

# NBC-R4ACS/0,5-94C/R4ACS - Patch cable



1112918

<https://www.phoenixcontact.com/us/products/1112918>

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Patch cable, degree of protection: IP20, cable length: 0.5 m, number of positions: 8, 1 Gbps, CAT5, material: PP, connection method: Pierce connection, connection cross section: AWG 26-26, cable outlet: straight, Ethernet

## Your advantages

- Perfect for industrial applications
- PUR cable for moving applications (bend)
- 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++
- Resistant to shock and vibrations, thanks to robust molding
- High-speed data transmission with up to 1 Gbps (CAT5)

## Commercial data

Item number	1112918
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB11
Product key	ABNABE
GTIN	4063151034412
Weight per piece (including packing)	54.8 g
Weight per piece (excluding packing)	22.22 g
Customs tariff number	85444210
Country of origin	PL

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## Technical data

### Product properties

Product type	Data cable preassembled
Sensor type	Ethernet
Number of positions	8
Shielded	yes
Cable outlet	straight

### Insulation characteristics

Overvoltage category	I
Degree of pollution	2

### Electrical properties

Rated voltage (III/2)	72 V
Rated current	1.5 A
Insulation resistance	> 1 TΩ
Contact resistance	< 20 mΩ
Transmission characteristics (category)	CAT5
Transmission speed	1 Gbps

### 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
Contact material	CuSn6
Contact surface material	Ni/Au
Contact carrier material	PC
Housing material	PP
Outer sheath, material	PUR
Conductor material	Copper, bare

### Dimensions

Width	13.8 mm
Height	14.8 mm
Length	44.2 mm

### Connection data

#### Connection technology

Connection method	Pierce connection
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## Conductor connection

Connection method	Pierce connection
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## Connector

### Connection 1

Type	Plug straight RJ45
Shielded	yes
Handle color	black
Insertion/withdrawal cycles	≥ 750
Degree of protection	IP20
Number of positions	8
Insertion/withdrawal cycles	750


### Connection 2

Type	Plug straight RJ45
Shielded	yes
Handle color	black
Insertion/withdrawal cycles	≥ 750
Number of positions	8
Degree of protection	IP20

## Cable/line

Cable length	0.50 m
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### Ethernet drag chain CAT5, 4-pair [94C]

Dimensional drawing	
Shielded	yes
UL AWM Style	20963 (80°C/30 V)
Cable weight	57 kg/km
Cable type	Ethernet drag chain CAT5, 4-pair
Short symbol	9YC(ST)11Y
Cable type (abbreviation)	94C
Signal type/category	Ethernet CAT5 (IEC 11801), 1 Gbps
Cable structure	4x2xAWG26/19, S/UTP
External cable diameter	6.9 mm +0.1 mm ... 0.2 mm
Outer sheath, material	PUR
External sheath, color	water blue RAL 5021

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Thickness, outer sheath	0.85 mm
Conductor material	Bare Cu litz wires
Conductor structure signal line	19x 0.10 mm
AWG signal line	26
Conductor cross section	4x 2x 0.14 mm <sup>2</sup>
Material wire insulation	PP
Wire diameter incl. insulation	1 mm
Single wire, color	white/blue-blue, white/orange-orange, white/green-green, white/brown-brown
Twisted pairs	2 cores to the pair
Overall twist	Four pairs and four fillers to the core
Shielding	Tinned copper braided shield
Optical shield covering	90 %
Nominal voltage, cable	≤ 100 V
Test voltage Core/Core	700 V (50 Hz, 1 min.)
Test voltage Core/Shield	700 V (50 Hz, 1 min.)
Cable insulation resistance	≥ 500 MΩ*km
Coupling resistance	≤ 100.00 mΩ/m (at 10 MHz)
Wave impedance	100 Ω ±5 Ω (at 100 MHz)
Loop resistance	≤ 290.00 Ω/km
Cable capacity	approx. 50 nF/km (at 1 kHz)
Signal runtime	5.3 ns/m
Tensile strength	≤ 100 N
Minimum bending radius, fixed installation	4 x D
Minimum bending radius, flexible installation	8 x D
Number of bending cycles	5000000
Minimum bending radius, drag chain applications	7,5 x D
Traversing rate	3 m/s
Acceleration	5 m/s <sup>2</sup>
Damping	3.2 dB (with 1 MHz)
	6 dB (at 4 MHz)
	9.5 dB (at 10 MHz)
	12.1 dB (at 16 MHz)
	13.6 dB (at 20 MHz)
	17.1 dB (at 31.25 MHz)
	24.8 dB (at 62.5 MHz)
32 dB (at 100 MHz)	
Near end crosstalk attenuation (NEXT)	65.3 dB (with 1 MHz)
	56.3 dB (at 4 MHz)
	50.3 dB (at 10 MHz)
	47.2 dB (at 16 MHz)
	45.8 dB (at 20 MHz)
	42.9 dB (at 31.25 MHz)
38.4 dB (at 62.5 MHz)	

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	35.3 dB (at 100 MHz)
Power-summated near end crosstalk attenuation (PSNEXT)	62.3 dB (with 1 MHz)
	53.3 dB (at 4 MHz)
	47.3 dB (at 10 MHz)
	44.2 dB (at 16 MHz)
	42.8 dB (at 20 MHz)
	39.9 dB (at 31.25 MHz)
	35.4 dB (at 62.5 MHz)
	32.3 dB (at 100 MHz)
Return loss (RL)	23 dB (at 4 MHz)
	24.1 dB (at 8 MHz)
	25 dB (at 10 MHz)
	25 dB (at 16 MHz)
	25 dB (at 20 MHz)
	23.6 dB (at 31.25 MHz)
	21.5 dB (at 62.5 MHz)
	20.1 dB (at 100 MHz)
Halogen-free	according to IEC 60754-1
Resistance to oil	in accordance with EN 60811-2-1
Flame resistance	according to IEC 60332-1-2
Ambient temperature (operation)	-20 °C ... 80 °C (Cable, flexible installation)
	-40 °C ... 80 °C (cable, fixed installation)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 85 °C (RJ45 connector)
Ambient temperature (storage/transport)	-40 °C ... 85 °C (RJ45 connector)

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## Classifications

### ECLASS

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

### ETIM

ETIM 8.0	EC002599
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### UNSPSC

UNSPSC 21.0	39121400
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## Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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