

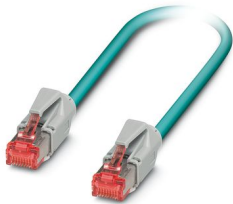
# NBC-R4AC/5,0-93E/R4AC - Network cable



1408935

<https://www.phoenixcontact.com/us/products/1408935>

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 Ethernet cable, CAT5e, shielded, 2-pair, 26\* AWG stranded (7-wire), RAL 5021 (water blue), RJ45 plug/IP20 to RJ45 plug/IP20, line, length: 5 m

## Your advantages

- Perfect for industrial applications
- Perfect for office, building, and protected industrial applications (e.g., in control cabinets)
- Compact angle

## Commercial data

Item number	1408935
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB11
Product key	ABNABD
Catalog page	Page 398 (C-2-2019)
GTIN	4046356856645
Weight per piece (including packing)	235.7 g
Weight per piece (excluding packing)	215.805 g
Customs tariff number	85444210
Country of origin	PL

1408935

<https://www.phoenixcontact.com/us/products/1408935>

## Technical data

### Product properties

Product type	Data cable preassembled
Sensor type	Ethernet
Number of positions	4
No. of cable outlets	1
Number of slots	1
Shielded	yes
Cable outlet	straight

### Signaling

Status display	No
----------------	----

### Electrical properties

Rated voltage (III/3)	72 V (DC)
Nominal voltage $U_N$	48 V
Nominal current $I_N$	1 A
Transmission medium	Copper
Transmission characteristics (category)	CAT5 (IEC 11801:2002)
Transmission speed	100 Mbps

### Mechanical properties

#### Mechanical data

Insertion/withdrawal cycles	$\geq 750$
Insertion force per signal contact	50.00 N
Extraction force per signal contact	30 N

### Material specifications

Flammability rating according to UL 94	V2
Outer sheath, material	PUR
Conductor material	Bare Cu litz wires

### Connector

#### Connection 1

Type	Plug straight RJ45
Shielded	yes
Handle color	gray
Material	CuSn (Contact)
	Ni/Au (Contact surface)
	PC (Contact carriers)
	PA (Housing)
Insertion/withdrawal cycles	$\geq 750$

# NBC-R4AC/5,0-93E/R4AC - Network cable



1408935

<https://www.phoenixcontact.com/us/products/1408935>

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 60 °C


## Connection 2

Type	Plug straight RJ45
Shielded	yes
Handle color	gray
Material	CuSn (Contact)
	Ni/Au (Contact surface)
	PC (Contact carriers)
	PA (Housing)
Insertion/withdrawal cycles	≥ 750
Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 60 °C

## Cable/line

Cable length	5.00 m
--------------	--------

## Ethernet flexible CAT5, 2-pair [93E]

Dimensional drawing	
Shielded	yes
UL AWM Style	20963 (80°C/30 V)
Cable weight	42 kg/km
Cable type	Ethernet flexible CAT5, 2-pair
Short symbol	02YS(ST)C11Y
Cable type (abbreviation)	93E
Signal type/category	Ethernet CAT5 (IEC 11801), 100 Mbps
Cable structure	2x2xAWG26/7, SF/UTP
External cable diameter	6.4 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	water blue RAL 5021
Thickness, outer sheath	1.2 mm
Conductor material	Bare Cu litz wires
Conductor structure signal line	7x 0.16 mm
AWG signal line	26
Conductor cross section	2x 2x 0.14 mm <sup>2</sup>
Material wire insulation	Foamed PE
Wire diameter incl. insulation	0.98 mm

# NBC-R4AC/5,0-93E/R4AC - Network cable



1408935

<https://www.phoenixcontact.com/us/products/1408935>

Single wire, color	white/orange-orange, white/green-green
Twisted pairs	2 cores to the pair
Overall twist	Two pairs with two fillers to the core
Shielding	Aluminum-coated foil, tinned copper braided shield
Optical shield covering	70 %
Current carrying capacity of cable	2 A (according to DIN VDE 0891-1)
Nominal voltage, cable	≤ 100 V (Peak value, not for high-power applications)
Test voltage Core/Core	700 V (50 Hz, 1 min.)
Test voltage Core/Shield	700 V (50 Hz, 1 min.)
Cable insulation resistance	≥ 500 MΩ*km
Coupling resistance	≤ 100.00 mΩ/m (at 10 MHz)
Wave impedance	100 Ω ±5 Ω (at 100 MHz)
Loop resistance	≤ 290.00 Ω/km
Cable capacity	approx. 45 nF/km (at 1 kHz)
Signal runtime	5.3 ns/m
Tensile strength	≤ 80 N
Minimum bending radius, fixed installation	4 x D
Minimum bending radius, flexible installation	8 x D
Damping	3.2 dB (with 1 MHz)
	6 dB (at 4 MHz)
	9.5 dB (at 10 MHz)
	12.1 dB (at 16 MHz)
	13.6 dB (at 20 MHz)
	17.1 dB (at 31.25 MHz)
	24.8 dB (at 62.5 MHz)
	32 dB (at 100 MHz)
Near end crosstalk attenuation (NEXT)	65.3 dB (with 1 MHz)
	56.3 dB (at 4 MHz)
	50.3 dB (at 10 MHz)
	47.2 dB (at 16 MHz)
	45.8 dB (at 20 MHz)
	42.9 dB (at 31.25 MHz)
	38.4 dB (at 62.5 MHz)
	35.3 dB (at 100 MHz)
Power-summated near end crosstalk attenuation (PSNEXT)	62.3 dB (with 1 MHz)
	53.3 dB (at 4 MHz)
	47.3 dB (at 10 MHz)
	44.2 dB (at 16 MHz)
	42.8 dB (at 20 MHz)
	39.9 dB (at 31.25 MHz)
	35.4 dB (at 62.5 MHz)
	32.3 dB (at 100 MHz)
Return attenuation (RL)	23 dB (at 4 MHz)
	24.1 dB (at 8 MHz)

# NBC-R4AC/5,0-93E/R4AC - Network cable



1408935

<https://www.phoenixcontact.com/us/products/1408935>

	25 dB (at 10 MHz)
	25 dB (at 16 MHz)
	25 dB (at 20 MHz)
	23.6 dB (at 31.25 MHz)
	21.5 dB (at 62.5 MHz)
	20.1 dB (at 100 MHz)
Halogen-free	according to IEC 60754-1
Resistance to oil	in accordance with EN 60811-2-1
Flame resistance	according to IEC 60332-1-2
	in acc. to UL VW1
	in accordance with UN ECE-R 118.03
Ambient temperature (operation)	-20 °C ... 80 °C (Cable, flexible installation)
	-40 °C ... 80 °C (cable, fixed installation)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20 (RJ45 connector)
	IP20
Ambient temperature (operation)	-20 °C ... 70 °C (RJ45 connector)

# NBC-R4AC/5,0-93E/R4AC - Network cable

1408935

<https://www.phoenixcontact.com/us/products/1408935>



## Drawings

### Schematic diagram



Connector pin assignment plug RJ45



# NBC-R4AC/5,0-93E/R4AC - Network cable



1408935

<https://www.phoenixcontact.com/us/products/1408935>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1408935>



**EAC**

Approval ID: 19060508

# NBC-R4AC/5,0-93E/R4AC - Network cable



1408935

<https://www.phoenixcontact.com/us/products/1408935>

## Classifications

### ECLASS

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

### ETIM

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

### UNSPSC

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

# NBC-R4AC/5,0-93E/R4AC - Network cable



1408935

<https://www.phoenixcontact.com/us/products/1408935>

## Environmental product compliance

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

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](mailto:info@phoenixcon.com)