

# RKS12T-0.6-RSS12T/TXL

## Actuator and Sensor Cable, PUR – Extension Cable



### Technical data

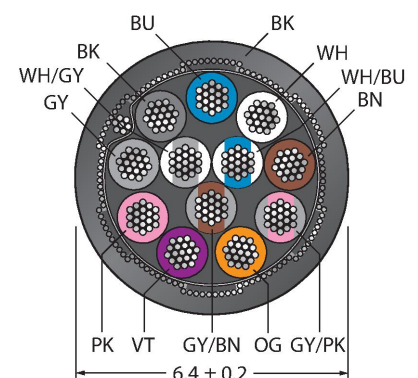
|                              |                                         |
|------------------------------|-----------------------------------------|
| Type                         | RKS12T-0.6-RSS12T/TXL                   |
| ID                           | 6626938                                 |
| Connector A                  | Female, M12 × 1, Straight, A-coded      |
| Number of Pins               | 12                                      |
| Contacts                     | Brass, CuZn, Gold-plated                |
| Contact carriers             | Plastic, TPU, Black                     |
| Connector body               | Plastic, TPU, Black                     |
| Coupling nut/screw           | Brass, CuZn, Nickel-plated              |
| Seal                         | Plastic, FPM/FKM                        |
| Mechanical lifespan          | > 100 Mating cycles                     |
| Pollution degree             | 3                                       |
| Protection class             | IP67, IP69K, Only in screwed condition  |
| Connector B                  | Male, M12 × 1, Straight, A-coded        |
| Number of pins               | 12                                      |
| Contacts                     | Brass, CuZn, Gold-plated                |
| Contact carriers             | Plastic, TPU, Black                     |
| Connector body               | Plastic, TPU, Black                     |
| Coupling nut/retaining screw | Brass, CuZn, Nickel-plated              |
| Mechanical life              | > 100 Mating cycles                     |
| Pollution degree             | 3                                       |
| Protection class             | IP67, IP69K, Only when screwed together |
| Cable                        |                                         |
| Cable diameter               | Ø 6.4 mm ±0.20                          |
| Cable length                 | 0.6 m                                   |
| Cable jacket                 | PUR, Black                              |
| Shielding                    | Aluminum foil, tinned copper wire       |
| Core insulation              | PP                                      |

### Features



- Female M12, straight, 12-pin
- Shield on coupling nut/screw
- Male M12, straight, 12-pin
- Jacket material: PUR, shielded
- Jacket color: black
- Suitable for drag chain use
- Resistant to chemicals, UV radiation and oils
- Flame retardant (FT2 acc. to UL 1581, IEC 60332-2-2)
- Resistant to welding sparks
- Free from halogen, silicone, PVC and LABS
- Particularly resistant to abrasion
- Protection class: IP67, IP69K
- Cable length: 0.6 m

### Cable Cross-Section



### Contact assignment

Technical data

|                                                 |                                                                |
|-------------------------------------------------|----------------------------------------------------------------|
| Core cross-section                              | 12 x 0.14 mm²                                                  |
| Arrangement of strands                          | 18 x 0.1 mm                                                    |
| Core colors                                     | BN, WH, BU, BK, GY, PK, VT, OG, GY/<br>PK, WH/BU, WH/GY, GY/BN |
| Electrical properties at +20 °C                 |                                                                |
| Rated voltage                                   | 30 V                                                           |
| Test voltage                                    | 2000 V                                                         |
| Current                                         | 1.5 A                                                          |
| Insulation resistance                           | > 30.5 MΩ/km                                                   |
| forward resistance                              | max. 138 Ω/km                                                  |
| Mechanical and chemical properties              |                                                                |
| Bending radius (stationary installation)        | ≥ 5 x Ø                                                        |
| Bending radius (flexible use)                   | ≥ 10 x Ø                                                       |
| Bending cycles                                  | ≥ 5 million                                                    |
| Admissible acceleration                         | max. 5 m/s²                                                    |
| Admissible travel path, horizontal              | 5 m (at 5 m/s²)                                                |
| Admissible travel path, vertical                | 2 m (at 5 m/s²)                                                |
| Admissible traversing speed                     | 3.3 m/s                                                        |
| Torsional stress                                | ± 180 °/m                                                      |
| Ambient temperature range (stationary)          | -50...+80 °C                                                   |
| Ambient temperature range (In motion)           | -25...+80 °C                                                   |
| Ambient temperature during drag chain operation | -25...+60 °C                                                   |
| Approvals                                       | cULus                                                          |

Stranded Wire Colors

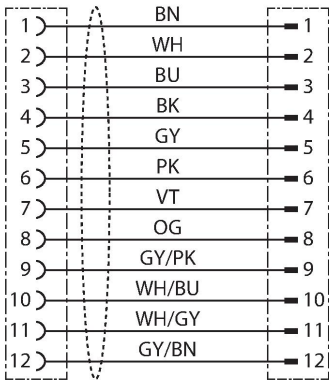
| Pin | DIN 47100 (old) | DIN EN 60947-5-2 (new) |
|-----|-----------------|------------------------|
| 1   | BN              | BN                     |
| 2   | BU              | WH                     |
| 3   | WH              | BU                     |
| 4   | GN              | BK                     |
| 5   | PK              | GY                     |
| 6   | YE              | PK                     |
| 7   | BK              | VT                     |
| 8   | GY              | OG                     |
| 9   | RD              | GY/PK                  |
| 10  | VT              | WH/BU                  |
| 11  | GY/PK           | WH/GY                  |
| 12  | RD/BU           | GY/BN                  |



Functional principle

Drawing shows design status including hexagon coupling nut (Production start CW11/2016). Wiring diagram shows contact assignment acc. to DIN EN 60947-5-2 (Production start CW16/2017).

Circuit Diagram



Accessories

|                                                                                                                       |         |                                                                                                                                         |         |
|-----------------------------------------------------------------------------------------------------------------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------|---------|
| TORQUE-WRENCH-SET-AS                                                                                                  | 6936170 | BLANK-LABEL-FOR-CORDSETS-TEL-TXL                                                                                                        | 6936206 |
| Torque wrench set; handles with adjustable torque 0.4-1.0 Nm, torque wrench for M8 (SW9), fork wrench for M12 (SW 14) |         | Label for TEL and TXL cables, length: 18 mm, height: 4 mm, material: polycarbonate (PC), color: white, halogen-free and flame-retardant |         |
|                                                                                                                       |         |                                                       |         |

Accessories

|                                                                                   |                       |           |                                                                                                                                                                            |
|-----------------------------------------------------------------------------------|-----------------------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dimension drawing                                                                 | Type                  | ID        |                                                                                                                                                                            |
|  | LABEL-HOLDER-FLEX-PVC | 100048170 | PVC label holder for identification of extension cables (TEL/TXL product series); for cable diameters: min. 5 mm; dimensions 4 × 18 mm; delivery unit: 50 pcs. per package |
|                                                                                   |                       |           |                                                                                                                                                                            |