

Network cable - NBC-MSD/15,0-93E/R4AC SCO US - 1409862


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Network cable, Ethernet CAT5 (1 Gbps), 4-position, PUR halogen-free, water blue RAL 5021, shielded, Plug straight M12 SPEEDCON / IP67, Coding: D, on Plug straight RJ45 / IP20, Cable length: 15 m



Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 993029
GTIN	4046356993029
Weight per Piece (excluding packing)	1.000 g
Custom tariff number	85444290
Country of origin	United States

Technical data

Dimensions

Length of cable	15 m
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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	50 V
Number of positions	4

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Technical data

General data

Signal type/category	Ethernet CAT5, 1 Gbps
Standards/regulations	M12 connector IEC 61076-2-101

Characteristics head 1

Head type	Plug straight M12 SPEEDCON / IP67
Coding	D (Data)

Characteristics head 2

Head type	Plug straight RJ45 / IP20
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Standards and Regulations

Standard designation	M12 connector
Standards/regulations	IEC 61076-2-101

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
Cable structure	2x2xAWG26/7; SF/UTP
Conductor cross section	2x 2x 0.14 mm ²
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

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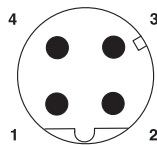
Technical data

Cable

Standards/specifications	Electrical requirements EN 50288-2-2
Insulation resistance	≥ 500 MΩ*km
Loop resistance	≤ 290 Ω (per 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 (Peak value, not for high-power applications)
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
	in acc. to UL VW1
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

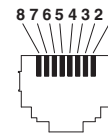
Drawings

Schematic diagram



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

Schematic diagram



Connector pin assignment plug RJ45

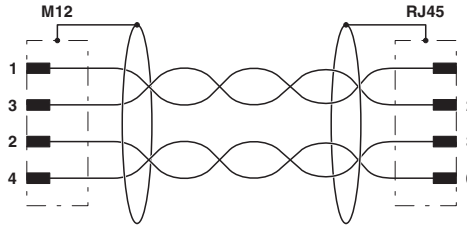
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Cable cross section



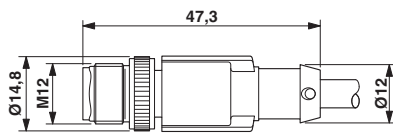
PUR ETHERNET 2x2 FLEX [93E]

Circuit diagram



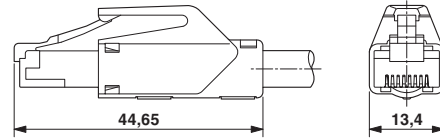
Contact assignment of the M12 and RJ45 plug

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing



RJ45 connector, IP20

Classifications

eCl@ss

eCl@ss 5.1	27061801
eCl@ss 6.0	27061801
eCl@ss 8.0	27061801
eCl@ss 9.0	27061801

ETIM

ETIM 4.0	EC002586
ETIM 5.0	EC000830
ETIM 6.0	EC000830

UNSPSC

UNSPSC 13.2	26121604
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Approvals

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Approvals

Approvals

UL Listed / UL Listed

Ex Approvals

Approval details

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 335024
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UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 335024
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Nominal current I _N	0.5 A
Nominal voltage U _N	30 V
