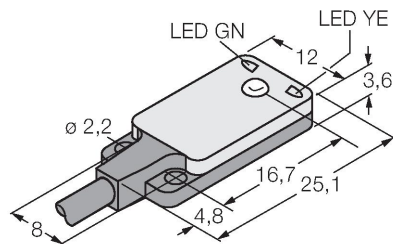


VS2KRP5Q

Photoelectric Sensor – Opposed Mode Sensor (Emitter/Receiver)

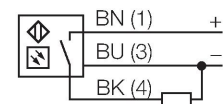
Miniature Sensor



Features

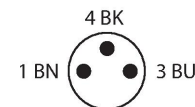
- Cable with male end, M8 × 1, 3-pin, PVC, 150 mm
- Operating voltage: 10...30 VDC
- Ultra flat design
- PNP switching output, dark operation

Wiring diagram



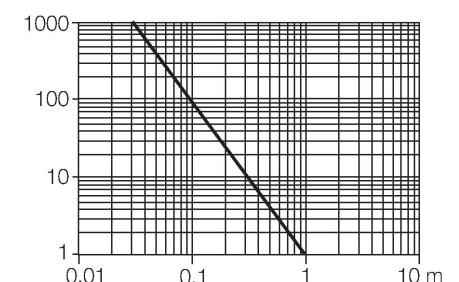
Technical data

Type	VS2KRP5Q
ID	3070675
Optical data	
Function	Opposed mode sensor
Operating mode	Receiver
Light type	Red
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
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
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, 0.15 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



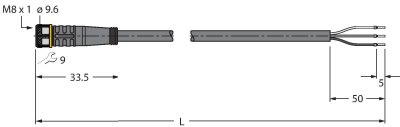
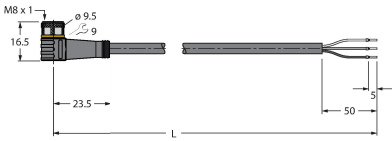
Technical data

Number of cores	3
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
Tests/approvals	
Approvals	CE

Accessories

SMBVS2RA	3058603
mounting bracket, straight	

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