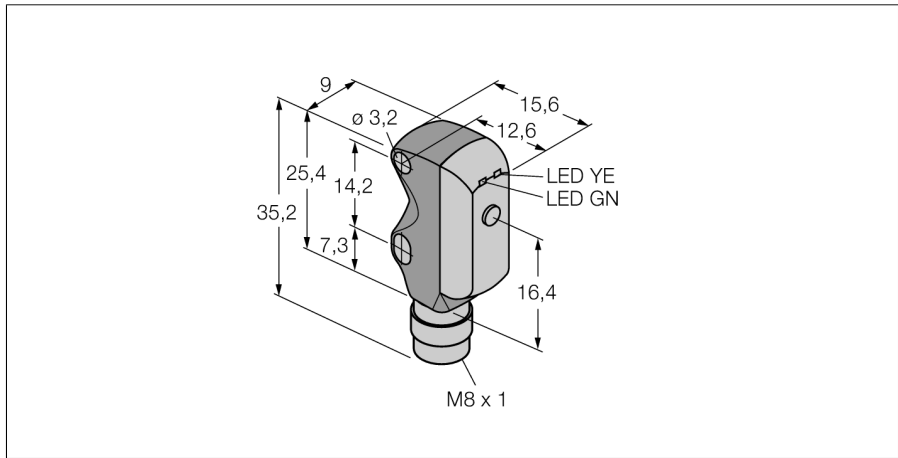
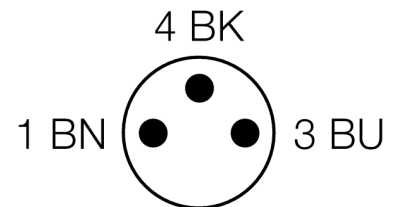
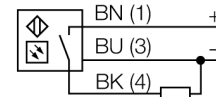


**Photoelectric sensor
retroreflective sensor
miniature sensor
VS3RP5XLVQ**



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

Wiring diagram



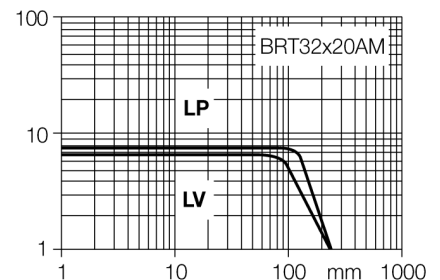
Type code	VS3RP5XLVQ
Ident no.	3063718
Operating mode	retro-reflective sensor
Light type	red
Wavelength	680 nm
Range	0...250 mm
Ambient temperature	-20...+55 °C
Operating voltage	10...30VDC
Residual ripple	< 10 % U _s
DC rated operational current	≤ 50 mA
No-load current I ₀	≤ 25 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO, dark operation, PNP
Switching frequency	≤ 500 Hz
Readiness delay	≤ 150 ms
Design	rectangular, VS3
Dimensions	16.6 x 9 x 25.4 mm
Housing material	plastic, ABS
Lens	plastic, acrylic
Connection	male, M8 x 1
Protection class	IP67
Power-on indication	LED green
Switching state	LED yellow
Error indication	LED green

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 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



**Photoelectric sensor
retroreflective sensor
miniature sensor
VS3RP5XLVQ**

Accessories

Type code	Ident no.	Description	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	

Wiring accessories

Type code	Ident no.	Description	Dimension drawing
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	

Function accessories

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