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Model Number

OBT30-R2-E2-1T

Triangulation sensor (BGE) 2 m fixed cable

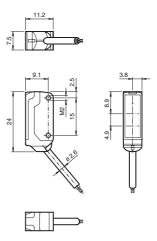
Features

- Ultra-small housing design
- 45° cable outlet for maximum mounting freedom under extremely tight space constraints
- Improvement in machine availability with abrasion-resistant, antistatic glass front
- Detection of flat objects in front of a close background
- Highly visible light spot, even on dark materials

Product information

The nano sensor has been developed for a broad range of applications. It offers excellent durability and is exceptionally easy to install. The housing is compact and, with its 45° cable outlet, can be installed in the smallest spaces. New functional principles and functionality open up a range of new options. The abrasion-resistant lens allows long operating times close to the moving object.

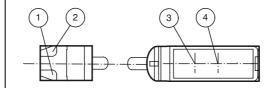
Dimensions



Electrical connection



Indicators/operating means



1	Operating display	green
2	Signal display	yellow
3	Emitter	
4	Receiver	

Technical data General specifications Detection range 0 ... 30 mm Reference target standard white, 100 mm x 100 mm LED Light source Light type modulated visible red light, 630 nm Angle deviation Diameter of the light spot approx. 2 mm at a distance of 30 mm Angle of divergence approx. 2 frontal Optical face Ambient light limit EN 60947-5-2: 30000 Lux Functional safety related parameters 800 a MTTF_d Mission Time (T_M) 20 a Diagnostic Coverage (DC) 0 % Indicators/operating means Operation indicator LED green, statically lit Power on , short-circuit : LED green flashing (approx. 4 Hz) Function indicator LED yellow ON: sensor detects background **Electrical specifications** Operating voltage U_B 10 ... 30 V DC , class 2 No-load supply current < 10 mA Protection class Output Switching type NO contact Signal output 1 PNP output, short-circuit protected, reverse polarity protected, open collector max. 30 V DC Switching voltage Switching current max. 50 mA, resistive load ≤ 1.5 V DC Voltage drop U_{d} Switching frequency approx. 800 Hz Response time 600 μs **Directive conformity** Electromagnetic compatibility Directive 2014/30/EU EN 60947-5-2:2007 EN 60947-5-2/A1:2012 **Ambient conditions** Ambient temperature -25 ... 60 °C (-13 ... 140 °F) -30 ... 70 °C (-22 ... 158 °F) Storage temperature **Mechanical specifications** 7.5 mm Housing width Housing height 24 mm Housing depth 11.2 mm Degree of protection IP67 Connection 2 m fixed cable Material Housing PC/ABS and TPU Optical face glass Cable PUR Fixing screws, 2 x M2 allen head screws included with delivery Installation Mass approx. 20 q Cable length 2 m Approvals and certificates **UL** approval E87056, cULus Recognized, Class 2 Power Source

Accessories

MH-R2-01

Mounting aid for R2 series, Mounting bracket

MH-R2-02

Mounting aid for R2 series, Mounting bracket

MH-R2-03

Mounting aid for R2 series, Mounting bra-

MH-R2-04

Mounting aid for R2 series, Mounting bra-

Other suitable accessories can be found at www.pepperl-fuchs.com

PEPPERL+FUCHS

CCC approval

CCC approval / marking not required for products rated ≤36 V

Curves/Diagrams

