



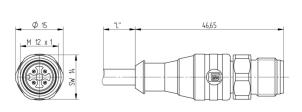
# Product: WRST 4-WRKWT/LED P 4-521 ☑

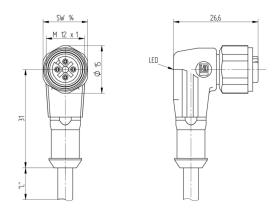
Sensor/Actuator Double-Ended Cordset: Male straight A-coded white 4-pin M12 F&B (Wash-Down) connector to female angled A-coded transparent 4-pin M12 F&B (Wash-Down) connector with 3xLEDs (PNP), 10-30 V DC, 4 A; TPE orange cable, 4-wires, 0.25 mm<sup>2</sup>

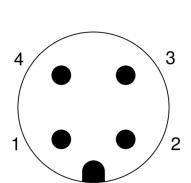
## **Product Description**

Sensor/Actuator Double-Ended Cordset: Male straight A-coded white 4-pin M12 F&B (Wash-Down) connector to female angled A-coded transparent 4-pin M12 F&B (Wash-Down) connector with 3xLEDs (PNP), 10-30 V DC, 4 A; TPE orange cable, 4-wires, 0.25 mm²

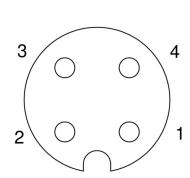
## **Technical Drawing**



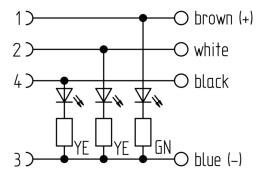




Male

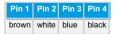


Female



# **Technical Specifications**

### Face View Side 1



### Face View Side 2



## **Product Description**

| Product Family:        | Sensor / Actuator Connectors |
|------------------------|------------------------------|
| Brand:                 | Lumberg Automation           |
| Connector Type:        | Cordset, double ended        |
| Shielding:             | Unshielded                   |
| Rated Voltage:         | 30 V                         |
| Rated Voltage (UL):    | 30 V AC/DC                   |
| Rated Impulse Voltage: | 0.8 kV                       |
| Operating Voltage:     | 10-30 V 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:               | > 10^9 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:                | III 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 offcadmium 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:               | > 10^9 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:                | 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:             | 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:                   | Transparent                             |
| Flammability Class (Molded Body), Side 2:    | UL 94 HB                                |
| Attachment Material, Side 2:                 | Stainless Steel                         |
| O-Ring Material, Side 2:                     | EPDM, black                             |
| Function Indicator, Side 2:                  | 3xLEDs (PNP)                            |
| 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 |
|-----------|--------------------------------|--------------|
| 934753037 | WRST 4-WRKWT/LED P 4-521/0,6 M | 0.6 m        |
| 934753038 | WRST 4-WRKWT/LED P 4-521/1 M   | 1 m          |
| 934753039 | WRST 4-WRKWT/LED P 4-521/2 M   | 2 m          |
| 934753040 | WRST 4-WRKWT/LED P 4-521/5 M   | 5 m          |
| 934753041 | WRST 4-WRKWT/LED P 4-521/10 M  | 10 m         |
| 934753042 | WRST 4-WRKWT/LED P 4-521/15 M  | 15 m         |

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