

1698001  
<https://www.phoenixcontact.com/us/products/1698001>

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.



Patch cable, RJ45/IP20 straight on RJ45/IP20 straight, cable length: 0.3 m, number of positions: 8, 10 Gbps, CAT6<sub>A</sub>, connection cross section: AWG 26- 26, Ethernet, 4x2xAWG26/7; S/FTP, violet

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	1698001
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB11
Product key	ABNABH
GTIN	4067923262287
Weight per piece (including packing)	33.1 g
Weight per piece (excluding packing)	32.9 g
Customs tariff number	85444210
Country of origin	CN

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



1698001

<https://www.phoenixcontact.com/us/products/1698001>

## 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

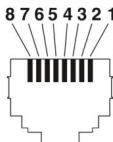
Rated voltage (III/2)	72 V
Transmission medium	Copper
Transmission speed	10 Gbps
Transmission speed	10 Gbps
Power transmission	PoE++

### Dimensions

Width	11.6 mm
Height	14.8 mm
Length	40 mm

### Connector

#### Connection 1

Dimensional drawing	 <p>Connector pin assignment plug RJ45</p>
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)
Overvoltage category	I
Degree of pollution	2
Material Contact	Brass
Material Contact surface	Au

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

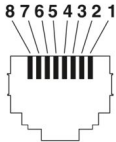


1698001

<https://www.phoenixcontact.com/us/products/1698001>

Material Contact carrier	PC
Color (Housing)	violet
Flammability rating according to UL 94	V0
Degree of protection	IP20
Ambient temperature (operation)	-20 °C ... 80 °C

## Connection 2

Dimensional drawing	 <p>Connector pin assignment plug RJ45</p>
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)
Overvoltage category	I
Degree of pollution	2
Material Contact	Brass
Material Contact surface	Au
Material Contact carrier	PC
Color (Housing)	violet
Flammability rating according to UL 94	V0
Degree of protection	IP20
Ambient temperature (operation)	-20 °C ... 80 °C

## Cable/line

Cable length	0.30 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

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



1698001

<https://www.phoenixcontact.com/us/products/1698001>

Outer sheath, material	LSZH
External sheath, color	violet
Conductor material	Bare Cu litz wires
Material wire insulation	PE
Single wires, quantity	8
Single wire, cross section [AWG]	26
Thickness, outer sheath	approx. 0.70 mm
Optical shield covering	70 %
Insulation resistance	$\geq 5000 \text{ M}\Omega \cdot \text{km}$
Loop resistance	$\leq 148.00 \text{ }\Omega/\text{km}$
Wave impedance	100 $\Omega$
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)
Power-summated near end crosstalk attenuation (PSNEXT)	34.8 dB (at 500 MHz)
	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)
Return attenuation (RL)	37.8 dB (at 200 MHz)
	35.1 dB (at 300 MHz)
	33.3 dB (at 400 MHz)
	31.8 dB (at 500 MHz)
	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)

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



1698001

<https://www.phoenixcontact.com/us/products/1698001>

	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)
	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)
Shield attenuation	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)
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)
	-20 °C ... 80 °C (Cable, flexible installation)
Ambient temperature (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
------------------	---------------

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



1698001

<https://www.phoenixcontact.com/us/products/1698001>

## Approvals

🔗 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1698001>



**UL Listed**

Approval ID: E335024\_20210804



**cUL Listed**

Approval ID: E335024\_20210804

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



1698001

<https://www.phoenixcontact.com/us/products/1698001>

## Classifications

### ECLASS

ECLASS-13.0	27060307
ECLASS-15.0	27060307

### ETIM

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

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



1698001  
<https://www.phoenixcontact.com/us/products/1698001>

## 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)