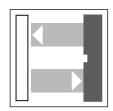
Dimensions



Diffuse reflective photoelectric sensor

OLT300-F22-A0-V15 OLT300-F22-A2-V15



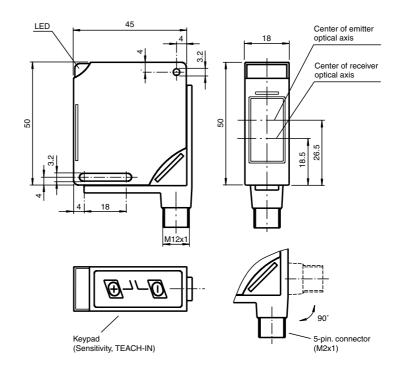
300 mm



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Features

- Energetic diffuse type sensor for the detection of small objects (Ø 0.1 mm)
- Automatic adjustment of the switching points (sensitivity) via TEACH-IN
- · Visible red light, pulsed LASER light
- Pre-fault indication and output (dynamic and static)
- · Multifunction input
- Parameterisable via optical communication link (e.g. free step values for time function)
- Connector (M12x1) 90° adjustable position
- Protection degree at least IP68
- Boost mode approx. 4 x the brightness of the transmitted light as adjustment aid



Connectors, mounting accessories etc... see "accessories" section

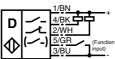
e.g. connectors: V15-G-2M-PVC (straight)

V15-W-2M-PUR (angled)

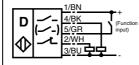
Electrical connection

A0:

A2:



- 1 Supply +
- 2 -inverted switch output or pre-fault output (programmable)
- 3 Supply -
- 4 Switch output
- 5 Control input



Technical data

Valid for the whole family

General specifications

0 ... 300 mm Sensing range 50 ... 300 mm Adjustment range

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 $\pm\,2$

> ≤ 10000 Lux sun light ≤ 7500 Lux halogen light

Standard conformity EN 60947-5-2

Electrical specifications

No-load supply current

Time delay before availability

Indicating/operating means

Ambient light limit

10 ... 30 V DC , ripple 10 %SS Rated operational voltage

overvoltage and polarity reversal protected

≤ 25 mA

≤ 50 ms (with time delay before availability)

Switching state Power on.

blinking with 2 Hz or 4 Hz in TEACH-IN mode

2 Hz flashing: pre-fault indication 65 ms: press the key to quit 1.5 s: fault by TEACH-IN

+/- for the adjustment of the sensing range and teach

Output

Key

LED yellow

LED green

I FD red

Rated operational current ≤ 200 mA , every output, short and overload

protected

Voltage drop U_{d} ≤ 2.5 V Switching frequency f \leq 1 kHz Switch-on delay $\leq 0.5 \text{ ms}$ t_{on} Range hysteresis Н parameterisable

Input

Internal resistor ≥ 12 kOhm Switch-on delay 3 ms Switch-off delay 3 ms t_{off}

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 type connector V15 (M12 x 1), 5 pin, rotatable

through 90°

Material

Housing **PBT**

Light exit Scratch resistant plastic plate

Connector AlSi Dove tail AlSi Mass 60 g

Version data

Input type

Model number OLT300-F22-A0-V15 OLT300-F22-A2-V15

Output type 2 switch outputs npn, parameterisable as - NO/NC (antivalent)

- NO and pre-fault indication - NC and pre-fault indication

1 control/test input, non active: ≥ 7 V or open;

active: ≤ 3 V

2 switch outputs pnp,

parameterisable as - NO/NC (antivalent)

- NO and pre-fault indication

- NC and pre-fault indication 1 control/test input,

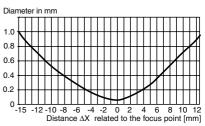
non active: $\leq 3 \text{ V}$ or not connected; active: ≥ 7 V

Model number

OLT300-F22-A0-V15 OLT300-F22-A2-V15

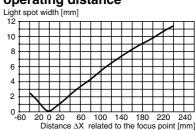
Characteristic curves

Light spot diameter in the focus area



Note: The light spot shape is circular in the vicinity of the focus point

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