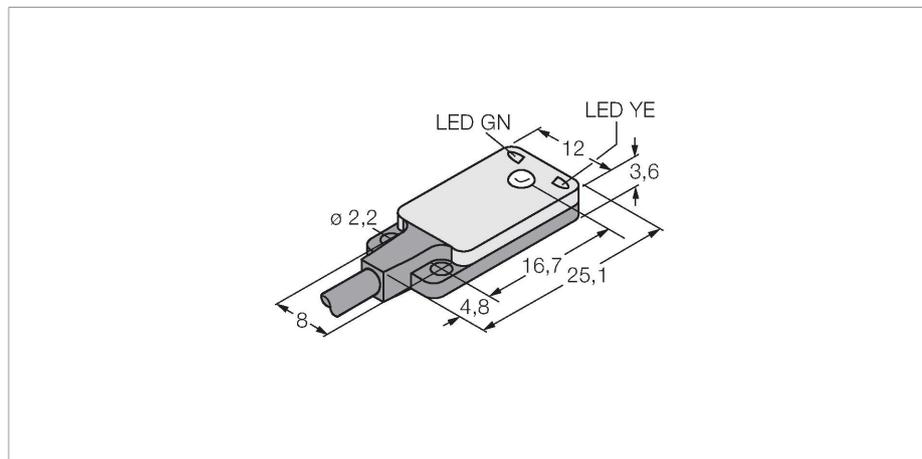


# VS2KRP5

## Photoelectric Sensor – Opposed Mode Sensor (Emitter/Receiver)

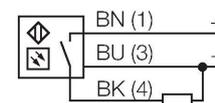
### Miniature Sensor



#### Features

- Cable, 2 m, 3-wire
- Operating voltage: 10...30 VDC
- Ultra flat design
- PNP switching output, dark operation

#### Wiring diagram

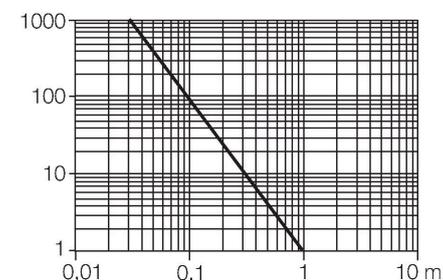


#### Technical data

Type	VS2KRP5
ID no.	3070674
<b>Optical data</b>	
Function	Opposed mode sensor
Operating mode	Receiver
Light type	Red
Wavelength	940 nm
Range	0...3000 mm
<b>Electrical data</b>	
Operating voltage	10...30 VDC
Residual ripple	< 10 % U <sub>ss</sub>
DC rated operational current	≤ 50 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO contact, PNP
Switching frequency	≤ 500 Hz
Readiness delay	≤ 100 ms
Response time typical	< 1 ms
<b>Mechanical data</b>	
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

#### 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 extremely 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

Number of cores	3
Core cross-section	0.34 mm <sup>2</sup>
Ambient temperature	-20...+55 °C
Protection class	IP67
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green, Flashing
Excess gain indication	LED
Alarm display	LED yellow Flashing
<b>Tests/approvals</b>	
Approvals	CE

## Accessories

SMBVS2RA	3058603
mounting bracket, straight	