

## Network cable - NBC-FSDBPS/0,35-93G/R4AC - 1422882

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EtherCAT® patch cable

Network cable, degree of protection: IP67/IP20, number of positions: 4, 100 Mbps, CAT5, cable outlet: straight



### Key Commercial Data

|              |                                                                                                         |
|--------------|---------------------------------------------------------------------------------------------------------|
| Packing unit | 1 pc                                                                                                    |
| GTIN         | <br>4 055626 319223 |
| GTIN         | 4055626319223                                                                                           |

### Technical data

#### Ambient conditions

|                                 |                                                |
|---------------------------------|------------------------------------------------|
| Ambient temperature (operation) | -10 °C ... 60 °C (cable, fixed installation)   |
|                                 | -5 °C ... 50 °C (cable, flexible installation) |

#### General data

|                                       |                 |
|---------------------------------------|-----------------|
| Rated current at 40°C                 | 1 A             |
| Rated voltage                         | 50 V            |
| Number of positions                   | 4               |
| Degree of pollution                   | 1               |
| Alternative short product description | EtherCAT® cable |
| Rated voltage (III/3)                 | 72 V (DC)       |

#### Characteristics head 2

|       |       |
|-------|-------|
| Color | black |
|-------|-------|

### Standards and Regulations

|                                        |    |
|----------------------------------------|----|
| Flammability rating according to UL 94 | V2 |
|----------------------------------------|----|

#### Cable

|            |                            |
|------------|----------------------------|
| Cable type | PROFINET PVC stranded CAT5 |
|------------|----------------------------|

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## Technical data

### Cable

|                                               |                                                    |
|-----------------------------------------------|----------------------------------------------------|
| Cable type (abbreviation)                     | 93B                                                |
| UL AWM style                                  | 21694                                              |
| Signal type/category                          | PROFINET CAT5 (IEC 11801), 100 Mbps                |
|                                               | EtherCAT® CAT5 (IEC 11801), 100 Mbps               |
| 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            | 1.55 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                                           |
| Outer sheath, material                        | PVC                                                |
| Material, inner sheath                        | PVC                                                |
| Material conductor insulation                 | PE                                                 |
| Conductor material                            | Tin-plated Cu litz wires                           |
| Insulation resistance                         | ≥ 500 MΩ*km                                        |
| Loop resistance                               | ≤ 120.00 Ω/km                                      |
| Wave impedance                                | 100 Ω ±15 Ω (at 100 MHz)                           |
| Near end crosstalk attenuation (NEXT)         | 80 dB (with 1 MHz)                                 |
|                                               | 76 dB (at 4 MHz)                                   |
|                                               | 70 dB (at 10 MHz)                                  |
|                                               | 65 dB (at 16 MHz)                                  |
|                                               | 63 dB (at 20 MHz)                                  |
|                                               | 60 dB (at 31.25 MHz)                               |
|                                               | 55 dB (at 62.5 MHz)                                |
|                                               | 50 dB (at 100 MHz)                                 |
| Attenuation                                   | 2.1 dB (with 1 MHz)                                |
|                                               | 4 dB (at 4 MHz)                                    |
|                                               | 6.3 dB (at 10 MHz)                                 |
|                                               | 8 dB (at 16 MHz)                                   |
|                                               | 9 dB (at 20 MHz)                                   |
|                                               | 11.4 dB (at 31.25 MHz)                             |

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### Technical data

#### Cable

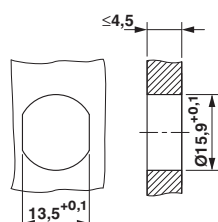
|                                         |                                                   |
|-----------------------------------------|---------------------------------------------------|
|                                         | 16.5 dB (at 62.5 MHz)                             |
|                                         | 21.3 dB (at 100 MHz)                              |
| Signal speed                            | 0.66 c                                            |
| Signal runtime                          | 5.3 ns/m                                          |
| Coupling resistance                     | $\leq 20.00 \text{ m}\Omega/\text{m}$ (at 10 MHz) |
| 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)                   |
| Resistance to oil                       | Resistant to oil to a limited extent              |
| Other resistance                        | UV resistant According to UL 1581, Section 1200   |
| 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                                  |

#### Environmental Product Compliance

|            |                                                                                                     |
|------------|-----------------------------------------------------------------------------------------------------|
| REACH SVHC | Lead 7439-92-1                                                                                      |
| China RoHS | Environmentally Friendly Use Period = 50                                                            |
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

### Drawings

Dimensional drawing



Housing cutout for M16 fastening thread, mounting panel with feed-through hole (alternatively with surface as protection against rotation)

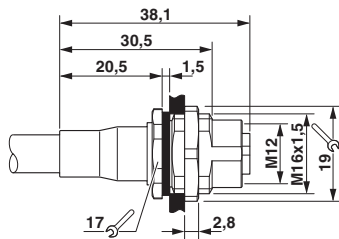
Cable cross section



PROFINET PVC stranded CAT5 [93B]

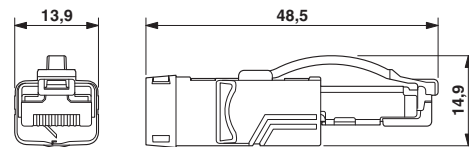
## Network cable - NBC-FSDBPS/0,35-93G/R4AC - 1422882

Dimensional drawing



M12 flush-type connector

Dimensional drawing



RJ45 connector, IP20

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#### Как с нами связаться

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