



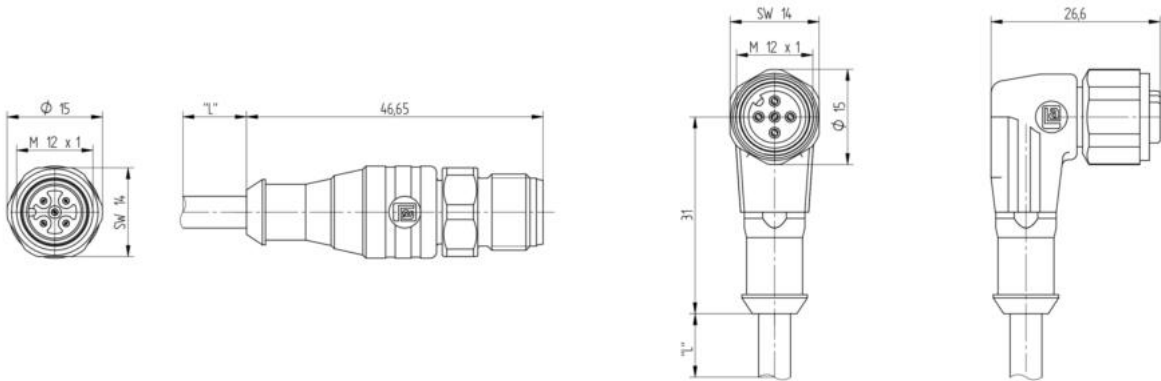
**Product:** [WRST 5-WRKWT 5-522](#) 

Sensor/Actuator Double-Ended Cordset: Male straight A-coded white 5-pin M12 F&B (Wash-Down) connector to female angled A-coded white 5-pin M12 F&B (Wash-Down) connector, 50 V AC / 60 V DC, 4 A; TPE orange cable, 5-wires, 0.25 mm<sup>2</sup>

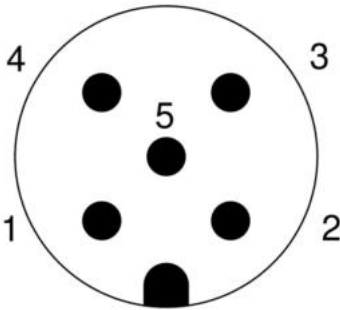
**Product Description**

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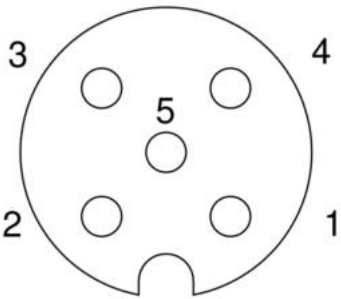
**Technical Drawing**



Male



Female



**Technical Specifications**

Face View Side 1

| Pin 1 | Pin 2 | Pin 3 | Pin 4 | Pin 5 |
|-------|-------|-------|-------|-------|
| brown | white | blue  | black | grey  |

Face View Side 2

| Pin 1 | Pin 2 | Pin 3 | Pin 4 | Pin 5 |
|-------|-------|-------|-------|-------|
| brown | white | blue  | black | grey  |

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 F&B (Wash-Down)                      |
| Type of Contact / Gender:            | Male                                     |
| Connector Design:                    | Straight                                 |
| Attachment Type:                     | Coupling Screw                           |
| Number of Pins:                      | 5                                        |
| 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:                             | 522                             |
| Conductor Size:                           | 0.25 mm²                        |
| Number of Wires:                          | 5                               |
| 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 5.0 ± 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:                      | 5                                       |
| 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:                | 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:                   | 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 |
|--------|--------------------------|--------------|
| 4155   | WRST 5-WRKWT 5-522/0,6 M | 0.6 m        |
| 4156   | WRST 5-WRKWT 5-522/1 M   | 1 m          |
| 4157   | WRST 5-WRKWT 5-522/2 M   | 2 m          |
| 4158   | WRST 5-WRKWT 5-522/5 M   | 5 m          |

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