



**Automatización Eléctrica**  
Especialistas en Automatización

At the end of this document you will find links to products related to this catalog. You can go directly to our shop by clicking [HERE](#). [HERE](#)

## Network cable - VS-BU/PN-IP20-93R-LI/2,0 - 1416281

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Assembled PROFINET cable, CAT5e, shielded, star quad, AWG 22 stranded (19-wire), RAL 6018 (yellow green), RJ45 socket module/IP20 for Freenet system, 4-pos. on RJ45 plug/IP20, line, length: 2 m



### Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 473514

### Technical data

#### Dimensions

Length of cable	2 m
-----------------	-----

#### Ambient conditions

Degree of protection	IP20
----------------------	------

#### General data

Number of positions	4
Signal type/category	PROFINET CAT5 (IEC 11801:2002)

#### Characteristics head 1

Head type	Socket module straight RJ45 Freenet / IP20
No. of positions (pin connector pattern)	4

#### Characteristics head 2

Head type	Plug straight RJ45 / IP20
No. of positions (pin connector pattern)	4
Material (component)	Plastic

#### Cable

Cable type	PROFINET robot CAT5
Cable type (abbreviation)	93R
UL AWM style	20233 (80°C/300 V)
Cable structure	1x4xAWG22/19; S/TQ

## Network cable - VS-BU/PN-IP20-93R-LI/2,0 - 1416281

### Technical data

#### Cable

Conductor cross section	4x 0.34 mm <sup>2</sup>
AWG signal line	22
Conductor structure signal line	19x 0.15 mm
Core diameter including insulation	1.5 mm
Wire colors	White, yellow, blue, orange
Overall twist	Star quad
Shielding	Tinned copper braided shield
Optical shield covering	85 %
External sheath, color	green RAL 6018
Outer sheath thickness	approx. 1 mm
External cable diameter D	6.5 mm ±0.2 mm
Minimum bending radius, fixed installation	5 x D
Torsion force	± 180 °/m (1,000,000 torsion cycles)
Cable weight	55 kg/km
Outer sheath, material	PUR
Material conductor insulation	Foamed PE
Conductor material	Tin-plated Cu litz wires
Insulation resistance	≥ 500 MΩ*km
Conductor resistance	≤ 120 Ω/km
Wave impedance	100 Ω ±5 Ω (at 100 MHz)
Signal runtime	4.8 ns/m
Nominal voltage, cable	300 V
Test voltage Core/Core	2000 V (50 Hz, 1 min.)
Test voltage Core/Shield	2000 V (50 Hz, 1 min.)
Flame resistance	According to IEC 60332-1-2
Halogen-free	According to IEC 60754-1
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	UV resistant According to UL 1581, Section 1200
Ambient temperature (operation)	-40 °C ... 80 °C
	-40 °C ... 80 °C
Ambient temperature (installation)	-20 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C

### Classifications

#### eCl@ss

eCl@ss 4.0	272607xx
eCl@ss 4.1	27260701
eCl@ss 5.0	27260701
eCl@ss 5.1	27060307

# Network cable - VS-BU/PN-IP20-93R-LI/2,0 - 1416281

## Classifications

### eCl@ss

eCl@ss 6.0	27060390
eCl@ss 7.0	27060390
eCl@ss 8.0	27060308

### ETIM

ETIM 4.0	EC002599
ETIM 5.0	EC002599

### UNSPSC

UNSPSC 6.01	31261501
UNSPSC 7.0901	31261501
UNSPSC 11	31261501
UNSPSC 12.01	31261501
UNSPSC 13.2	31261501

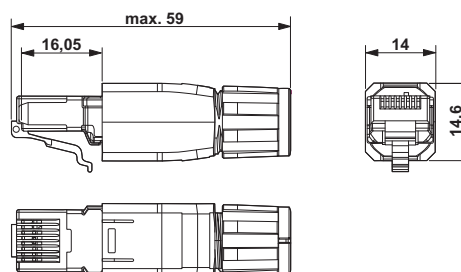
## Drawings

Cable cross section



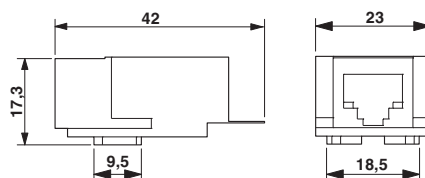
PROFINET robot CAT5 [93R]

Dimensional drawing



RJ45 connector, IP20

Dimensional drawing



RJ45 socket insert

Phoenix Contact 2016 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>



Below is a list of articles with direct links to our shop Electric Automation Network where you can see:

- Quote per purchase volume in real time.
- Online documentation and datasheets of all products.
- Estimated delivery time enquiry in real time.
- Logistics systems for the shipment of materials almost anywhere in the world.
- Purchasing management, order record and tracking of shipments.

To access the product, [click on the green button.](#)

Product	Code	Reference	Product link
Assembled PROFINET cable, CAT5e, shielded, star quad, AWG 22 stranded (19-wire), RAL 6018 (yellow green), RJ45 socket module/IP20 for Freenet system, 4-pos. on RJ45 plug/IP20, line, length: 2 m	1416281	VS-BU/PN-IP20-93R-LI/2,0	<a href="#">Buy on EAN</a>