

**Model Number**

**OBE2000-R2-SE3-0,2M-V3-Y267445**

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

**Features**

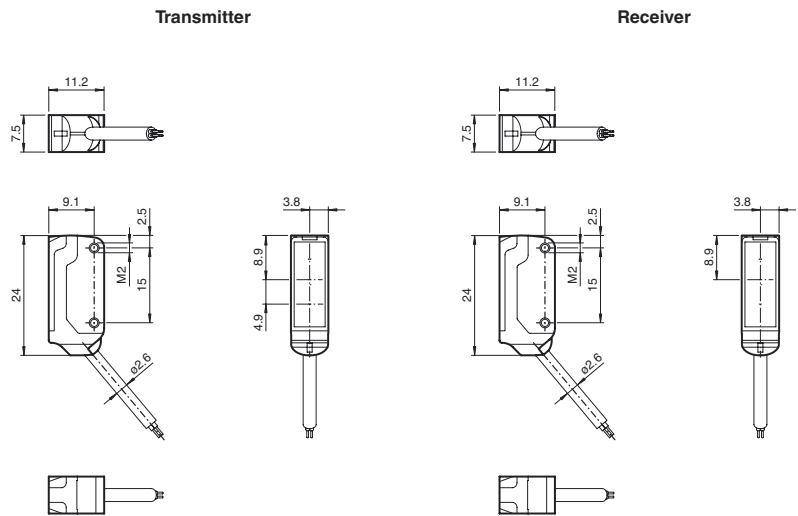
- Ultra-small housing design
- 45° cable outlet for maximum mounting freedom under extremely tight space constraints
- Improvement in machine availability with abrasion-resistant, antistatic glass front
- Long sensor range with high power mode

**Product information**

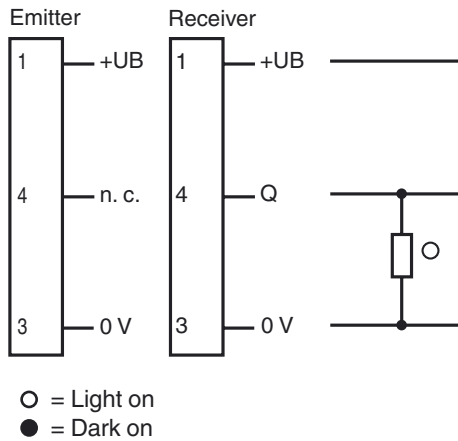
The R2 series nano sensor has been developed for a broad range of applications. It offers excellent durability and is exceptionally easy to install. The housing is compact and, with its 45° cable outlet, can be installed in the smallest spaces. New functional principles and functionality open up a range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

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**Dimensions**



**Electrical connection**

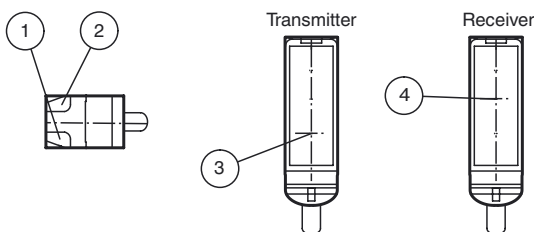


○ = Light on  
● = Dark on

**Pinout**



**Indicators/operating means**



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

**Technical data****System components**

Emitter	OBE2000-R2-0,2M-V3-Y267431
Receiver	OBE2000-R2-E3-0,2M-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<sub>d</sub> 806 a

Mission Time (T<sub>M</sub>) 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<sub>B</sub> 10 ... 30 V DC , class 2

No-load supply current I<sub>0</sub> Emitter: ≤ 11 mA  
Receiver: ≤ 8 mA

**Output**

Switching type NC contact / light 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<sub>d</sub> ≤ 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**

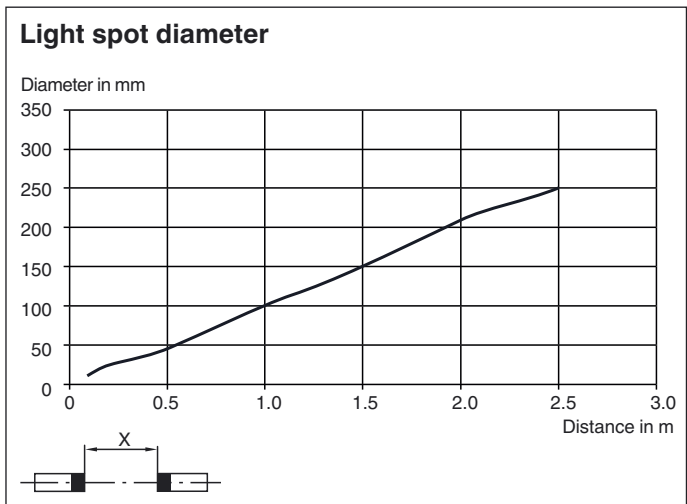
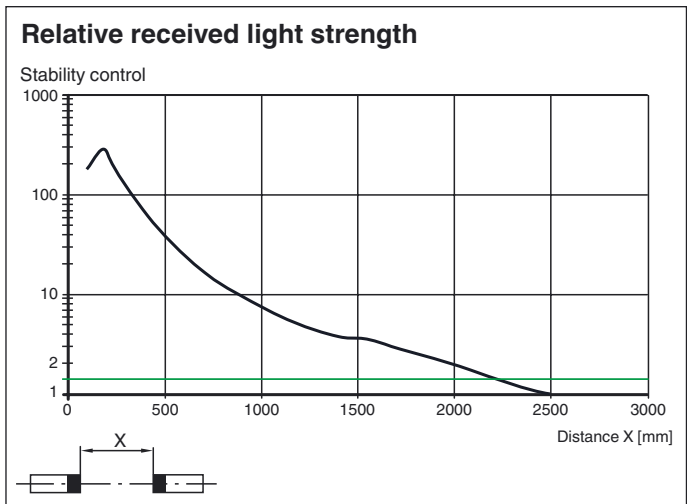
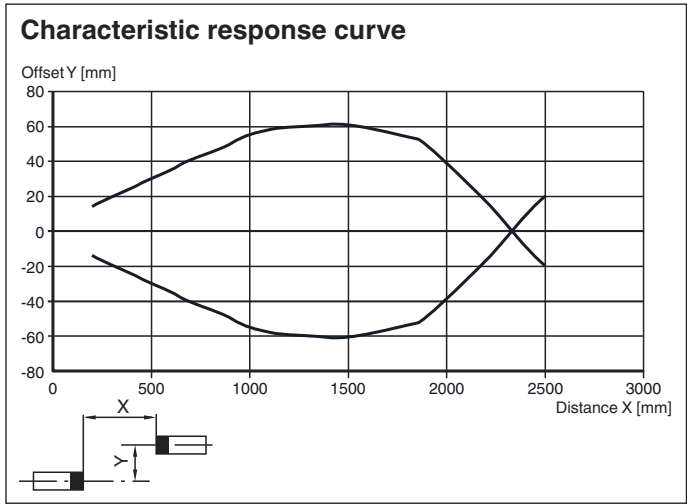
Cable socket, M8, 3-pin, PUR cable

**V3-WM-2M-PUR**

Cable socket, M8, 3-pin, PUR cable

Other suitable accessories can be found at [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com)

**Curves/Diagrams**



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