

## Network cable - NBC-MS/ 0,5-94B/FS SCO US - 1408747


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://download.phoenixcontact.com>)



Network cable, Ethernet CAT5, Ethernet CAT5e, 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: 0.5 m



### Key commercial data

Packing unit	1
GTIN	 4 046356 828598
Custom tariff number	85444210

### Technical data

#### Dimensions

Length of cable	0.5 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 11801:2002)
	Ethernet CAT5e (TIA 568B:2001)
Standards/regulations	M12 connector IEC 61076-2-101

#### Characteristics head 1

Head type	Plug Straight M12 SPEEDCON / IP67
Coding	A (Standard)

#### Characteristics head 2

Head type	Socket Straight M12 SPEEDCON / IP67
-----------	-------------------------------------

# Network cable - NBC-MS/ 0,5-94B/FS SCO US - 1408747

## Technical data

### Characteristics head 2

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

### Cable

Cable type	Ethernet, flexible, CAT5e
Cable type (abbreviation)	94B
UL AWM style	20963 (80 °C / 60 V)
Signal type/category	Ethernet CAT5 (IEC 11801:2002), 1 Gbps Ethernet CAT5e (TIA 568B:2001), 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	0.98 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

# Network cable - NBC-MS/ 0,5-94B/FS SCO US - 1408747

## Technical data

### Cable

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

## 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	27060308
eCl@ss 8.0	27279218

### ETIM

ETIM 3.0	EC001855
ETIM 4.0	EC002599
ETIM 5.0	EC002599

### 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

---

# Network cable - NBC-MS/ 0,5-94B/FS SCO US - 1408747

## Approvals

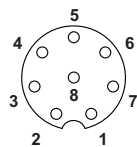
Approvals submitted

## Approval details

UL Listed	
Nominal current I <sub>N</sub>	0.5 A
Nominal voltage U <sub>N</sub>	60 V

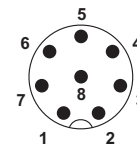
## Drawings

Schematic diagram



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

Schematic diagram



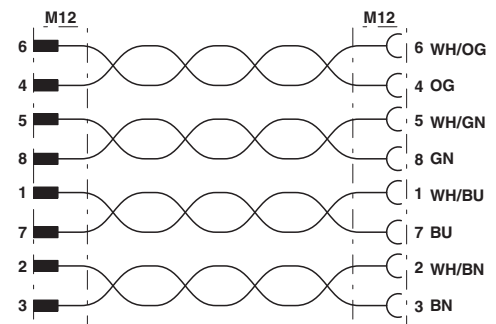
Pin assignment M12 plug, 8-pos., A-coded, view plug side

Cable cross section



Ethernet, flexible, CAT5e [94B]

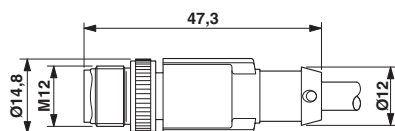
Circuit diagram



Contact assignment of the M12 connector and the M12 socket

## Network cable - NBC-MS/ 0,5-94B/FS SCO US - 1408747

Dimensioned drawing



Plug, M12 x 1, straight, shielded

Dimensioned drawing



M12 x 1 socket, straight, shielded