

## Bus system cable - NBC-MR/ 5,0-971/FR SCO VR KM - 1412101


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>)



Bus system cable, VARAN, 6-position, PVC, black, shielded, Plug angled M12 SPEEDCON, A-coded, on Socket angled M12 SPEEDCON, A-coded, cable length: 5 m, Customer version



### Key Commercial Data

Packing unit	1 pc
Minimum order quantity	25 pc
GTIN	 4 046356 955362
GTIN	4046356955362

### Technical data

#### Dimensions

Length of cable	5 m
-----------------	-----

#### Ambient conditions

Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
---------------------------------	----------------------------------

#### General data

Rated current at 40°C	2 A
Rated voltage	30 V AC
	30 V DC
Number of positions	6
Signal type/category	VARAN
Overvoltage category	II
Degree of pollution	3
Contact material	CuZn
Contact carrier material	TPU GF
Contact surface material	Ni/Au

# Bus system cable - NBC-MR/ 5,0-971/FR SCO VR KM - 1412101

## Technical data

### Standards and Regulations

Flammability rating according to UL 94	HB
--	----

### 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 <sup>2</sup> (Signal line)
	2x 0.25 mm <sup>2</sup> (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)
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

# Bus system cable - NBC-MR/ 5,0-971/FR SCO VR KM - 1412101

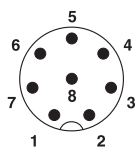
## Technical data

### Cable

Ambient temperature (installation)	-40 °C ... 80 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C

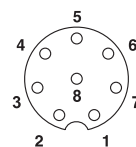
## Drawings

Schematic diagram



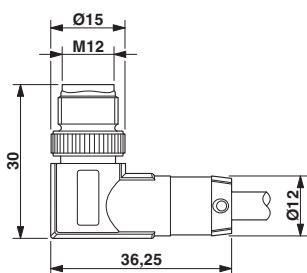
Pin assignment M12 plug, 8-pos., view plug side

Schematic diagram



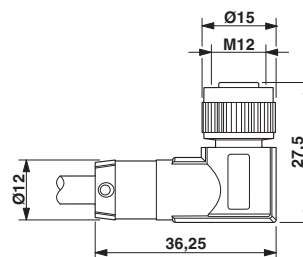
Pin assignment M12 socket, 8-pos., A-coded, view female side

Dimensional drawing



M12 x 1 male plug, angled, shielded

Dimensional drawing



M12 x 1 socket, angled, shielded

Phoenix Contact 2018 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
 Flachmarktstr. 8  
 32825 Blomberg  
 Germany  
 Tel. +49 5235 300  
 Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Ethernet Cables / Networking Cables](#) category:*

*Click to view products by [Phoenix Contact](#) manufacturer:*

Other Similar products are found below :

[73-6670-7](#) [73-6680-15](#) [73-7797-25](#) [MCJB2-10P6Q7-120](#) [84909-0204](#) [1200700174](#) [1200860368](#) [E16A06002M030](#) [E200102-009-S1](#)  
[AX105346-EW](#) [MT14-187L](#) [17-103530](#) [ERWPAB3002M005](#) [190-038045-01](#) [NK5EPC18RDY](#) [NK5EPC18VLY](#) [NK5EPC18YLY](#)  
[NK5EPC1GRY](#) [NK5EPC4Y](#) [NK5EPC6YLY](#) [NK5EPC8BLY](#) [NK5EPC9YLY](#) [1969343-6](#) [C501100010](#) [C501106002](#) [C501106007](#)  
[C501106015](#) [C501106025](#) [C601102010](#) [C601104010](#) [C601106007](#) [C601106015](#) [2142758-2](#) [2168427-2](#) [CAT1106007](#) [21949-1](#) [2J1866A](#)  
[RJF SFTP 5E 0500](#) [AX100351](#) [MN14CEC/ST](#) [C501100015](#) [C501106004](#) [C501106010](#) [C5F1108007](#) [C601104004](#) [C601106004](#)  
[CA21106004](#) [CA21106010](#) [CA21106015](#) [CA21109007](#)