

VS-OE-OE-93B-100,0 - Data cable

1416389

<https://www.phoenixcontact.com/us/products/1416389>



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.



By the meter, Data cable, PROFINET CAT5 (100 Mbps), EtherCAT® CAT5 (100 Mbps), shielded, PVC/PVC, green RAL 6018, 4-wire (1x4xAWG22/7, SF/TQ), color single wire: white, yellow, blue, orange, cable length: 100 m

Commercial data

Item number	1416389
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF11
Product key	AF1LFA
Catalog page	Page 392 (C-2-2019)
GTIN	4046356474023
Weight per piece (including packing)	6,320 g
Weight per piece (excluding packing)	6,320 g
Customs tariff number	85444290
Country of origin	DE

VS-OE-OE-93B-100,0 - Data cable

1416389

<https://www.phoenixcontact.com/us/products/1416389>



Technical data

Product properties

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

Electrical properties

Transmission medium	Copper
---------------------	--------


Interfaces

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

Cable/line

Cable length	100 m
--------------	-------

PROFINET PVC stranded CAT5 [93B]

Dimensional drawing	
Cable weight	67 kg/km
UL AWM Style	21694
Number of positions	4
Shielded	yes
Cable type	PROFINET PVC stranded CAT5 [93B]
Conductor structure	1x4xAWG22/7, SF/TQ
Signal runtime	5.3 ns/m
Signal speed	0.66 c
Conductor structure signal line	7x 0.25 mm
AWG signal line	22
Conductor cross section	4x 0.34 mm²
Wire diameter incl. insulation	1.55 mm
External cable diameter	6.50 mm ±0.2 mm
Outer sheath, material	PVC
External sheath, color	green RAL 6018
Conductor material	Tin-plated Cu litz wires
Material wire insulation	PE

VS-OE-OE-93B-100,0 - Data cable



1416389

<https://www.phoenixcontact.com/us/products/1416389>

Single wire, color	white, yellow, blue, orange
Thickness, outer sheath	approx. 0.90 mm
Overall twist	Star quad
Optical shield covering	85 %
Insulation resistance	$\geq 500 \text{ M}\Omega \cdot \text{km}$
Coupling resistance	$\leq 20.00 \text{ m}\Omega/\text{m}$ (at 10 MHz)
Loop resistance	$\leq 120.00 \text{ }\Omega/\text{km}$
Wave impedance	$100 \text{ }\Omega \pm 15 \text{ }\Omega$ (at 100 MHz)
Nominal voltage, cable	600 V
Test voltage Core/Core	2000 V (50 Hz, 1 min.)
Test voltage Core/Shield	2000.00 V (50 Hz, 1 min.)
Minimum bending radius, fixed installation	3 x D
Minimum bending radius, flexible installation	7 x D
Smallest bending radius, fixed installation	20 mm
Smallest bending radius, movable installation	46 mm
Near end crosstalk attenuation (NEXT)	80 dB (with 1 MHz)
	76 dB (at 4 MHz)
	70 dB (at 10 MHz)
	65 dB (at 16 MHz)
	63 dB (at 20 MHz)
	60 dB (at 31.25 MHz)
	55 dB (at 62.5 MHz)
	50 dB (at 100 MHz)
Shield attenuation	2.1 dB (with 1 MHz)
	4 dB (at 4 MHz)
	6.3 dB (at 10 MHz)
	8 dB (at 16 MHz)
	9 dB (at 20 MHz)
	11.4 dB (at 31.25 MHz)
	16.5 dB (at 62.5 MHz)
	21.3 dB (at 100 MHz)
Flame resistance	according to UL 1685 (CSA FT 4)
Resistance to oil	Resistant to oil to a limited extent
Other resistance	UV resistant (according to UL 1581, Section 1200)
Ambient temperature (operation)	-40 °C ... 70 °C (cable, fixed installation)
	-40 °C ... 70 °C (Cable, flexible installation)
Ambient temperature (installation)	-20 °C ... 60 °C

VS-OE-OE-93B-100,0 - Data cable



1416389

<https://www.phoenixcontact.com/us/products/1416389>

Classifications

ECLASS

ECLASS-13.0	27061801
-------------	----------

ETIM

ETIM 9.0	EC003249
----------	----------

UNSPSC

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

VS-OE-OE-93B-100,0 - Data cable



1416389

<https://www.phoenixcontact.com/us/products/1416389>

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	50.722 kg CO2e

Phoenix Contact 2025 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com