

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


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Network cable, Ethernet, 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 PCE
GTIN	 4 046356 828574
Custom tariff number	85444210
Country of origin	GERMANY

### Technical data

#### Dimensions

Length of cable	0.5 m
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#### General data

Rated current at 40°C	1 A
Rated voltage	30 V
Number of positions	8
Signal type/category	Ethernet CAT5 (IEC 11801:2002)
Signal type/category	Ethernet CAT5e (TIA 568B:2001)
Standards/regulations	M12 plug-in connector IEC 61076-2-101
Degree of protection	IP65 (M12 plug-in connector)
Degree of protection	IP67 (M12 plug-in connector)
Degree of protection	IP20 (RJ45 plug-in connector)

#### Characteristics head 1

Head design	Plug Straight M12 SPEEDCON / IP67
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## Technical data

### Characteristics head 1

Coding	A (Standard)
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### Characteristics head 2

Head design	Plug Straight RJ45 / IP20
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### Line characteristics

Cable type	Ethernet
Cable type (abbreviation)	94B
UL AWM style	20963 (80 °C / 60 V)
Signal type/category	Ethernet CAT5 (IEC 11801:2002)
Signal type/category	Ethernet CAT5e (TIA 568B:2001)
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 (signal line)
Thickness, insulation	1 mm (Outer cable sheath)
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
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 (at 20 °C)
Conductor resistance	≤ 290 Ω/km (at 20 °C)
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)

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### Technical data

#### Line characteristics

Nominal voltage, cabel	≤ 100 V (at 20 °C)
Nominal voltage, cabel	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
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)
Ambient temperature (operation)	-20 °C ... 80 °C (cable, flexible installation)
Ambient temperature (installation)	-20 °C ... 80 °C
Ambient temperature (storage/transport)	-20 °C ... 80 °C

### Classifications

#### ETIM

ETIM 3.0	EC001855
ETIM 4.0	EC002599
ETIM 5.0	EC002599

#### UNSPSC

UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	31251501
UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501

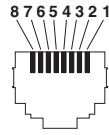
#### eCl@ss

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

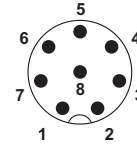
### Drawings

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

Schematic diagram



Schematic diagram



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

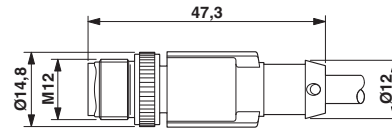
Connector pin assignment plug RJ45

Cable cross section



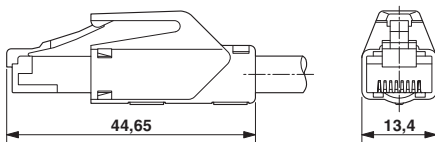
Ethernet [94B]

Dimensioned drawing



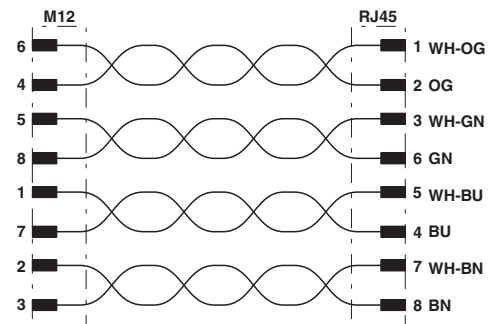
Plug, M12 x 1, straight, shielded

Dimensioned drawing



RJ45 plug-in connector, IP20

Circuit diagram



Contact assignment of the M12 and RJ45 plug