

# NBC-R4AC/1,0-93F/R4AC - Network cable



1199413

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Network cable, Ethernet CAT5e, 4-position, TPE, Teal, shielded, Plug straight RJ45 / IP20, on Plug straight RJ45 / IP20, cable length: 1 m

## Commercial data

Item number	1199413
Packing unit	1 pc
Sales key	AB11
Product key	ABNABA
GTIN	4063151261757
Weight per piece (including packing)	22.22 g
Weight per piece (excluding packing)	22.22 g
Country of origin	US

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## Technical data

### Product properties

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

### Interfaces

Signal type/category	Ethernet CAT5e
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### Electrical properties

Nominal voltage $U_N$	30 V AC
	57 V DC
Nominal current $I_N$	1.5 A

### Mechanical properties

#### Mechanical data

Insertion/withdrawal cycles	$\geq 750$
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### Material specifications

Flammability rating according to UL 94	V0
Outer sheath, material	TPE

### Connector

#### Connection 1

Type	Plug straight RJ45 / IP20
Number of positions	4 (8)
Handle color	black
Material	(Contact)
	Gold (Contact surface)
	PVC (Housing)
Insertion/withdrawal cycles	$\geq 750$
Degree of protection	IP20
Number of positions	4
Insertion/withdrawal cycles	750

#### Connection 2

Type	Plug straight RJ45 / IP20
Number of positions	4 (8)

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Handle color	black
Material	(Contact)
	Gold (Contact surface)
	PVC (Housing)
Insertion/withdrawal cycles	≥ 750
Ambient temperature (operation)	-40 °C ... 85 °C
Number of positions	4
Degree of protection	IP20

## Cable/line

Cable length	1 m
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### Highly flexible Ethernet CAT5e [93F]

Dimensional drawing	
Shielded	yes
UL AWM Style	2463 (80 °C / 600 V)
Cable type	Highly flexible Ethernet CAT5e
Cable type (abbreviation)	93F
Signal type/category	Ethernet CAT5e (TIA 568B)
Cable structure	2x2xAWG24/7, SF/UTP
External cable diameter	6.7 mm ±0.25 mm
Outer sheath, material	TPE
External sheath, color	Teal
Conductor material	Tin-plated Cu litz wires
Conductor structure signal line	7x 0.20 mm (7x32)
AWG signal line	24
Conductor cross section	2x 2x 0.2 mm <sup>2</sup>
Material wire insulation	PE
Wire diameter incl. insulation	1.2 mm
Single wire, color	white/orange-orange, white/green-green
Twisted pairs	2 cores to the pair
Overall twist	2 pairs to the core
Shielding	Aluminum-lined polyester foil, tinned copper braided shield
Optical shield covering	75 %
Nominal voltage, cable	600 V
Test voltage, cable	2000 V
Wave impedance	100 Ω ±15 Ω (at 100 MHz)

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Cable impedance	100 Ω ±15 Ω (at 1 ... 100 MHz)
Number of bending cycles	1000000
Minimum bending radius, drag chain applications	10 x D
Traversing path	0.23 m
Traversing rate	1.5 m/s
Acceleration	20.5 m/s <sup>2</sup>
Number of bending cycles	20000000
Minimum bending radius, drag chain applications	20 X D
Torsion force	360 °/m (1 lb. load)
Torsion cycles	3000000
Torsional frequency	71 (cycles/min)
Ambient temperature (operation)	20 °C
Near end crosstalk attenuation (NEXT)	50 dB (with 100 MHz (IEC 62153-4-9))
Return loss (RL)	20 dB (at 10 MHz (+6LOG))
	26 dB (at 20 MHz)
	26 dB (at 100 MHz (-5LOG))
Flame resistance	VW-1
Other resistance	Resistant to welding splashes Abrasion and oil resistance
	UV resistant CMX outdoor
Ambient temperature (operation)	-40 °C ... 80 °C (Cable, flexible installation)

## Environmental and real-life conditions

### Ambient conditions

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

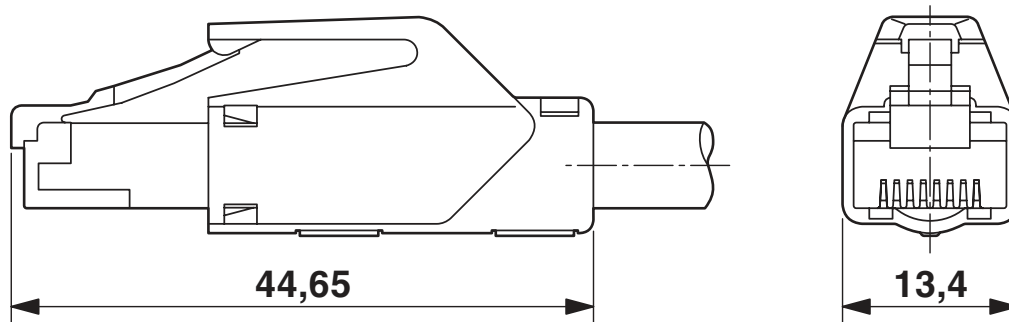
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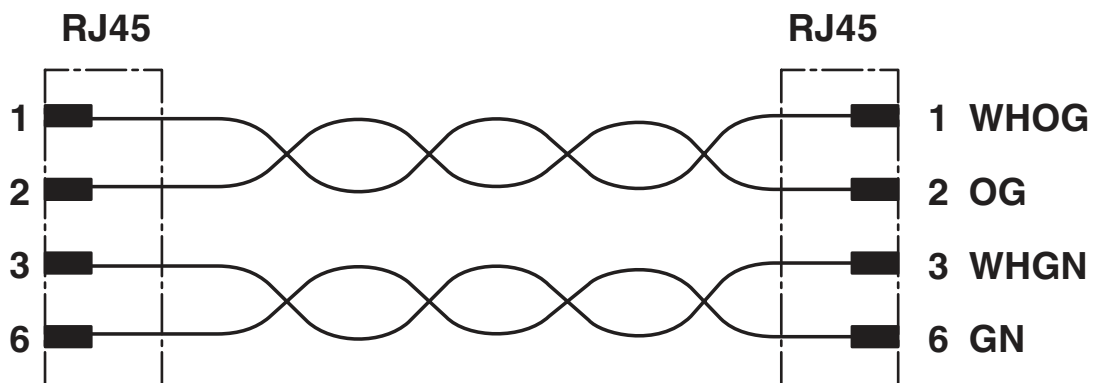
## Drawings

Dimensional drawing



RJ45 connector, IP20

Circuit diagram



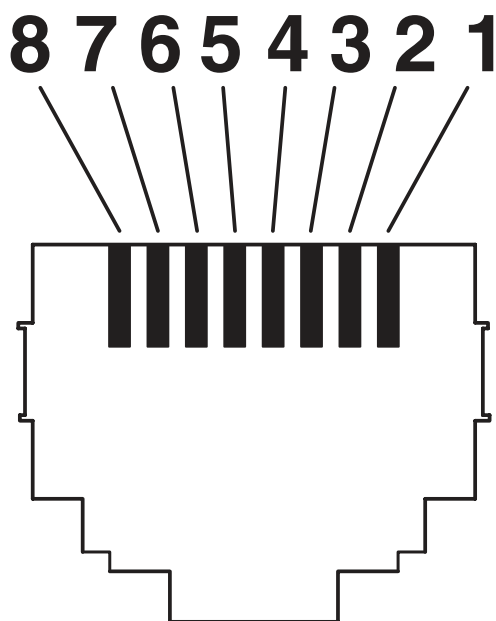
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Schematic diagram



Connector pin assignment plug RJ45

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## Approvals

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 <b>UL Listed</b> Approval ID: File E335024				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	60 V	0.5 A	-	-

 <b>cUL Listed</b> Approval ID: File E335024				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	60 V	0.5 A	-	-

<b>cULus Listed</b>				
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## Classifications

### ECLASS

ECLASS-11.0	27469090
ECLASS-12.0	27469090
ECLASS-13.0	27469090

### ETIM

ETIM 8.0	EC002943
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