

# Network cable - VS-OE-OE-94F-100,0



1416347

<https://www.phoenixcontact.com/us/products/1416347>

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, Ethernet CAT6<sub>A</sub> (10 Gbps), 8-position halogen-free, shielded, free cable end, on free cable end, cable length: 100 m

## Commercial Data

Item number	1416347
Packing unit	1 pc
Minimum order quantity	1 pc
Sales Key	B06
Product Key	BF1LFA
Catalog Page	Page 393 (C-2-2019)
GTIN	4046356474832
Weight per Piece (including packing)	4,300 g
Weight per Piece (excluding packing)	3,954 g
Customs tariff number	85444995
Country of origin	DE

# Network cable - VS-OE-OE-94F-100,0



1416347

<https://www.phoenixcontact.com/us/products/1416347>

## Technical Data

### Product properties

Product type	Data cable by the meter
Number of positions	8
Shielded	yes

### Electrical properties

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

### Interfaces

Signal type/category	Ethernet CAT6 <sub>A</sub> , 10 Gbps
----------------------	--------------------------------------

### Connector

#### Connection 1

Type	free cable end
------	----------------

#### Connection 2

Type	free cable end
------	----------------

### Cable / line

Cable length	100 m
Cable weight	42 kg/km
UL AWM Style	20963 (80°C/30 V)
Number of positions	8
Shielded	yes
Cable type	Ethernet 10 Gbit [94F]
Signal runtime	5.13 ns/m
Conductor structure signal line	7x 0.16 mm
AWG signal line	26
Conductor cross section	4x 2x 0.14 mm <sup>2</sup>
Wire diameter incl. insulation	1.04 mm
External cable diameter	6.4 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	water blue RAL 5021
Conductor material	Bare Cu litz wires
Material wire insulation	Foamed PE
Single wire, color	white/blue-blue, white/orange-orange, white/green-green, white/brown-brown
Thickness, outer sheath	0.65 mm
Twisted pairs	2 cores to the pair
Type of pair shielding	Aluminum-lined foil
Overall twist	4 pairs for core
Optical shield covering	70 %

# Network cable - VS-OE-OE-94F-100,0



1416347

<https://www.phoenixcontact.com/us/products/1416347>

Insulation resistance	$\geq 500 \text{ M}\Omega \cdot \text{km}$
Loop resistance	$\leq 290.00 \text{ }\Omega/\text{km}$
Wave impedance	$100 \text{ }\Omega \pm 5 \text{ }\Omega$ (at 100 MHz)
Cable capacity	47 nF/km
Nominal voltage, cable	$\leq 100 \text{ V}$
Test voltage Core/Core	700 V (50 Hz, 1 min.)
Test voltage Core/Shield	700 V (50 Hz, 1 min.)
Minimum bending radius, fixed installation	4 x D
Minimum bending radius, flexible installation	8 x D
Tensile strength	$\leq 100 \text{ N}$
Near end crosstalk attenuation (NEXT)	75.3 dB (with 1 MHz)
	66.3 dB (at 4 MHz)
	61.8 dB (at 8 MHz)
	60.3 dB (at 10 MHz)
	57.2 dB (at 16 MHz)
	55.8 dB (at 20 MHz)
	54.3 dB (at 25 MHz)
	52.8 dB (at 31.25 MHz)
	48.4 dB (at 62.5 MHz)
	45.3 dB (at 100 MHz)
	40.8 dB (at 200 MHz)
	39.3 dB (at 250 MHz)
	38.1 dB (at 300 MHz)
	36.3 dB (at 400 MHz)
	34.8 dB (at 500 MHz)
Power-summated near end crosstalk attenuation (PSNEXT)	72.3 dB (with 1 MHz)
	63.3 dB (at 4 MHz)
	58.8 dB (at 8 MHz)
	57.3 dB (at 10 MHz)
	54.2 dB (at 16 MHz)
	52.8 dB (at 20 MHz)
	51.3 dB (at 25 MHz)
	49.9 dB (at 31.25 MHz)
	45.4 dB (at 62.5 MHz)
	42.3 dB (at 100 MHz)
	37.8 dB (at 200 MHz)
	36.3 dB (at 250 MHz)
	35.1 dB (at 300 MHz)
	33.3 dB (at 400 MHz)
	31.8 dB (at 500 MHz)
Return loss (RL)	20 dB (with 1 MHz)
	23 dB (at 4 MHz)
	24.5 dB (at 8 MHz)
	25 dB (at 10 MHz)

# Network cable - VS-OE-OE-94F-100,0



1416347

<https://www.phoenixcontact.com/us/products/1416347>

	25 dB (at 16 MHz)
	25 dB (at 20 MHz)
	24.2 dB (at 25 MHz)
	23.3 dB (at 31.25 MHz)
	20.7 dB (at 62.5 MHz)
	19 dB (at 100 MHz)
	16.4 dB (at 200 MHz)
	15.6 dB (at 250 MHz)
	15.6 dB (at 300 MHz)
	15.6 dB (at 400 MHz)
	15.6 dB (at 500 MHz)
Shield attenuation	3.1 dB (with 1 MHz)
	5.7 dB (at 4 MHz)
	8 dB (at 8 MHz)
	8.9 dB (at 10 MHz)
	11.2 dB (at 16 MHz)
	12.6 dB (at 20 MHz)
	14.1 dB (at 25 MHz)
	15.8 dB (at 31.25 MHz)
	22.5 dB (at 62.5 MHz)
	28.7 dB (at 100 MHz)
	41.4 dB (at 200 MHz)
	46.6 dB (at 250 MHz)
	51.4 dB (at 300 MHz)
	60.1 dB (at 400 MHz)
	67.9 dB (at 500 MHz)
	≥ 80 dB (at 30 ... 100 MHz)
Halogen-free	according to IEC 60754-1
Flame resistance	according to IEC 60332-1-2
Resistance to oil	in accordance with DIN EN 60811-2-1
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-20 °C ... 80 °C (Cable, flexible installation)
Ambient temperature (installation)	-20 °C ... 80 °C

# Network cable - VS-OE-OE-94F-100,0

1416347

<https://www.phoenixcontact.com/us/products/1416347>



## Approvals



**EAC**

Approval ID: RU D-DE.HB35.B.00385

# Network cable - VS-OE-OE-94F-100,0



1416347

<https://www.phoenixcontact.com/us/products/1416347>

## Classifications

### ECLASS

ECLASS-9.0	27061801
ECLASS-10.0.1	27060390
ECLASS-11.0	27061801

### ETIM

ETIM 8.0	EC003249
----------	----------

### UNSPSC

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

# Network cable - VS-OE-OE-94F-100,0



1416347

<https://www.phoenixcontact.com/us/products/1416347>

## Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

# Network cable - VS-OE-OE-94F-100,0



1416347

<https://www.phoenixcontact.com/us/products/1416347>

## Accessories

### RJ45 connector

RJ45 connector - CUC-IND-C1ZNI-S/R4IE8 - 1421607

<https://www.phoenixcontact.com/us/products/1421607>



RJ45 connector, type: RJ45, degree of protection: IP20, number of positions: 8, 1 Gbps, CAT5 (IEC 11801:2002), material: Zinc die-cast, connection method: IDC fast connection, connection cross section: AWG 26- 24, cable outlet: straight, color: green, Ethernet

### RJ45 connector

RJ45 connector - CUC-IND-C1ZNI-B/R4IE8 - 1421876

<https://www.phoenixcontact.com/us/products/1421876>



RJ45 connector, type: RJ45, degree of protection: IP20, number of positions: 8, 1 Gbps, CAT5 (IEC 11801:2002), material: Zinc die-cast, connection method: IDC fast connection, connection cross section: AWG 26- 24, cable outlet: angled, Ethernet



# Network cable - VS-OE-OE-94F-100,0



1416347

<https://www.phoenixcontact.com/us/products/1416347>

## RJ45 connector

RJ45 connector - CUC-IND-C1ZNI-T/R4IE8 - 1421877

<https://www.phoenixcontact.com/us/products/1421877>



RJ45 connector, type: RJ45, degree of protection: IP20, number of positions: 8, 1 Gbps, CAT5 (IEC 11801:2002), material: Zinc die-cast, connection method: IDC fast connection, connection cross section: AWG 26- 24, cable outlet: angled, Ethernet

---

## RJ45 connector

RJ45 connector - VS-08-RJ45-5-Q/IP20 BK - 1658008

<https://www.phoenixcontact.com/us/products/1658008>



RJ45 connector, type: RJ45, degree of protection: IP20, number of positions: 8, 1 Gbps, CAT5 (IEC 11801:2002), material: PA, connection method: IDC fast connection, connection cross section: AWG 26- 23, cable outlet: straight, color: black, Ethernet

# Network cable - VS-OE-OE-94F-100,0



1416347

<https://www.phoenixcontact.com/us/products/1416347>

## RJ45 connector

RJ45 connector - VS-08-RJ45-5-Q/IP20 - 1656725

<https://www.phoenixcontact.com/us/products/1656725>



RJ45 connector, degree of protection: IP20, number of positions: 8, 1 Gbps, CAT5 (IEC 11801:2002), material: PA, connection method: IDC fast connection, connection cross section: AWG 26- 23, cable outlet: straight, color: traffic grey A RAL 7042, Ethernet

## RJ45 connector

RJ45 connector - VS-08-RJ45-10G/Q - 1419001

<https://www.phoenixcontact.com/us/products/1419001>



RJ45 connector, IP20, CAT6<sub>A</sub>, 8-pos., with QUICKON fast connection technology, for 26 ... 24 AWG 1-wire and 7-wire conductors, color: black

Phoenix Contact 2022 © - 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](mailto:info@phoenixcon.com)