

Network cable - NBC-R4AC/1,0-93E/R4AC - 1408933

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Assembled Ethernet cable, CAT5e, shielded, 2-pair, AWG 26 stranded (7-wire), RAL 5021 (water blue), RJ45 plug/IP20 on RJ45 plug/IP20, line, length 1 m



Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 856621
GTIN	4046356856621
Weight per Piece (excluding packing)	59.470 g
Custom tariff number	85444210
Country of origin	Poland

Technical data

Dimensions

Length of cable	1.00 m
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Ambient conditions

Degree of protection	IP20 (RJ45 connector)
Ambient temperature (operation)	-40 °C ... 60 °C (RJ45 connector)

General data

Rated current at 40°C	1 A
Rated voltage	50 V
Number of positions	4
Alternative short product description	Ethernet cable
Rated voltage (III/3)	72 V (DC)

Characteristics head 1

Color	gray
Material (component)	CuSn (Contact)

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Technical data

Characteristics head 1

	Ni/Au (Contact surface)
	PC (Contact carriers)
	PA (Housing)
Insertion/withdrawal cycles	≥ 750
Ambient temperature (operation)	-40 °C ... 60 °C

Characteristics head 2

Color	gray
Material (component)	CuSn (Contact)
	Ni/Au (Contact surface)
	PC (Contact carriers)
	PA (Housing)
Insertion/withdrawal cycles	≥ 750
Ambient temperature (operation)	-40 °C ... 60 °C

Standards and Regulations

Flammability rating according to UL 94	V2
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Cable

Cable type	PUR ETHERNET 2x2 FLEX
Cable type (abbreviation)	93E
UL AWM style	20963 (80°C/30 V)
Signal type/category	Ethernet CAT5 (IEC 11801), 100 Mbps
Cable structure	2x2xAWG26/7; SF/UTP
Conductor cross section	2x 2x 0.14 mm ²
AWG signal line	26
Conductor structure signal line	7x 0.16 mm
Core diameter including insulation	0.98 mm
Wire colors	white/orange-orange, white/green-green
Twisted pairs	2 cores to the pair
Overall twist	Two pairs with two fillers to the core
Shielding	Aluminum-coated foil, tinned copper braided shield
Optical shield covering	70 %
External sheath, color	water blue RAL 5021
Outer sheath thickness	1.2 mm
External cable diameter D	6.4 mm ±0.2 mm
Minimum bending radius, fixed installation	4 x D
Minimum bending radius, flexible installation	8 x D
Tensile strength GRP	≤ 80 N
Cable weight	42 kg/km
Outer sheath, material	PUR
Material conductor insulation	Foamed PE

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Cable

Conductor material	Bare Cu litz wires	
Standards/specifications	Electrical requirements EN 50288-2-2	
Insulation resistance	$\geq 500 \text{ M}\Omega \cdot \text{km}$	
Loop resistance	$\leq 290.00 \text{ }\Omega/\text{km}$	
Cable capacity	approx. 45 nF/km (at 1 kHz)	
Wave impedance	100 $\Omega \pm 5 \text{ }\Omega$ (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)	
	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)		
Attenuation		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)	
	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)		
Signal runtime	5.3 ns/m	
Coupling resistance	$\leq 100.00 \text{ m}\Omega/\text{m}$ (at 10 MHz)	

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Technical data

Cable

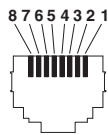
Nominal voltage, cable	≤ 100 V (Peak value, not for high-power applications)
Test voltage Core/Core	700 V (50 Hz, 1 min.)
Test voltage Core/Shield	700 V (50 Hz, 1 min.)
Current carrying capacity of cable	2 A (according to DIN VDE 0891-1)
Flame resistance	according to IEC 60332-1-2
	in acc. to UL VW1
Halogen-free	according to IEC 60754-1
Resistance to oil	according to 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
Ambient temperature (storage/transport)	-20 °C ... 80 °C

Environmental Product Compliance

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

Drawings

Schematic diagram



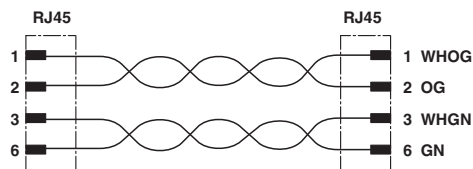
Connector pin assignment plug RJ45

Cable cross section



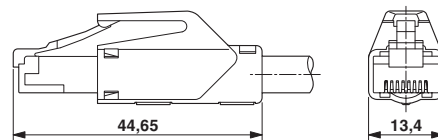
PUR ETHERNET 2x2 FLEX [93E]

Circuit diagram



Contact assignment of RJ45 plugs

Dimensional drawing



RJ45 connector, IP20

Classifications

eCl@ss

eCl@ss 4.0	272607xx
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Classifications

eCl@ss

eCl@ss 4.1	27260701
eCl@ss 5.0	27260701
eCl@ss 5.1	19030300
eCl@ss 6.0	27061800
eCl@ss 7.0	27060308
eCl@ss 8.0	27060308
eCl@ss 9.0	27060308

ETIM

ETIM 3.0	EC001262
ETIM 4.0	EC001262
ETIM 5.0	EC002599

UNSPSC

UNSPSC 6.01	26121616
UNSPSC 7.0901	26121616
UNSPSC 11	26121604
UNSPSC 12.01	31261501
UNSPSC 13.2	26121604

Approvals


Approvals

Approvals

EAC

Ex Approvals

Approval details

EAC		B.00767
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