



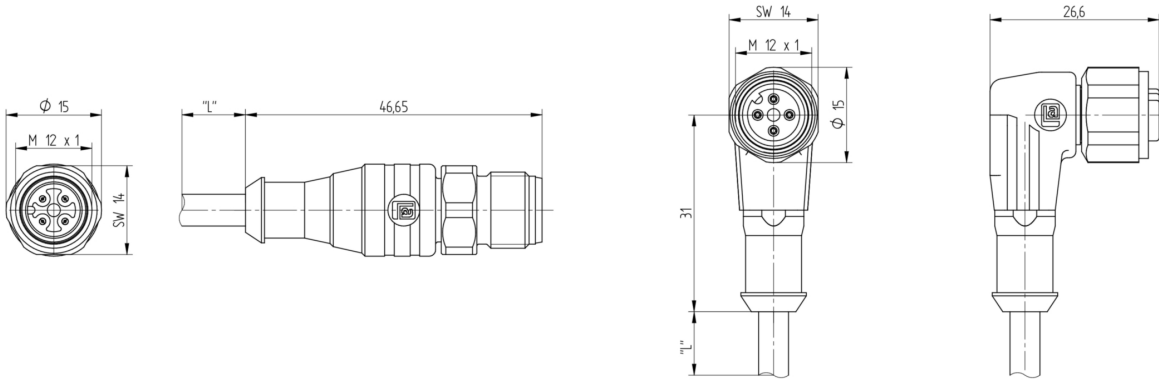
**Product:** [WRST 4-WRKWT 4-521](#)

Sensor/Actuator Double-Ended Cordset: Male straight A-coded white 4-pin M12 F&B (Wash-Down) connector to female angled A-coded white 4-pin M12 F&B (Wash-Down) connector, 230 V AC/DC, 4 A; TPE orange cable, 4-wires, 0.25 mm<sup>2</sup>

**Product Description**

Sensor/Actuator Double-Ended Cordset: Male straight A-coded white 4-pin M12 F&B (Wash-Down) connector to female angled A-coded white 4-pin M12 F&B (Wash-Down) connector, 230 V AC/DC, 4 A; TPE orange cable, 4-wires, 0.25 mm<sup>2</sup>

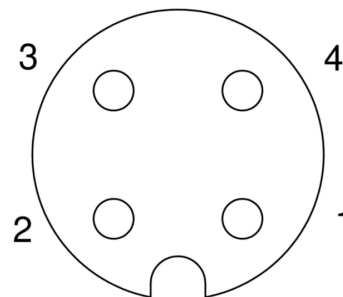
**Technical Drawing**



**Male**



**Female**



**Technical Specifications**

Face View Side 1

| Pin 1 | Pin 2 | Pin 3 | Pin 4 |
|-------|-------|-------|-------|
| brown | white | blue  | black |

Face View Side 2

| Pin 1 | Pin 2 | Pin 3 | Pin 4 |
|-------|-------|-------|-------|
| brown | white | blue  | black |

## Product Description

|                        |                              |
|------------------------|------------------------------|
| Product Family:        | Sensor / Actuator Connectors |
| Brand:                 | Lumberg Automation           |
| Connector Type:        | Cordset, double ended        |
| Shielding:             | Unshielded                   |
| Rated Voltage:         | 250 V                        |
| Rated Voltage (UL):    | 30 V AC/DC                   |
| Rated Impulse Voltage: | 2.5 kV                       |
| Operating Voltage:     | 230 V AC/DC                  |
| Rated Current*:        | 4 A                          |
| Rated Current (UL)*:   | 4 A                          |

## Technical Data Side 1

|                                      |  |
|--------------------------------------|--|
| Product Sub Family:                  | M12 F&B (Wash-Down)                      |
| 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 <sup>9</sup> Ohm                    |
| Mating Cycles:                       | ≤ 100                                    |
| Ambient Temperature (Operation)*:    | - 40 °C - + 105 °C                       |
| Operating Temperature (UL):          | max. + 65 °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:                | II acc. to DIN EN 60664-1 (VDE 0110-1)   |
| Contact Base Material:               | CuSn                                     |
| Contact Plating:                     | Cu/Au                                    |
| Contact Bearer Material:             | PP-GF                                    |
| Contact Bearer Color:                | White                                    |
| Flammability Class (Contact Bearer): | UL 94 HB                                 |
| Molded Body Material:                | PP-GF                                    |
| Molded Body Color:                   | White                                    |
| Flammability Class (Molded Body):    | UL 94 HB                                 |
| Attachment Material:                 | Stainless Steel                          |
| Fastening Torque (Attachment):       | M 12x1: (50-60) Ncm, hand-tight          |
| Note:                                | Do not connect or disconnect under load. |

## Cable Data

|   |                                 |
|---|---------------------------------|
| Cable Number:                             | 521                             |
| Conductor Size:                           | 0.25 mm <sup>2</sup>            |
| Number of Wires:                          | 4                               |
| Minimal Bending Radius (Fixed Inst):      | > 5 x D                         |
| Minimal Bending Radius (Flexible Inst):   | > 10 x D                        |
| Cycles (Bending):                         | > 2 M                           |
| Conductor material:                       | Cu                              |
| Cable Jacket Material:                    | TPE-V-compound, flame retardent |
| Cable Jacket Color:                       | orange                          |
| Cable Diameter D:                         | ø 4.7 ± 0.20 mm                 |
| Wire Insulation Material:                 | PP                              |
| Insulated Wire Diameter:                  | ø 1.25 mm                       |
| Ambient Temperature (Fixed Installation): | - 40 °C - + 90 °C               |
| Ambient Temperature (Flex Installation):  | - 25 °C - + 90 °C               |
| Ambient Temperature (Drag Chain Inst):    | - 25 °C - + 60 °C               |

|                                    |  |
|------------------------------------|--|
| UL Cable Type:                     | AWM: 21484   |
| Flammability Class (Cable Jacket): | UL horizontal flame test, flame-retardant  |
| Cable Characteristics:             | Free of silicone; Free of FCKW; Free of cadmium and lead; Microbe and hydrolysis resistant |

## Technical Data Side 2

|  |  |
|--|--|
| Product Sub Family, Side 2:                  | M12 F&B (Wash-Down)                    |
| Type of Contact / Gender, Side 2:            | Female                                 |
| Connector Design, Side 2:                    | Angled                                 |
| Attachment Type, Side 2:                     | Coupling Nut                           |
| Number of Pins, Side 2:                      | 4                                      |
| 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 - + 105 °C                     |
| Operating Temperature (UL), Side 2:          | max. + 65 °C                           |
| Protection Degree / IP Rating, Side 2**:     | IP65, IP67, IP68 (1 m / 24 h), IP69K   |
| 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:             | PP-GF                                  |
| Contact Bearer Color, Side 2:                | White                                  |
| Flammability Class (Contact Bearer), Side 2: | UL 94 HB                               |
| Molded Body Material, Side 2:                | PP-GF                                  |
| Molded Body Color, Side 2:                   | White                                  |
| Flammability Class (Molded Body), Side 2:    | UL 94 HB                               |
| Attachment Material, Side 2:                 | Stainless Steel                        |
| O-Ring Material, Side 2:                     | EPDM, black                            |
| Fastening Torque (Attachment), Side 2:       | M 12x1: (50-60) Ncm, hand-tight        |

## Approvals

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

## Safety & Environmental Compliance

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

## Resistances

|                 |                                  |
|-----------------|----------------------------------|
| ECOLAB:         | Yes                              |
| 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 |
|-----------|--------------------------|--------------|
| 934737019 | WRST 4-WRKWT 4-521/0,6 M | 0.6 m        |
| 934737020 | WRST 4-WRKWT 4-521/1 M   | 1 m          |
| 934737021 | WRST 4-WRKWT 4-521/2 M   | 2 m          |
| 934737022 | WRST 4-WRKWT 4-521/5 M   | 5 m          |
| 934737023 | WRST 4-WRKWT 4-521/10 M  | 10 m         |
| 934737024 | WRST 4-WRKWT 4-521/15 M  | 15 m         |

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