

VS-OE-IP20-93C-LI/2,0 - Network cable



1416182

<https://www.phoenixcontact.com/us/products/1416182>

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.



Assembled PROFINET cable, CAT5e, shielded, star quad, AWG 22 flexible cable conduit capable (7-wire), RAL 6018 (yellow-green), RJ45 plug/IP20 on free conductor end, line, length 2 m

Commercial data

Item number	1416182
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	AB11
Product key	ABNABA
Catalog page	Page 308 (PC-2011)
GTIN	4046356474658
Weight per piece (including packing)	147 g
Weight per piece (excluding packing)	132.428 g
Customs tariff number	85444210
Country of origin	PL

Technical data

Product properties

Product type	Data cable preassembled
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	1

Electrical properties

Transmission medium	Copper
Transmission speed	100 Mbps
Wave impedance	100 Ω

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 1000
Insertion force per signal contact	50.00 N
Extraction force per signal contact	30 N
Max. bending cycles	3000000

Material specifications

Flammability rating according to UL 94	V0
Outer sheath, material	PUR
Conductor material	Tin-plated Cu litz wires

Connector

Connection 1

Type	Plug straight RJ45
Shielded	yes
Degree of protection	IP20

Connection 2

Type	Plug straight RJ45
Shielded	yes
Insertion/withdrawal cycles	≥ 750
Degree of protection	IP20


Cable/line

VS-OE-IP20-93C-LI/2,0 - Network cable



1416182

<https://www.phoenixcontact.com/us/products/1416182>

Cable length	2.00 m
PROFINET drag chain CAT5 [93C]	
Dimensional drawing	
Shielded	yes
Cable weight	61 kg/km
Cable type	PROFINET drag chain CAT5
Short symbol	2YH(ST)C11Y
Cable type (abbreviation)	93C
Signal type/category	PROFINET CAT5 (IEC 11801), 100 Mbps EtherCAT® CAT5 (IEC 11801), 100 Mbps
Cable structure	1x4xAWG22/7, SF/TQ
External cable diameter	6.50 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	green RAL 6018
Thickness, outer sheath	approx. 0.90 mm
Material, inner sheath	FRNC
Conductor material	Tin-plated Cu litz wires
Conductor structure signal line	7x 0.25 mm
AWG signal line	22
Conductor cross section	4x 0.34 mm ²
Material wire insulation	PE
Wire diameter incl. insulation	1.5 mm
Single wire, color	white, yellow, blue, orange
Overall twist	Star quad
Shielding	Aluminum-coated foil, tinned copper braided shield
Optical shield covering	85 %
Nominal voltage, cable	600 V (UL rating)
Test voltage Core/Core	2000 V (50 Hz, 1 min.)
Test voltage Core/Shield	2000.00 V (50 Hz, 1 min.)
Cable insulation resistance	≥ 500 MΩ*km
Coupling resistance	≤ 20.00 mΩ/m (at 10 MHz)
Wave impedance	100 Ω ±15 Ω (at 1 ... 100 MHz)
Loop resistance	≤ 120.00 Ω/km
Signal runtime	5.3 ns/m
Signal speed	0.66 c
Tensile strength	≤ 150 N

VS-OE-IP20-93C-LI/2,0 - Network cable



1416182

<https://www.phoenixcontact.com/us/products/1416182>

Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	7.5 x D
Number of bending cycles	3000000
Bending radius	100 mm
Traversing path	10 m
Traversing rate	4 m/s
Acceleration	4 m/s ²
Torsion force	± 30 °/m
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)
	50 dB (at 100 MHz)
Halogen-free	yes
Resistance to oil	in accordance with DIN EN 60811-2-1
Flame resistance	according to IEC 60332-1-2
Other resistance	UV resistant
Special properties	Electrical properties in accordance with EN 50288-2-2
Ambient temperature (operation)	-40 °C ... 70 °C (Cable, flexible installation)
	-40 °C ... 70 °C (cable, fixed installation)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
	IP20

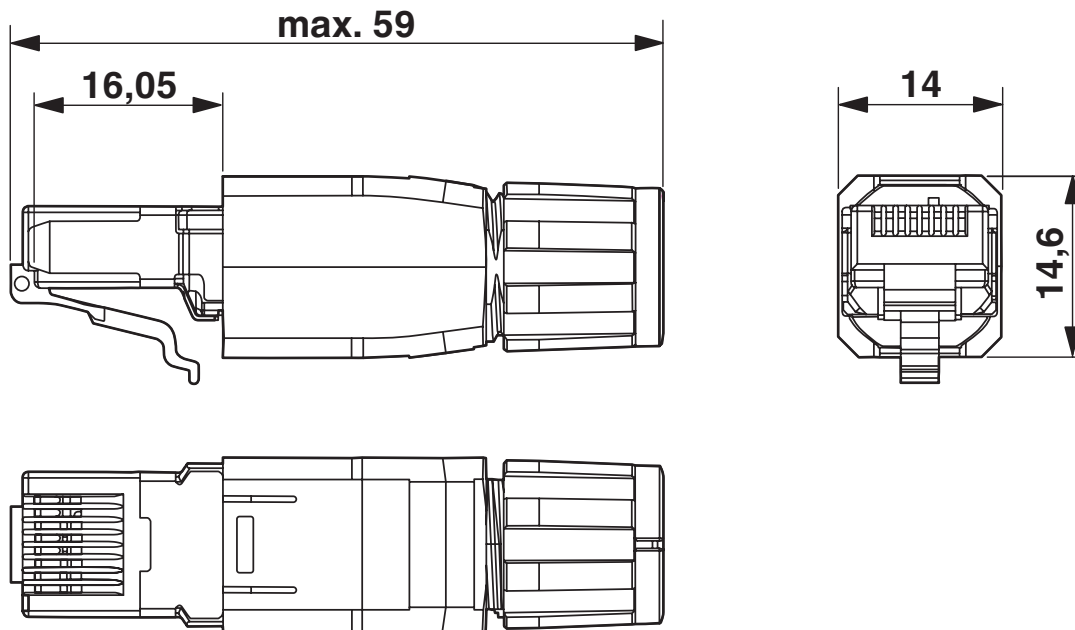
VS-OE-IP20-93C-LI/2,0 - Network cable

1416182

<https://www.phoenixcontact.com/us/products/1416182>

Drawings

Dimensional drawing



RJ45 connector, IP20

VS-OE-IP20-93C-LI/2,0 - Network cable



1416182

<https://www.phoenixcontact.com/us/products/1416182>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1416182>



EAC

Approval ID: 19060508

VS-OE-IP20-93C-LI/2,0 - Network cable



1416182

<https://www.phoenixcontact.com/us/products/1416182>

Classifications

ECLASS

ECLASS-11.0	27060308
ECLASS-12.0	27060308
ECLASS-13.0	27060307

ETIM

ETIM 9.0	EC002599
----------	----------

UNSPSC

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

VS-OE-IP20-93C-LI/2,0 - Network cable



1416182

<https://www.phoenixcontact.com/us/products/1416182>

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%
-------------------------------------	----------------------------

Phoenix Contact 2024 © - 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