

## Network cable - NBC-MS/ 20,0-94B/MS SCO US - 1418083


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 Plug straight M12 SPEEDCON / IP67, coding: A, cable length: 20 m



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 055626 211886
GTIN	4055626211886
Weight per Piece (excluding packing)	58.000 g
Custom tariff number	85444210
Country of origin	United States

### Technical data

#### Dimensions

Length of cable	20 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	48 V AC
	60 V DC
Number of positions	8

# Network cable - NBC-MS/ 20,0-94B/MS SCO US - 1418083

## Technical data

### General data

Signal type/category	Ethernet CAT5 (on the basis of IEC 11801), 1 Gbps
Standards/regulations	M12 connector IEC 61076-2-101
Contact material	CuSn
Contact carrier material	TPU GF
Contact surface material	Ni/Au
Degree of protection	IP65/IP67
Transmission characteristics (category)	CAT5

### Characteristics head 1

Head type	Plug straight M12 SPEEDCON / IP67
Coding	A (Standard)
Shielded	yes
Outer sheath, material	PUR
External sheath, color	water blue RAL#5021
Type type, plug side	Plug straight
Type type, socket side	Plug, straight

### Characteristics head 2

Head type	Plug straight M12 SPEEDCON / IP67
Coding	A (Standard)
Color	black

### Standards and Regulations

Standards/specifications	M12 connector IEC 61076-2-101
--------------------------	-------------------------------

### Cable

Cable type	Ethernet flexible CAT5, 4-pair
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

## Network cable - NBC-MS/ 20,0-94B/MS SCO US - 1418083

### Technical data

#### Cable

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 GRP	≤ 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	≤ 290.00 Ω/km
Cable capacity	48 nF/km (at 1 kHz)
Wave impedance	100 Ω ±5 Ω (at 100 MHz)
Near end crosstalk attenuation (NEXT)	71.3 dB (with 1 MHz)
	62.3 dB (at 4 MHz)
	56.3 dB (at 10 MHz)
	53.2 dB (at 16 MHz)
	51.8 dB (at 20 MHz)
	48.9 dB (at 31.25 MHz)
	44.4 dB (at 62.5 MHz)
	41.3 dB (at 100 MHz)
Power-summated near end crosstalk attenuation (PSNEXT)	62.3 dB (with 1 MHz)
	53.3 dB (at 4 MHz)
	47.3 dB (at 10 MHz)
	44.2 dB (at 16 MHz)
	42.8 dB (at 20 MHz)
	39.9 dB (at 31.25 MHz)
	35.4 dB (at 62.5 MHz)
	32.3 dB (at 100 MHz)
Attenuation	3.2 dB (with 1 MHz)
	6 dB (at 4 MHz)
	9.5 dB (at 10 MHz)
	12.1 dB (at 16 MHz)
	13.6 dB (at 20 MHz)
	17.1 dB (at 31.25 MHz)

## Network cable - NBC-MS/ 20,0-94B/MS SCO US - 1418083

### Technical data

#### Cable

	24.8 dB (at 62.5 MHz)
	32 dB (at 100 MHz)
Return loss (RL)	23 dB (at 4 MHz)
	24.1 dB (at 8 MHz)
	25 dB (at 10 MHz)
	25 dB (at 16 MHz)
	25 dB (at 20 MHz)
	23.6 dB (at 31.25 MHz)
	21.5 dB (at 62.5 MHz)
	20.1 dB (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

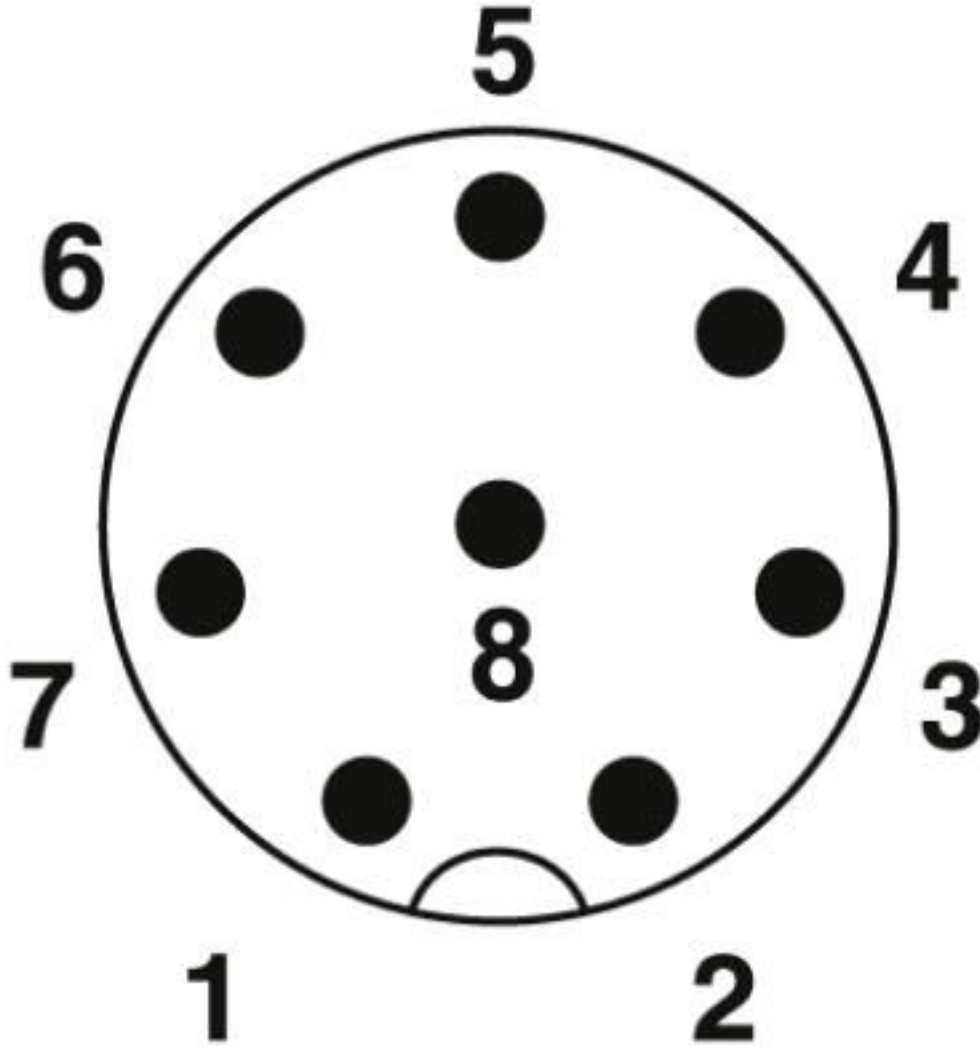
#### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

#### Drawings

# Network cable - NBC-MS/ 20,0-94B/MS SCO US - 1418083

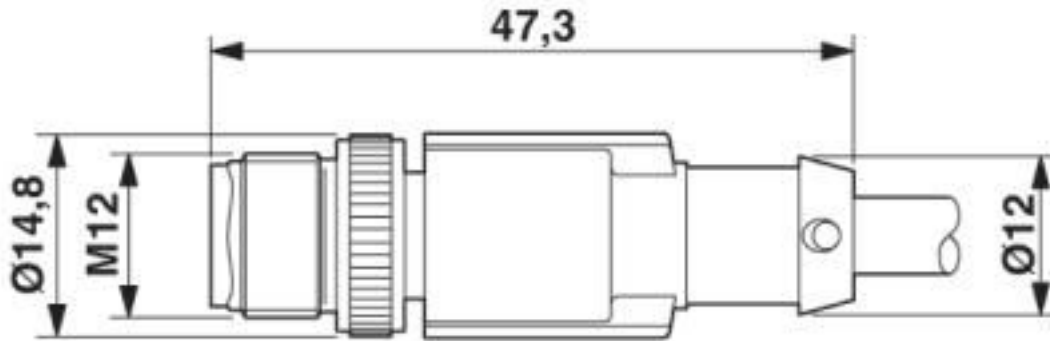
Schematic diagram



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

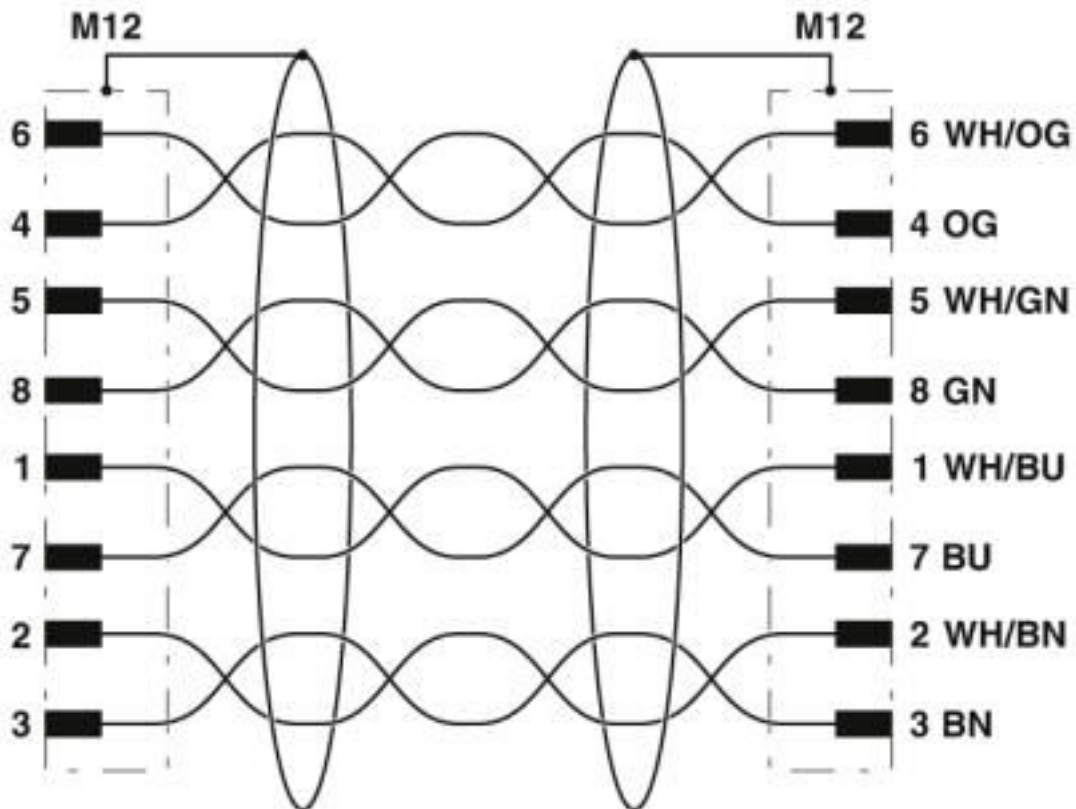
# Network cable - NBC-MS/ 20,0-94B/MS SCO US - 1418083

Dimensional drawing



Plug, M12 x 1, straight, shielded

Circuit diagram



Contact assignment of the M12 plugs

# Network cable - NBC-MS/ 20,0-94B/MS SCO US - 1418083

Cable cross section



Ethernet flexible CAT5, 4-pair [94B]

## Classifications

eCl@ss

eCl@ss 10.0.1	27060308
eCl@ss 4.0	27060306
eCl@ss 4.1	27060306
eCl@ss 5.0	27061801
eCl@ss 5.1	27061801
eCl@ss 6.0	27279200
eCl@ss 7.0	27279218

## Network cable - NBC-MS/ 20,0-94B/MS SCO US - 1418083

### Classifications

#### eCl@ss

eCl@ss 8.0	27061801
eCl@ss 9.0	27060308

#### ETIM

ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC002599
ETIM 6.0	EC001855
ETIM 7.0	EC001855

#### UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	31251501
UNSPSC 18.0	26121604
UNSPSC 19.0	26121604
UNSPSC 20.0	26121604
UNSPSC 21.0	26121604

### 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 voltage UN	30 V		



## Network cable - NBC-MS/ 20,0-94B/MS SCO US - 1418083

### Approvals

Nominal current I <sub>N</sub>	1.5 A

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Ethernet Cables / Networking Cables](#) category:*

*Click to view products by [Phoenix Contact](#) manufacturer:*

Other Similar products are found below :

[0152660053](#) [603020002](#) [73-7797-25](#) [73-8890-10](#) [73-8890-14](#) [73-8891-14](#) [73-8891-25](#) [73-8892-50](#) [73-8894-10](#) [73-8894-3](#) [73-8895-14](#) [73-8896-7](#) [MCJB2-10P6Q7-120](#) [84909-0204](#) [9QA0-111-12-3.00](#) [1200650742](#) [1200700174](#) [1200860368](#) [1200650013](#) [1201080008](#) [1-21919-1](#) [1300500373](#) [1300101844](#) [1300101845](#) [130050-0004](#) [1300500014](#) [1410147](#) [E16A06002M030](#) [E200102-009-S1](#) [MT14-187L](#) [17-103530](#) [NK5EPC18RDY](#) [NK5EPC18VLY](#) [NK5EPC18YLY](#) [NK5EPC1GRY](#) [NK5EPC30BLY](#) [NK5EPC30VLY](#) [NK5EPC30YLY](#) [NK5EPC4Y](#) [NK5EPC6YLY](#) [NK5EPC8BLY](#) [NK5EPC9YLY](#) [NK6PC30BUY](#) [NK6PC30GRY](#) [NK6PC30RDY](#) [NK6PC30Y](#) [NK6PC30YLY](#) [1969343-6](#) [C501100010](#) [C501106002](#)