

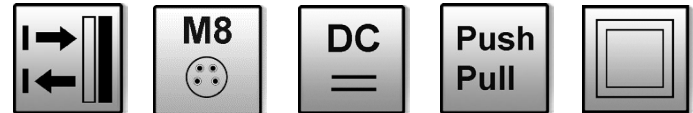
ON330571

Auto-reflective sensors



- / plastic housing, compact design
- / adjustment via tech-in
- / adjustment aid with status LED
- / small light spot due to PinPoint LED
- / M8-connector, 4-pin

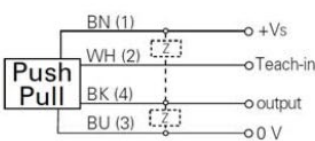
**works like a retro-reflective sensor
– without reflector**



TECHNICAL DATA

dimensions	39 x 13 x 23mm
operating range	30 ... 300mm
alignment optical axis	< 2°
operating voltage	10 ... 30V DC
current consumption (w/o load)	≤ 45mA
output current (max. load)	≤ 100mA
output signal	push-pull, no/nc
voltage drop	≤ 3V DC
response / decay time	≤ 0.5ms
switching frequency	1kHz
transmitting element (pulsed)	LED, red light, spot
wave length	630nm
short-circuit protection	+
reverse polarity protection	+
display (operating)	LED green
display (signal / adjustment aid)	LED yellow
display (teach-in)	LED blue
material (front screen)	PMMA
material (housing)	plastic (ASA, MABS)
degree of protection (EN 60529)	IP67
temperature (operating)	-25 ... +60°C
connection	M8-connector, 4-pin

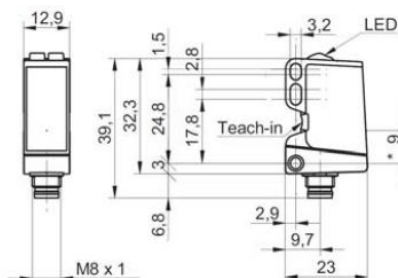
Connection



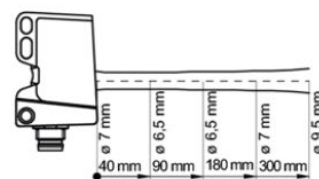
Colors of LED



Dimensional drawing



Radiation path

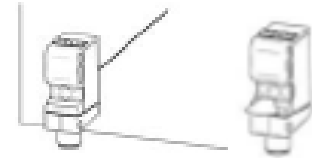


All units in mm

* transmitter axis

Teach-in procedure

1. Aim the sensor to a reference surface e.g. a reflecting machine part and make sure that the blue Teach-LED lights.



2. Touch the blue Teach-LED which is placed at the rear side of the housing with a ferromagnetic tool for longer than 2 sec. but max. 4 sec., until all 3 LED start blinking with a frequency of 1Hz.



3. Touch the blue Teach-LED again for a short time with a ferromagnetic tool in order to confirm the reference surface.



4. The standard configuration of the output is NO (normally open). It can be changed to NC (normally closed) by touching the blue LED again for a short time within 4 sec. During this time all 3 LEDs are blinking slowly (1Hz).



5. As soon as only the blue LED lights, the Teach-in procedure is finished successfully.



If all LEDs blink fast (8Hz), the Teach-in procedure failed and has to be repeated.



Adjustment control:

The ON330571 has an adjustment control which tests the reflecting capacity of the reference surface. Touch the Teach-LED with a ferromagnetic tool for 6 sec. until all 3 LEDs blink with 4Hz and remove the tool. The yellow LED now indicates the reflecting capacity of the reference surface. The higher the blinking frequency, the better the reflecting capacity (1Hz = bad, 8Hz optimal). Then go back to operation mode by touching the blue Teach-LED again shortly with a ferromagnetic tool.

Note:

The Teach-in function is active for only 5min. after switching on power. The yellow LED indicates the detection of an object, but does not compulsory correspond to the switching output.

The Teach-in procedure works by using a ferromagnetic tool and as well by using pin 2 (white wire) of the M8-connector. Pin 2 (white wire) has to be connected to +Ub.

Compatible cable socket: e.g. VK200375

Mounting kit: AY000118

Safety warnings:

Before initial operation, please make sure to follow all safety instructions that may be provided in the product information!

Never use these devices in applications where the safety of a person depends on their functionality.