

# NBC-MRD/ 2,0-93E/R4AC SCO US

Order No.: 1406122



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Network cable, Ethernet CAT5, Ethernet CAT5e, 4-position, PUR halogen-free, water blue RAL 5021, shielded, Plug angled M12 SPEEDCON / IP67, Coding: D, on Plug Straight RJ45 / IP20, Cable length: 2 m

Ethernet




## Product notes

WEEE/RoHS-compliant since:  
04/03/2012



## Commercial data

EAN	 4 046356 799270
Note	Made-to-order
sales group	D117
Pack	1 Pcs.
Customs tariff	85444210
Gross weight in pieces	0.1168 KG
Net weight per piece	0.1134 KG

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## Technical data

### Dimensions

Length of cable	2 m
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### Ambient conditions

Degree of protection	IP65 (M12 connector)
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	IP67 (M12 connector)
	IP20 (RJ45 connector)

**General data**

Rated current at 40°C	1 A
Rated voltage	50 V
Number of positions	4
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 angled M12 SPEEDCON / IP67
Coding	D (Data)

**Characteristics head 2**

Head type	Plug Straight RJ45 / IP20
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**Cable**

Cable type	PUR ETHERNET 2x2 FLEX
Cable type (abbreviation)	93E
UL AWM style	20963 (80°C/30 V)
Signal type/category	Ethernet CAT5 (IEC 11801), 100 Mbps Ethernet CAT5e (TIA 568B), 100 Mbps
Cable structure	2x2xAWG26/7; SF/UTP
Conductor cross section	2x 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
Wire colors	white/orange-orange, white/green-green
Twisted pairs	2 cores to the pair
Overall twist	Two pairs with two fillers to the core
Shielding	Aluminum-coated foil, tinned copper braided shield
Optical shield covering	70 %
External sheath, color	water blue RAL 5021
Outer sheath thickness	1.2 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	≤ 80N
Cable weight	42 kg/km
Outer sheath, material	PUR
Material conductor insulation	Foamed PE
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 500 MΩ*km
Conductor resistance	≤ 290 Ω/km
Cable capacity	approx. 45 nF/km (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
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	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

### Certificates / Approvals



Certification

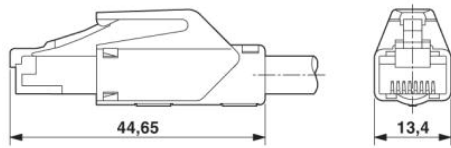
UL Listed

Certifications applied for:

Certification Ex:

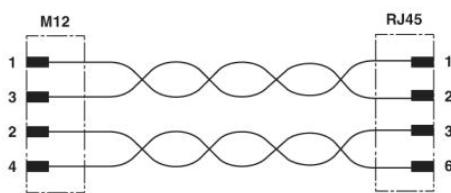
## Drawings

### Dimensioned drawing



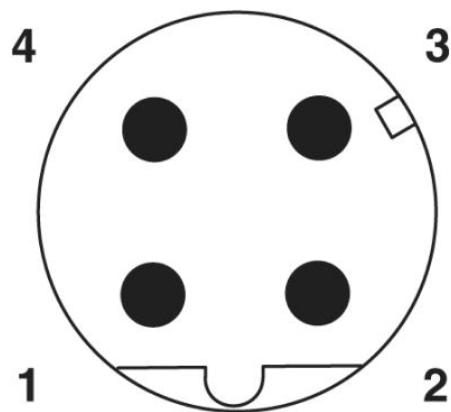
RJ45 connector, IP20

### Circuit diagram

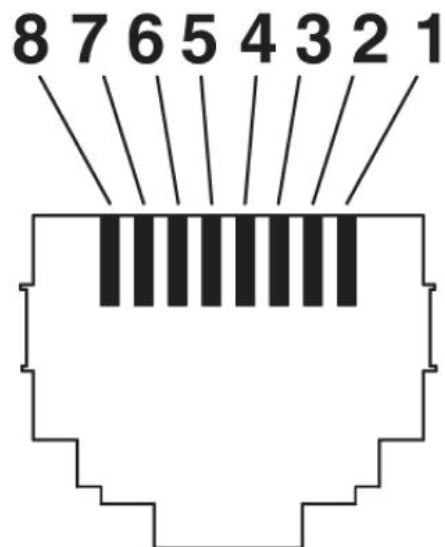


Contact assignment of the M12 and RJ45 plug

### Schematic diagram

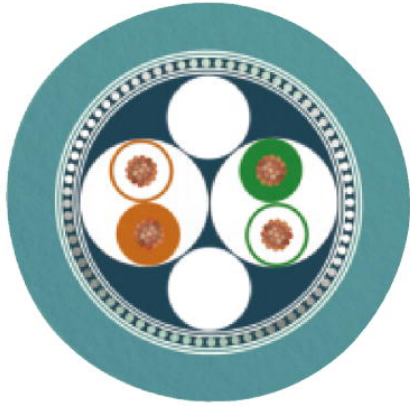


Pin assignment M12 male connector, 4-pos., D-coded, male side



Connector pin assignment plug RJ45

PUR ETHERNET 2x2 FLEX [93E]



**Address**

PHOENIX CONTACT Deutschland GmbH  
Flachmarktstr. 8  
32825 Blomberg, Germany  
Phone +49 5235 3 12000  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>



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