

Network cable - NBC-M12FR/1,5-971/R4AQ VR - 1412403


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Assembled VARAN cable, shielded, stranded, black, angled M12 socket, SPEEDCON, 6-pos. to RJ45 plug/IP20, QUICKON, length: 1.5 m



Key Commercial Data

Packing unit	1
GTIN	 4 0 4 6 3 5 6 9 6 2 4 4 5
GTIN	4046356962445
Custom tariff number	85444290

Technical data

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	0 °C ... 50 °C (for installation)
	-20 °C ... 80 °C (cable, fixed installation)
	-25 °C ... 90 °C (Plug / socket)

General data

Rated current at 40 °C	2 A
Rated voltage	30 V
Number of positions	6
Overvoltage category	I
Degree of pollution	1
Rated voltage (III/3)	72 V (DC)
Insertion/withdrawal cycles	≥ 100

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Technical data

General data

Contact material	CuZn
Contact carrier material	TPU GF
Contact surface material	Ni/Au

Standards and Regulations

Flammability rating according to UL 94	V0
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Cable

Cable type	VARAN
Cable type (abbreviation)	971
UL AWM style	2461 (80°C/300 V)
Signal type/category	VARAN CAT5 (IEC 11801), 100 Mbps
Cable structure	1X2X24/32+2X2X24/19; SF/UTP
Conductor cross section	2x 2x 0.25 mm ² (Signal line)
	2x 0.25 mm ² (Power supply)
AWG signal line	24
AWG power supply	24
Conductor structure signal line	19x 0.13 mm
Conductor structure, voltage supply	32x 0.10 mm
Core diameter including insulation	1.25 mm (Signal line)
	1.4 mm (Power supply)
Wire colors	Blue-yellow, green-orange, red-blue
Twisted pairs	2 cores to the pair
Overall twist	3 pairs with filler elements to the core
Shielding	Aluminum-coated foil, tinned copper braided shield
Optical shield covering	85 %
External sheath, color	black
Outer sheath thickness	0.9 mm
External cable diameter D	7 mm ±0.2 mm
Minimum bending radius, fixed installation	4 x D
Minimum bending radius, flexible installation	8 x D
Number of bending cycles	200000
Minimum bending radius, drag chain applications	5 x D
Outer sheath, material	PVC
Material conductor insulation	PE
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 500 MΩ*km (at 20 °C)
Conductor resistance	78 Ω/km (at 20 °C)

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Technical data

Cable

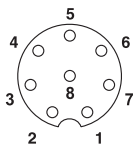
Working capacitance	approx. 57 nF (at 1 kHz)
Signal runtime	5.3 ns/m
Nominal voltage, cable	≤ 80 V
Test voltage Core/Core	1000 V
Test voltage Core/Shield	1000 V
Flame resistance	according to IEC 60332-1-2
Resistance to oil	According to DIN EN 60811-2-1, 168 h at 100°C
Ambient temperature (operation)	-40 °C ... 80 °C
Ambient temperature (installation)	-40 °C ... 80 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Shielded	yes

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

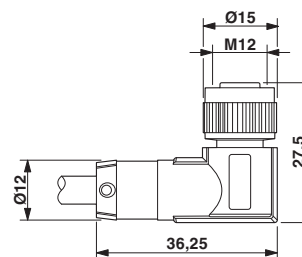
Drawings

Schematic diagram



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

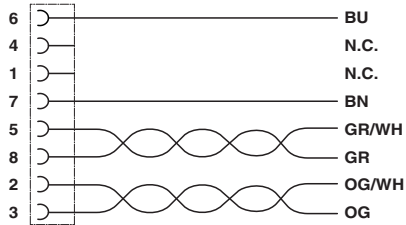
Dimensional drawing



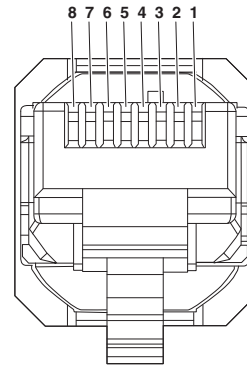
M12 x 1 socket, angled, shielded

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Circuit diagram



Schematic diagram



Contact assignment of the M12 socket

Classifications

eCl@ss

eCl@ss 10.0.1	27060308
eCl@ss 4.0	27141200
eCl@ss 4.1	27141200
eCl@ss 5.0	27149100
eCl@ss 5.1	27149100
eCl@ss 6.0	27261200
eCl@ss 7.0	27060308
eCl@ss 9.0	27060308

ETIM

ETIM 6.0	EC001262
ETIM 7.0	EC001262

UNSPSC

UNSPSC 13.2	26121604
UNSPSC 18.0	26121604
UNSPSC 19.0	26121604
UNSPSC 20.0	26121604
UNSPSC 21.0	26121604