

NBC-R4ACS/0,5-94F/OE - Patch cable



1113204

<https://www.phoenixcontact.com/us/products/1113204>

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Patch cable, cable length: 0.5 m, number of positions: 8, 10 Gbps, CAT6_A, connection cross section: AWG 26- 26, Ethernet

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
- Future-proof high-speed data transmission with up to 10 Gbps (CAT6_A)

Commercial data

Item number	1113204
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB11
Product key	ABNABF
GTIN	4063151035433
Weight per piece (including packing)	41.9 g
Weight per piece (excluding packing)	32.027 g
Customs tariff number	85444210
Country of origin	PL

Technical data

Product properties

Product type	Data cable preassembled
Product family	RJ45 INDUSTRIAL IE8 CAT6A
Sensor type	Ethernet
Number of positions	8
Shielded	yes

Electrical properties

Rated voltage (III/2)	72 V
Rated current	1.5 A
Insulation resistance	> 1 TΩ
Contact resistance	< 20 mΩ
Transmission characteristics (category)	CAT6 _A
Transmission speed	10 Gbps

Mechanical properties

Mechanical data

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

Material specifications

Outer sheath, material	PUR
Conductor material	Copper, bare

Dimensions

Width	13.8 mm
Height	14.8 mm
Length	44.2 mm

Connector

Connection 1

Type	RJ45 Plug, straight, 8-position
Number of positions	8
Signal type/category	Ethernet CAT6 _A (IEC 11801), 10 Gbps
Insertion/withdrawal cycles	≥ 750
Insertion force	50 N (per signal contact)
Withdrawal force	30 N (per signal contact)
Overvoltage category	I
Degree of pollution	2
Material Contact	CuSn6
Material Contact surface	Ni/Au

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Material Contact carrier	PC
Material Housing	PP
Color (Housing)	black
Flammability rating according to UL 94	V2
Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 85 °C


Connection 2

Type	free cable end
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Cable/line

Cable length	0.50 m
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Ethernet 10 Gbit [94F]

Dimensional drawing	
Cable weight	42 kg/km
UL AWM Style	20963 (80°C/30 V)
Number of positions	8
Shielded	yes
Cable type	Ethernet 10 Gbit [94F]
Conductor structure	4x2xAWG26/7; S/FTP
Signal runtime	5.13 ns/m
Conductor structure signal line	7x 0.16 mm
AWG signal line	26
Conductor cross section	4x 2x 0.14 mm ²
Wire diameter incl. insulation	1.04 mm
External cable diameter	6.40 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	water blue RAL 5021
Conductor material	Bare Cu litz wires
Material wire insulation	Foamed PE
Single wire, color	white/blue-blue, white/orange-orange, white/green-green, white/brown-brown
Thickness, outer sheath	0.65 mm
Twisted pairs	2 cores to the pair
Type of pair shielding	Aluminum-lined foil
Overall twist	4 pairs for core
Optical shield covering	70 %

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Insulation resistance	$\geq 500 \text{ M}\Omega \cdot \text{km}$
Loop resistance	$\leq 290.00 \text{ }\Omega/\text{km}$
Wave impedance	$100 \text{ }\Omega \pm 5 \text{ }\Omega$ (at 100 MHz)
Cable capacity	47 nF/km
Nominal voltage, cable	$\leq 100 \text{ V}$
Test voltage Core/Core	700 V (50 Hz, 1 min.)
Test voltage Core/Shield	700.00 V (50 Hz, 1 min.)
Minimum bending radius, fixed installation	4 x D
Minimum bending radius, flexible installation	8 x D
Smallest bending radius, fixed installation	26 mm
Smallest bending radius, movable installation	52 mm
Tensile strength	$\leq 100 \text{ N}$
Near end crosstalk attenuation (NEXT)	75.3 dB (with 1 MHz)
	66.3 dB (at 4 MHz)
	61.8 dB (at 8 MHz)
	60.3 dB (at 10 MHz)
	57.2 dB (at 16 MHz)
	55.8 dB (at 20 MHz)
	54.3 dB (at 25 MHz)
	52.8 dB (at 31.25 MHz)
	48.4 dB (at 62.5 MHz)
	45.3 dB (at 100 MHz)
	40.8 dB (at 200 MHz)
	39.3 dB (at 250 MHz)
	38.1 dB (at 300 MHz)
	38.1 dB (at 400 MHz)
	38.1 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)
	36.3 dB (at 250 MHz)
	35.1 dB (at 300 MHz)
	33.3 dB (at 400 MHz)
	31.8 dB (at 500 MHz)
Return attenuation (RL)	20 dB (with 1 MHz)
	23 dB (at 4 MHz)

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	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 250 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 dB (at 8 MHz)
	8.9 dB (at 10 MHz)
	11.2 dB (at 16 MHz)
	12.6 dB (at 20 MHz)
	14.1 dB (at 25 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)
	46.6 dB (at 250 MHz)
	51.4 dB (at 300 MHz)
	60.1 dB (at 400 MHz)
	67.9 dB (at 500 MHz)
	≥ 80.00 dB (at 30 ... 100 MHz)
Halogen-free	according to IEC 60754-1
Flame resistance	according to IEC 60332-1-2
	in accordance with UN ECE-R 118.03
Resistance to oil	in accordance with DIN EN 60811-2-1
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-20 °C ... 80 °C (Cable, flexible installation)
Ambient temperature (installation)	-20 °C ... 80 °C

Standards and regulations

Standards/specifications	IEC 60603-7
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Classifications

ECLASS

ECLASS-13.0	27060307
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ETIM

ETIM 9.0	EC001855
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UNSPSC

UNSPSC 21.0	39121400
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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%

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