

# NBC-MSDBP/1,0-937/R4AQ - Network cable



1418713

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Network cable, degree of protection: IP20, cable length: 1 m, number of positions: 4, CAT5, cable outlet: straight, PROFINET

## Your advantages

- Perfect for industrial applications
- Perfect for office, building, and protected industrial applications (e.g., in control cabinets)
- Compact angle

## Commercial data

Item number	1418713
Packing unit	1 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Product key	ABNPAB
GTIN	4055626146010
Weight per piece (including packing)	103.9 g
Weight per piece (excluding packing)	118.505 g
Country of origin	PL

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## Technical data

### Mounting

Mounting type	Screw mounting
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### Product properties

Type	M12
Product type	Circular connectors (device side)
Sensor type	PROFINET
Number of positions	4
No. of cable outlets	1
Shielded	yes
Cable outlet	straight

### Insulation characteristics

Degree of pollution	3
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### Material specifications

Flammability rating according to UL 94	V2
Outer sheath, material	PE-X
Conductor material	silver-plated Cu litz wires

### Electrical properties

Rated voltage (III/3)	72 V (DC)
Transmission medium	Copper
Transmission characteristics (category)	CAT5 (IEC 11801:2002)
Transmission speed	100 Mbps
Wave impedance	100 Ω

### Mechanical properties

#### Mechanical data

Insertion/withdrawal cycles	≥ 100
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### Connector

#### Connection 1

Type	Flush-type female connector straight M12
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#### Connection 2

Type	Plug straight RJ45
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### Cable/line

Cable length	1.00 m
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PROFINET RADOX<sup>®</sup> railway application CAT5 [937]

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Dimensional drawing	
Shielded	yes
Cable weight	70 kg/km
Cable type	PROFINET RADOX <sup>®</sup> railway application CAT5
Cable type (abbreviation)	937
Signal type/category	PROFINET CAT5 (IEC 11801), 100 Mbps EtherCAT <sup>®</sup> CAT5 (IEC 11801), 100 Mbps
Cable structure	1x4xAWG22/7, SF/TQ
External cable diameter	6.60 mm ±0.4 mm
Outer sheath, material	PE-X
External sheath, color	black RAL 9005
Thickness, outer sheath	approx. 1.00 mm
Conductor material	silver-plated Cu litz wires
Conductor structure signal line	7x 0.25 mm
AWG signal line	22
Conductor cross section	4x 0.34 mm <sup>2</sup>
Material wire insulation	Foamed PE
Wire diameter incl. insulation	approx. 1.5 mm
Single wire, color	white-blue, orange-yellow
Overall twist	Star quad
Shielding	Plastic-coated aluminum foil, tinned copper braided shield
Nominal voltage, cable	300 V AC
Test voltage, cable	2000 V AC (50 Hz, 5 minutes)
Cable resistance	≤ 54.4 Ω/km
Coupling resistance	200.00 mΩ/m (f ≤ 30 MHz)
Wave impedance	100 Ω ±5 Ω (f = 100 MHz)
Working capacitance	≤ 65 pF (Line-line) ≤ 100 pF (Line-shield)
Signal speed	75 c
Minimum bending radius, fixed installation	6 x D
Remote crosstalk attenuation (FEXT)	78 dB (with 1 MHz) 77 dB (at 4 MHz) 70 dB (at 10 MHz) 65 dB (at 31.5 MHz) 56 dB (at 62.5 MHz) 48 dB (at 100 MHz) 73 dB (with 1 MHz)

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Near end crosstalk attenuation (NEXT)	70 dB (at 4 MHz)
	65 dB (at 10 MHz)
	57 dB (at 31.5 MHz)
	52 dB (at 62.5 MHz)
	48 dB (at 100 MHz)
Return attenuation (RL)	25 dB (at 4 MHz)
	30 dB (at 10 MHz)
	30 dB (at 31.5 MHz)
	30 dB (at 62.5 MHz)
	28 dB (at 100 MHz)
Shield attenuation	40.00 dB (30 MHz ≤ f ≤ 100 MHz)
Fire protection in rail vehicles	BS 6853 (Category Ia, Ib, II)
	GM/RT 2130 (Category Ia, Ib, II)
	EN 45545 (Risk level HL1 - HL3)
	DIN 5510 (Fire protection level 1, 2, 3, 4)
	NF F16-101 (Category A1, A2, B)
	NF F16-101 (Class C/F0)
	NFPA 130
UNI CEI 11170 (Risk level LR1 - LR4)	
Halogen-free	in accordance with EN 50267-2-1
Resistance to oil	according to IRM 902, 72 h at 100 °C
Concentration of fumes	BS 6853 D.8.7
	EN 61034-2
	UL 1685, 12 (FT4)
Fume toxicity	BS 6853 B.1
	EN 50305, 9.2
Fume corrosiveness	EN 50267-2-2
Flame resistance	EN 60332-1-2
	EN 50266
	EN 60332-3-25
	NF C32-070, 2.1
	NF C32-070, 2.2
	UL 1685, 12 (FT4)
	in accordance with ISO 6722-1 5.22 (UN ECE-R 118.01)
Other resistance	Resistance to fuels (according to IRM 903, 168 h at 70 °C)
Ambient temperature (operation)	-40 °C ... 90 °C (Cable, flexible installation)
	-50 °C ... 90 °C (cable, fixed installation)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 70 °C (Plug / socket)

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## Classifications

### ECLASS

ECLASS-11.0	27060307
ECLASS-12.0	27060307
ECLASS-13.0	27060307

### ETIM

ETIM 9.0	EC001855
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### UNSPSC

UNSPSC 21.0	26121600
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## Environmental product compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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