

NBC-R4AC/4,0-93M/R4AC - Patch cable



1420418

<https://www.phoenixcontact.com/us/products/1420418>

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, degree of protection: IP20, cable length: 4 m, number of positions: 4, 100 Mbps, CAT5, material: PA 6.6, PROFINET

Your advantages

- Perfect for industrial applications
- Perfect for office, building, and protected industrial applications (e.g., in control cabinets)
- Compact angle

Commercial data

Item number	1420418
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	ABNABA
GTIN	4055626214276
Weight per piece (including packing)	292 g
Weight per piece (excluding packing)	274.471 g
Country of origin	PL

NBC-R4AC/4,0-93M/R4AC - Patch cable



1420418

<https://www.phoenixcontact.com/us/products/1420418>

Technical data

Product properties

Product type	Data cable preassembled
Sensor type	PROFINET
Number of positions	4
Connection profile	RJ45 8(4)
Number of slots	1
Shielded	yes

Insulation characteristics

Overvoltage category	I
Degree of pollution	1

Electrical properties

Rated voltage (III/3)	72 V (DC)
Rated current	1.75 A
Nominal voltage U_N	48 V
Nominal current I_N	1 A
Transmission speed	100 Mbps

Mechanical properties

Mechanical data

Insertion force per signal contact	50.00 N
Extraction force per signal contact	30 N

Material specifications

Flammability rating according to UL 94	V2
Housing material	PA 6.6
Contact material	CuSn
Contact surface material	Ni/Au
Outer sheath, material	PUR

Connector

Connection 1

Type	Plug straight RJ45
Shielded	yes
Handle color	black
Material	CuSn (Contact)
	Ni/Au (Contact surface)
	PA (Contact carriers)
	PA (Housing)
Insertion/withdrawal cycles	≥ 750

NBC-R4AC/4,0-93M/R4AC - Patch cable



1420418

<https://www.phoenixcontact.com/us/products/1420418>

Degree of protection	IP20
----------------------	------

Connection 2

Type	Plug straight RJ45
Shielded	yes
Handle color	black
Material	CuSn (Contact)
	Ni/Au (Contact surface)
	PA (Contact carriers)
	PA (Housing)
Insertion/withdrawal cycles	≥ 750
Degree of protection	IP20

Cable/line

Cable length	4.00 m
--------------	--------

PROFINET stranded CAT5 [93M]

Dimensional drawing	
Shielded	yes
UL AWM Style	20236 (80°C/30 V)
Cable weight	65 kg/km
Cable type	PROFINET stranded CAT5
Cable type (abbreviation)	93M
Signal type/category	PROFINET CAT5 (IEC 11801), 100 Mbps EtherCAT® CAT5 (IEC 11801), 100 Mbps
Cable structure	1x4xAWG22/7, SF/TQ
External cable diameter	6.50 mm ±0.2 mm
Outer sheath, material	PUR
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 mm²
Material wire insulation	PE
Wire diameter incl. insulation	approx. 1.5 mm
Single wire, color	white, yellow, blue, orange

NBC-R4AC/4,0-93M/R4AC - Patch cable



1420418

<https://www.phoenixcontact.com/us/products/1420418>

Overall twist	Star quad
Shielding	Aluminum-coated foil, tinned copper braided shield
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	$\geq 500 \text{ M}\Omega \cdot \text{km}$
Coupling resistance	$\leq 20.00 \text{ m}\Omega/\text{m}$ (at 10 MHz)
Wave impedance	$100 \text{ }\Omega \pm 15 \text{ }\Omega$ (at 100 MHz)
Loop resistance	$\leq 120.00 \text{ }\Omega/\text{km}$
Working capacitance	52 pF
Signal runtime	5.3 ns/m
Minimum bending radius, fixed installation	4 x D
Minimum bending radius, flexible installation	8 x D
Near end crosstalk attenuation (NEXT)	80 dB (with 1 MHz)
	76 dB (at 4 MHz)
	70 dB (at 10 MHz)
	65 dB (at 16 MHz)
	63 dB (at 20 MHz)
	60 dB (at 31.25 MHz)
	55 dB (at 62.5 MHz)
	50 dB (at 100 MHz)
Ambient temperature (operation)	-40 °C ... 80 °C (Cable, flexible installation)
	-40 °C ... 80 °C

Environmental and real-life conditions

Ambient conditions

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

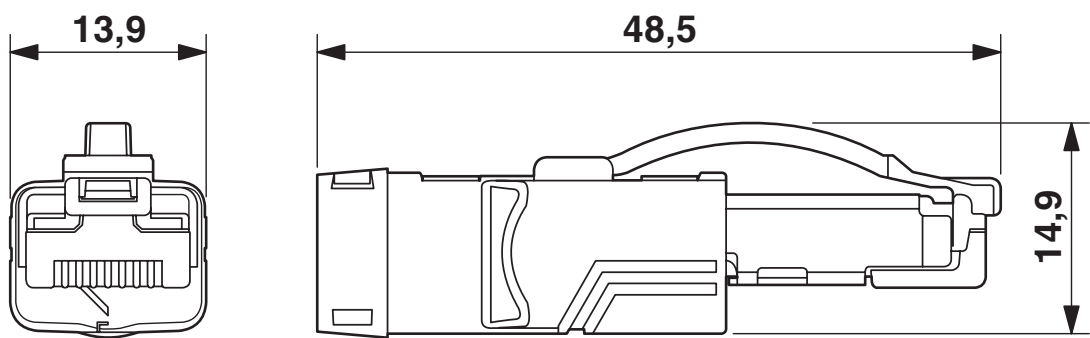
NBC-R4AC/4,0-93M/R4AC - Patch cable



1420418
<https://www.phoenixcontact.com/us/products/1420418>

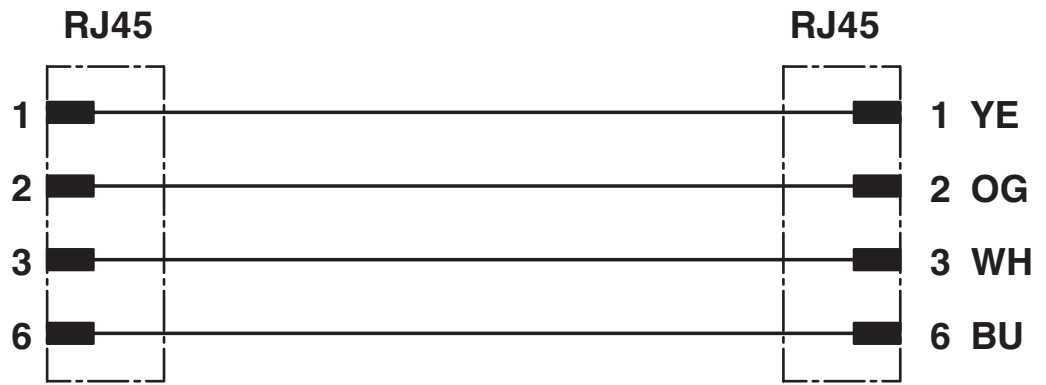
Drawings

Dimensional drawing



RJ45 connector, IP20

Circuit diagram



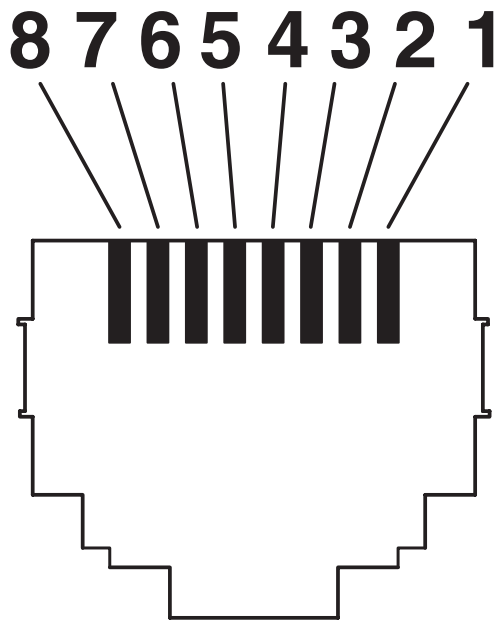
NBC-R4AC/4,0-93M/R4AC - Patch cable

1420418

<https://www.phoenixcontact.com/us/products/1420418>



Schematic diagram



Connector pin assignment plug RJ45

NBC-R4AC/4,0-93M/R4AC - Patch cable



1420418

<https://www.phoenixcontact.com/us/products/1420418>

Approvals

🔗 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1420418>



EAC

Approval ID: 19060508

NBC-R4AC/4,0-93M/R4AC - Patch cable



1420418

<https://www.phoenixcontact.com/us/products/1420418>

Classifications

ECLASS

ECLASS-11.0	27060308
ECLASS-12.0	27060308
ECLASS-13.0	27060307

ETIM

ETIM 9.0	EC002599
----------	----------

UNSPSC

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

NBC-R4AC/4,0-93M/R4AC - Patch cable



1420418
<https://www.phoenixcontact.com/us/products/1420418>

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 2024 © - 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