



OLT300-F22-A0-V15

Diffuse mode sensor

# OLT300-F22-A0-V15

CE



Laser Class II



- ◆ Energetic diffuse type sensor for detection of small objects ( $\varnothing$  0.1 mm)
- ◆ Automatic adjustment of switching points (sensitivity) via TEACH-IN
- ◆ Visible red light, pulsed LASER light
- ◆ Pre-fault indication and output (dynamic and static)
- ◆ Multifunction input
- ◆ Parameterisation via optical communication link (e.g. optional time increments)
- ◆ Connector (M12 x 1) 90° adjustable position
- ◆ Protection degree at least IP68
- ◆ Boost Mode - approx. 4 times the brightness of the transmitted light as an aid in adjustment

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**General specifications**

Adjustment range	50 ... 300 mm
Upper limit of the sensing range	300 mm
Reference target	standard white 100 mm x 100 mm
Light type	Visible red light 670 nm pulsed LASER-light (12 μs), 2 mW peak power, Laser class 2, eyesafe
Diameter of the light spot	0.1 mm at a distance of 60 mm ± 2
Ambient light limit	≤ 10000 Lux sun light ≤ 7500 Lux halogen light

**Indicators/operating means**

LED yellow	switching state
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**Electrical specifications**

Rated operational voltage $U_e$	10 ... 30 V DC , ripple 10 % <sub>SS</sub> overvoltage and polarity reversal protected
No-load supply current $I_0$	≤ 25 mA
Time delay before availability $t_v$	≤ 50 ms (with time delay before availability)

**Output**

Output type	2 switch outputs npn, parameterisable as - NO/NC (antivalent) - NO and pre-fault indication - NC and pre-fault indication
Rated operational current $I_e$	≤ 200 mA , every output, short and overload protected
Voltage drop $U_d$	≤ 2.5 V
Switching frequency $f$	≤ 1 kHz
Switch-on delay $t_{on}$	≤ 0.5 ms
Range hysteresis $H$	parameterisable with ULTRA 2001

**Standard conformity**

Standards	EN 60947-5-2
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**Ambient conditions**

Ambient temperature	-10 ... 40 °C (263 ... 313 K)
Storage temperature	-40 ... 70 °C (233 ... 343 K)

**Mechanical specifications**

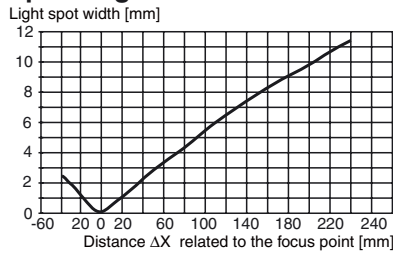
Protection degree	IP68 according to EN 60529
Connection	connector V15 (M12 x 1), 5 pin, rotatable through 90°
Material	
Housing	PBT
Optical face	scratch resistant plastic pane
Mass	60 g

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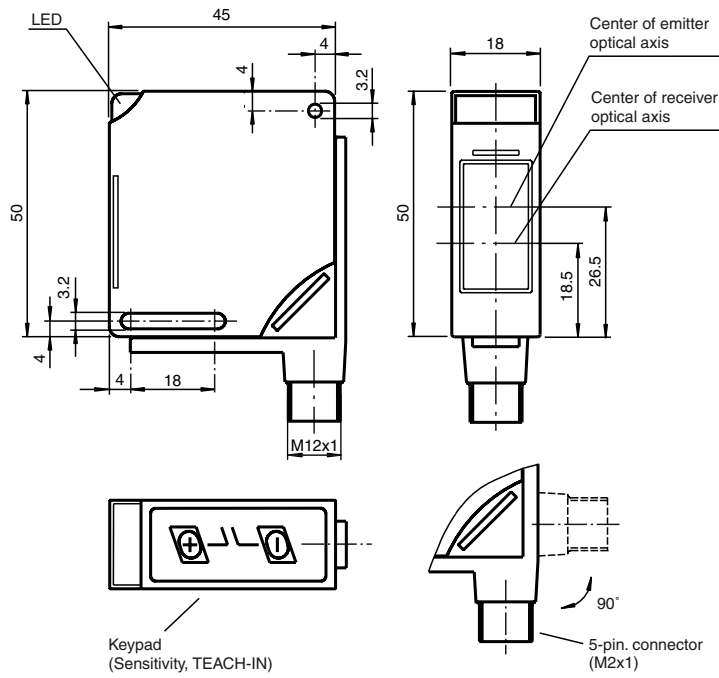
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## Light spot width up to the rated operating distance



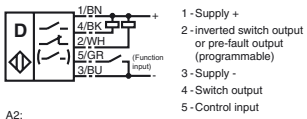
Note : The light spot is bar shaped and the measurement was made at the thinnest position

## Dimensions

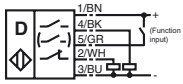


## Electrical connection

A0:



A2:



o = light ON, • = dark ON