

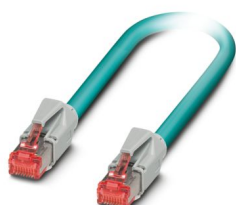
# NBC-R4AC/10,0-94B/R4AC - Network cable



1408953

<https://www.phoenixcontact.com/us/products/1408953>

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, shielded, 4-pair, 26 AWG stranded (7-wire), RAL 5021 (water blue), RJ45 plug/IP20 to RJ45 plug/IP20, line, length: 10 m

## Your advantages

- Compact angle
- Perfect for industrial applications
- PVC cable for flexible installations
- Worldwide approval with CE, UL, WEEE, and EAC
- Secure connection and disconnection with reliable locking clip protection
- Ideal EMC properties, thanks to 360° shielding
- Simultaneous power transmission with PoE++
- Resistant to shock and vibrations, thanks to robust molding
- High-speed data transmission with up to 1 Gbps (CAT5)

## Commercial data

Item number	1408953
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB11
Product key	ABNABE
GTIN	4046356856805
Weight per piece (including packing)	492.425 g
Weight per piece (excluding packing)	487.247 g
Customs tariff number	85444210
Country of origin	PL

# NBC-R4AC/10,0-94B/R4AC - Network cable



1408953

<https://www.phoenixcontact.com/us/products/1408953>

## Technical data

### Product properties

Product type	Data cable preassembled
Product family	RJ45 INDUSTRIAL IE8 CAT5
Sensor type	Ethernet
Number of positions	8
Shielded	yes

### Electrical properties

Rated voltage (III/3)	72 V (DC)
Nominal voltage $U_N$	48 V
Nominal current $I_N$	1 A
Transmission speed	1 Gbps
Transmission characteristics (category)	CAT5 (IEC 11801:2002)
Transmission speed	1 Gbps
Wave impedance	100 $\Omega$

### Material specifications

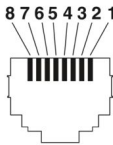
Outer sheath, material	PUR
Conductor material	Bare Cu litz wires

### Dimensions

Width	13.4 mm
Height	12.9 mm
Length	44.7 mm

### Connector

#### Connection 1

Dimensional drawing	 <p>Connector pin assignment plug RJ45</p>
Type	RJ45 Plug, straight, 8-position
Number of positions	8
Signal type/category	Ethernet CAT5 (IEC 11801:2002), 1 Gbps
Insertion/withdrawal cycles	$\geq 750$
Insertion force	30 N (per signal contact)

# NBC-R4AC/10,0-94B/R4AC - Network cable

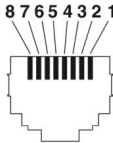


1408953

<https://www.phoenixcontact.com/us/products/1408953>

Withdrawal force	50 N (per signal contact)
Degree of pollution	2
Material Contact	CuSn
Material Contact surface	Ni/Au
Material Contact carrier	PC
Material Housing	PA
Color (Housing)	gray
Flammability rating according to UL 94	V2
Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 60 °C

## Connection 2

Dimensional drawing	 <p>Connector pin assignment plug RJ45</p>
Type	RJ45 Plug, straight, 8-position
Number of positions	8
Signal type/category	Ethernet CAT5 (IEC 11801:2002), 1 Gbps
Insertion/withdrawal cycles	≥ 750
Insertion force	30 N (per signal contact)
Withdrawal force	50 N (per signal contact)
Degree of pollution	2
Material Contact	CuSn
Material Contact surface	Ni/Au
Material Contact carrier	PC
Material Housing	PA
Color (Housing)	gray
Flammability rating according to UL 94	V2
Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 60 °C

## Cable/line

Cable length	10.00 m
--------------	---------


Ethernet flexible CAT5, 4-pair [94B]

# NBC-R4AC/10,0-94B/R4AC - Network cable



1408953

<https://www.phoenixcontact.com/us/products/1408953>

Dimensional drawing	
Cable weight	47 kg/km
UL AWM Style	20963 (80°C/30 V)
Number of positions	8
Shielded	yes
Cable type	Ethernet flexible CAT5, 4-pair [94B]
Conductor structure	4x2xAWG26/7, SF/UTP
Signal runtime	5.3 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	0.96 mm
External cable diameter	6.40 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	1.05 mm
Twisted pairs	2 cores to the pair
Overall twist	4 pairs for core
Optical shield covering	70 %
Insulation resistance	≥ 5 GΩ*km
Coupling resistance	≤ 100.00 mΩ/m (at 10 MHz)
Loop resistance	≤ 290.00 Ω/km
Wave impedance	100 Ω ±5 Ω (at 100 MHz)
Cable capacity	48 nF/km (at 1 kHz)
Nominal voltage, cable	≤ 100 V
Test voltage Core/Core	700 V (50 Hz, 1 min.)
Test voltage Core/Shield	700.00 V (50 Hz, 1 min.)
Minimum bending radius, fixed installation	4 x D
Minimum bending radius, flexible installation	8 x D
Smallest bending radius, fixed installation	26 mm
Smallest bending radius, movable installation	52 mm
Tensile strength	≤ 100 N
	71.3 dB (with 1 MHz)

# NBC-R4AC/10,0-94B/R4AC - Network cable



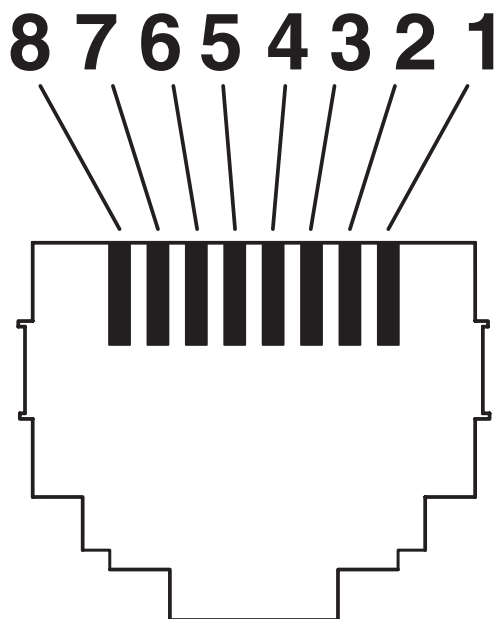
1408953

<https://www.phoenixcontact.com/us/products/1408953>

Near end crosstalk attenuation (NEXT)	62.3 dB (at 4 MHz)
	56.3 dB (at 10 MHz)
	53.2 dB (at 16 MHz)
	51.8 dB (at 20 MHz)
	48.9 dB (at 31.25 MHz)
	44.4 dB (at 62.5 MHz)
	41.3 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)
Return attenuation (RL)	32.3 dB (at 100 MHz)
	23 dB (at 4 MHz)
	24.1 dB (at 8 MHz)
	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)
Shield attenuation	20.1 dB (at 100 MHz)
	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)
Halogen-free	32 dB (at 100 MHz)
	according to IEC 60754-1
Flame resistance	according to IEC 60332-1-2
Resistance to oil	in accordance with 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

## Drawings

### Schematic diagram

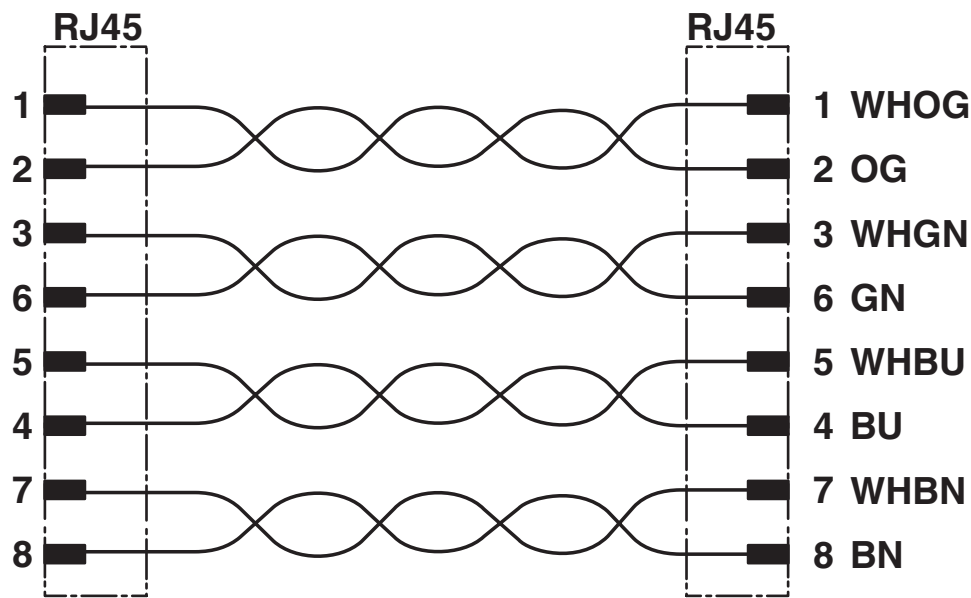


Connector pin assignment plug RJ45

1408953

<https://www.phoenixcontact.com/us/products/1408953>

Circuit diagram



Contact assignment of RJ45 plugs

# NBC-R4AC/10,0-94B/R4AC - Network cable



1408953

<https://www.phoenixcontact.com/us/products/1408953>

## Approvals

🔗 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1408953>



**EAC**

Approval ID: 19060508



1408953

<https://www.phoenixcontact.com/us/products/1408953>

Classifications

ECLASS

ECLASS-13.0	27060307
ECLASS-15.0	27060307

ETIM

ETIM 9.0	EC001855
----------	----------

UNSPSC

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

# NBC-R4AC/10,0-94B/R4AC - Network cable



1408953

<https://www.phoenixcontact.com/us/products/1408953>

## 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 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](mailto:info@phoenixcon.com)