



Model Number

OBE2000-R3-SE1-Y302635

Thru-beam sensor
with 2 m fixed cable

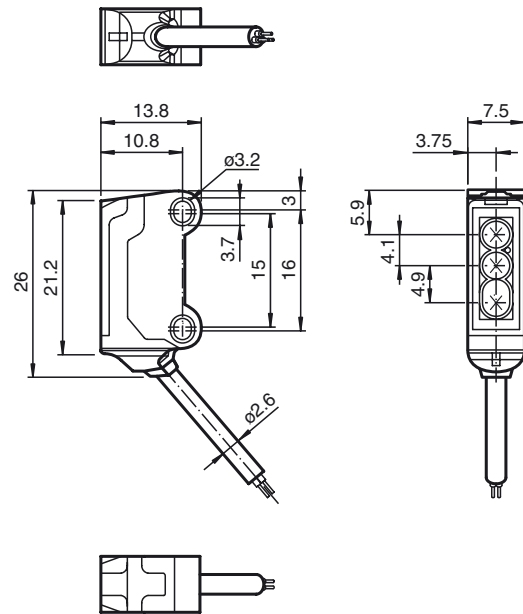
Features

- 45° cable outlet for maximum mounting freedom under extremely tight space constraints
- Improvement in machine availability with abrasion-resistant, antistatic glass front
- Extremely large detection range in Long Range Mode

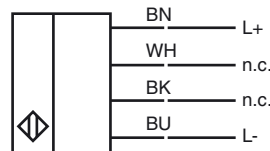
Product information

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.

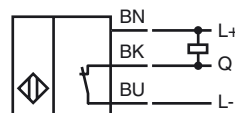
Dimensions



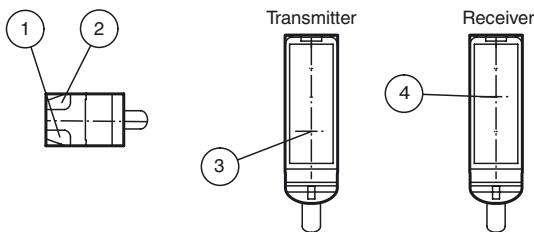
Electrical connection emitter



Electrical connection receiver



Indicators/operating means



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

Release date: 2019-10-30 02:59 Date of issue: 2019-10-30 302635_eng.xml

Technical data**System components**

Emitter	OBE2000-R3-Y302637
Receiver	OBE2000-R3-E1-Y302636

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	approx. 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	I ₀	Emitter: ≤ 11 mA Receiver: ≤ 8 mA

Output

Switching type	NC contact	
Signal output	1 NPN output, short-circuit protected, reverse polarity protected, open collector	
Switching voltage	max. 30 V DC	
Switching current	max. 50 mA , resistive load	
Voltage drop	U _d	≤ 1.5 V DC
Switching frequency	f	approx. 100 Hz
Response time		5 ms

Conformity

Product standard	EN 60947-5-2
------------------	--------------

Ambient conditions

Ambient temperature	-25 ... 60 °C (-13 ... 140 °F)
Storage temperature	-30 ... 70 °C (-22 ... 158 °F)

Mechanical specifications

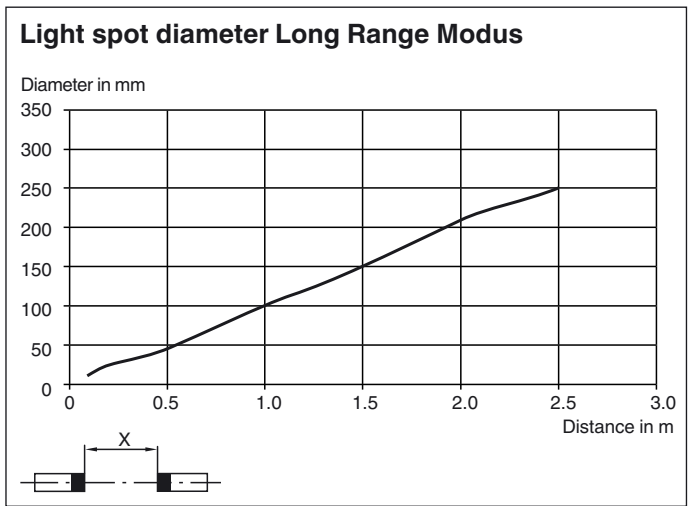
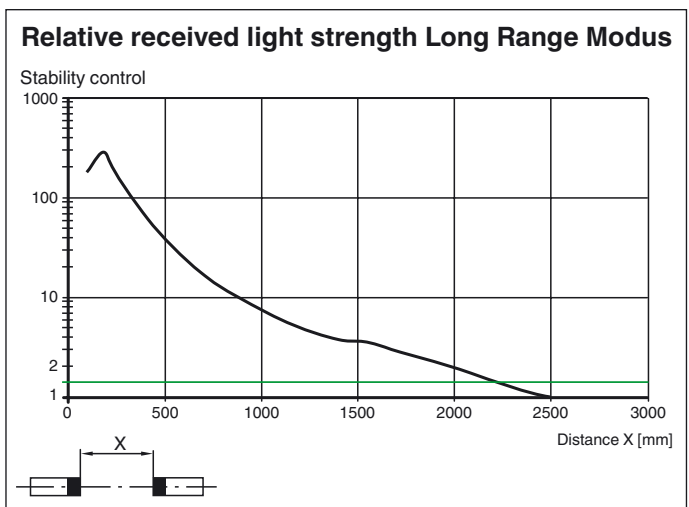
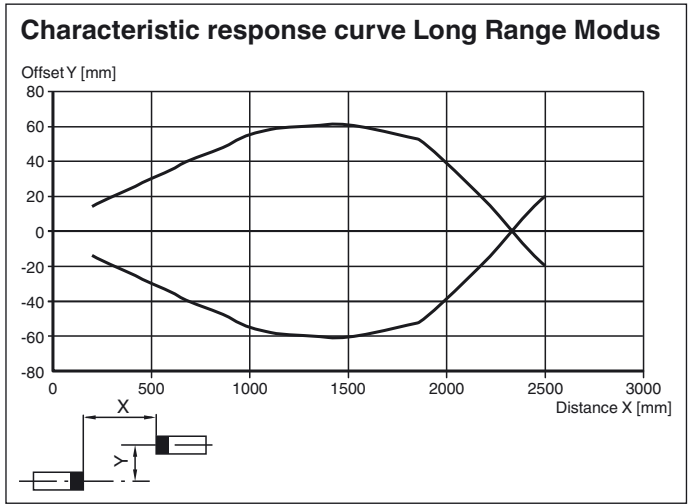
Housing width	7.5 mm
Housing height	26 mm
Housing depth	13.8 mm
Degree of protection	IP67
Connection	2 m fixed cable
Material	
Housing	PC/ABS and TPU
Optical face	Polycarbonate
Cable	PUR
Mass	approx. 20 g Per sensor
Cable length	2 m

Approvals and certificates

UL approval	cULus Recognized, Class 2 Power Source
CCC approval	CCC approval / marking not required for products rated ≤36 V

Other suitable accessories can be found at

Curves/Diagrams



Release date: 2019-10-30 02:59 Date of issue: 2019-10-30 302635_eng.xml