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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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Bus system cable - NBC-R4AC/2,0-93G/R4AC - 1408982

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EtherCAT® patch cable, shielded, star quad, 22 AWG stranded (7-wire), green, straight RJ45 plug/IP20 to straight RJ45 plug/IP20, length: 2 m

EtherCAT® patch cable



Key commercial data

| | |
|----------------------|----------|
| Packing unit | 1 pc |
| Custom tariff number | 85444210 |
| Country of origin | Poland |

Technical data

Dimensions

| | |
|-----------------|-----|
| Length of cable | 2 m |
|-----------------|-----|

Ambient conditions

| | |
|----------------------|-----------------------|
| Degree of protection | IP20 (RJ45 connector) |
|----------------------|-----------------------|

General data

| | |
|-----------------------|---|
| Rated current at 40°C | 1 A |
| Rated voltage | 50 V |
| Number of positions | 4 |
| Signal type/category | EtherCAT® CAT5 (IEC 11801:2002), 100 Mbps |
| | EtherCAT® CAT5e (TIA 568B:2001), 100 Mbps |

Characteristics head 1

| | |
|--|---------------------------|
| Head type | Plug Straight RJ45 / IP20 |
| No. of positions (pin connector pattern) | 4 (8) |
| Color | black |
| Material (component) | CuSn (Contact) |

Bus system cable - NBC-R4AC/2,0-93G/R4AC - 1408982

Technical data

Characteristics head 1

| | |
|---------------------------------|-------------------------|
| | Ni/Au (Contact surface) |
| | PA (Contact carriers) |
| | PA (Housing) |
| Insertion/withdrawal cycles | ≥ 750 |
| Ambient temperature (operation) | -25 °C ... 80 °C |

Characteristics head 2

| | |
|--|---------------------------|
| Head type | Plug Straight RJ45 / IP20 |
| No. of positions (pin connector pattern) | 4 (8) |
| Color | black |
| Material (component) | CuSn (Contact) |
| | Ni/Au (Contact surface) |
| | PA (Contact carriers) |
| | PA (Housing) |
| Insertion/withdrawal cycles | ≥ 750 |
| Ambient temperature (operation) | -25 °C ... 80 °C |

Cable

| | |
|---|--|
| Cable type | EtherCAT® |
| Cable type (abbreviation) | 93G |
| UL AWM style | 21694 |
| Signal type/category | EtherCAT® CAT5 (IEC 11801:2002) |
| | EtherCAT® CAT5e (TIA 568B:2001) |
| Cable structure | 1x4xAWG22/7; SF/TQ |
| Conductor cross section | 4x 0.34 mm² |
| AWG signal line | 22 |
| Conductor structure signal line | 7x 0.25 mm |
| Core diameter including insulation | approx. 1.5 mm |
| Wire colors | White, yellow, blue, orange |
| Overall twist | Star quad |
| Shielding | Aluminum-coated foil, tinned copper braided shield |
| Optical shield covering | 85 % |
| External sheath, color | Green RAL 6018 |
| Outer sheath thickness | approx. 0.9 mm |
| External cable diameter D | 6.5 mm ±0.2 mm |
| Minimum bending radius, fixed installation | 3 x D |
| Minimum bending radius, flexible installation | 7 x D |
| Cable weight | 67 kg/km |

Bus system cable - NBC-R4AC/2,0-93G/R4AC - 1408982

Technical data

Cable

| | |
|---|---|
| Outer sheath, material | PVC |
| Material, inner sheath | PVC |
| Material conductor insulation | PE |
| Conductor material | Tin-plated Cu litz wires |
| Insulation resistance | $\geq 500 \text{ M}\Omega \cdot \text{km}$ |
| Conductor resistance | $\leq 120000000 \text{ }\Omega/\text{km}$ |
| Working capacitance | 52 pF |
| Wave impedance | $100 \text{ }\Omega \pm 15 \text{ }\Omega$ (at 100 MHz) |
| Signal runtime | 5.3 ns/m |
| Coupling resistance | $\leq 20.00 \text{ m}\Omega/\text{m}$ |
| Nominal voltage, cable | 600 V |
| Test voltage Core/Core | 2000 V (50 Hz, 1 min.) |
| Test voltage Core/Shield | 2000 V (50 Hz, 1 min.) |
| Flame resistance | According to UL 1685 (CSA FT 4) |
| Ambient temperature (operation) | -40 °C ... 70 °C (cable, fixed installation) |
| | -40 °C ... 70 °C (cable, flexible installation) |
| Ambient temperature (installation) | -20 °C ... 60 °C |
| Ambient temperature (storage/transport) | -50 °C ... 70 °C |

Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 4.0 | 272607xx |
| eCl@ss 4.1 | 27260701 |
| eCl@ss 5.0 | 27260701 |
| eCl@ss 5.1 | 27060307 |
| eCl@ss 6.0 | 27061801 |
| eCl@ss 7.0 | 27061801 |
| eCl@ss 8.0 | 27061801 |

ETIM

| | |
|----------|----------|
| ETIM 4.0 | EC002599 |
| ETIM 5.0 | EC002599 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 26121616 |
| UNSPSC 7.0901 | 26121616 |
| UNSPSC 11 | 26121604 |

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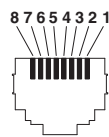
Classifications

UNSPSC

| | |
|--------------|----------|
| UNSPSC 12.01 | 31261501 |
| UNSPSC 13.2 | 26121616 |

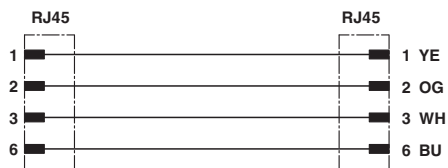
Drawings

Schematic diagram



Connector pin assignment plug RJ45

Circuit diagram



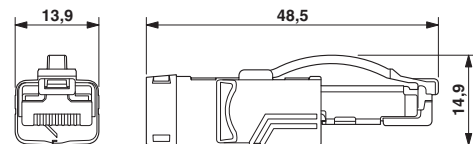
Contact assignment of RJ45 plugs

Cable cross section



EtherCAT® [93G]

Dimensioned drawing



RJ45 connector, IP20