

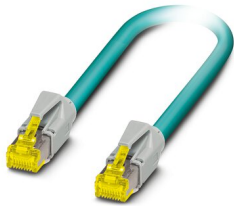
NBC-R4AC-10G/1,5-94F/R4AC-10G - Patch cable



1422211

<https://www.phoenixcontact.com/us/products/1422211>

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Patch cable, CAT6_A, 4-pair, shielded, connection not crossed (line), assembled at both ends with RJ45/IP20 connectors, outer sheath material: PUR, length: 1.5 m

Your advantages

- Perfect for industrial applications
- Perfect for office, building, and protected industrial applications (e.g., in control cabinets)
- Compact angle

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 1422211 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | AB11 |
| Product key | ABNABF |
| GTIN | 4055626292656 |
| Weight per piece (including packing) | 94.6 g |
| Weight per piece (excluding packing) | 77.51 g |
| Customs tariff number | 85444210 |
| Country of origin | PL |

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Technical data

Product properties

| | |
|---------------------|-------------------------|
| Product type | Data cable preassembled |
| Sensor type | Ethernet |
| Number of positions | 8 |
| Shielded | yes |

Electrical properties

| | |
|---|-------------------|
| Rated voltage (III/3) | 72 V (DC) |
| Nominal voltage U_N | 48 V |
| Nominal current I_N | 0.5 A |
| Transmission medium | Copper |
| Transmission characteristics (category) | CAT6 _A |
| Transmission speed | 10 Gbps |
| Wave impedance | 100 Ω |

Mechanical properties

Mechanical data

| | |
|-------------------------------------|---------|
| Insertion/withdrawal cycles | 200 |
| Insertion force per signal contact | 50.00 N |
| Extraction force per signal contact | 30 N |

Material specifications

| | |
|------------------------|--------------------|
| Outer sheath, material | PUR |
| Conductor material | Bare Cu litz wires |

Connector

Connection 1

| | |
|-----------------------------|--------------------|
| Type | Plug straight RJ45 |
| Shielded | yes |
| Insertion/withdrawal cycles | ≥ 750 |
| Degree of protection | IP20 |
| Number of positions | 8 |
| Insertion/withdrawal cycles | 750 |

Connection 2

| | |
|-----------------------------|--------------------|
| Type | Plug straight RJ45 |
| Shielded | yes |
| Insertion/withdrawal cycles | ≥ 750 |
| Number of positions | 8 |
| Degree of protection | IP20 |


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Cable/line

| | |
|---------------------------------|--|
| Cable length | 1.50 m |
| Ethernet 10 Gbit [94F] | |
| Dimensional drawing |  |
| Shielded | yes |
| UL AWM Style | 20963 (80°C/30 V) |
| Cable weight | 42 kg/km |
| Cable type | Ethernet 10 Gbit |
| Short symbol | 02YSC11Y |
| Cable type (abbreviation) | 94F |
| Signal type/category | Ethernet CAT6 _A , 10 Gbps |
| Cable structure | 4x2xAWG26/7; S/FTP |
| External cable diameter | 6.4 mm ±0.2 mm |
| Outer sheath, material | PUR |
| External sheath, color | water blue RAL 5021 |
| Thickness, outer sheath | 0.65 mm |
| Conductor material | Bare Cu litz wires |
| Conductor structure signal line | 7x 0.16 mm |
| AWG signal line | 26 |
| Conductor cross section | 4x 2x 0.14 mm ² |
| Material wire insulation | Foamed PE |
| Wire diameter incl. insulation | 1.04 mm |
| Single wire, color | white/blue-blue, white/orange-orange, white/green-green, white/brown-brown |
| Twisted pairs | 2 cores to the pair |
| Type of pair shielding | Aluminum-lined foil |
| Overall twist | 4 pairs for core |
| Shielding | Tinned copper braided shield |
| Optical shield covering | 70 % |
| Nominal voltage, cable | ≤ 100 V |
| Test voltage Core/Core | 700 V (50 Hz, 1 min.) |
| Test voltage Core/Shield | 700 V (50 Hz, 1 min.) |
| Cable insulation resistance | ≥ 500 MΩ*km |
| Wave impedance | 100 Ω ±5 Ω (at 100 MHz) |
| Loop resistance | ≤ 290.00 Ω/km |
| Cable capacity | 47 nF/km |

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| | |
|--|------------------------|
| Signal runtime | 5.13 ns/m |
| Tensile strength | ≤ 100 N |
| Minimum bending radius, fixed installation | 4 x D |
| Minimum bending radius, flexible installation | 8 x D |
| Damping | 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) | |
| 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) |
| | 36.3 dB (at 400 MHz) |
| 34.8 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) |

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| | |
|---------------------------------|---|
| | 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 loss (RL) | 20 dB (with 1 MHz) |
| | 23 dB (at 4 MHz) |
| | 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 | ≥ 80 dB (at 30 ... 100 MHz) |
| Halogen-free | according to IEC 60754-1 |
| Resistance to oil | in accordance with DIN EN 60811-2-1 |
| Flame resistance | according to IEC 60332-1-2 |
| 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 |
| Ambient temperature (operation) | -25 °C ... 60 °C (RJ45 connector) |

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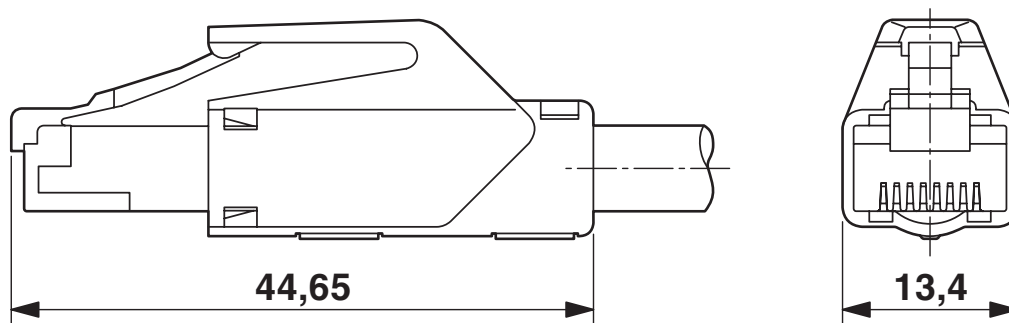
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Drawings

Dimensional drawing



RJ45 connector, IP20

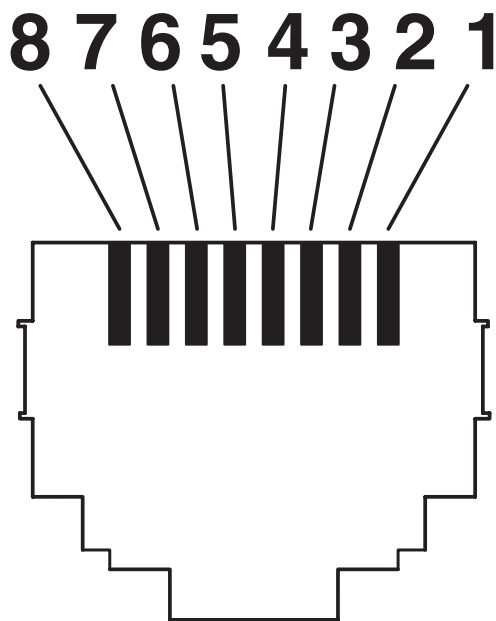
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Schematic diagram



Connector pin assignment plug RJ45

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1422211>



EAC

Approval ID: 19060508

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Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-11.0 | 27061801 |
| ECLASS-12.0 | 27061801 |
| ECLASS-13.0 | 27061801 |

ETIM

| | |
|----------|----------|
| ETIM 8.0 | EC003249 |
|----------|----------|

UNSPSC

| | |
|-------------|----------|
| UNSPSC 21.0 | 26121600 |
|-------------|----------|

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Environmental product compliance

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

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