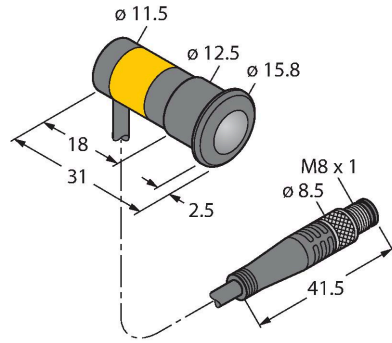


# SB12E1Q3

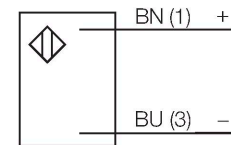
## Photoelectric Sensor – Opposed Mode Sensor (Emitter)



### Features

- Cable 2 m, 3-pin
- Supply voltage 10-30 VDC

### Wiring diagram



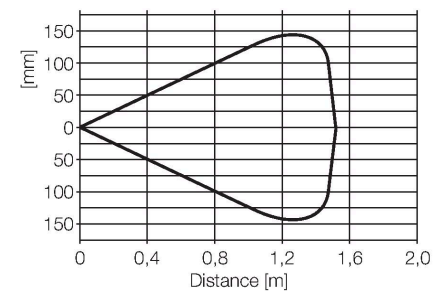
### Technical data

Type	SB12E1Q3
ID no.	3081995
<b>Optical data</b>	
Function	Opposed mode sensor
Operating mode	Emitter
Light type	IR
Wavelength	880 nm
Range	0...1500 mm
<b>Electrical data</b>	
Operating voltage	10...30 VDC
DC rated operational current	≤ 100 mA
No-load current	≤ 15 mA
Readiness delay	≤ 1000 ms
Response time typical	< 2.5 ms
<b>Mechanical data</b>	
Design	Threaded barrel, SB12
Dimensions	Ø 12 x 30.5 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Polycarbonate
Electrical connection	Cable with connector, M8 x 1, 0.15 m, PVC
Number of cores	3
Core cross-section	0.34 mm <sup>2</sup>
Ambient temperature	-20...+50 °C
Protection class	IP65
Power-on indication	LED, Green
Error indication	LED, green, Flashing

### Functional principle

Opposed mode sensors consist of an emitter and receiver. They are installed opposite to each other whereby the emitted light aims directly at the receiver. When an object interrupts or weakens the light beam, the sensor switches. Opposed mode sensors are the most reliable photoelectric sensors for detection of opaque targets. The excellent light/dark contrast and the high excess gain allow operation over larger distances and under difficult conditions.

### Excess Gain Curve



## Technical data

Excess gain indication

LED

Tests/approvals