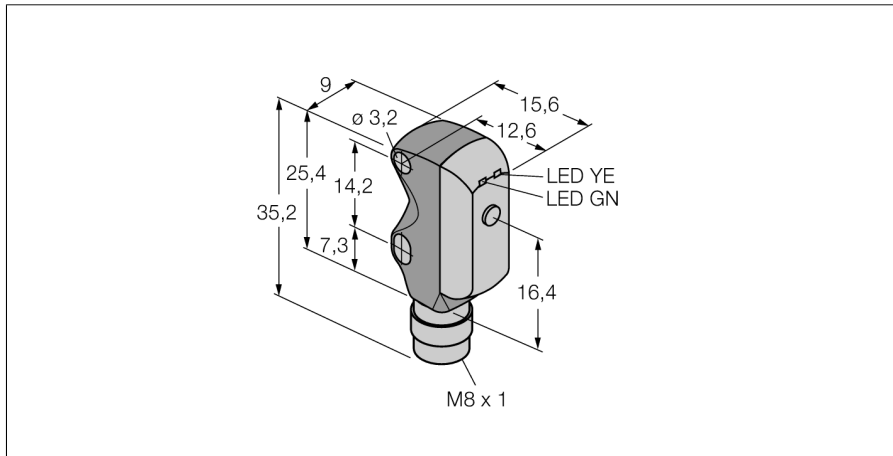
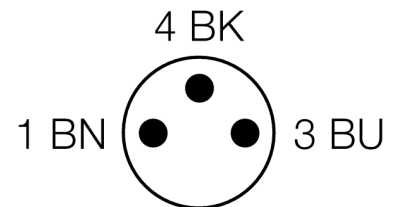
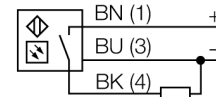


**Photoelectric sensor  
retroreflective sensor  
miniature sensor  
VS3AP5XLVQ**



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

**Wiring diagram**



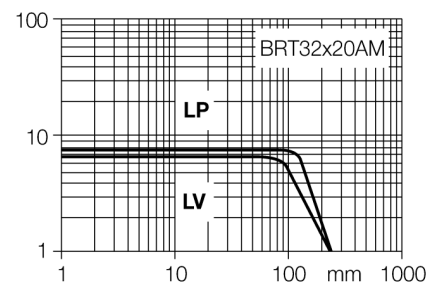
|                                |                          |
|--------------------------------|--------------------------|
| <b>Type code</b>               | VS3AP5XLVQ               |
| Ident no.                      | 3063716                  |
| <b>Operating mode</b>          | retro-reflective sensor  |
| Light type                     | red                      |
| Wavelength                     | 680 nm                   |
| Range                          | 0...250 mm               |
| Ambient temperature            | -20...+55 °C             |
| <b>Operating voltage</b>       | 10...30VDC               |
| Residual ripple                | < 10 % U <sub>s</sub>    |
| DC rated operational current   | ≤ 50 mA                  |
| No-load current I <sub>0</sub> | ≤ 25 mA                  |
| Short-circuit protection       | yes                      |
| Reverse polarity protection    | yes                      |
| Output function                | NO, light operation, PNP |
| Switching frequency            | ≤ 500 Hz                 |
| Readiness delay                | ≤ 150 ms                 |
| <b>Design</b>                  | 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                     |
| <b>Power-on indication</b>     | 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  
VS3AP5XLVQ**

**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 <a href="http://www.turck.com">www.turck.com</a> |                   |
| 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 <a href="http://www.turck.com">www.turck.com</a>   |                   |

**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 |                   |