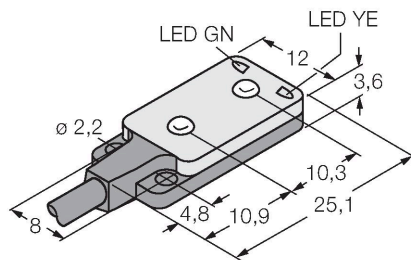


VS2RN5CV30

Photoelectric Sensor – Convergent Mode Sensor

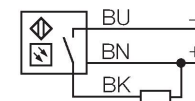
Miniature Sensor



Features

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

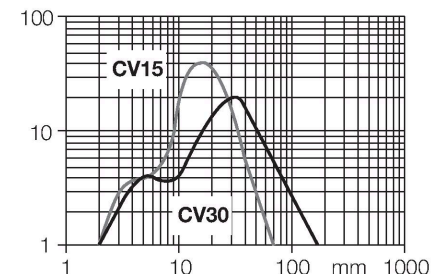
Wiring diagram



Functional principle

Convergent mode sensors are equipped with a lens in front of the emitter diode that produces a small and intense focal point at a defined distance from the sensor. Similar to diffuse mode sensors, the light reflected by the target is evaluated. Convergent mode sensors are ideal for detection of small targets or colour marks and edge guiding or positioning control of transparent materials. The targets must always be within the focal depth of the sensors. The focal depth is defined as the area in front of or behind the focal point within which the object can be detected. Based on the intense light concentration in the focal point, convergent mode sensors are capable of detecting targets with a low reflectivity.

Excess gain curve
Excess gain in relation to the distance



Technical data

Type	VS2RN5CV30
ID	3061750
Optical data	
Function	Proximity switch
Operating mode	Convergent
Light type	Red
Wavelength	660 nm
Focal distance	30 mm
Range	30 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, 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, 2 m, PVC

Technical data

Number of cores	3
Core cross-section	0.34 mm ²
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	