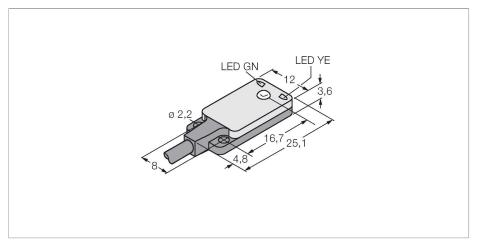
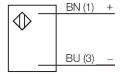
VS25EVQ-69237 Photoelectric Sensor - Opposed Mode Sensor (Emitter) Miniature Sensor



Features

- Cable with male end, M8 × 1, 3-pin, PVC,
- Operating voltage: 10...30 VDC
- ■Ultra flat design

Wiring diagram



Technical data

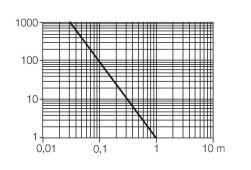
ID no. 3069237	Туре	VS25EVQ-69237
Function Opposed mode sensor Operating mode Emitter Light type Red Wavelength 660 nm Range 01200 mm Electrical data Operating voltage 1030 VDC Residual ripple <10 % Uss DC rated operational current ≤50 mA No-load current ≤25 mA Short-circuit protection yes Reverse polarity 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 with connector, M8 x 1, PVC Ambient temperature -20+55 °C Protection class IP67	ID no.	3069237
Operating mode Emitter Light type Red Wavelength 660 nm Range 01200 mm Electrical data 0 Operating voltage 1030 VDC Residual ripple < 10 % U₂,	Optical data	
Light type Red Wavelength 660 nm Range 01200 mm Electrical data 0 perating voltage 1030 VDC Residual ripple < 10 % U₅	Function	Opposed mode sensor
Wavelength 660 nm Range 01200 mm Electrical data 030 VDC Residual ripple < 10 % U₅	Operating mode	Emitter
Range 01200 mm Electrical data Operating voltage 1030 VDC Residual ripple < 10 % U₃ DC rated operational current ≤ 50 mA No-load current ≤ 25 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 with connector, M8 × 1, PVC Ambient temperature -20+55 °C Protection class IP67	Light type	Red
Electrical data Operating voltage 1030 VDC Residual ripple < 10 % U₂₂ DC rated operational current ≤ 50 mA No-load current ≤ 25 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 with connector, M8 × 1, PVC Ambient temperature -20+55 °C Protection class IP67	Wavelength	660 nm
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Residual ripple < 10 % U₅s	Electrical data	
DC rated operational current ≤ 50 mA No-load current ≤ 25 mA Short-circuit protection yes Reverse polarity protection yes Readiness delay ≤ 100 ms Response time typical < 1 ms	Operating voltage	1030 VDC
No-load current ≤ 25 mA Short-circuit protection yes Reverse polarity protection yes Readiness delay ≤ 100 ms Response time typical < 1 ms	Residual ripple	< 10 % U _{ss}
Short-circuit protection yes Reverse polarity protection yes Readiness delay ≤ 100 ms Response time typical < 1 ms	DC rated operational current	≤ 50 mA
Reverse polarity protection yes Readiness delay ≤ 100 ms Response time typical < 1 ms	No-load current	≤ 25 mA
Readiness delay ≤ 100 ms Response time typical < 1 ms	Short-circuit protection	yes
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 with connector, M8 x 1, PVC Ambient temperature -20+55 °C Protection class IP67	Reverse polarity protection	yes
Mechanical dataDesignRectangular, VS2Dimensions4.7 x 12 x 25.1 mmHousing materialPlastic, Thermoplastic materialLensplastic, MABSElectrical connectionCable with connector, M8 x 1, PVCAmbient temperature-20+55 °CProtection classIP67	Readiness delay	≤ 100 ms
Design Rectangular, VS2 Dimensions 4.7 x 12 x 25.1 mm Housing material Plastic, Thermoplastic material Lens plastic, MABS Electrical connection Cable with connector, M8 × 1, PVC Ambient temperature -20+55 °C Protection class IP67	Response time typical	< 1 ms
Dimensions 4.7 x 12 x 25.1 mm Housing material Lens Plastic, Thermoplastic material plastic, MABS Electrical connection Cable with connector, M8 × 1, PVC Ambient temperature -20+55 °C Protection class	Mechanical data	
Housing material Lens plastic, Thermoplastic material plastic, MABS Electrical connection Cable with connector, M8 × 1, PVC Ambient temperature -20+55 °C Protection class IP67	Design	Rectangular, VS2
Lensplastic, MABSElectrical connectionCable with connector, M8 × 1, PVCAmbient temperature-20+55 °CProtection classIP67	Dimensions	4.7 x 12 x 25.1 mm
Electrical connection Cable with connector, M8 × 1, PVC Ambient temperature -20+55 °C Protection class IP67	Housing material	Plastic, Thermoplastic material
Ambient temperature -20+55 °C Protection class IP67	Lens	plastic, MABS
Protection class IP67	Electrical connection	Cable with connector, M8 × 1, PVC
	Ambient temperature	-20+55 °C
Power-on indication LED, Green	Protection class	IP67
	Power-on indication	LED, Green



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

Excess gain indication	LED
Tests/approvals	
Approvals	CE

Accessories

SMBVS2RA 3058603