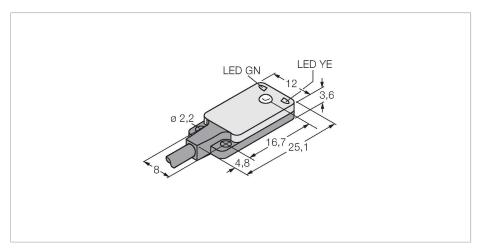
VS2KAN5VQ Photoelectric Sensor – Opposed Mode Sensor (Emitter/ Receiver) Miniature Sensor



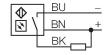
Technical data

_	VOOLANTEVO	
Type	VS2KAN5VQ	
ID no.	3063099	
Optical data		
Function	Opposed mode sensor	
Operating mode	Emitter/receiver pair	
Light type	Red	
Wavelength	660 nm	
Range	01200 mm	
Electrical data		
Operating voltage	1030 VDC	
Residual ripple	< 10 % U _{ss}	
DC rated operational current	≤ 50 mA	
Short-circuit protection	yes	
Reverse polarity protection	yes	
Output function	NO contact, NPN	
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	

Features

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

Wiring diagram

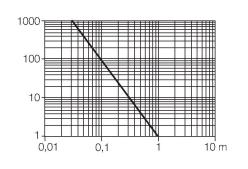




Functional principle

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

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	Туре	ID no.	
M8 x 1 o 9.6	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
M8 x 1 2 9 9.5 2 9 16.5	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