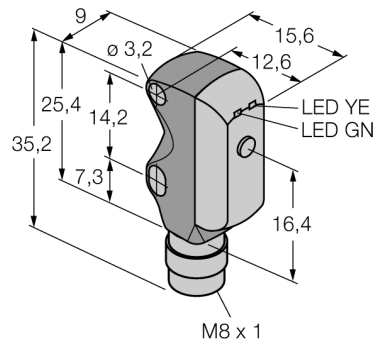


Photoelectric Sensor

Retroreflective Sensor with Polarizing Filter

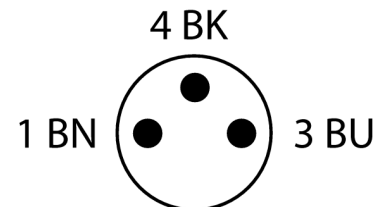
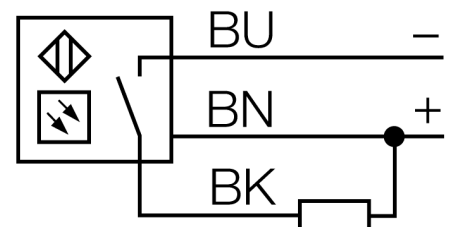
Miniature Sensor

VS3RN5XLPQ5



- Male M8 × 1; 3-pin
- Coaxial optics, no blind zone
- Operating voltage: 10...30 VDC
- NPN switching output, dark operation

Wiring Diagram



Functional principle

Retro-reflective sensors incorporate emitter and receiver in a single compact housing. The light beam of the emitter is directed towards a reflector which returns the light back to the receiver. An object is detected when it interrupts this beam. Retro-reflective sensors incorporate some of the advantages of opposed mode sensors (good contrast and high excess

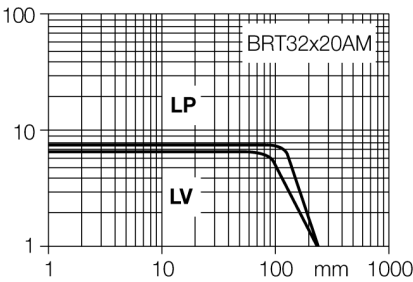
Type	VS3RN5XLPQ5
ID	3070887
Optical data	
Function	Retroreflective Sensor
Operating mode	Polarized (coaxial)
Reflector included in delivery	no
Light type	Red polarized
Wavelength	680 nm
Range	0...250 mm
Electrical data	
Operating voltage U_s	10...30 VDC
Residual ripple	< 10 % U_s
DC rated operating current I_s	≤ 50 mA
No-load current I_0	≤ 25 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO contact, dark operation, NPN
Switching frequency	≤ 500 Hz
Readiness delay	≤ 150 ms
Response time typical	< 1 ms
Mechanical data	
Design	Rectangular, VS3
Housing material	Plastic, Thermoplastic material
Lens	glass, Glass
Electrical connection	Cable with connector, M12 × 1, 0.15 m, PVC
Number of cores	4
Ambient temperature	-20...+55 °C
Protection class	IP67
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green
Excess gain indication	LED

Tests/approvals	
Approvals	CE

gain). Further it is merely required to install and wire a single device. Devices with polarisation filter should be used for detection of shiny targets.

Excess gain curve

Excess gain in relation to the distance



Accessories

Type code	Ident no.		Dimension drawing
SMBVS3S	3062618	Montagewinkel, 300 Edelstahl, rechtwinklig, für Sensoren der Baureihe VS3	
SMBVS3T	3062617	Montagewinkel, 300 Edelstahl, rechtwinklig, sehr hoch, für Sensoren der Baureihe VS3	

Function accessories

Type code	Ident no.		Dimension drawing
BRT-32X20AM	3058982	Rectangular reflector, reflection coefficient 1.2, material acrylic, ambient temperature -20 ... +60 °C, microprism geometry	