

1697703
<https://www.phoenixcontact.com/us/products/1697703>

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.



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_A)

Commercial data

Item number	1697703
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB11
Product key	ABNABH
GTIN	4067923262157
Weight per piece (including packing)	549.3 g
Weight per piece (excluding packing)	549.3 g
Customs tariff number	85444210
Country of origin	CN

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



1697703

<https://www.phoenixcontact.com/us/products/1697703>

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

Type	Plug straight RJ45
Shielded	yes
Handle color	yellow
Insertion/withdrawal cycles	≥ 750
Degree of protection	IP20
Ambient temperature (operation)	-20 °C ... 80 °C

Connection 2

Type	Plug straight RJ45
Shielded	yes
Handle color	yellow
Insertion/withdrawal cycles	≥ 750
Degree of protection	IP20
Ambient temperature (operation)	-20 °C ... 80 °C

Cable/line

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

Ethernet, Type B, 8-pos., CAT6A, LSZH [BC6A]

Number of positions	8
Shielded	yes

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



1697703

<https://www.phoenixcontact.com/us/products/1697703>

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	yellow
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	≥ 5000 MΩ*km
Loop resistance	≤ 148.00 Ω/km
Wave impedance	100 Ω
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-summated 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)

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



1697703

<https://www.phoenixcontact.com/us/products/1697703>

Return attenuation (RL)	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)
	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/10,0-BC6A/R4OC-YE - Patch cable



1697703

<https://www.phoenixcontact.com/us/products/1697703>

Approvals

 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1697703>



UL Listed

Approval ID: E335024_20210804



cUL Listed

Approval ID: E335024_20210804

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



1697703

<https://www.phoenixcontact.com/us/products/1697703>

Classifications

ECLASS

ECLASS-13.0	27060307
ECLASS-15.0	27060307

ETIM

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

UNSPSC

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

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



1697703

<https://www.phoenixcontact.com/us/products/1697703>

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