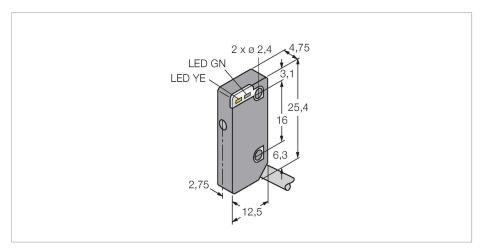
VS4RP5R Photoelectric Sensor – Opposed Mode Sensor (Emitter/ Receiver) Miniature Sensor



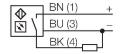
Technical data

ID 3069426 Optical data Function Opposed mode sensor Operating mode Receiver Range 01000 mm Electrical data Operating voltage 1030 VDC Residual ripple < 10 % U₅s DC rated operational current ≤ 50 mA No-load current ≤ 25 mA Short-circuit protection yes Reverse polarity protection yes Output function NO contact, dark operation, PNP Switching frequency ≤ 660 Hz Readiness delay ≤ 100 ms Response time typical <1 ms Mechanical data Design Rectangular, VS4 Dimensions 12.5 x 4.75 x 25.4 mm	Туре	VS4RP5R
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Response time typical < 1 ms Mechanical data Design Rectangular, VS4 Dimensions 12.5 x 4.75 x 25.4 mm	Switching frequency	≤ 660 Hz
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Dimensions 12.5 x 4.75 x 25.4 mm	Mechanical data	
	Design	Rectangular, VS4
· · · · · · · · · · · · · · · · · · ·	Dimensions	12.5 x 4.75 x 25.4 mm
Housing material Plastic, Thermoplastic material	Housing material	Plastic, Thermoplastic material
Lens plastic, Polycarbonate	Lens	plastic, Polycarbonate
Electrical connection Cable, 2 m, PVC	Electrical connection	Cable, 2 m, PVC
Number of cores 3	Number of cores	3

Features

- Cable 2 m
- Protection class IP67
- Operating voltage: 10...30 VDC
- ■Flat design
- ■PNP switching output, dark operation

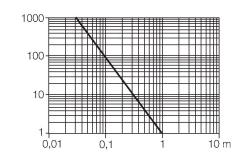
Wiring diagram



Functional principle

Opposed mode sensors consist of an emitter and a 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 objects. The excellent light/dark contrast and the very high excess gain are typical for this function mode and enable operation over large distances and under difficult conditions.

Excess gain curve Excess gain in relation to distance







Technical data

Core cross-section	0.381 mm ²
Ambient temperature	-20+55 °C
Protection class	IP67
Power-on indication	LED, Green
Switching state	LED, Green
Error indication	LED, green, Flashing
Excess gain indication	LED
Alarm display	LED yellow Flashing
Tests/approvals	
Approvals	CE

Accessories

SMBVS4SRA 3069435

Montagewinkel, 300 Edelstahl, rechtwinklig, für Sensoren der Baureihe VS4