



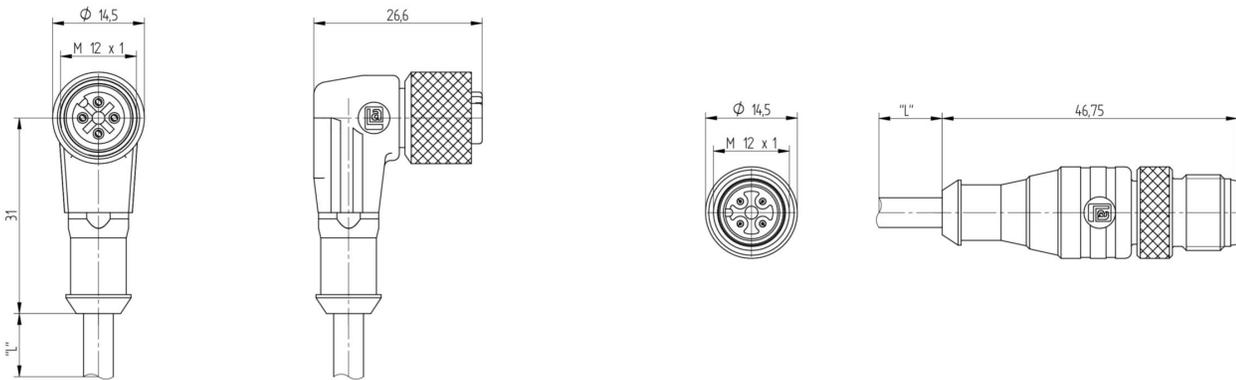
Product: [RST 4-RKWT 4-646](#)

Sensor / Actuator Connectors: Cordset, double ended, M12 Standard, Straight Male, 4-pole to a, M12 Standard, Angled Female, 4-pole; with Grey PVC 22 AWG cable

Product Description

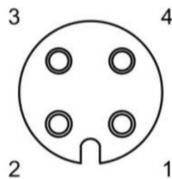
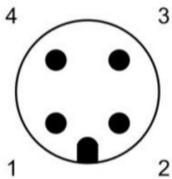
Sensor / Actuator Connectors: Cordset, double ended, M12 Standard, Straight Male, 4-pole to a, M12 Standard, Angled Female, 4-pole, 250 V | 4 A; with Grey PVC 22 AWG cable

Technical Drawing



Face View
M12 Male

Face View
M12 Female



Color Code
1 = BN
2 = WH
3 = BU
4 = BK

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Technical Specifications

[Product Description](#)

| | |
|------------------------|------------------------------|
| Product Family: | Sensor / Actuator Connectors |
| Brand: | Lumberg Automation |
| Connector Type: | Cordset, double ended |
| Shielding: | Unshielded |
| Rated Voltage: | 250 V |
| Rated Impulse Voltage: | 2.5 kV |
| Operating Voltage: | 230 V AC/DC |
| Rated Current*: | 4 A |

Technical Data Side 1

| | |
|--------------------------------------|--|
| Product Sub Family: | M12 Standard |
| Type of Contact / Gender: | Male |
| Connector Design: | Straight |
| Attachment Type: | Coupling Screw |
| Number of Pins: | 4 |
| Coding: | A |
| Contact Resistance: | ≤ 10 mOhm |
| Insulation Resistance: | > 10 ⁹ Ohm |
| Mating Cycles: | ≤ 100 |
| Ambient Temperature (Operation)*: | - 40 °C - + 90 °C |
| Protection Degree / IP Rating**: | IP65, IP67 |
| Design Standard: | IEC 61076-2-101 |
| 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: | CuSn |
| Contact Plating: | Cu/Au |
| Contact Bearer Material: | TPU |
| Contact Bearer Color: | Orange |
| Flammability Class (Contact Bearer): | UL 94 HB |
| Molded Body Material: | TPU |
| Molded Body Color: | Grey Translucent |
| Flammability Class (Molded Body): | UL 94 HB |
| Attachment Material: | CuZn, Nickel-plated, External thread |
| Fastening Torque (Attachment): | M 12x1: (50-60) Ncm, hand-tight |

Cable Data

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| Cable Number: | 646 |
| Conductor Size: | 22 AWG |
| Number of Wires: | 4 |
| Minimal Bending Radius (Fixed Inst): | > 7 x D |
| Minimal Bending Radius (Flexible Inst): | > 10 x D |
| Cycles (Bending): | > 1 M |
| Conductor material: | Cu [Bare Copper] |
| Cable Jacket Material: | PVC |
| Cable Jacket Color: | Grey |
| Cable Diameter D: | Ø 5.10 mm |
| Wire Insulation Material: | PVC-SR |
| Insulated Wire Diameter: | Ø 1.25 mm |
| Ambient Temperature (Fixed Installation): | - 40 to 105°C |
| Ambient Temperature (Flex Installation): | - 15 to 105°C |
| Ambient Temperature (Drag Chain Inst): | - 15 to 105°C |
| UL Cable Type: | AWM 2661, C(RU) AWM I/II A/B |
| Flammability Class (Cable Jacket): | UL VW-1, FT1 |
| Cable Characteristics: | Mechanical Resistances, Abrasion, Impact, Weathering; Chemical Resistances to Oils, Acids, Alkalis |

Technical Data Side 2

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|-----------------------------|--------------|
| Product Sub Family, Side 2: | M12 Standard |
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|--|--|
| Type of Contact / Gender, Side 2: | Female |
| Connector Design, Side 2: | Angled |
| Attachment Type, Side 2: | Coupling Thread |
| Number of Pins, Side 2: | 4 |
| Coding, Side 2: | A |
| 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 - + 90 °C |
| Protection Degree / IP Rating, Side 2**: | IP65, IP67 |
| Design Standard, Side 2: | IEC 61076-2-101 |
| 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: | CuSn |
| Contact Plating, Side 2: | Cu/Au |
| Contact Bearer Material, Side 2: | TPU |
| Contact Bearer Color, Side 2: | Orange |
| Flammability Class (Contact Bearer), Side 2: | UL 94 HB |
| Molded Body Material, Side 2: | TPU |
| Molded Body Color, Side 2: | Grey Transluscent |
| Flammability Class (Molded Body), Side 2: | UL 94 HB |
| Attachment Material, Side 2: | CuZn, Nickel-plated, Internal thread |
| O-Ring Material, Side 2: | FKM, green or black |
| Fastening Torque (Attachment), Side 2: | M 12x1: (50-60) Ncm, hand-tight |
| Note, Side 2: | Do not connect or disconnect under load. |

Approvals

| | |
|----------|---------|
| UL-File: | E315587 |
| UL: | Yes |
| VDE: | Yes |

Safety & Environmental Compliance

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|-----------------|-----|
| RoHS Compliant: | Yes |
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Resistances

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| Oil Resistance: | Good chemical and oil resistance |
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Notes

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| Protection Degree / IP Rating Note: | Protection Degree and IP Rating per test standard IEC 60529 using a Lumberg Automation mating product |
| Note Derating: | Notice derating |

Variants

| Item # | Item Description | Cable Length |
|-----------|-----------------------|--------------|
| 600006270 | RST 4-RKWT 4-646/0.3M | 0.3 m |
| 600006271 | RST 4-RKWT 4-646/0.5M | 0.5 m |
| 600006272 | RST 4-RKWT 4-646/0.6M | 0.6 m |
| 600006273 | RST 4-RKWT 4-646/1M | 1 m |
| 600006274 | RST 4-RKWT 4-646/1.5M | 1.5 m |
| 600006275 | RST 4-RKWT 4-646/2M | 2 m |
| 600006276 | RST 4-RKWT 4-646/5M | 5 m |
| 600006277 | RST 4-RKWT 4-646/10M | 10 m |
| 600006536 | RST 4-RKWT 4-646/6M | 6 m |
| 600006824 | RST 4-RKWT 4-646/3M | 3 m |
| 600006826 | RST 4-RKWT 4-646/8M | 8 m |
| 600007019 | RST 4-RKWT 4-646/15M | 15 m |
| 600007020 | RST 4-RKWT 4-646/30M | 30 m |

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