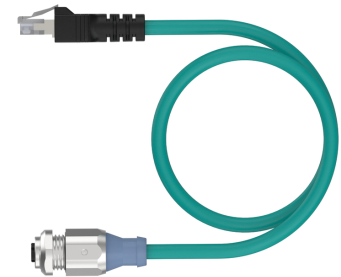
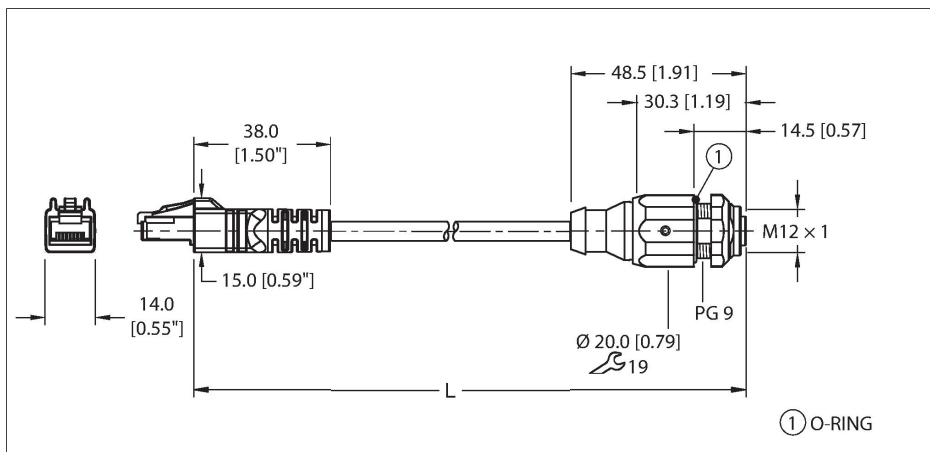


# RJ45S FKSDDED 441-2M

## Industrial Ethernet Cable – Extension Cable

### Rear Mount



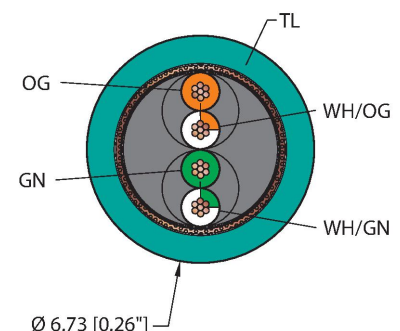
#### Technical data

|                                 |                                                           |
|---------------------------------|-----------------------------------------------------------|
| Type                            | RJ45S FKSDDED 441-2M                                      |
| ID                              | U3-00229                                                  |
| Connector A                     | Male, RJ45, Straight                                      |
| Number of contacts              | 8                                                         |
| Contacts                        | Bronze, CuSn, Gold-plated                                 |
| Contact carriers                | Plastic, PC, Transparent                                  |
| Connector body                  | Plastic, TPU, Black                                       |
| Protection class (When coupled) | IP20                                                      |
|                                 | NEMA: 1                                                   |
| Connector B                     | Female, M12 x 1, D-code                                   |
| Design specification            | Acc. to IEC 61076-2-101                                   |
| Number of contacts              | 4                                                         |
| Contacts                        | Bronze, CuSn, Gold-plated                                 |
| Contact carriers                | Plastic, Nylon or TPU, Black                              |
| Connector body                  | Plastic, TPU, Blue gray                                   |
| Seal                            | O-ring, Plastic, FKM/FPM                                  |
| Housing material/finish         | Brass, CuZn, Nickel-plated                                |
| Tightening torque               | 0.4 ... 1.8 Nm<br>(note max. torque of mating connector!) |
| Mounting type                   | Rear mount                                                |
| Panel seal                      | O-ring, Plastic, NBR                                      |
| Mounting Thread B               | PG9                                                       |
| Locknut                         | Brass, CuZn, Chrome-plated                                |

#### Features

- RJ45, Male, Straight, 8-pin, Shielded
- M12, Female, Receptacle, 4-pin
- Industrial Ethernet Cable
- fieldbus type: Ethernet CAT5E, Teal TPE jacket, shielded, 2UTPX24 AWG
- -40 Cold Bend Rating
- Flame Ratings: UL 1685, UL1061
- Flexlife® and C-Track Approved

#### Cable cross section



#### Contact assignment

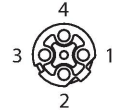
## Technical data

|                                           |                                                                                      |
|-------------------------------------------|--------------------------------------------------------------------------------------|
| Receptacle mounting torque                | 2.5...6.8 Nm                                                                         |
| Mechanical life                           | > 100 Mating cycles                                                                  |
| Pollution degree                          | 3                                                                                    |
| Protection class (When coupled)           | IP67                                                                                 |
| <b>Cable data</b>                         |                                                                                      |
| Cable ID                                  | RF51211                                                                              |
| Fieldbus                                  | Ethernet, 441                                                                        |
| Total number of conductors                | 4                                                                                    |
| Cable diameter                            | Ø 6.73 mm                                                                            |
| Length (L)                                | 2 m                                                                                  |
| Cable jacket                              | TPE, Teal                                                                            |
| Shielding                                 | Aluminum/polyester (OUT), 38 AWG, TC (Tinned Copper), 75% coverage                   |
| Conductor material                        | TC (tinned copper)                                                                   |
| Conductor colors                          | OG, WH/OG, GN, WH/GN                                                                 |
| <b>Sub assembly 1</b>                     |                                                                                      |
| Description of assembly                   | UTP (Unshielded Twisted Pair)                                                        |
| Number of pairs                           | 2                                                                                    |
| Conductor diameter                        | 0.048 "                                                                              |
| Conductor insulation material             | HDPE                                                                                 |
| Cable conductor cross-section             | 2x24 AWG [Similar to 0.25 mm²]                                                       |
| Number of strands x O.D.                  | 7x32 AWG                                                                             |
| <b>Electrical properties at +20 °C</b>    |                                                                                      |
| Rated voltage                             | 42 V                                                                                 |
| Rated voltage                             | 250 V <sub>AC</sub> /300 V <sub>DC</sub>                                             |
| Current                                   | 1.5 A                                                                                |
| <b>Mechanical and chemical properties</b> |                                                                                      |
| Bending radius (static)                   | ≥ 4 x Ø                                                                              |
| Bending radius (dynamic)                  | ≥ 10 x Ø                                                                             |
| Bending radius (C-track)                  | ≥ 4 In.                                                                              |
| Bending cycles (C-track)                  | 35 Million *                                                                         |
| Torsional stress                          | ± 270 °/m                                                                            |
| Torsion rating                            | Max. 3 million                                                                       |
| Torsional stress                          | 52 Cycles/min                                                                        |
| UL cold bend rating                       | -40 °C                                                                               |
|                                           | *When properly installed @ 20°C, 50%RH, and a cycle speed of ≤0.5 cycles per second. |
| C-Track                                   | Yes                                                                                  |

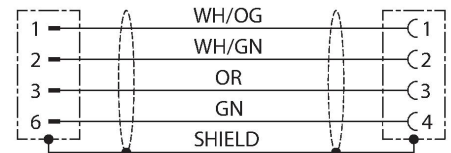
Connector A



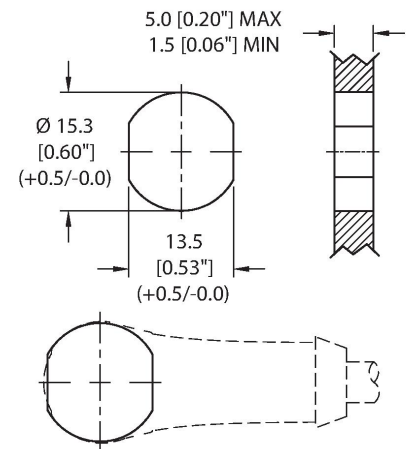
Connector B



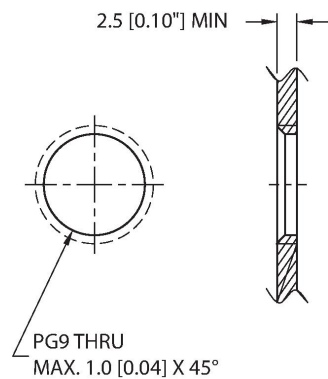
## Circuit Diagram



## Mounting hole - Through



## Mounting hole - Threaded



Technical data

|                                                                                                                                                                                      |                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| Ambient temperature range (static)                                                                                                                                                   | -40...+80 °C                    |
| Ambient temperature range (dynamic)                                                                                                                                                  | 5...+80 °C                      |
| Temperature range (installation)                                                                                                                                                     | -10...+80 °C                    |
| Approval                                                                                                                                                                             |                                 |
| Approvals                                                                                                                                                                            | UL Listed<br>CE<br>UKCA<br>RoHS |
| Note                                                                                                                                                                                 |                                 |
| - Flex ratings may be reduced if used in extreme temperatures, exposure to certain chemicals, operating above the rated cycle speed, or operating below the rated cable bend radius. |                                 |
| - We reserve the right to make technical alterations without prior notice.                                                                                                           |                                 |

Rear-mounted

