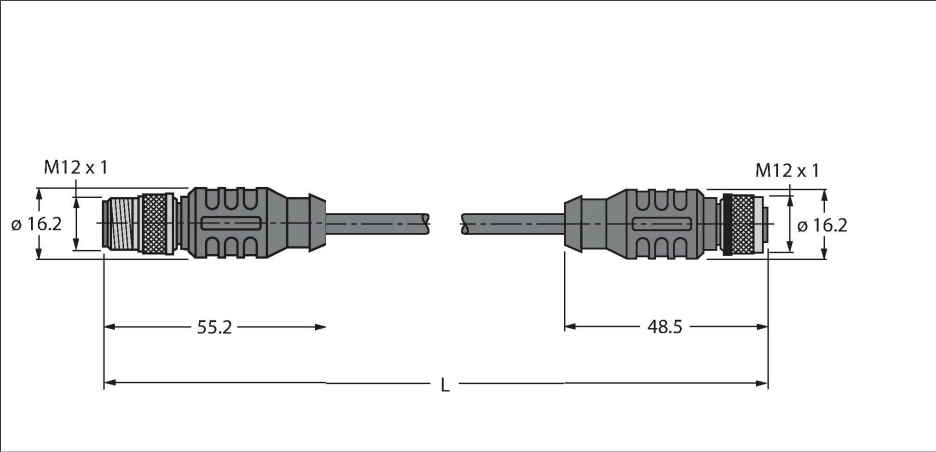


# RSS-RKS-8442-2M

## Power with Ethernet – Connection Cable



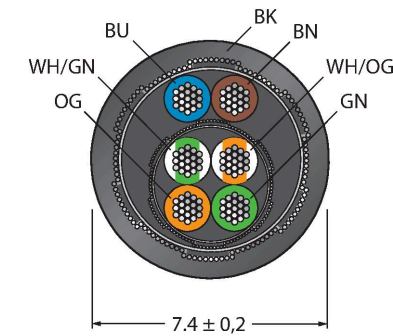
### Technical data

|                              |                                                                                                                                                      |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type                         | RSS-RKS-8442-2M                                                                                                                                      |
| ID                           | 6935097                                                                                                                                              |
| Remark to product            | Characteristic Impedance: 100 Ω (±15 %); Insulation Resistance: 5 GΩ × km; Propagation Delay @100 MHz: 4.7 ns/m; Mutual Capacitance @1 kHz: 50 nF/km |
| Connector A                  | Male, M12 × 1, Straight, A-coded                                                                                                                     |
| Number of pins               | 8                                                                                                                                                    |
| Contacts                     | Metal, CuZn, Gold-plated                                                                                                                             |
| Contact carriers             | Plastic, TPU, Black                                                                                                                                  |
| Connector body               | Plastic, TPU, Black                                                                                                                                  |
| Coupling nut/screw           | Brass, CuZn, Nickel-plated                                                                                                                           |
| Tightening torque (range)    | 0.8 ... 1 Nm (observe max. torque of mating connector!)                                                                                              |
| Mechanical lifespan          | > 100 Mating cycles                                                                                                                                  |
| Pollution degree             | 3                                                                                                                                                    |
| Protection class             | IP67, Only in screwed condition                                                                                                                      |
| Connector B                  | Female, M12 × 1, Straight, A-coded                                                                                                                   |
| Number of Pins               | 8                                                                                                                                                    |
| Contacts                     | Metal, CuZn, Gold-plated                                                                                                                             |
| Contact carriers             | Plastic, TPU, Black                                                                                                                                  |
| Connector body               | Plastic, TPU, Black                                                                                                                                  |
| Coupling nut/retaining screw | Brass, CuZn, Nickel-plated                                                                                                                           |
| Seal                         | Plastic, FPM/FKM                                                                                                                                     |
| Tightening torque            | 0.8 ... 1 Nm (observe max. torque of mating connector!)                                                                                              |
| Mechanical life              | > 100 Mating cycles                                                                                                                                  |
| Pollution degree             | 3                                                                                                                                                    |

### Features

- 
- 
- Jacket material: TPU, color: black
  - Transmission properties: CAT5e according to TIA 568B:2001
  - Power pair: 2 x 22 AWG 48 x 0.1
  - Data pair: 4 x 24 AWG 32 x 0.1
  - Shield: tinned copper braid
  - Jacket diameter: 7.4 mm
  - Suitable for drag chain use
  - Oil- and UV-resistant
  - Flame-retardant acc. to FT2 as of UL 1581
  - Free from halogen, PVC and silicone
  - Cable UL-approved acc. to AWM Style 20549
  - Cable according to EUROMAP 75 and VARAN
  - RoHS-compliant
  - Protection class IP67
  - M12 female, straight, 8-pin
  - M12 male, straight, 8-pin
  - Cable length: 2.0 m

### Cable Cross-Section



### Contact assignment



Technical data

|                                          |                                   |
|------------------------------------------|-----------------------------------|
| Protection class                         | IP67, Only when screwed together  |
| Cable                                    |                                   |
| Network protocol                         | Ethernet                          |
| Cable diameter                           | Ø 7.4 mm ±0.20                    |
| Cable length                             | 2 m                               |
| Cable jacket                             | TPU, Black                        |
| Shielding                                | Aluminum foil, tinned copper wire |
| Core insulation                          | PP                                |
| Data cable cores                         |                                   |
| Core cross-section                       | 4 x 0.2 mm <sup>2</sup>           |
| Arrangement of strands                   | 32 x 0.1 mm                       |
| Power cable cores                        |                                   |
| Core cross-section                       | 2x 0.32 mm <sup>2</sup>           |
| Litz wire arrangement                    | 48 x0.1 mm                        |
| Core colors                              | WH/OG, OG, WH/GN, GN              |
| Core colors                              | BU, BN                            |
| Electrical properties at +20 °C          |                                   |
| Rated voltage                            | 48 V                              |
| Test voltage                             | 2000 V                            |
| Current                                  | 2 A                               |
| Insulation resistance                    | > 100 MΩ/km                       |
| forward resistance                       | ≤ 5 mΩ                            |
| Mechanical and chemical properties       |                                   |
| Bending radius (stationary installation) | ≥ 5 x Ø                           |
| Bending radius (flexible use)            | ≥ 10 x Ø                          |
| Bending cycles                           | ≥ 3 million                       |
| Ambient temperature (fixed)              | -20...+80 °C                      |
| Ambient temperature (drag chain)         | 0...+50 °C                        |
| Other Featues                            |                                   |
| Qualified for drag chain use             | yes                               |
| Halogen-free                             | yes                               |
| Silicone-free                            | yes                               |
| PVC-free                                 | yes                               |
| UV resistance                            | yes                               |
| Oil-resistant                            | yes                               |
| Flame-retardant                          | yes                               |
| Approvals                                | Cable UL Style 20549              |

Circuit Diagram

