47 kg/km   |
| Outer sheath, material                        | PUR  |
| Material conductor insulation                 | Foamed PE  |
| Conductor material                            | Bare Cu litz wires   |
| Insulation resistance                         | ≥ 500 MΩ*km  |
| Conductor resistance                          | ≤ 290 Ω/km   |
| Cable capacity                                | 48 nF/km (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  |
| Test voltage Core/Core                        | 700 V (50 Hz, 1 min.)  |
| Test voltage Core/Shield                      | 700 V (50 Hz, 1 min.)  |
| Flame resistance                              | According to IEC 60332-1-2   |
| Halogen-free                                  | According to IEC 60754-1   |
| Resistance to oil                             | according to 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   |

## Network cable - NBC-MS/ 5,0-94B/MS SCO - 1407436

### 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 | 27279218 |
| eCl@ss 9.0 | 27060311 |

#### 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 / EAC

---

Ex Approvals

---

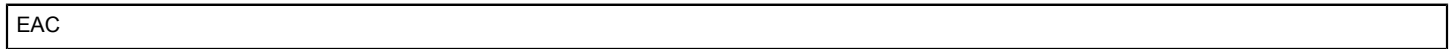
Approvals submitted

---

Approval details

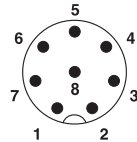
# Network cable - NBC-MS/ 5,0-94B/MS SCO - 1407436

## Approvals



## Drawings

Schematic diagram



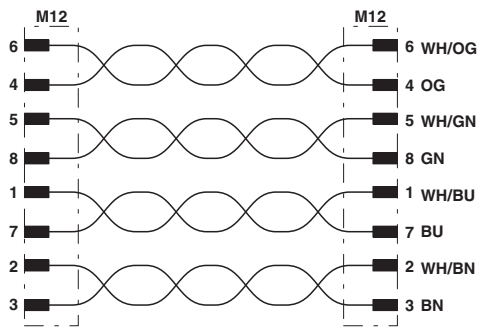
Pin assignment M12 plug, 8-pos., A-coded, view plug side

Cable cross section



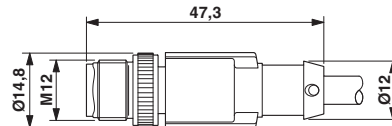
Ethernet, flexible, CAT5 [94B]

Circuit diagram



Contact assignment of the M12 plugs

Dimensional drawing



Plug, M12 x 1, straight, shielded