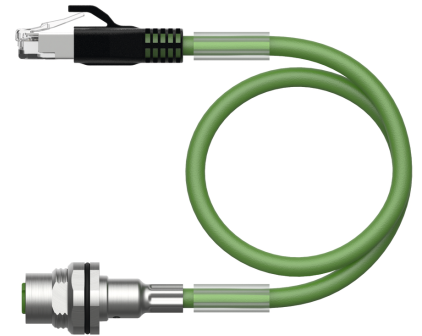
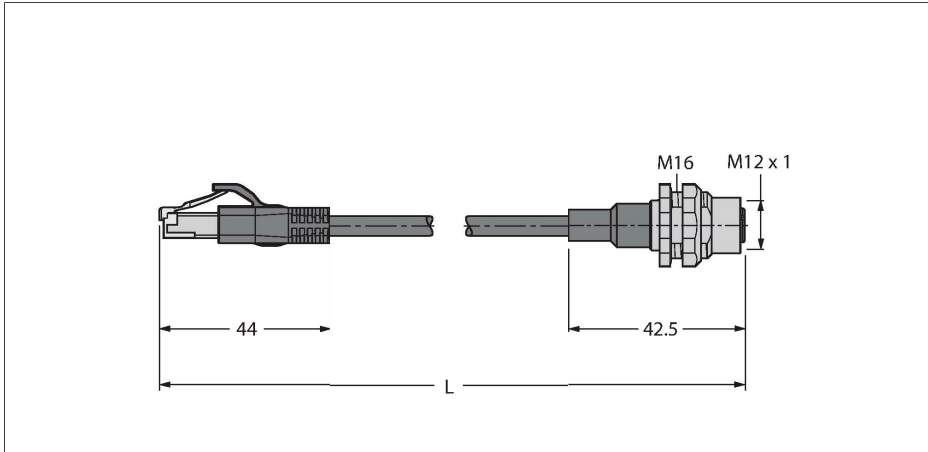


# RJ45S-FKSDD-4416-0.5M

## Industrial Ethernet/PROFINET Cable – Extension Cable



### Technical data

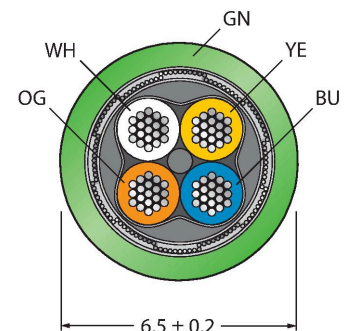
|                     |                                                         |
|---------------------|---------------------------------------------------------|
| Type                | RJ45S-FKSDD-4416-0.5M                                   |
| ID                  | 6441602                                                 |
| Connector A         | Male, RJ45, Straight                                    |
| Number of Pins      | 4                                                       |
| Contacts            | Metal, CuZn, Gold-plated                                |
| Contact carriers    | Plastic, PC                                             |
| Connector body      | Plastic, TPU, Black                                     |
| Mechanical lifespan | > 100 Mating cycles                                     |
| Pollution degree    | 3/2                                                     |
| Protection class    | IP20, Only in screwed condition                         |
| Connector B         | Female, M12 × 1, Straight, D-coded                      |
| Number of pins      | 4                                                       |
| Contacts            | Brass, CuZn, Gold-plated                                |
| Contact carriers    | Plastic, PBT GF, Green                                  |
| Connector body      | Brass, CuZn, Black                                      |
| Seal                | Plastic, FPM/FKM                                        |
| Tightening torque   | 1 ... 1.2 Nm (observe max. torque of mating connector!) |
| Mechanical life     | > 100 Mating cycles                                     |
| Pollution degree    | 3/2                                                     |
| Protection class    | IP67, Only when screwed together                        |
| Cable               |                                                         |
| Network protocol    | Ethernet                                                |
| Cable diameter      | Ø 6.5 mm ±0.20                                          |
| Cable jacket        | PUR, Green                                              |
| Shielding           | Aluminum foil, tinned copper wire                       |
| Core insulation     | PE                                                      |
| Core cross-section  | 4 x 0.32 mm²                                            |

### Features



- RJ45 male connector, straight, 4-pin
- M12 female flange, straight
- Ethernet cable: 4-pin, AWG 22
- CAT 5E
- Jacket material: PUR
- Jacket color: green
- Shielding: overlapping aluminum foil, tinned copper wire
- Jacket diameter: 6.5 mm
- Suitable for drag chain use
- Oil resistant acc. to IEC 60811-2-1 and UL13
- Halogen free acc. to IEC 60754
- Flame retardant acc. to IEC 60332-1-2 and UL2556 VW1
- Approval: UL
- RoHS compliant
- PNO compliant

### Cable Cross-Section



Technical data

|                                          |                  |
|------------------------------------------|------------------|
| Arrangement of strands                   | 7 x 0.25 mm      |
| Core colors                              | WH, YE, BU, OG   |
| Electrical properties at +20 °C          |                  |
| Rated voltage                            | 48 V             |
| Test voltage                             | 2000 V           |
| Current                                  | 3 A              |
| DC resistance (loop)                     | 120 Ω/km         |
| Nom. impedance                           | 100 Ω (1MHZ)     |
| Nom. capacitance                         | 50 pF/m          |
| Mechanical and chemical properties       |                  |
| Bending radius (stationary installation) | ≥ 5 x Ø          |
| Bending radius (flexible use)            | ≥ 8 x Ø          |
| Bending cycles                           | ≥ 3 million      |
| Torsional stress                         | ± 180 °/m        |
| Torsion cycles                           | ≤ 100,000 Cycles |
| Ambient temperature range (stationary)   | -50...+70 °C     |
| Ambient temperature range (In motion)    | -20...+60 °C     |
| Other Features                           |                  |
| Qualified for drag chain use             | yes              |
| Halogen-free                             | yes              |
| PVC-free                                 | yes              |
| UV resistance                            | yes              |
| Oil-resistant                            | yes              |
| Flame-retardant                          | yes              |
| Approvals                                | UL Listed        |

Contact assignment



Heading wiring diagram 3  
Pin Assignment Right

Circuit Diagram

