

## Network cable - NBC-MS/ 2,0-94B/FS SCO US - 1406119

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 halogen-free, water blue RAL 5021, shielded, Plug straight M12 SPEEDCON / IP67, Coding: A, on Socket straight M12 SPEEDCON / IP67, Coding: A, Cable length: 2 m



### Key Commercial Data

Packing unit	1 STK
Weight per Piece (excluding packing)	1.000 g
Custom tariff number	85444210
Country of origin	United States

### Technical data

#### Dimensions

Length of cable	2 m
-----------------	-----

#### Ambient conditions

Degree of protection	IP65
	IP67
Ambient temperature (operation)	-25 °C ... 85 °C (M12 connector)

#### 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
-----------	-----------------------------------

## Network cable - NBC-MS/ 2,0-94B/FS SCO US - 1406119

### Technical data

#### Characteristics head 1

Coding	A (Standard)
--------	--------------

#### Characteristics head 2

Head type	Socket straight M12 SPEEDCON / IP67
Coding	A (Standard)

#### 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
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
Loop resistance	≤ 290 Ω (per km)
Cable capacity	48 nF/km (at 1 kHz)

# Network cable - NBC-MS/ 2,0-94B/FS SCO US - 1406119

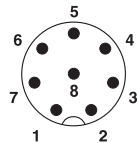
## Technical data

### Cable

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

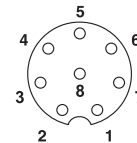
## Drawings

Schematic diagram



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

Schematic diagram



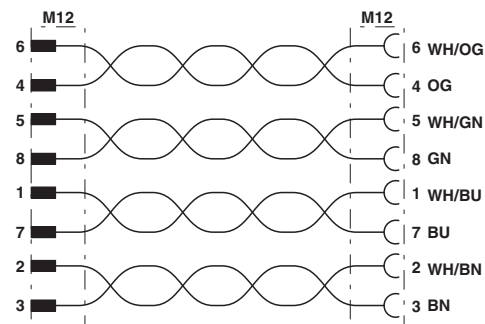
Pin assignment M12 socket, 8-pos., A-coded, view female side

Cable cross section



Ethernet, flexible, CAT5 [94B]

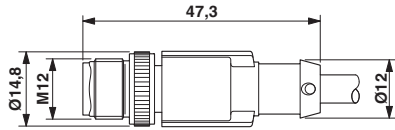
Circuit diagram



Contact assignment of the M12 connector and the M12 socket

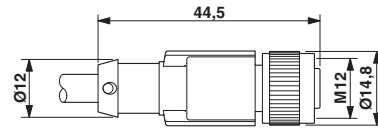
# Network cable - NBC-MS/ 2,0-94B/FS SCO US - 1406119

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing



M12 x 1 socket, straight, shielded

## Approvals

Approvals

---


Approvals

UL Listed

---

Ex Approvals

## Approval details

UL Listed  <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> FILE E 335024	
Nominal current I <sub>N</sub>	1.5 A
Nominal voltage U <sub>N</sub>	30 V