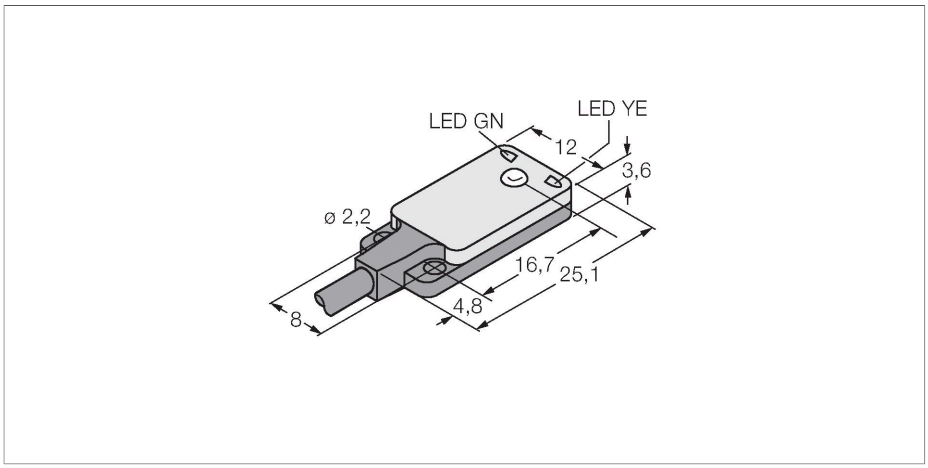
VS25E
Photoelectric Sensor – Opposed Mode Sensor (Emitter)
Miniature Sensor



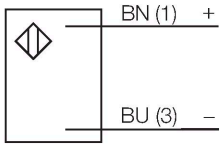
Technical data

Type	VS25E
ID	3057250
Optical data	
Function	Opposed mode sensor
Operating mode	Emitter
Light type	IR
Wavelength	940 nm
Range	0…3000 mm
Electrical data	
Operating voltage	10…30 VDC
Residual ripple	< 10 % U_{ss}
DC rated operational current	≤ 50 mA
No-load current	≤ 30 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Readiness delay	≤ 100 ms
Response time typical	< 1 ms
Mechanical data	
Design	Rectangular, VS2
Dimensions	4.7 x 12 x 25.1 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, MABS
Electrical connection	Cable, 2 m, PVC
Number of cores	2
Core cross-section	0.34 mm^2
Ambient temperature	-20…+55 °C

Features

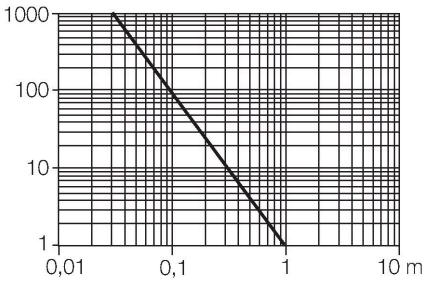
- Cable, 2 m, 3-wire
- Operating voltage: 10…30 VDC
- Ultra flat design

Wiring diagram



Functional principle

Opposed mode sensors consist of an emitter and receiver. They are installed opposite each other so that the light from the emitter is aimed 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. An excellent contrast between light and dark conditions and an extremly high excess gain are typical of this sensing mode, thus allowing operation over larger distances and under difficult conditions.
Excess gain curve
Excess gain in relation to the distance



Technical data

Protection class	IP67
Power-on indication	LED, Green
Excess gain indication	LED
Tests/approvals	
Approvals	CE

Accessories

SMBVS2RA	3058603
mounting bracket, straight	

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