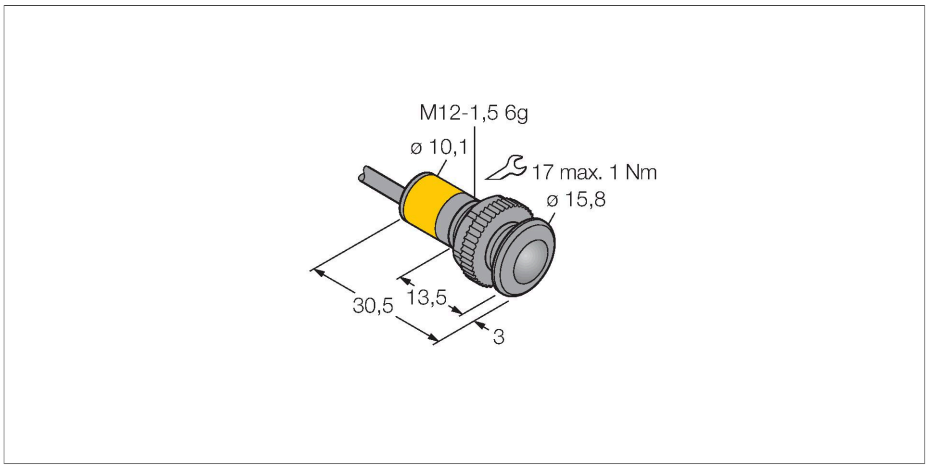
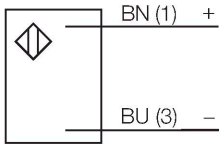
SB12TE1
Photoelectric Sensor – Opposed Mode Sensor (Emitter)



Features

- Male M8 × 1, 3-pin
- Supply voltage 10-30 VDC

Wiring diagram



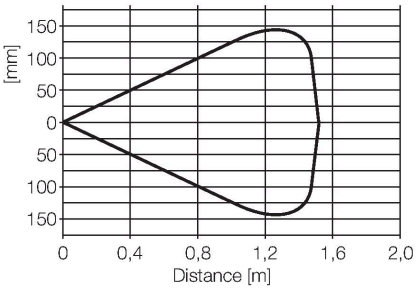
Technical data

Type	SB12TE1
ID no.	3011138
Optical data	
Function	Opposed mode sensor
Operating mode	Emitter
Light type	IR
Wavelength	880 nm
Range	0…1500 mm
Electrical data	
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
Mechanical data	
Design	Threaded barrel, SB12
Dimensions	Ø 12 x 30.5 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Polycarbonate
Electrical connection	Cable, 2 m, PVC
Number of cores	3
Core cross-section	0.34 mm^2
Ambient temperature	-20…+50 °C
Protection class	IP67
Power-on indication	LED, Green
Error indication	LED, green, Flashing
Excess gain indication	LED

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



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Technical data

Tests/approvals

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