

VS-OE-OE-936-100,0 - Data cable

1416570

<https://www.phoenixcontact.com/us/products/1416570>



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By the meter, Data cable, PROFINET CAT5 (100 Mbps), shielded, PE-X halogen-free, black RAL 9005, 4-wire (1x4xAWG22/7, SF/TQ), color single wire: white-blue, orange-yellow, cable length: 100 m

Commercial data

Item number	1416570
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF11
Product key	AF1LF A
Catalog page	Page 240 (PC-2009)
GTIN	4046356479264
Weight per piece (including packing)	7,527 g
Weight per piece (excluding packing)	7,527 g
Customs tariff number	85444290
Country of origin	DE

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Technical data

Product properties

Product type	Data cable by the meter
Application	Railway applications
Sensor type	PROFINET
Number of positions	4
Shielded	yes

Electrical properties

Transmission medium	Copper
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Interfaces

Signal type/category	PROFINET CAT5 (IEC 11801:2002), 100 Mbps
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Cable/line

Cable length	100 m
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PROFINET RADOX® railway application CAT5 reinforced [936]

Dimensional drawing	
Cable weight	81 g/m
Number of positions	4
Shielded	yes
Cable type	PROFINET RADOX® railway application CAT5 reinforced [936]
Conductor structure	1x4xAWG22/7, SF/TQ
Signal speed	66 c
Conductor structure signal line	7x 0.25 mm
AWG signal line	22
Conductor cross section	4x 0.34 mm²
Wire diameter incl. insulation	1.95 mm
External cable diameter	7.25 mm ±0.3 mm
Outer sheath, material	PE-X
External sheath, color	black RAL 9005
Conductor material	silver-plated Cu litz wires
Material wire insulation	PE-X
Single wire, color	white-blue, orange-yellow
Thickness, outer sheath	≥ 0.80 mm

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Overall twist	Star quad
Optical shield covering	100 %
Max. conductor resistance	$\leq 54.4 \Omega/\text{km}$
Coupling resistance	200.00 m Ω /m (f $\leq$ 30 MHz)
Wave impedance	100 $\Omega \pm 5 \Omega$ (f = 100 MHz)
Working capacitance	$\leq 65 \text{ pF}$ (Line-line)
	$\leq 100 \text{ pF}$ (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
Minimum bending radius, flexible installation	10 x D
Smallest bending radius, fixed installation	44 mm
Smallest bending radius, movable installation	73 mm
Near end crosstalk attenuation (NEXT)	80 dB (with 1 MHz)
	76 dB (at 4 MHz)
	67 dB (at 10 MHz)
	60 dB (at 31.5 MHz)
	56 dB (at 62.5 MHz)
	53 dB (at 100 MHz)
Return attenuation (RL)	35 dB (at 4 MHz)
	35 dB (at 10 MHz)
	35 dB (at 31.5 MHz)
	33 dB (at 62.5 MHz)
	33 dB (at 100 MHz)
Remote crosstalk attenuation (FEXT)	80 dB (with 1 MHz)
	70 dB (at 4 MHz)
	65 dB (at 10 MHz)
	58 dB (at 31.5 MHz)
	59 dB (at 62.5 MHz)
	67 dB (at 100 MHz)
Shield attenuation	2 dB (with 1 MHz)
	4 dB (at 4 MHz)
	6.5 dB (at 10 MHz)
	10.5 dB (at 31.5 MHz)
	14 dB (at 62.5 MHz)
	18 dB (at 100 MHz)
	40.00 dB (30 MHz $\leq$ f $\leq$ 100 MHz)
Halogen-free	in accordance with EN 50267-2-1
Flame resistance	IEC 60332-1-2
	EN 50266
	EN 60332-3-25
	NF C32-070, 2.1
	NF C32-070, 2.2
	UL 1685, 12 (FT4)

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	in accordance with ISO 6722-1 5.22 (UN ECE-R 118.01)
Fume corrosiveness	EN 50267-2-2
Fume toxicity	BS 6853 B.1
	EN 50305, 9.2
Concentration of fumes	BS 6853 D.8.7
	EN 61034-2
	UL 1685, 12 (FT4)
Resistance to oil	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)

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Classifications

ECLASS

ECLASS-13.0	27061801
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ETIM

ETIM 9.0	EC003249
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UNSPSC

UNSPSC 21.0	26121600
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Environmental product compliance

EU RoHS	
Fulfills EU RoHS substance requirements	Yes, No exemptions
China RoHS	
Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%
EF3.0 Climate Change	
CO2e kg	62.239 kg CO2e

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