

# NBC-R4ACR/5,0-93G/R4ACR - Patch cable



1409014

<https://www.phoenixcontact.com/us/products/1409014>

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.



EtherCAT® patch cable, shielded, star quad, 22 AWG stranded (7-wire), green, angled RJ45 plug/IP20 to angled RJ45 plug/IP20, length: 5 m

EtherCAT® patch cable

## Commercial data

Item number	1409014
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	NULL
Product key	ABNABA
GTIN	4046356857352
Weight per piece (including packing)	363.1 g
Weight per piece (excluding packing)	363.1 g
Customs tariff number	85444210
Country of origin	PL

# NBC-R4ACR/5,0-93G/R4ACR - Patch cable



1409014

<https://www.phoenixcontact.com/us/products/1409014>

## Technical data

### Product properties

Product type	Data cable preassembled
Product family	RJ45 INDUSTRIAL PN4 CAT5
Number of positions	4
Number of slots	1

### Interfaces

Signal type/category	EtherCAT® CAT5 (IEC 11801:2002), 100 Mbps
----------------------	---

### Signaling

Status display	no
Status display present	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 speed	100 Mbps
Transmission characteristics (category)	CAT5 (IEC 11801:2002)

### Material specifications

Outer sheath, material	PVC
------------------------	-----

### Connector

#### Connection 1

Type	Plug angled RJ45
Handle color	black
Material	CuSn (Contact)
	Ni/Au (Contact surface)
	PA (Contact carrier)
	PA (Housing)
Insertion/withdrawal cycles	≥ 750
Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 80 °C

#### Connection 2

Type	Plug angled RJ45
Handle color	black
Material	CuSn (Contact)
	Ni/Au (Contact surface)
	PA (Contact carrier)

# NBC-R4ACR/5,0-93G/R4ACR - Patch cable



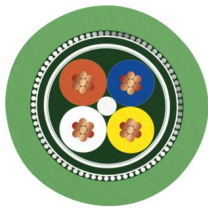
1409014

<https://www.phoenixcontact.com/us/products/1409014>

	PA (Housing)
Insertion/withdrawal cycles	≥ 750
Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 80 °C

## Cable/line

EtherCAT® [93G]

Dimensional drawing	
Shielded	yes
UL AWM Style	21694
Cable weight	67 kg/km
Cable type	EtherCAT®
Cable type (abbreviation)	93G
Signal type/category	EtherCAT® CAT5 (IEC 11801), 100 Mbps
Cable structure	1x4xAWG22/7, SF/TQ
External cable diameter	6.50 mm ±0.2 mm
Outer sheath, material	PVC
External sheath, color	green RAL 6018
Thickness, outer sheath	approx. 0.90 mm
Material, inner sheath	PVC
Conductor material	Tin-plated Cu litz wires
Conductor structure signal line	7x 0.25 mm
AWG signal line	22
Conductor cross-section	4x 0.34 mm <sup>2</sup>
Material wire insulation	PE
Wire diameter incl. insulation	1.55 mm
Single wire, color	white, yellow, blue, orange
Overall twist	Star quad
Shielding	Aluminum-coated foil, tinned copper braided shield
Optical shield covering	85 %
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.)
Cable insulation resistance	≥ 500 MΩ*km
Coupling resistance	≤ 20.00 mΩ/m (at 10 MHz)
Wave impedance	100 Ω ±15 Ω (at 100 MHz)

# NBC-R4ACR/5,0-93G/R4ACR - Patch cable



1409014

<https://www.phoenixcontact.com/us/products/1409014>

Loop resistance	≤ (per km)
Signal runtime	5.3 ns/m
Signal speed	0.66 c
Minimum bending radius, fixed installation	3 x D
Minimum bending radius, flexible installation	7 x D
Resistance to oil	Resistant to oil to a limited extent
Flame resistance	according to UL 1685 (CSA FT 4)
Other resistance	UV resistant (according to UL 1581, Section 1200)
Ambient temperature (operation)	-40 °C ... 70 °C (Cable, flexible installation) -40 °C ... 70 °C (cable, fixed installation)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20 (RJ45 connector) IP20
Ambient temperature (operation) (male connector/female connector)	-25 °C ... 80 °C (RJ45 connector)

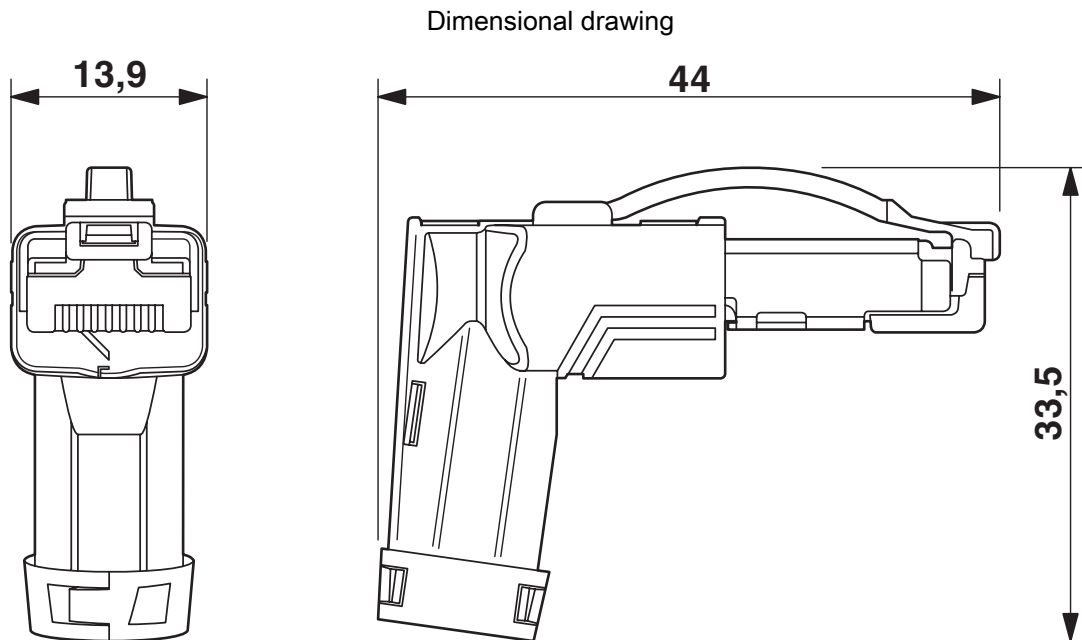
# NBC-R4ACR/5,0-93G/R4ACR - Patch cable



1409014

<https://www.phoenixcontact.com/us/products/1409014>

## Drawings



RJ45 connector, IP20, angled

1409014

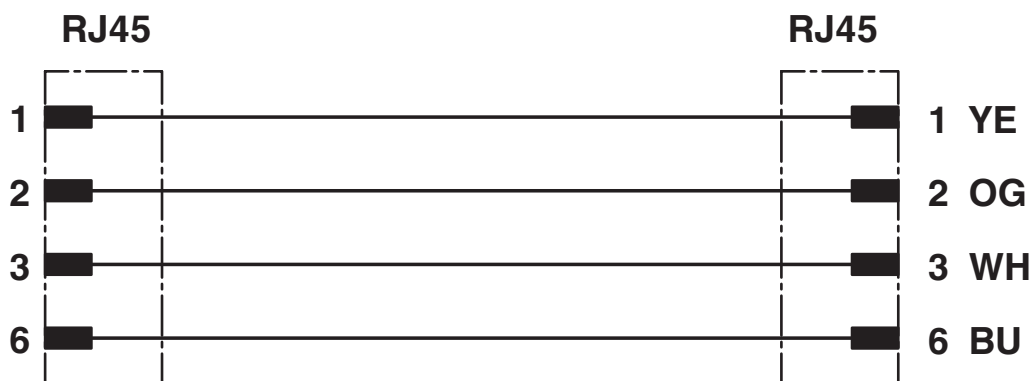
<https://www.phoenixcontact.com/us/products/1409014>

Schematic diagram



Connector pin assignment plug RJ45

Circuit diagram



Contact assignment of RJ45 plugs

# NBC-R4ACR/5,0-93G/R4ACR - Patch cable



1409014

<https://www.phoenixcontact.com/us/products/1409014>

## Classifications

### ECLASS

ECLASS-13.0	27060307
ECLASS-15.0	27060307

# NBC-R4ACR/5,0-93G/R4ACR - Patch cable



1409014

<https://www.phoenixcontact.com/us/products/1409014>

## 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 2026 © - 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)