

# NBC-R4OC/12,5-BC6A/R4OC-GR - Patch cable



1523707

<https://www.phoenixcontact.com/us/products/1523707>

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Patch cable, RJ45/IP20 straight on RJ45/IP20 straight, cable length: 12.5 m, number of positions: 8, CAT6<sub>A</sub>, connection cross section: AWG 26- 26, Ethernet, 4x2xAWG26/7; S/FTP, green

## Your advantages

- Perfect for office, building, and protected industrial applications (e.g., in control cabinets)
- 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++
- Future-proof high-speed data transmission with up to 10 Gbps (CAT6<sub>A</sub>)

## Commercial data

Item number	1523707
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB11
Product key	ABNABH
GTIN	4063151990275
Weight per piece (including packing)	645.9 g
Weight per piece (excluding packing)	660.6 g
Customs tariff number	85444210
Country of origin	CN

1523707

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## Technical data

### Product properties

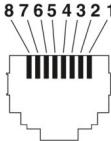
Product type	Data cable preassembled
Product family	RJ45 STANDARD CAT6A
Sensor type	Ethernet
Number of positions	8
Shielded	yes

### Electrical properties

Rated voltage (III/2)	72 V
Power transmission	PoE++

### Connector

#### Connection 1

Dimensional drawing	 A diagram of an RJ45 connector showing the pin assignment. The pins are numbered 1 through 8, with 1 at the bottom and 8 at the top. The wires are shown as lines radiating from the center of the connector, with the order being 8, 7, 6, 5, 4, 3, 2, 1 from top to bottom.
Connector pin assignment plug RJ45	

Type	RJ45 Plug, straight, 8-position
Number of positions	8
Shielded	yes
Signal type/category	Ethernet CAT6 <sub>A</sub> (IEC 11801:2002), 10 Gbps
Insertion/withdrawal cycles	≥ 750
Insertion force	30 N (per signal contact)
Withdrawal force	50 N (per signal contact)
Overshoot category	I
Degree of pollution	2
Material Contact	Brass
Material Contact surface	Au
Material Contact carrier	PC
Color (Housing)	green
Flammability rating according to UL 94	V0
Degree of protection	IP20
Ambient temperature (operation)	-20 °C ... 80 °C

#### Connection 2

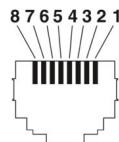
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## Dimensional drawing



Connector pin assignment plug RJ45

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Degree of protection	IP20
Ambient temperature (operation)	-20 °C ... 80 °C

## Cable/line

Cable length	12.50 m
Ethernet, Type B, 8-pos., CAT6A, LSZH [BC6A]	
Number of positions	8
Shielded	yes
Cable type	Ethernet, Type B, 8-pos., CAT6A, LSZH [BC6A]
Conductor structure	4x2xAWG26/7; S/FTP
Conductor structure signal line	7x 0.16 mm
AWG signal line	26
Wire diameter incl. insulation	1 mm
External cable diameter	6.50 mm ±0.3 mm
Outer sheath, material	LSZH
External sheath, color	green
Conductor material	Bare Cu litz wires
Material wire insulation	PE
Single wires, quantity	8
Single wire, cross section [AWG]	26

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Thickness, outer sheath	approx. 0.70 mm
Optical shield covering	70 %
Insulation resistance	$\geq 5000 \text{ M}\Omega\text{-km}$
Loop resistance	$\leq 148.00 \text{ }\Omega/\text{km}$
Wave impedance	100 $\Omega$
Test voltage Core/Core	1000 V DC
Test voltage Core/Shield	1500.00 V DC
Minimum bending radius, fixed installation	8 x D
Smallest bending radius, fixed installation	52 mm
Near end crosstalk attenuation (NEXT)	75 dB (with 1 MHz) 66.3 dB (at 4 MHz) 60.3 dB (at 10 MHz) 57.2 dB (at 16 MHz) 55.8 dB (at 20 MHz) 52.9 dB (at 31.25 MHz) 48.4 dB (at 62.5 MHz) 45.3 dB (at 100 MHz) 40.8 dB (at 200 MHz) 38.1 dB (at 300 MHz) 36.3 dB (at 400 MHz) 34.8 dB (at 500 MHz)
Power-summed 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) 35.1 dB (at 300 MHz) 33.3 dB (at 400 MHz) 31.8 dB (at 500 MHz)
Return attenuation (RL)	20 dB (with 1 MHz) 23 dB (at 4 MHz) 24.5 dB (at 8 MHz) 25 dB (at 10 MHz) 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)

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Shield attenuation	19 dB (at 100 MHz) 16.4 dB (at 200 MHz) 15.6 dB (at 300 MHz) 15.6 dB (at 400 MHz) 15.6 dB (at 500 MHz)  3.1 dB (with 1 MHz) 5.7 dB (at 4 MHz) 8.9 dB (at 10 MHz) 11.2 dB (at 16 MHz) 12.6 dB (at 20 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) 51.4 dB (at 300 MHz) 60.1 dB (at 400 MHz) 67.9 dB (at 500 MHz)
Halogen-free	complying with IEC 60754-1/2
Flame resistance	IEC 60332-1-2/IEC 60332-3-24/CM
Ambient temperature (operation)	-20 °C ... 80 °C (cable, fixed installation)
Ambient temperature (installation)	-20 °C ... 80 °C (Cable, flexible installation)
	0 °C ... 60 °C

## Environmental and real-life conditions

### Ambient conditions

Ambient temperature (operation)	-20 °C ... 80 °C
Ambient temperature (storage/transport)	0 °C ... 40 °C

## Standards and regulations

Flame resistance	IEC 60332-1-2
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## Approvals

ⓘ To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1523707>



**UL Listed**

Approval ID: E335024\_20210804



**cUL Listed**

Approval ID: E335024\_20210804

## Classifications

### ECLASS

ECLASS-13.0	27060307
ECLASS-15.0	27060307

### ETIM

ETIM 9.0	EC001855
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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### 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%
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## Accessories

### HC-M-RJ45-AD-PC2-M - Contact insert module

1435214

<https://www.phoenixcontact.com/us/products/1435214>

Contact insert module, adapter for patch cables, the matching patch cables can be found in the accessories list



### NBC-R4OC/0,5-BC6A/R4OC - Patch cable

1227573

<https://www.phoenixcontact.com/us/products/1227573>

Patch cable, RJ45/IP20 straight on RJ45/IP20 straight, cable length: 0.5 m, number of positions: 8, connection cross section: AWG 26- 26, 4x2xAWG26/7; S/FTP, gray



## NBC-R4OC/12,5-BC6A/R4OC-GR - Patch cable



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### NBC-R4OC/1,0-BC6A/R4OC - Patch cable

1227575

<https://www.phoenixcontact.com/us/products/1227575>

Patch cable, RJ45/IP20 straight on RJ45/IP20 straight, cable length: 1 m, number of positions: 8, connection cross section: AWG 26- 26, 4x2xAWG26/7; S/FTP, gray



### NBC-R4OC/1,5-BC6A/R4OC - Patch cable

1227578

<https://www.phoenixcontact.com/us/products/1227578>

Patch cable, RJ45/IP20 straight on RJ45/IP20 straight, cable length: 1.5 m, number of positions: 8, connection cross section: AWG 26- 26, 4x2xAWG26/7; S/FTP, gray



## NBC-R4OC/12,5-BC6A/R4OC-GR - Patch cable



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### NBC-R4OC/2,0-BC6A/R4OC - Patch cable

1227580

<https://www.phoenixcontact.com/us/products/1227580>

Patch cable, RJ45/IP20 straight on RJ45/IP20 straight, cable length: 2 m, number of positions: 8, connection cross section: AWG 26- 26, 4x2xAWG26/7; S/FTP, gray



### NBC-R4OC/3,0-BC6A/R4OC - Patch cable

1227581

<https://www.phoenixcontact.com/us/products/1227581>

Patch cable, RJ45/IP20 straight on RJ45/IP20 straight, cable length: 3 m, number of positions: 8, connection cross section: AWG 26- 26, 4x2xAWG26/7; S/FTP, gray



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### NBC-R4OC/5,0-BC6A/R4OC - Patch cable

1227583

<https://www.phoenixcontact.com/us/products/1227583>

Patch cable, RJ45/IP20 straight on RJ45/IP20 straight, cable length: 5 m, number of positions: 8, connection cross section: AWG 26- 26, 4x2xAWG26/7; S/FTP, gray



### NBC-R4OC/7,5-BC6A/R4OC - Patch cable

1227585

<https://www.phoenixcontact.com/us/products/1227585>

Patch cable, RJ45/IP20 straight on RJ45/IP20 straight, cable length: 7.5 m, number of positions: 8, connection cross section: AWG 26- 26, 4x2xAWG26/7; S/FTP, gray



## NBC-R4OC/12,5-BC6A/R4OC-GR - Patch cable

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### NBC-R4OC/10,0-BC6A/R4OC - Patch cable

1227588

<https://www.phoenixcontact.com/us/products/1227588>

Patch cable, RJ45/IP20 straight on RJ45/IP20 straight, cable length: 10 m, number of positions: 8, connection cross section: AWG 26- 26, 4x2xAWG26/7; S/FTP, gray



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### NBC-R4OC/0,3-BC5/R4OC - Patch cable

1227558

<https://www.phoenixcontact.com/us/products/1227558>

Patch cable, degree of protection: IP20, cable length: 0.3 m, number of positions: 8, CAT5, connection method: Pierce connection, connection cross section: AWG 26- 26, cable outlet: straight, Ethernet, 2x2xAWG26/7, S/UTP, gray



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## NBC-R4OC/0,5-BC5/R4OC - Patch cable

1227559

<https://www.phoenixcontact.com/us/products/1227559>

Patch cable, degree of protection: IP20, cable length: 0.5 m, number of positions: 8, CAT5, connection method: Pierce connection, connection cross section: AWG 26- 26, cable outlet: straight, Ethernet, 2x2xAWG26/7, S/UTP, gray



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## NBC-R4OC/1,0-BC5/R4OC - Patch cable

1227560

<https://www.phoenixcontact.com/us/products/1227560>

Patch cable, degree of protection: IP20, cable length: 1 m, number of positions: 8, CAT5, connection method: Pierce connection, connection cross section: AWG 26- 26, cable outlet: straight, Ethernet, 2x2xAWG26/7, S/UTP, gray



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## NBC-R4OC/1,5-BC5/R4OC - Patch cable

1227561

<https://www.phoenixcontact.com/us/products/1227561>

Patch cable, degree of protection: IP20, cable length: 1.5 m, number of positions: 8, CAT5, connection method: Pierce connection, connection cross section: AWG 26- 26, cable outlet: straight, Ethernet, 2x2xAWG26/7, S/UTP, gray



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## NBC-R4OC/2,0-BC5/R4OC - Patch cable

1227562

<https://www.phoenixcontact.com/us/products/1227562>

Patch cable, degree of protection: IP20, cable length: 2 m, number of positions: 8, CAT5, connection method: Pierce connection, connection cross section: AWG 26- 26, cable outlet: straight, Ethernet, 2x2xAWG26/7, S/UTP, gray



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## NBC-R4OC/3,0-BC5/R4OC - Patch cable

1227563

<https://www.phoenixcontact.com/us/products/1227563>

Patch cable, degree of protection: IP20, cable length: 3 m, number of positions: 8, CAT5, connection method: Pierce connection, connection cross section: AWG 26- 26, cable outlet: straight, Ethernet, 2x2xAWG26/7, S/UTP, gray



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## NBC-R4OC/5,0-BC5/R4OC - Patch cable

1227564

<https://www.phoenixcontact.com/us/products/1227564>

Patch cable, degree of protection: IP20, cable length: 5 m, number of positions: 8, CAT5, connection method: Pierce connection, connection cross section: AWG 26- 26, cable outlet: straight, Ethernet, 2x2xAWG26/7, S/UTP, gray



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## NBC-R4OC/7,5-BC5/R4OC - Patch cable

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Patch cable, degree of protection: IP20, cable length: 7.5 m, number of positions: 8, CAT5, connection method: Pierce connection, connection cross section: AWG 26- 26, cable outlet: straight, Ethernet, 2x2xAWG26/7, S/UTP, gray



## NBC-R4OC/10,0-BC5/R4OC - Patch cable

1227566

<https://www.phoenixcontact.com/us/products/1227566>

Patch cable, degree of protection: IP20, cable length: 10 m, number of positions: 8, CAT5, connection method: Pierce connection, connection cross section: AWG 26- 26, cable outlet: straight, Ethernet, 2x2xAWG26/7, S/UTP, gray



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