

OT450521

Dimensions 56 x 18 x 32mm

- ✓ plastic housing, compact design
- ✓ Setting through teach-in
- ✓ LED display with adjustment assistance
- ✓ Suppression of mutual influence
- ✓ M12 plug 4-pole



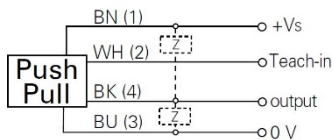
Colour-independent light sensor with background suppression



Technical data

function	background supression
sensing distance	30 ... 400mm
setting range	60 ... 400mm
voltage supply range	10 ... 30V DC
current consumption (without load)	≤ 30mA
output current (max. load)	≤ 100mA
output signal	push-pull, no/nc
voltage drop	≤ 3V DC
response time / release time	≤ 0,49ms
switching frequency	1kHz
transmitting element (timed)	LED, red light, punctiform
wavelength	630nm
short-circuit proof	+
reverse polarity protected	+
display (operation)	LED green
display (signal) / adjustment aid	LED yellow
display (teach-In)	LED blue
interference suppression	+
material (housing)	plastic (ASA, MABS)
material (front screen)	PMMA
protection class (EN 60529)	IP 67
temperature (operation)	-25 ... +60°C
connection	M12-plug 4polig

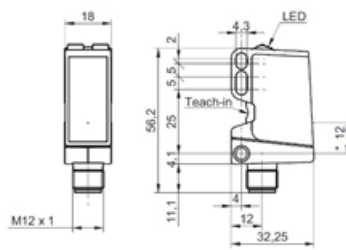
Electrical connection



LED colours

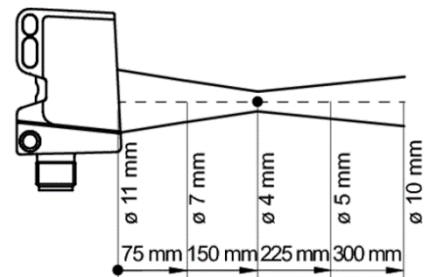


Dimensional drawing



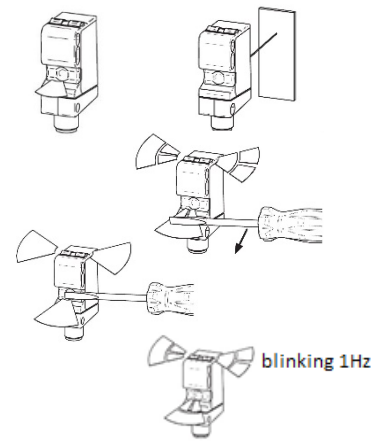
- all dimensions in mm - transmitter axis

Beam path



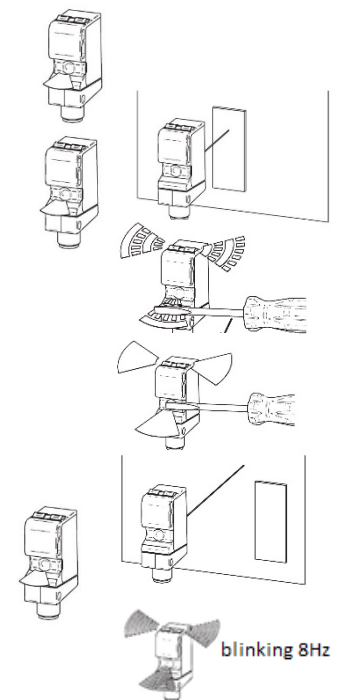
Teach-in procedure for 1 point teach (normal):

1. Adjust the sensor to the object to be detected and make sure that the blue teach LED is on.
2. Touch the blue teach LED at the back of the housing with a ferromagnetic tool for **longer than 2 seconds, but shorter than 4 seconds**, until all 3 LEDs flash at **1Hz**. The blue LED lights up more strongly as soon as a tool is detected.
3. Touch the blue teach LED again quickly with a ferromagnetic tool to confirm the position of the object.
4. If the sensor is to operate as a normally closed contact (output switched off when object is detected), touch the blue teach LED again quickly with a ferromagnetic tool within 4 seconds, otherwise the device operates as a normally open contact. During this time, all 3 LEDs flash slowly (1Hz).
5. As soon as the blue LED lights up, the teaching process is completed.



Teach-in procedure for 2-point teach (for objects close to the background):

1. Adjust the sensor to the object to be detected and make sure that the blue teach LED is on.
2. Touch the blue teach LED at the back of the housing with a ferromagnetic tool for **longer than 4 seconds, but shorter than 6 seconds**, until all 3 LEDs flash at **2Hz**. The blue LED is on more strongly as soon as a tool is detected.
3. Touch the blue teach LED again quickly with a ferromagnetic tool to confirm the position of the object.
4. Remove the object from the detection range and touch the blue teach LED quickly to teach the background.
5. As soon as the blue LED is on, the teaching process is completed.

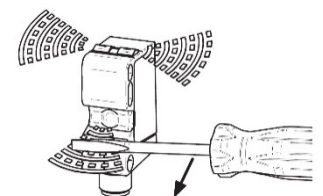


If all 3 LEDs are blinking fast (8Hz), the teach process has failed and must be repeated.

Note: The yellow LED signals whether an object is detected and does not necessarily correspond to the state of the switching output.. The teach-in function locks 5min after switching on! The teach-in process works both with a ferromagnetic tool and via pin 2 of the M12 connector (white wire) by connecting it to the operating voltage (+Ub).

Reset to factory setting

Touch the blue teach LED at the back of the housing with a ferromagnetic tool for approx. 6 seconds until all 3 LEDs are blinking fast (4Hz) and pull the tool away immediately after the blinking frequency has set in. Afterwards, the blue teach LED should be on continuously again and the sensor returns to the delivery settings.



Suitable cable socket: e.g. **VK200325**

Fixture kit: **AY000138**

Safety notice: If there is a direct impact on personal safety, the use of these products is prohibited.