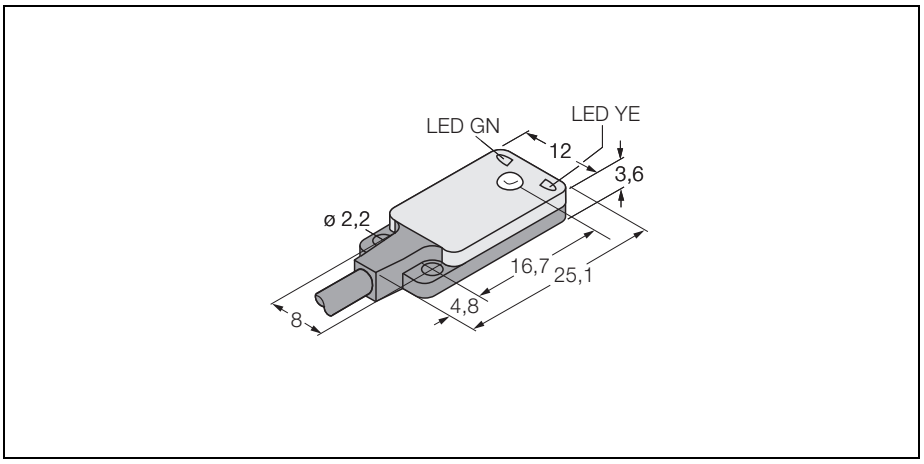
# Photoelectric sensor
# opposed mode sensor (emitter/receiver)
# VS2KRN5V

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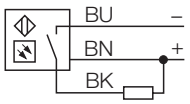
|---|---|
| **Type** | VS2KRN5V |
| Ident-No. | 3058221 |
| **Operating mode** | Opposed mode (Emitter/Receiver) |
| Type of light | red |
| Wave length | 660 nm |
| Max. sensing range [m] | 0... 1,2 m |
| Operating temperature | -20 ...+ 55 °C |
| **Rated operational voltage (DC) $U_B$** | 10... 30 VDC |
| Rated operational current (DC) $I_e$ | ≤ 50 mA |
| No-load current $I_0$ | ≤ 25 mA |
| Short-circuit protection | yes, cyclic |
| Reverse polarity protection | yes |
| Output function | normally open, NPN |
| Switching frequency | ≤ 500 Hz |
| Max. switch-on delay | ≤ 100 ms |
| **Housing style** | rectangular; VS2 |
| Dimensions | 3,6 x 12 x 25,1 mm |
| Housing material | plastic, ABS |
| Lens | Kunststoff, MABS |
| Wiring | cable |
| Cable length | 2 m |
| Cable cross section | 3 x 0,34 $mm^2$ |
| Degree of protection | IP67 |
| **Supply voltage indication** | LED green |
| Switching status indication | LED yellow |
| Error indication | LED green blinkend |
| Alarm indication | LED yellow blinkend |

- **cable, 2 m**
- **dark operate**

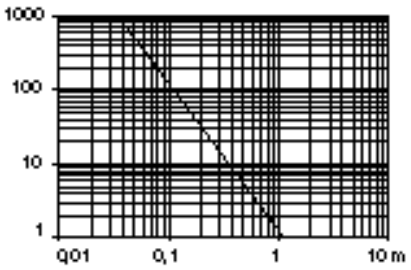
**Wiring diagram**




Opposed mode sensors consist of a separate emitter and receiver. These are installed directly 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



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