NBC-R4AC/8,0-93E/R4AC - Network cable

1412096

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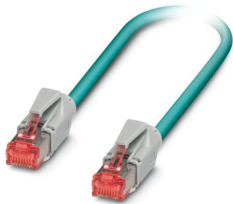
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Assembled Ethernet cable, CAT5e, shielded, 2-pair, 26* AWG stranded (7-wire), RAL 5021 (water blue), RJ45 plug/IP20 to RJ45 plug/IP20, line, length: 8 m

Commercial data

Item number	1412096
Packing unit	1 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Product key	ABNABD
GTIN	4046356949484
Weight per piece (including packing)	378 g
Weight per piece (excluding packing)	378 g
Country of origin	PL

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Technical data

Product properties

Product type	Data cable preassembled
Product family	RJ45 INDUSTRIAL IE4 CAT5
Sensor type	Ethernet
Number of positions	4
No. of cable outlets	1
Number of slots	1
Shielded	yes
Cable outlet	straight

Signaling

Status display	no
Status display present	no

Electrical properties

Rated voltage (III/3)	72 V (DC)
Nominal voltage U_N	48 V
Nominal current I_N	1 A
Transmission medium	Copper
Transmission speed	100 Mbps
Transmission characteristics (category)	CAT5 (IEC 11801:2002)

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 750

Material specifications

Flammability rating according to UL 94	V2
Outer sheath, material	PUR

Connector

Connection 1

Type	Plug straight RJ45
Handle color	gray
Material	CuSn (Contact)
	Ni/Au (Contact surface)
	PC (Contact carrier)
	PA (Housing)
Insertion/withdrawal cycles	≥ 750
Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 60 °C

Connection 2

Type	Plug straight RJ45
Handle color	gray
Material	CuSn (Contact)
	Ni/Au (Contact surface)
	PC (Contact carrier)
	PA (Housing)
Insertion/withdrawal cycles	≥ 750
Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 60 °C

Cable/line

Cable length	8.00 m

Ethernet flexible CAT5, 2-pair [93E]

Dimensional drawing	
Shielded	yes
UL AWM Style	20963 (80°C/30 V)
Cable weight	42 kg/km
Cable type	Ethernet flexible CAT5, 2-pair
Cable type (abbreviation)	93E
Signal type/category	Ethernet CAT5 (IEC 11801), 100 Mbps
Cable structure	2x2xAWG26/7, SF/UTP
External cable diameter	6.40 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	water blue RAL 5021
Thickness, outer sheath	1.20 mm
Conductor material	Bare Cu litz wires
Conductor structure signal line	7x 0.16 mm
AWG signal line	26
Conductor cross section	2x 2x 0.14 mm²
Material wire insulation	Foamed PE
Wire diameter incl. insulation	0.98 mm
Single wire, color	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 %
Current carrying capacity of cable	2.00 A (according to DIN VDE 0891-1)
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	700.00 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. 45 nF/km (at 1 kHz)
Signal runtime	5.3 ns/m
Tensile strength	≤ 80 N
Minimum bending radius, fixed installation	4 x D
Minimum bending radius, flexible installation	8 x D
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)
Return attenuation (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
	in acc. to UL VW1
	in accordance with UN ECE-R 118.03
Ambient temperature (operation)	-20 °C ... 80 °C (Cable, flexible installation)

	-40 °C ... 80 °C (cable, fixed installation)

Environmental and real-life conditions

Ambient conditions

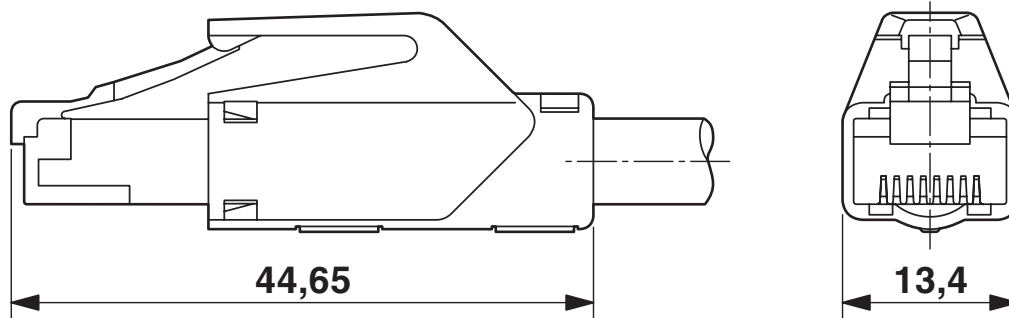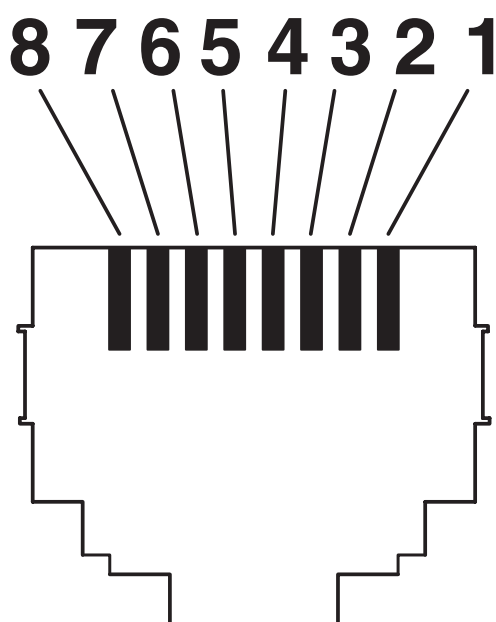| Degree of protection	IP20 (RJ45 connector)
	IP20
Ambient temperature (operation) (male connector/female connector)	-40 °C ... 60 °C (RJ45 connector)

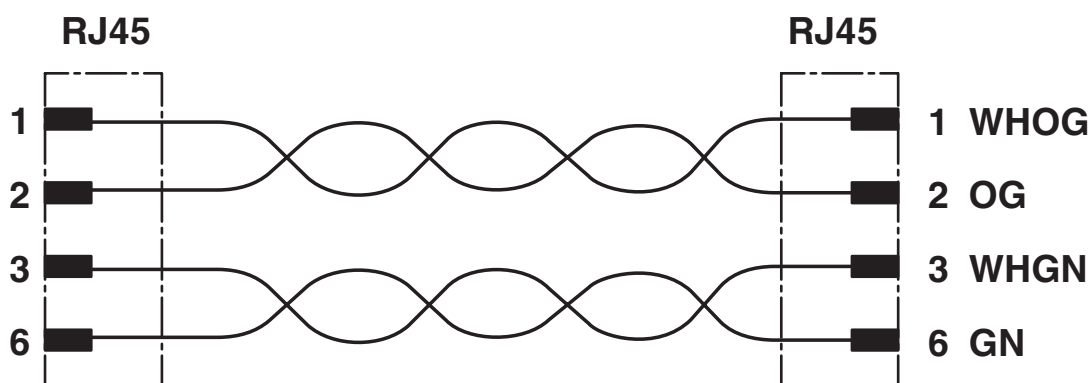# NBC-R4AC/8,0-93E/R4AC - Network cable

Drawings

Dimensional drawing

44,65

13,4

RJ45 connector, IP20

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Schematic diagram

8 7 6 5 4 3 2 1

Connector pin assignment plug RJ45

Circuit diagram

RJ45   **RJ45**

1		1 WHOG
2		2 OG
3		3 WHGN
6		6 GN

Contact assignment of RJ45 plugs

Classifications

ECLASS

ECLASS-13.0	27060307
ECLASS-15.0	27060307

UNSPSC

UNSPSC 21.0	26121604

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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%