

# NBC-R4RC/2,0-93B/R4RC - Network cable



1408975

<https://www.phoenixcontact.com/us/products/1408975>

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, 22 AWG stranded (7-wire), RAL 6018 (yellow-green), RJ45 plug/IP67 push/pull metal housing to RJ45 plug/IP67 push/pull metal housing, line, length: 2 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	1408975
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	AB11
Product key	ABNABA
GTIN	4046356857031
Weight per piece (including packing)	275.2 g
Weight per piece (excluding packing)	258.954 g
Customs tariff number	85444210
Country of origin	PL

## Technical data

### Product properties

Product type	Data cable preassembled
Product family	RJ45 INDUSTRIAL PN4 CAT5
Sensor type	PROFINET
Number of positions	4
Shielded	yes

### Electrical properties

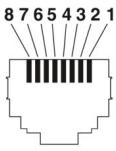
Rated voltage (III/3)	72 V (DC)
Nominal voltage $U_N$	48 V
Nominal current $I_N$	1 A
Transmission medium	Copper
Transmission speed	100 Mbps
Transmission characteristics (category)	CAT5 (IEC 11801:2002)
Transmission speed	100 Mbps
Wave impedance	100 $\Omega$

### Material specifications

Outer sheath, material	PVC
Conductor material	Tin-plated Cu litz wires

### Connector

#### Connection 1

Dimensional drawing	 Connector pin assignment plug RJ45
Type	RJ45 Plug, straight
Signal type/category	PROFINET CAT5 (IEC 11801), 100 Mbps
	EtherCAT® CAT5 (IEC 11801)
Insertion/withdrawal cycles	$\geq 750$
Insulation resistance	$\geq 100 \text{ M}\Omega$
Overvoltage category	I
Degree of pollution	2
Material Contact	CuSn
Material Contact surface	Ni/Au

# NBC-R4RC/2,0-93B/R4RC - Network cable



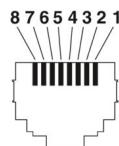
1408975

<https://www.phoenixcontact.com/us/products/1408975>

Material Contact carrier	PC
Material Housing	PA-GF
Color (Housing)	gray
Flammability rating according to UL 94	V2
Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 70 °C

## Connection 2

Dimensional drawing



Connector pin assignment plug RJ45

Type	RJ45 Plug, straight
Signal type/category	PROFINET CAT5 (IEC 11801), 100 Mbps
	EtherCAT® CAT5 (IEC 11801)
Insertion/withdrawal cycles	≥ 750
Insulation resistance	≥ 100 MΩ
Overshoot category	I
Degree of pollution	2
Material Contact	CuSn
Material Contact surface	Ni/Au
Material Contact carrier	PC
Material Housing	PA-GF
Color (Housing)	gray
Flammability rating according to UL 94	V2
Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 70 °C

## Cable/line

Cable length 2.00 m

PROFINET PVC stranded CAT5 [93B]

Dimensional drawing



# NBC-R4RC/2,0-93B/R4RC - Network cable



1408975

<https://www.phoenixcontact.com/us/products/1408975>

UL AWM Style	21695 (80 °C / 600 V)
Number of positions	4
Shielded	yes
Cable type	PROFINET PVC stranded CAT5 [93B]
Conductor structure	1x4xAWG22/7, SF/TQ
AWG signal line	22
Conductor cross section	4x 0.34 mm <sup>2</sup>
Wire diameter incl. insulation	1.5 mm ±0.1 mm
External cable diameter	6.50 mm ±0.2 mm
Outer sheath, material	PVC
External sheath, color	green RAL 6018
Conductor material	Tin-plated Cu litz wires
Material wire insulation	PE
Single wire, color	white, yellow, blue, orange
Overall twist	Star quad
Optical shield covering	85 %
Insulation resistance	≥ 5 GΩ*km
Loop resistance	≤ 120.00 Ω/km
Wave impedance	100 Ω ±5 Ω (at 100 MHz)
Nominal voltage, cable	≤ 600 V
Test voltage Core/Core	2000 V ((50 Hz/1 min))
Test voltage Core/Shield	2000.00 V ((50 Hz/1 min))
Minimum bending radius, fixed installation	4 x D
Minimum bending radius, flexible installation	8 x D
Flame resistance	UL 1581, Section 1060 and UL 2556, Section 9.3 (FT1) UL 1685 (CSA FT 4) UL 1581, Section 1100 and UL 2556, Section 9.1 (HFT/FT2)
Resistance to oil	OIL RES I according to UL 2256
Other resistance	UV resistant (according to UL 1581, Section 1200)
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation) -10 °C ... 70 °C (Cable, flexible installation)

## Standards and regulations

Standards/specifications

IEC PAS 61076-3-117

# NBC-R4RC/2,0-93B/R4RC - Network cable

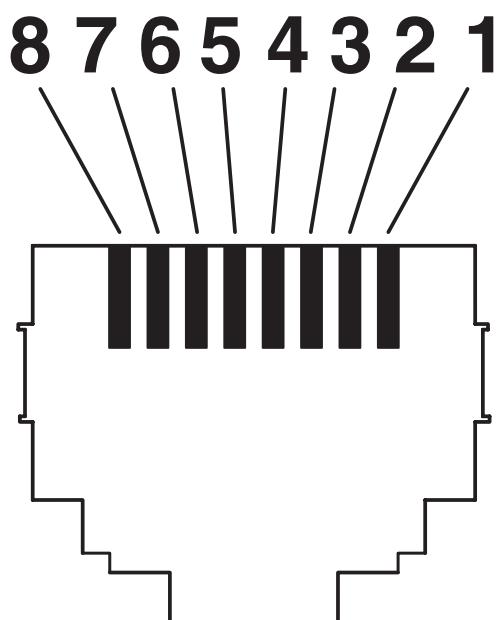
1408975

<https://www.phoenixcontact.com/us/products/1408975>



## Drawings

Schematic diagram



Connector pin assignment plug RJ45

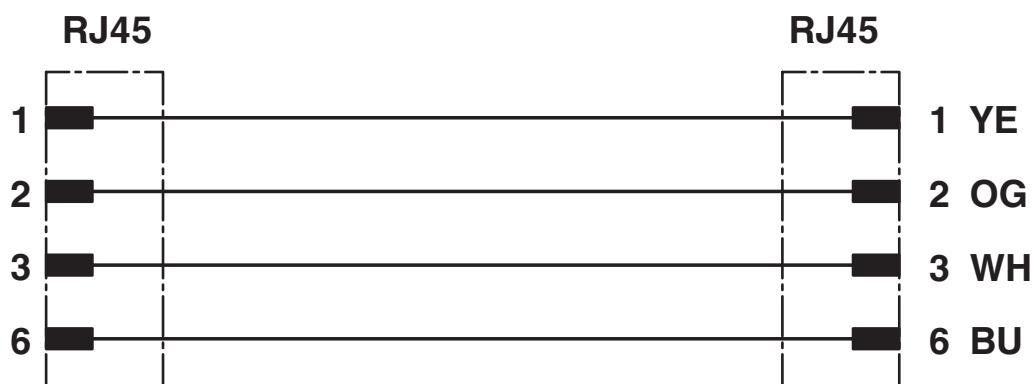
# NBC-R4RC/2,0-93B/R4RC - Network cable

1408975

<https://www.phoenixcontact.com/us/products/1408975>



Circuit diagram



Contact assignment of RJ45 plugs

# NBC-R4RC/2,0-93B/R4RC - Network cable

1408975

<https://www.phoenixcontact.com/us/products/1408975>



## Approvals

ⓘ To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1408975>



**EAC**

Approval ID: 19060508

# NBC-R4RC/2,0-93B/R4RC - Network cable

1408975

<https://www.phoenixcontact.com/us/products/1408975>



## Classifications

### ECLASS

ECLASS-13.0	27060307
ECLASS-15.0	27060307

### ETIM

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

### UNSPSC

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

# NBC-R4RC/2,0-93B/R4RC - Network cable

1408975

<https://www.phoenixcontact.com/us/products/1408975>



## 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.)	6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol(CAS: 119-47-1) 2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol (UV-329)(CAS: 3147-75-9)
SCIP	358eb65a-9336-477c-98b1-c2ea575fcc5c

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)