



# Product: RSTS 8X-RSTS 8X-478 ☑

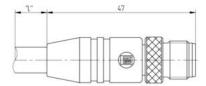
Gigabit Ethernet Cat7 Data Double-Ended Cordset: Male straight X-coded black M12 Standard to male straight X-coded black M12 Standard, shielded, 50 V AC / 60 V DC, 0.5 A; PUR black cable, 8-wires, 4x2x0.14 mm²

#### **Product Description**

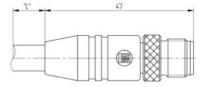
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#### **Technical Drawing**

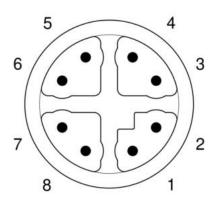




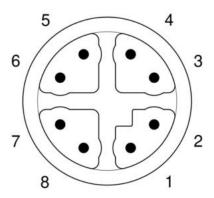




# Male



# Male



### **Technical Specifications**

#### Face View Side 1

|                         |              |       |               |       | Pin 7        | •    |
|-------------------------|--------------|-------|---------------|-------|--------------|------|
| white (orange) orange w | hite (green) | green | white (brown) | brown | white (blue) | blue |

#### Face View Side 2

| Pin 1          | Pin 2  | Pin 3         | Pin 4 | Pin 5         | Pin 6 | Pin 7        | Pin 8 |
|----------------|--------|---------------|-------|---------------|-------|--------------|-------|
| white (orange) | orange | white (green) | green | white (brown) | brown | white (blue) | blue  |

# **Product Description**

| Product Family:         | Data Connectors       |
|-------------------------|-----------------------|
| Brand:                  | Lumberg Automation    |
| Connector Type:         | Cordset, double ended |
| Shielding:              | Shielded              |
| Rated Voltage:          | 60 V                  |
| Rated Voltage (UL):     | 30 V AC / 60V DC      |
| Rated Impulse Voltage:  | 0.8 kV                |
| Operating Voltage:      | 50 V AC / 60 V DC     |
| Rated Current*:         | 0.5 A                 |
| Rated Current (UL)*:    | 0.5 A                 |
| Data Transmission:      | Gigabit Ethernet Cat7 |
| Data Transmission Rate: | 10 Gbit/s             |

#### **Technical Data Side 1**

| Product Sub Family:                  | M12 Standard                             |
|--------------------------------------|--|
| Type of Contact / Gender:            | Male                                     |
| Connector Design:                    | Straight                                 |
| Attachment Type:                     | Coupling Screw                           |
| Number of Pins:                      | 8  |
| Coding:                              | X  |
| Contact Resistance:                  | ≤ 10 mOhm                                |
| Insulation Resistance:               | > 10^9 Ohm                               |
| Mating Cycles:                       | ≤ 100                                    |
| Ambient Temperature (Operation)*:    | - 40 °C - + 80 °C                        |
| Operating Temperature (UL):          | max. + 55 °C                             |
| Protection Degree / IP Rating**:     | IP65, IP67                               |
| Design Standard:                     | IEC 61076-2-109                          |
| Pollution Degree:                    | 3 acc. to DIN EN 60664-1 (VDE 0110-1)    |
| Overvoltage Category:                | II acc. to DIN EN 60664-1 (VDE 0110-1)   |
| Contact Base Material:               | CuZn                                     |
| Contact Plating:                     | Cu/Au                                    |
| Contact Bearer Material:             | PA                                       |
| Contact Bearer Color:                | Black                                    |
| Flammability Class (Contact Bearer): | UL 94 V-0                                |
| Molded Body Material:                | PA                                       |
| Molded Body Color:                   | Black                                    |
| Flammability Class (Molded Body):    | UL 94 V-0                                |
| Attachment Material:                 | CuZn                                     |
| Attachment Plating:                  | Nickel-plated                            |
| Shielding Material:                  | GD-Zn, nickel-plated                     |
| Fastening Torque (Attachment):       | M 12x1: (50-60) Ncm, hand-tight          |
| Note:                                | Do not connect or disconnect under load. |

# **Cable Data**

| Cable Number:                           | 478                      |
|---|--------------------------|
| Conductor Size:                         | 4x2x0.14 mm <sup>2</sup> |
| Number of Wires:                        | 8                        |
| Minimal Bending Radius (Fixed Inst):    | > 30 mm                  |
| Minimal Bending Radius (Flexible Inst): | > 65 mm                  |
| Cycles (Bending):                       | > 0.2 M                  |
| Conductor material:                     | Cu                       |
| Cable Jacket Material:                  | PUR                      |
| Cable Jacket Color:                     | black                    |
| Cable Diameter D:                       | ø 6.8 ± 0.3 mm           |
| Wire Insulation Material:               | PE                       |

| Insulated Wire Diameter:                  | ø 1.05 ± 0.05 mm  |
|---|---|
| Overall Shield (Cable):                   | Cu-ETP1 tinned  |
| Foil shield:                              | Al-PT Foil  |
| Ambient Temperature (Fixed Installation): | - 40 °C - + 80 °C   |
| Ambient Temperature (Flex Installation):  | 0 °C - +50 °C   |
| UL Cable Type:                            | AWM: 21327  |
| Core Colors:                              | Twisted pairs: white & blue, white & orange, white & green, white & brown |

# **Technical Data Side 2**

| Product Sub Family, Side 2:                  | M12 Standard                           |
|--|--|
| Type of Contact / Gender, Side 2:            | Male                                   |
| Connector Design, Side 2:                    | Straight                               |
| Attachment Type, Side 2:                     | Coupling Screw                         |
| Number of Pins, Side 2:                      | 8                                      |
| Coding, Side 2:                              | X                                      |
| Contact Resistance, Side 2:                  | ≤ 10 mOhm                              |
| Insulation Resistance, Side 2:               | > 10^9 Ohm                             |
| Mating Cycles, Side 2:                       | ≤ 100                                  |
| Ambient Temperature (Operation), Side 2*:    | - 40 °C - + 80 °C                      |
| Operating Temperature (UL), Side 2:          | max. + 55 °C                           |
| Protection Degree / IP Rating, Side 2**:     | IP65, IP67                             |
| Design Standard, Side 2:                     | IEC 61076-2-109                        |
| Pollution Degree, Side 2:                    | 3 acc. to DIN EN 60664-1 (VDE 0110-1)  |
| Overvoltage Category, Side 2:                | II acc. to DIN EN 60664-1 (VDE 0110-1) |
| Contact Base Material, Side 2:               | CuZn                                   |
| Contact Plating, Side 2:                     | Cu/Au                                  |
| Contact Bearer Material, Side 2:             | PA                                     |
| Contact Bearer Color, Side 2:                | Black                                  |
| Flammability Class (Contact Bearer), Side 2: | UL 94 V-0                              |
| Molded Body Material, Side 2:                | PA                                     |
| Molded Body Color, Side 2:                   | Black                                  |
| Flammability Class (Molded Body), Side 2:    | UL 94 V-0                              |
| Attachment Material, Side 2:                 | CuZn                                   |
| Attachment Plating, Side 2:                  | Nickel-plated                          |
| Shielding Material, Side 2:                  | GD-Zn, nickel-plated                   |
| Fastening Torque (Attachment), Side 2:       | M 12x1: (50-60) Ncm, hand-tight        |

# **Approvals**

| UL-File: | E469096        |
|----------|----------------|
| UL:      | UL 1863; cULus |

# Safety & Environmental Compliance

| RoHS Compliant: | yes |  |
|-----------------|-----|--|

# Resistances

| Halogenfree:    | IEC 60754-2   |
|-----------------|---------------|
| Oil Resistance: | IEC 60811-2-1 |

#### **Notes**

| Protection Degree / IP Rating Note: | ** only if mounted and locked in combination with Hirschmann / Lumberg Automation connector. |
|-------------------------------------|--|
| Note Derating:                      | Notice derating  |

#### History

| Update and Revision: | Revision Number: 0.57 Revision Date: 02-03-2025 |
|----------------------|---|

#### Variants

|  | Item # | Item Description          | Cable Length |
|--|--------|---------------------------|--------------|
|  | 15471  | RSTS 8X-RSTS 8X-478/0,5 M | 0.5 m        |

| 12381     | RSTS 8X-RSTS 8X-478/1 M  | 1 m  |
|-----------|--------------------------|------|
| 934809005 | RSTS 8X-RSTS 8X-478/2 M  | 2 m  |
| 934809006 | RSTS 8X-RSTS 8X-478/5 M  | 5 m  |
| 934809007 | RSTS 8X-RSTS 8X-478/10 M | 10 m |
| 934809008 | RSTS 8X-RSTS 8X-478/15 M | 15 m |
| 15477     | RSTS 8X-RSTS 8X-478/20 M | 20 m |
| 15478     | RSTS 8X-RSTS 8X-478/30 M | 30 m |
| 13831     | RSTS 8X-RSTS 8X-478/40 M | 40 m |
| 21136     | RSTS 8X-RSTS 8X-478/45 M | 45 m |
| 21137     | RSTS 8X-RSTS 8X-478/50 M | 50 m |
| 21139     | RSTS 8X-RSTS 8X-478/60 M | 60 m |
| 21140     | RSTS 8X-RSTS 8X-478/70 M | 70 m |
| 21152     | RSTS 8X-RSTS 8X-478/80 M | 80 m |

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