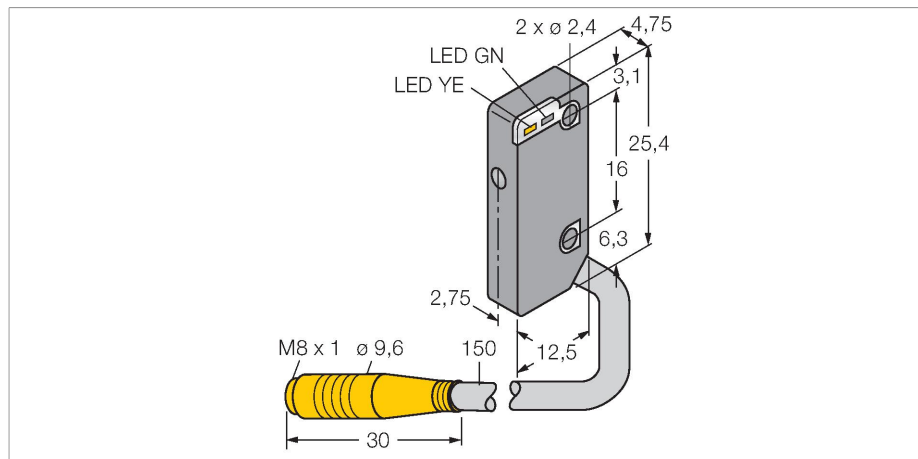


VS4RP5RQ

Photoelectric Sensor – Opposed Mode Sensor (Emitter/Receiver)

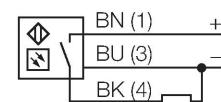
Miniature Sensor



Features

- Cable with male end, PVC, M8 x 1, 3-pin, 150 mm
- Protection class IP67
- Operating voltage: 10...30 VDC
- Flat design
- PNP switching output, dark operation

Wiring diagram



Technical data

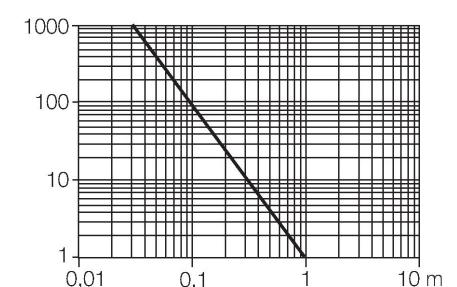
Type	VS4RP5RQ
ID	3069431
Optical data	
Function	Opposed mode sensor
Operating mode	Receiver
Range	0...1000 mm
Electrical data	
Operating voltage	10...30 VDC
Residual ripple	< 10 % U _{ss}
DC rated operational current	≤ 50 mA
No-load current	≤ 25 mA
Short-circuit protection	yes
Reverse polarity protection	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
Housing material	Plastic, Thermoplastic material
Lens	plastic, Polycarbonate
Electrical connection	Cable with connector, M8 x 1, 0.15 m, PVC
Number of cores	3



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



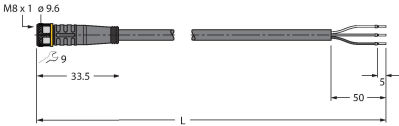
Technical data

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	

Accessories

Dimension drawing	Type	ID	
	PKG3M-2/TEL	6625058	Connection cable, female M8, straight, 3-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com
	PKW3M-2/TEL	6625064	Connection cable, female M8, angled, 3-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com