



Thru-beam sensor

OBE2000-R3-SE1-Y302635



- 45° cable outlet for maximum mounting freedom under extremely tight space constraints
- Extremely large detection range in Long Range Mode

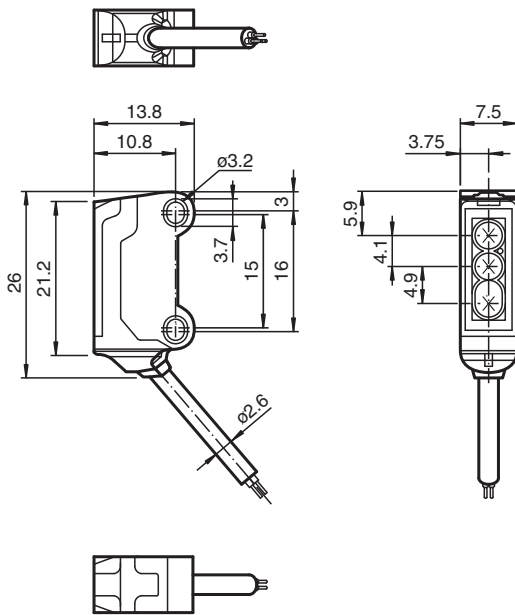
Thru-beam sensor (pair)



Function

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



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 °

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

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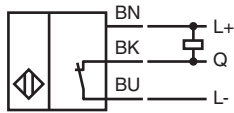
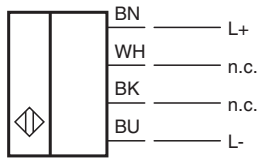
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Technical Data

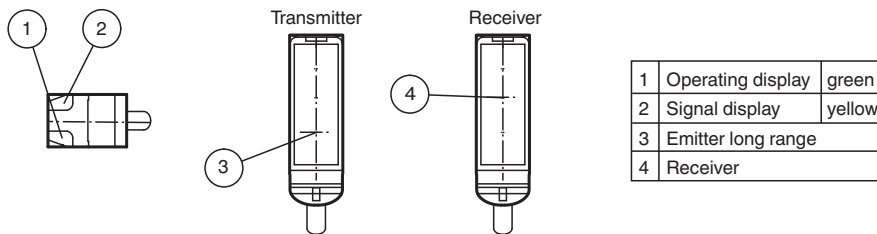
Diameter of the light spot	approx. 150 mm at a distance of 2000 mm	
Opening angle	approx. 2 °	
Optical face	frontal	
Ambient light limit	EN 60947-5-2 : 30000 Lux	
Functional safety related parameters		
MTTF _d	806 a	
Mission Time (T _M)	20 a	
Diagnostic Coverage (DC)	0 %	
Indicators/operating means		
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 operating reserve ; 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	
Approvals and certificates		
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	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	

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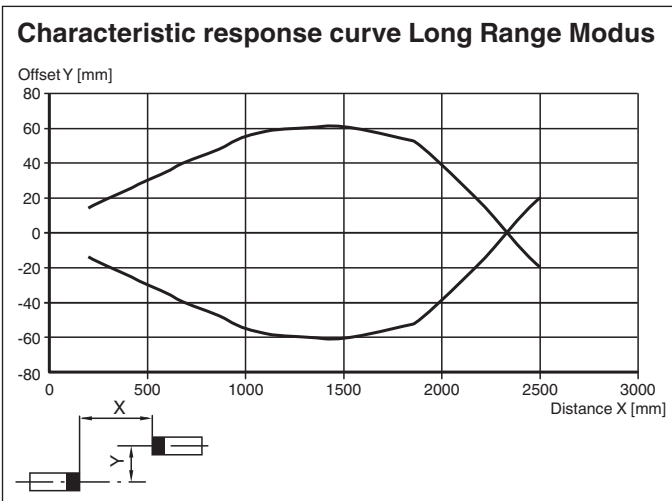
Connection



Assembly

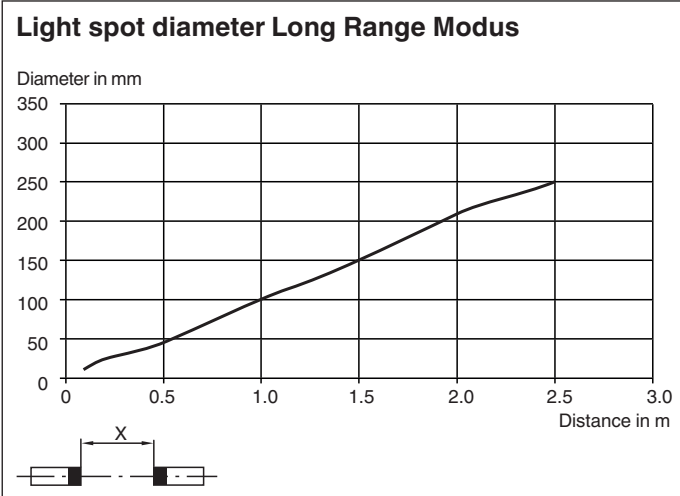
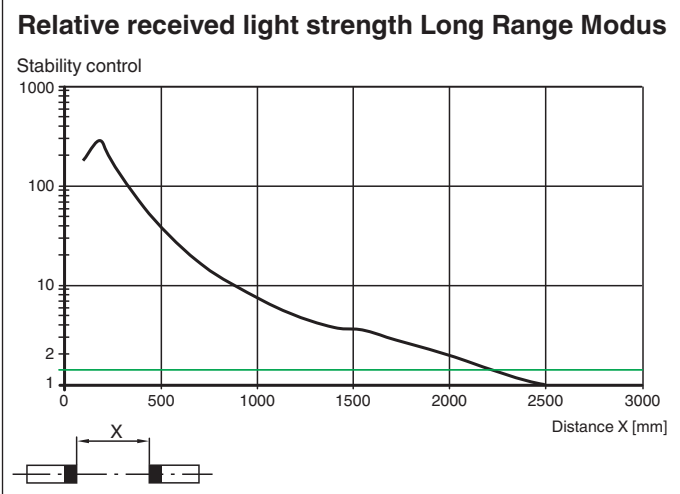


Characteristic Curve



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