

Model Number

OBE2000-R2-SE2-0,2M-V3-Y267444

Thru-beam sensor
with fixed cable and 3-pin, M8 connector

Features

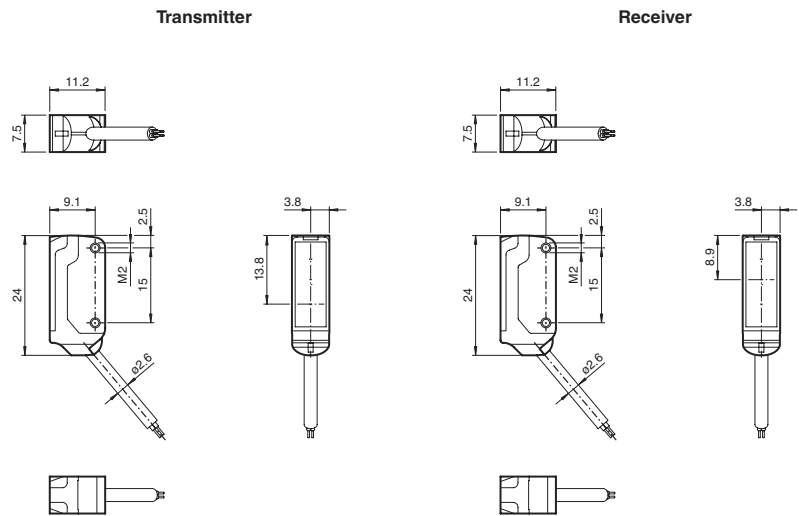
- Ultra-small housing design
- 45° cable outlet for maximum mounting freedom under extremely tight space constraints
- Improvement in machine availability with abrasion-resistant, antistatic glass front
- Long sensor range with high power mode

Product information

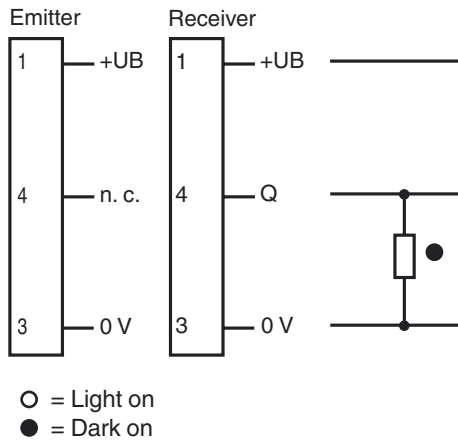
The R2 series nano sensor has been developed for a broad range of applications. It offers excellent durability and is exceptionally easy to install. The housing is compact and, with its 45° cable outlet, can be installed in the smallest spaces. New functional principles and functionality open up a range of new options. The abrasion-resistant lens allows long operating times close to the moving object.

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Dimensions



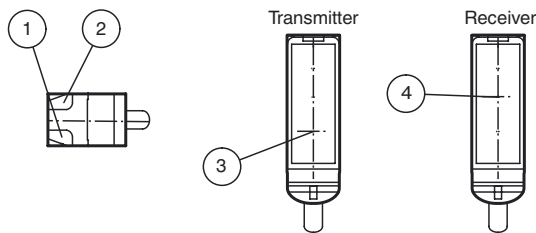
Electrical connection



Pinout



Indicators/operating means



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

Technical data**System components**

Emitter	OBE2000-R2-0,2M-V3-Y267431
Receiver	OBE2000-R2-E2-0,2M-V3

General specifications

Effective detection range 0 ... 2 m

Threshold detection range 2.5 m

Light source LED

Light type modulated visible red light , 630 nm

Angle deviation approx. 2 °

Diameter of the light spot 150 mm at a distance of 2000 mm

Angle of divergence approx. 2 °

Optical face frontal

Ambient light limit EN 60947-5-2 : 30000 Lux

Functional safety related parameters

MTTF_d 806 a

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 Receiver: LED yellow, lights up when light beam is free, flashes when falling short of the stability control ; OFF when light beam is interrupted

Electrical specifications

Operating voltage U_B 10 ... 30 V DC , class 2

No-load supply current I₀ Emitter: ≤ 11 mA
Receiver: ≤ 8 mA

Output

Switching type NO contact / dark on

Signal output 1 PNP output, short-circuit protected, reverse polarity protected, open collector

Switching voltage max. 30 V DC

Switching current max. 50 mA

Voltage drop U_d ≤ 1.5 V DC

Switching frequency f approx. 800 Hz

Response time 600 μs

Ambient conditions

Ambient temperature -25 ... 60 °C (-13 ... 140 °F)

Storage temperature -30 ... 70 °C (-22 ... 158 °F)

Mechanical specifications

Degree of protection IP67

Connection 200 mm fixed cable with 3-pin, M8 x 1 connector

Material

Housing PC/ABS and PBT

Optical face glass

Cable PUR

Installation Fixing screws , 2 x M2 allen head screws included with delivery

Mass approx. 20 g Per sensor

Cable length 200 mm

Compliance with standards and directives**Directive conformity**

EMC Directive 2004/108/EC EN 60947-5-2:2007

Approvals and certificates

UL approval cULus Recognized, Class 2 Power Source

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

Accessories**MH-R2-01**

Mounting bracket

MH-R2-02

Mounting bracket

MH-R2-03

Mounting bracket

MH-R2-04

Mounting bracket

V3-GM-2M-PUR

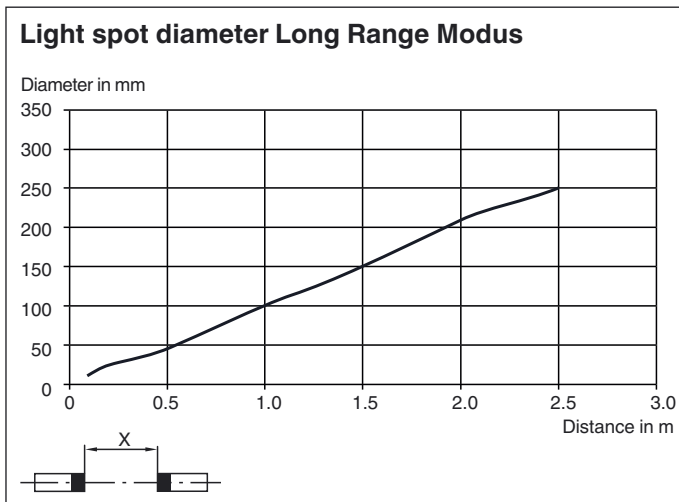
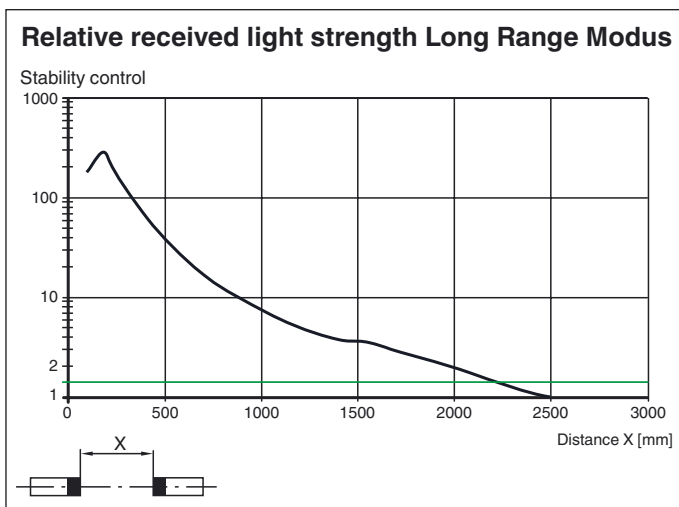
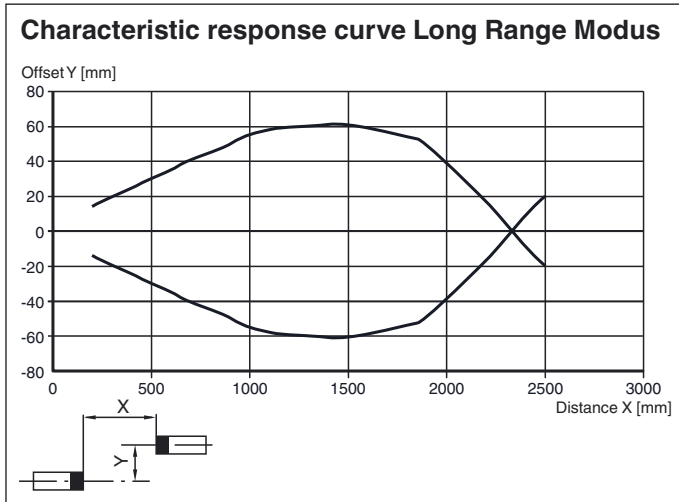
Cable socket, M8, 3-pin, PUR cable

V3-WM-2M-PUR

Cable socket, M8, 3-pin, PUR cable

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

Curves/Diagrams



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