

# Thru-beam sensor OBE2000-R2-SE3-0,2M-V3-Y267445



- 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

Thru-beam sensor for standard applications, miniature design, 2000 mm detection range, red light, light on, PNP output, fixed cable with M8 plug

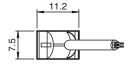
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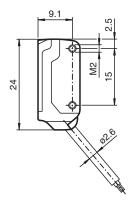
The nano sensor has been developed for a broad range of applications. It offers excellent durability and is exceptionally easy to install. The housing is compact and, with its 45° cable outlet, can be installed in the smallest spaces. New functional principles and functionality open up a range of new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

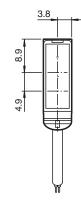
#### **Dimensions**

Transmitter

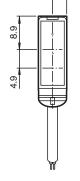
Receiver



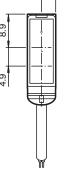




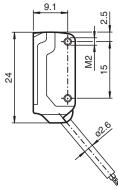


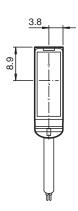


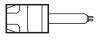




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Release date: 2022-06-03 Date of issue: 2022-06-03 Filename: 267445\_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information"

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

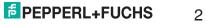
#### **Technical Data**

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
Opening angle		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	$U_B$	10 30 V DC , class 2
No-load supply current	Io	Emitter: ≤ 11 mA Receiver: ≤ 8 mA
Output		
Switching type		NC contact
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
Conformity		
Product standard		EN 60947-5-2
Approvals and certificates		
EAC conformity		TR CU 020/2011
UL approval		cULus Recognized, Class 2 Power Source
CCC approval		CCC approval / marking not required for products rated $\leq$ 36 V
Ambient conditions		
Ambient temperature		-25 60 °C (-13 140 °F)
Storage temperature		-30 70 °C (-22 158 °F)
Mechanical specifications		
Housing width		7.5 mm
Housing height		24 mm
Housing depth		11.2 mm
Degree of protection		IP67
Connection		200 mm fixed cable with 3-pin, M8 x 1 connector
Material		
Housing		PC/ABS and TPU
Optical face		glass
		PUR

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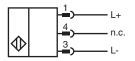
#### Thru-beam sensor

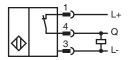
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## **Technical Data**

Installation	Fixing screws , 2 x M2 allen head screws included with delivery
Mass	approx. 20 g per sensor
Cable length	200 mm

#### Connection





# Accessories

	MH-R2-01	Mounting aid for R2 series, Mounting bracket
(T)	MH-R2-02	Mounting aid for R2 series, Mounting bracket
	MH-R2-03	Mounting aid for R2 series, Mounting bracket
	MH-R2-04	Mounting aid for R2 series, Mounting bracket
$\sum$	V3-WM-2M-PUR	Female cordset single-ended M8 angled A-coded, 3-pin, PUR cable grey

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