



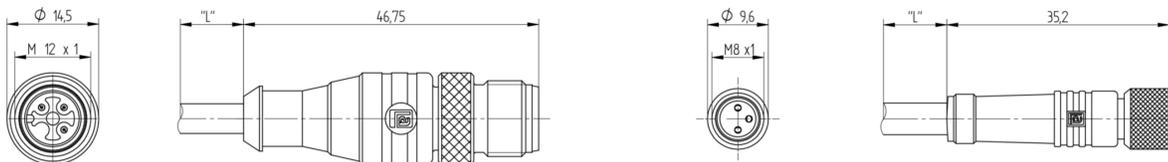
**Product:** [RST 3-RKMV 3-224](#)

Sensor/Actuator Double-Ended Cordset: Male straight A-coded translucent 3-pin M12 Standard connector to female straight A-coded translucent 3-pin M8 Standard connector, 50 V AC / 60 V DC, 4 A; PUR black cable, 3-wires, 0.34 mm<sup>2</sup>

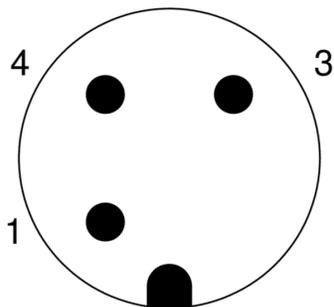
### Product Description

Sensor/Actuator Double-Ended Cordset: Male straight A-coded translucent 3-pin M12 Standard connector to female straight A-coded translucent 3-pin M8 Standard connector, 50 V AC / 60 V DC, 4 A; PUR black cable, 3-wires, 0.34 mm<sup>2</sup>

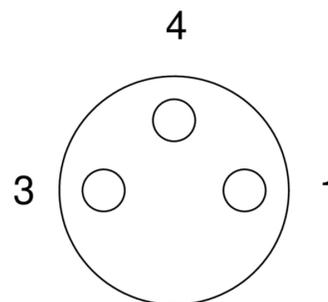
### Technical Drawing



Male



Female



### Technical Specifications

Face View Side 1

| Pin 1 | Pin 3 | Pin 4 |
|-------|-------|-------|
| brown | blue  | black |

Face View Side 2

| Pin 1 | Pin 3 | Pin 4 |
|-------|-------|-------|
| brown | blue  | black |

## Product Description

|                        |                              |
|------------------------|------------------------------|
| Product Family:        | Sensor / Actuator Connectors |
| Brand:                 | Lumberg Automation           |
| Connector Type:        | Cordset, double ended        |
| Shielding:             | Unshielded                   |
| Rated Voltage:         | 60 V                         |
| Rated Voltage (UL):    | 30 V AC/DC                   |
| Rated Impulse Voltage: | 1.5 kV                       |
| Operating Voltage:     | 50 V AC / 60 V DC            |
| Rated Current*:        | 4 A                          |
| Rated Current (UL)*:   | 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:                      | 3  |
| Coding:                              | A  |
| Contact Resistance:                  | ≤ 10 mOhm                                |
| Insulation Resistance:               | > 10 <sup>9</sup> Ohm                    |
| Mating Cycles:                       | ≤ 100                                    |
| Ambient Temperature (Operation)*:    | - 40 °C - + 90 °C                        |
| Operating Temperature (UL):          | max. + 50 °C                             |
| Protection Degree / IP Rating**:     | IP65, IP67, IP68 (1 m / 24 h), IP69K     |
| Design Standard:                     | IEC 61076-2-101                          |
| Pollution Degree:                    | 3 acc. to DIN EN 60664-1 (VDE 0110-1)    |
| Overvoltage Category:                | III acc. to DIN EN 60664-1 (VDE 0110-1)  |
| Contact Base Material:               | CuZn                                     |
| Contact Plating:                     | Cu/Au                                    |
| Contact Bearer Material:             | TPU-GF                                   |
| Contact Bearer Color:                | Orange                                   |
| Flammability Class (Contact Bearer): | UL 94 HB                                 |
| Molded Body Material:                | TPU                                      |
| Molded Body Color:                   | Translucent                              |
| Flammability Class (Molded Body):    | UL 94 HB                                 |
| Attachment Material:                 | CuZn                                     |
| Attachment Plating:                  | Nickel-plated                            |
| Fastening Torque (Attachment):       | M 12x1: (50-60) Ncm, hand-tight          |
| Note:                                | Do not connect or disconnect under load. |

## Cable Data

|   |                               |
|---|-------------------------------|
| Cable Number:                             | 224                           |
| Conductor Size:                           | 0.34 mm <sup>2</sup>          |
| Number of Wires:                          | 3                             |
| Minimal Bending Radius (Fixed Inst):      | > 5 x D                       |
| Minimal Bending Radius (Flexible Inst):   | > 10 x D                      |
| Cycles (Bending):                         | > 5 M                         |
| Cycles (Torsion):                         | > 5 M @ ± 360 °/1 m           |
| Conductor material:                       | Cu                            |
| Cable Jacket Material:                    | PUR                           |
| Cable Jacket Color:                       | black matt similarly RAL 9005 |
| Cable Diameter D:                         | ø 4.30 ± 0.20 mm              |
| Wire Insulation Material:                 | PP                            |
| Insulated Wire Diameter:                  | ø 1.30 ± 0.10 mm              |
| Ambient Temperature (Fixed Installation): | - 50 °C - + 80 °C             |

|  |  |
|--|--|
| Ambient Temperature (Flex Installation): | - 25 °C - + 80 °C  |
| Ambient Temperature (Drag Chain Inst):   | - 25 °C - + 60 °C  |
| UL Cable Type:                           | AWM: 20549   |
| Flammability Class (Cable Jacket):       | DIN EN 50265-2-2, VDE 0482-265-2-2, IEC 60332-2-2, CSA FT2   |
| Cable Characteristics:                   | Good microbes and hydrolysis resistance; Mainly plasticizer diffusion free; Exclusion of PVC and silicone; Free of lacquer wetting disturbing substances; Coldness flexibility |

## Technical Data Side 2

|  |   |
|--|---|
| Product Sub Family, Side 2:                  | M8 Standard                             |
| Type of Contact / Gender, Side 2:            | Female                                  |
| Connector Design, Side 2:                    | Straight                                |
| Attachment Type, Side 2:                     | Coupling Nut                            |
| Number of Pins, Side 2:                      | 3                                       |
| Coding, Side 2:                              | A                                       |
| Contact Resistance, Side 2:                  | ≤ 10 mOhm                               |
| Insulation Resistance, Side 2:               | > 10 <sup>9</sup> Ohm                   |
| Mating Cycles, Side 2:                       | ≤ 100                                   |
| Ambient Temperature (Operation), Side 2*:    | - 40 °C - + 90 °C                       |
| Operating Temperature (UL), Side 2:          | max. + 50 °C                            |
| Protection Degree / IP Rating, Side 2**:     | IP65, IP67, IP69K                       |
| Design Standard, Side 2:                     | IEC 61076-2-104                         |
| Pollution Degree, Side 2:                    | 3 acc. to DIN EN 60664-1 (VDE 0110-1)   |
| Overvoltage Category, Side 2:                | III 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:                   | Translucent                             |
| Flammability Class (Molded Body), Side 2:    | UL 94 HB                                |
| Attachment Material, Side 2:                 | CuZn                                    |
| Attachment Plating, Side 2:                  | Nickel-plated                           |
| O-Ring Material, Side 2:                     | FKM, green                              |
| Fastening Torque (Attachment), Side 2:       | M 8x1: 30 Ncm, hand-tight               |

## Approvals

|          |                |
|----------|----------------|
| UL-File: | E315587        |
| UL:      | UL 2238; cURus |

## Safety & Environmental Compliance

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

## Resistances

|                 |   |
|-----------------|---|
| Halogenfree:    | DIN EN 50267-2-1, IEC 60754-1, VDE 0482-267-2-1 |
| Oil Resistance: | Good chemical and oil resistance                |

## Notes

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

## Variants

| Item # | Item Description       | Cable Length |
|--------|------------------------|--------------|
| 28536  | RST 3-RKMV 3-224/0,3 M | 0.3 m        |
| 40190  | RST 3-RKMV 3-224/0,6 M | 0.6 m        |
| 17081  | RST 3-RKMV 3-224/1 M   | 1 m          |
| 38689  | RST 3-RKMV 3-224/1,5 M | 1.5 m        |
| 17082  | RST 3-RKMV 3-224/2 M   | 2 m          |

|       |                        |       |
|-------|------------------------|-------|
| 38690 | RST 3-RKMV 3-224/3 M   | 3 m   |
| 43712 | RST 3-RKMV 3-224/3,5 M | 3.5 m |
| 44195 | RST 3-RKMV 3-224/4 M   | 4 m   |
| 29616 | RST 3-RKMV 3-224/5 M   | 5 m   |
| 44393 | RST 3-RKMV 3-224/6 M   | 6 m   |
| 45679 | RST 3-RKMV 3-224/7 M   | 7 m   |
| 20186 | RST 3-RKMV 3-224/7,5 M | 7.5 m |
| 29617 | RST 3-RKMV 3-224/10 M  | 10 m  |
| 92983 | RST 3-RKMV 3-224/15 M  | 15 m  |
| 3711  | RST 3-RKMV 3-224/20 M  | 20 m  |

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