

NBC-R4ACS/2,0-93B/R4ACS - Patch cable



1112820

<https://www.phoenixcontact.com/us/products/1112820>

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Patch cable, degree of protection: IP20, cable length: 2 m, number of positions: 4, 100 Mbps, CAT5, material: PP, connection method: Pierce connection, cable outlet: straight, PROFINET

Your advantages

- Perfect for industrial applications
- PVC cable for flexible installations
- 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 100 Mbps (CAT5)

Commercial Data

Item number	1112820
Packing unit	1 pc
Minimum order quantity	1 pc
Sales Key	AB11
Product Key	ABNABA
GTIN	4063151033828
Weight per Piece (including packing)	153.9 g
Weight per Piece (excluding packing)	150 g
Customs tariff number	85444210
Country of origin	PL

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Technical Data

Product properties

Product type	Data cable preassembled
Number of positions	4
Locking type	Locking clips
Shielded	yes
Cable outlet	straight

Insulation characteristics

Overvoltage category	I
Degree of pollution	2

Electrical properties

Rated voltage (III/2)	72 V
Rated current	1.75 A
Insulation resistance	> 1 TΩ
Contact resistance	< 20 mΩ
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
Contact material	CuSn6
Contact surface material	Ni/Au
Contact carrier material	PC
Housing material	PP

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

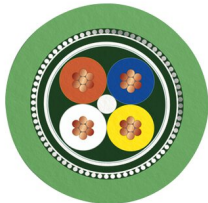
Connection 2

Type	Plug straight RJ45
Shielded	yes
Handle color	black
Insertion/withdrawal cycles	≥ 750

Cable/line

Cable length	2.00 m
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PROFINET PVC stranded CAT5 [93B]

Dimensional drawing	
Shielded	yes
UL AWM Style	21694
Cable weight	67 kg/km
Cable type	PROFINET PVC stranded CAT5
Short symbol	2YY(ST)CY
Cable type (abbreviation)	93B
Signal type/category	PROFINET CAT5 (IEC 11801), 100 Mbps EtherCAT [®] CAT5 (IEC 11801), 100 Mbps
Cable structure	1x4xAWG22/7; SF/TQ
External cable diameter	6.5 mm ±0.2 mm
Outer sheath, material	PVC
External sheath, color	green RAL 6018
Thickness, outer sheath	approx. 0.9 mm
Material, inner sheath	PVC
Conductor material	Tin-plated Cu litz wires
Conductor structure signal line	7x 0.25 mm
AWG signal line	22

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Conductor cross section	4x 0.34 mm ²
Material wire insulation	PE
Wire diameter incl. insulation	1.55 mm
Single wire, color	white, yellow, blue, orange
Overall twist	Star quad
Shielding	Aluminum-coated foil, tinned copper braided shield
Optical shield covering	85 %
Nominal voltage, cable	600 V
Test voltage Core/Core	2000 V (50 Hz, 1 min.)
Test voltage Core/Shield	2000 V (50 Hz, 1 min.)
Cable insulation resistance	≥ 500 MΩ*km
Coupling resistance	≤ 20.00 mΩ/m (at 10 MHz)
Wave impedance	100 Ω ±15 Ω (at 100 MHz)
Loop resistance	≤ 120.00 Ω/km
Signal runtime	5.3 ns/m
Signal speed	0.66 c
Minimum bending radius, fixed installation	3 x D
Minimum bending radius, flexible installation	7 x D
Damping	2.1 dB (with 1 MHz)
	4 dB (at 4 MHz)
	6.3 dB (at 10 MHz)
	8 dB (at 16 MHz)
	9 dB (at 20 MHz)
	11.4 dB (at 31.25 MHz)
	16.5 dB (at 62.5 MHz)
	21.3 dB (at 100 MHz)
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)
Resistance to oil	Resistant to oil to a limited extent
Flame resistance	according to UL 1685 (CSA FT 4)
Other resistance	UV resistant According to UL 1581, Section 1200
Ambient temperature (operation)	-40 °C ... 70 °C (Cable, flexible installation)
	-40 °C ... 70 °C (cable, fixed installation)

Environmental and real-life conditions

Ambient conditions

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

Standards and regulations

Standards/specifications	IEC 60603-7
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Classifications

ECLASS

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

ETIM

ETIM 8.0	EC001121
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UNSPSC

UNSPSC 21.0	39121400
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