

Network cable - NBC-MS/ 0,5-94B/R4AC SCO US - 1408749

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 RJ45 / IP20, Cable length: 0.5 m



Key Commercial Data

Packing unit	1 STK
Weight per Piece (excluding packing)	54.800 g
Custom tariff number	85444210
Country of origin	United States

Technical data

Dimensions

Length of cable	0.5 m
-----------------	-------

Ambient conditions

Degree of protection	IP65 (M12 connector)
	IP67 (M12 connector)
	IP20 (RJ45 connector)
Ambient temperature (operation)	-25 °C ... 85 °C (M12 connector)

General data

Rated current at 40°C	1 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/ 0,5-94B/R4AC SCO US - 1408749

Technical data

Characteristics head 1

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

Characteristics head 2

Head type	Plug straight RJ45 / IP20
-----------	---------------------------

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 ²
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)
Wave impedance	100 Ω ±5 Ω (at 100 MHz)

Network cable - NBC-MS/ 0,5-94B/R4AC SCO US - 1408749

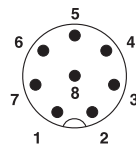
Technical data

Cable

Signal runtime	5.3 ns/m
Coupling resistance	$\leq 100.00 \text{ m}\Omega/\text{m}$ (At 10 MHz)
Nominal voltage, cable	$\leq 100 \text{ V}$
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

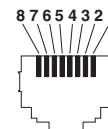
Drawings

Schematic diagram



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

Schematic diagram



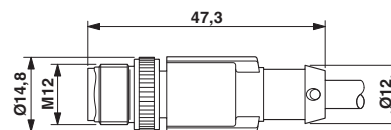
Connector pin assignment plug RJ45

Cable cross section



Ethernet, flexible, CAT5 [94B]

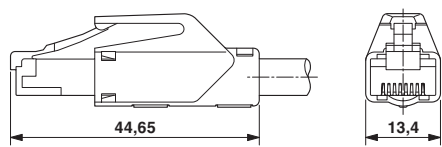
Dimensional drawing



Plug, M12 x 1, straight, shielded

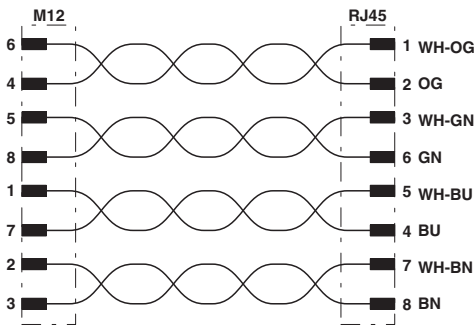
Network cable - NBC-MS/ 0,5-94B/R4AC SCO US - 1408749

Dimensional drawing



RJ45 connector, IP20

Circuit diagram



Contact assignment of the M12 and RJ45 plug

Approvals

Approvals

Approvals

UL Listed

Ex Approvals

Approval details

UL Listed  http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE E 335024	
Nominal current IN	0.5 A
Nominal voltage UN	60 V