



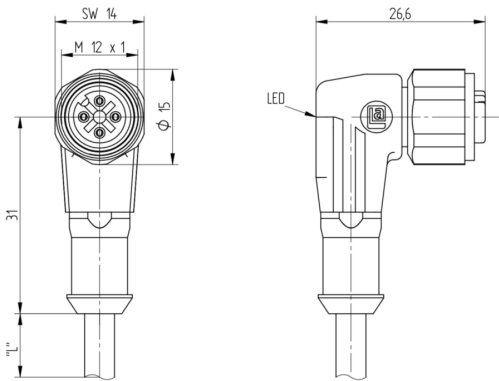
**Product:** [WRKWT/LED P 4-521](#)

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

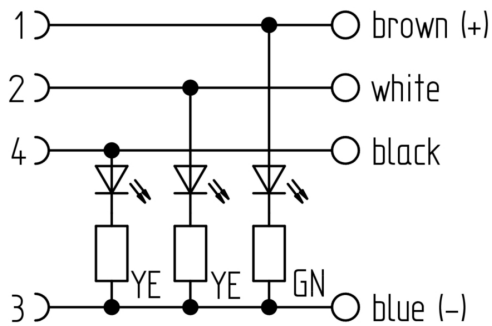
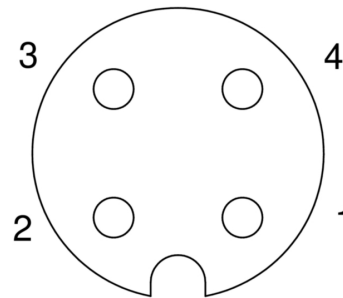
**Product Description**

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**Technical Drawing**



**Female**



**Technical Specifications**

**Face View**

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

**Technical Data**

Product Family:	Sensor / Actuator Connectors
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Product Sub Family:	M12 F&B (Wash-Down)
Brand:	Lumberg Automation
Connector Type:	Cordset, single ended
Type of Contact / Gender:	Female
Connector Design:	Angled
Number of Pins:	4
Coding:	A
Shielding:	Unshielded
Attachment Type:	Coupling Nut
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
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:	III acc. to DIN EN 60664-1 (VDE 0110-1)

## Materials

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:	Transparent
Flammability Class (Molded Body):	UL 94 HB
Attachment Material:	Stainless Steel
O-Ring Material:	EPDM, black

## Protection Circuitry

Function Indicator:	3xLEDs (PNP)
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## Additional Technical Data

Fastening Torque (Attachment):	M 12x1: (50-60) Ncm, hand-tight
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## 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

## Approvals

UL-File:	E315587
UL:	UL 2238; cURus

## Safety & Environmental Compliance

RoHS Compliant:	yes
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## Resistances

ECOLAB:	Yes
Oil Resistance:	Good chemical and oil resistance

## Notes

Note Derating:	Notice derating
Protection Degree / IP Rating Note:	** only if mounted and locked in combination with Hirschmann / Lumberg Automation connector.
Note:	Do not connect or disconnect under load.

## Variants

Item #	Item Description	Cable Length	Rated Current
13683	WRKWT/LED P 4-521/0,05 M	0.05 m	4 A
10502	WRKWT/LED P 4-521/10 M	10 m	4 A
7319	WRKWT/LED P 4-521/5 M	5 m	4 A

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