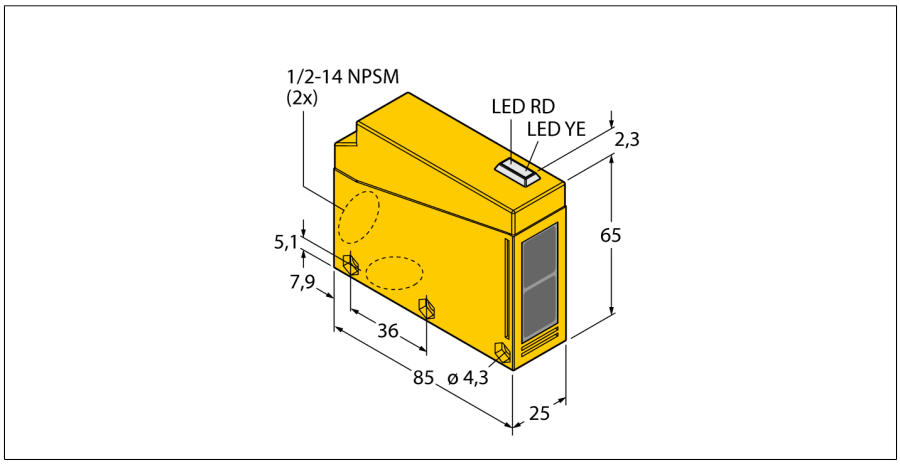
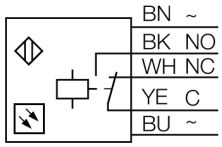
Photoelectric sensor
retroreflective sensor with polarizing filter
Q85VR3LP-B

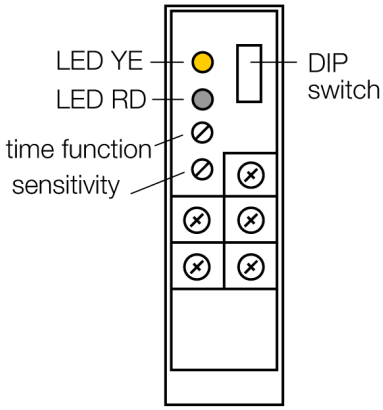


- **Integrated terminal chamber**
- **Cable glands, offset installation by 90° in two places**
- **Protection class IP67**
- **AID alignment aid**
- **Operating voltage: 12…240 VDC, 24… 240 VAC**
- **Relay output**
- **Light and dark operation**
- **Sensitivity adjusted via potentiometer**

Type code	Q85VR3LP-B
Ident no.	3031214
Operating mode	retro-reflective sensor with polarisation filter
Light type	red
Wavelength	680 nm
Range	80…4600 mm
Ambient temperature	-25…+55 °C
Operating voltage	12…240VDC
Operating voltage	24…240 VAC
DC rated operational current	≤ 3000 mA
AC rated operational current	≤ 3000 mA
Output function	NO/NC , Relay output
Switching frequency	0.025 kHz
Switching frequency	≤ 25 Hz
Max. AC switching capacity	2 VA
Design	rectangular, Q85
Dimensions	85 x 65 x 25 mm
Housing material	plastic, ABS, yellow
Lens	acrylic, Plastic
Connection	terminal chamber
Protection class	IP67
Switching state	LED yellow
Excess gain indication	LED red flashing

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 gain). Further it is merely required to install and wire a single device. A smaller sensing range and susceptibility of devices without polarisation filter can be of disadvantage when shiny objects have to be detected.

Excess gain curve

Excess gain in relation to the distance

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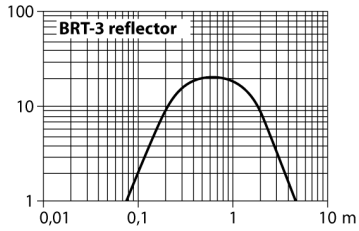

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