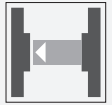




## Thru-beam sensor

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



- 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, dark on, PNP output, fixed cable with M8 plug

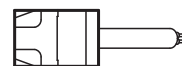
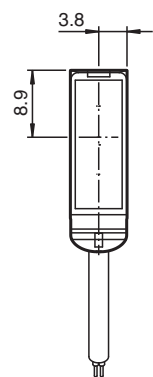
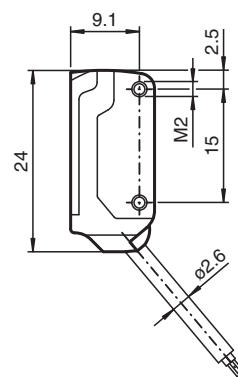
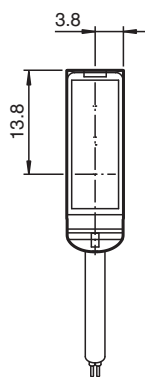
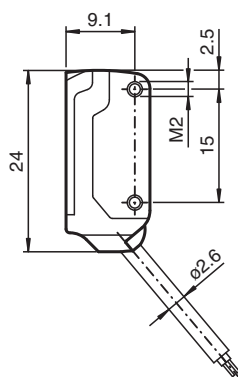
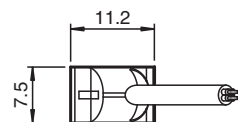
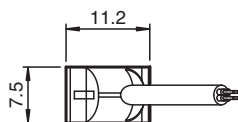


The nano sensor has been developed for a broad range of applications. It offers excellent durability and is exceptionally easy to install. The housing is compact and, with its 45° cable outlet, can be installed in the smallest spaces. New functional principles and functionality open up a range of new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

### Dimensions

Transmitter

Receiver



## Technical Data

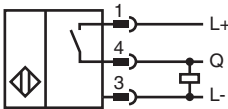
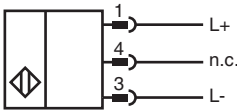
System components			
Emitter		OBE2000-R2-0,2M-V3-Y267431	
Receiver		OBE2000-R2-E2-0,2M-V3	
General specifications			
Effective detection range		0 ... 2 m	
Threshold detection range		2.5 m	
Light source		LED	
Light type		modulated visible red light , 630 nm	
Angle deviation		approx. 2 °	
Diameter of the light spot		150 mm at a distance of 2000 mm	
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 <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		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 <sub>d</sub>	≤ 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 ≤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		fixed cable with 3-pin M8 x 1 connector	
Material			
Housing		PC/ABS and TPU	
Optical face		glass	
Cable		PUR	

Release date: 2022-06-03 Date of issue: 2022-06-03 Filename: 267444\_eng.pdf






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

	<b>MH-R2-01</b>	Mounting aid for R2 series, Mounting bracket
	<b>MH-R2-02</b>	Mounting aid for R2 series, Mounting bracket
	<b>MH-R2-03</b>	Mounting aid for R2 series, Mounting bracket
	<b>MH-R2-04</b>	Mounting aid for R2 series, Mounting bracket
	<b>V3-WM-2M-PUR</b>	Female cordset single-ended M8 angled A-coded, 3-pin, PUR cable grey

Release date: 2022-06-03 Date of issue: 2022-06-03 Filename: 267444\_eng.pdf