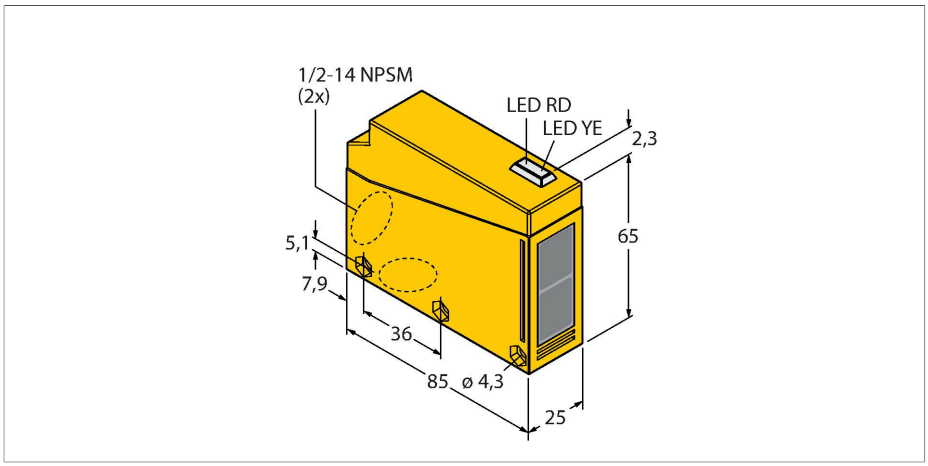
Q85BB62LP-B
Photoelectric Sensor – Retroreflective Sensor with Polarizing Filter



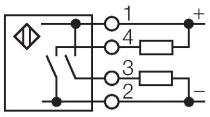
Technical data

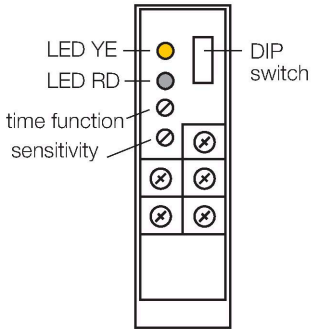
Type	Q85BB62LP-B
ID	3034257
Optical data	
Function	Retroreflective Sensor
Operating mode	Polarized
Reflector included in delivery	no
Light type	Red polarized
Wavelength	680 nm
Range	80…46000 mm
Electrical data	
Operating voltage	10…48 VDC
DC rated operational current	≤ 120 mA
No-load current	≤ 50 mA
Short-circuit protection	yes / Cyclic
Reverse polarity protection	yes
Output function	NO contact, PNP/NPN
Switching frequency	0.5 kHz
Switching frequency	≤ 500 Hz
Readiness delay	≤ 0 ms
Response time typical	< 1 ms
Overcurrent release	> 270 mA
Setting option	Potentiometer
Mechanical data	
Design	Rectangular, Q85
Dimensions	85 x 65 x 25 mm
Housing material	Plastic, Thermoplastic material, Yellow

Features

- Integrated terminal chamber
- Cable glands, offset installation by 90° in two places
- Protection class IP67
- AID alignment aid
- Operating voltage: 10…48 VDC
- Outputs: 1 × PNP, 1 × NPN
- Light and dark operation
- Sensitivity adjusted via potentiometer

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

Technical data

Lens	acrylic, Acrylic
Electrical connection	Terminal block
Number of cores	4
Ambient temperature	-25…+55 °C
Protection class	IP67
Switching state	LED, Yellow
Excess gain indication	LED, red, flashing
Tests/approvals