

1420603
<https://www.phoenixcontact.com/us/products/1420603>

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 documentation. Our general terms of use for downloads are valid.



Network cable, cable length: 0.25 m, number of positions: 4, CAT5, cable outlet: straight, PROFINET, 1x4xAWG22/7, SF/TQ, black RAL 9005

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	1420603
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Product key	ABNPAB
GTIN	4055626230931
Weight per piece (including packing)	54.7 g
Weight per piece (excluding packing)	51.027 g
Country of origin	PL

Technical data

Product properties

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

Insulation characteristics

Overvoltage category	I
Degree of pollution	3

Material specifications

Flammability rating according to UL 94	V0 (RJ45 und M12)
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

Connector

Connection 1

Type	Flush-type female connector straight M12
Locking type	SPEEDCON
Coding type	D
Degree of protection	IP65/IP67

Connection 2

Type	Plug straight RJ45
Degree of protection	IP20

Cable/line

Cable length	0.25 m
--------------	--------

PROFINET RADOX® railway application CAT5 [937]

NBC-FSDBP/0,25-937/R4AQ - Network cable



1420603

<https://www.phoenixcontact.com/us/products/1420603>

Dimensional drawing	
Cable weight	70 kg/km
Number of positions	4
Shielded	yes
Cable type	PROFINET RADOX® railway application CAT5 [937]
Conductor structure	1x4xAWG22/7, SF/TQ
Signal speed	75 c
Conductor structure signal line	7x 0.25 mm
AWG signal line	22
Conductor cross section	4x 0.34 mm ²
Wire diameter incl. insulation	approx. 1.5 mm
External cable diameter	6.60 mm ±0.4 mm
Outer sheath, material	PE-X
External sheath, color	black RAL 9005
Conductor material	silver-plated Cu litz wires
Material wire insulation	Foamed PE
Single wire, color	white-blue, orange-yellow
Thickness, outer sheath	approx. 1.00 mm
Overall twist	Star quad
Max. conductor 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)
Nominal voltage, cable	300 V AC
Test voltage	2000 V AC (50 Hz, 5 minutes)
Minimum bending radius, fixed installation	6 x D
Smallest bending radius, fixed installation	40 mm
Near end crosstalk attenuation (NEXT)	73 dB (with 1 MHz) 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)

NBC-FSDBP/0,25-937/R4AQ - Network cable



1420603

<https://www.phoenixcontact.com/us/products/1420603>

Remote crosstalk attenuation (FEXT)	30 dB (at 62.5 MHz)
	28 dB (at 100 MHz)
	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)
Shield attenuation	48 dB (at 100 MHz)
	2 dB (with 1 MHz)
	4.4 dB (at 4 MHz)
	7.4 dB (at 10 MHz)
	14 dB (at 31.5 MHz)
	20 dB (at 62.5 MHz)
	26 dB (at 100 MHz)
Halogen-free	40.00 dB (30 MHz ≤ f ≤ 100 MHz)
Flame resistance	in accordance with EN 50267-2-1
	IEC 60332-1-2
	EN 50266
	EN 60332-3-25
	NF C32-070, 2.1
	NF C32-070, 2.2
	UL 1685, 12 (FT4)
Fume corrosiveness	in accordance with ISO 6722-1 5.22 (UN ECE-R 118.01)
Fume toxicity	EN 50267-2-2
Concentration of fumes	BS 6853 B.1
	EN 50305, 9.2
	BS 6853 D.8.7
Resistance to oil	EN 61034-2
	UL 1685, 12 (FT4)
	according to IRM 902, 72 h at 100 °C
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
Other resistance	UNI CEI 11170 (Risk level LR1 - LR4)
	Resistance to fuels (according to IRM 903, 168 h at 70 °C)
Ambient temperature (operation)	-50 °C ... 90 °C (cable, fixed installation)
	-40 °C ... 90 °C (Cable, flexible installation)
Ambient temperature (installation)	-25 °C ... 90 °C

Environmental and real-life conditions

NBC-FSDBP/0,25-937/R4AQ - Network cable



1420603

<https://www.phoenixcontact.com/us/products/1420603>

Ambient conditions

Ambient temperature (operation)	-40 °C ... 70 °C (Plug / socket)
---------------------------------	----------------------------------

Standards and regulations

Flame resistance	UL 1685 (CSA FT 4)
------------------	--------------------

NBC-FSDBP/0,25-937/R4AQ - Network cable



1420603

<https://www.phoenixcontact.com/us/products/1420603>

Approvals

🔗 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1420603>



EAC

Approval ID: 19060508

NBC-FSDBP/0,25-937/R4AQ - Network cable



1420603

<https://www.phoenixcontact.com/us/products/1420603>

Classifications

ECLASS

ECLASS-13.0	27440103
ECLASS-15.0	27440103

ETIM

ETIM 9.0	EC003570
----------	----------

UNSPSC

UNSPSC 21.0	26121600
-------------	----------

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c)

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1) 2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol (UV-329)(CAS: 3147-75-9)
SCIP	5bd23903-1085-4cc1-8d42-25ec7329e8f8