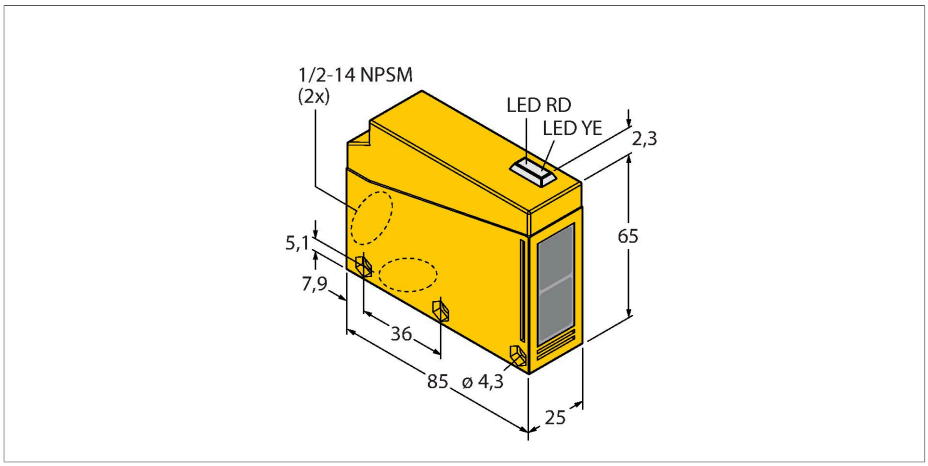
LOP4.6M-BR85-RVDZ5X2
Photoelectric Sensor – Retroreflective Sensor with Polarizing Filter



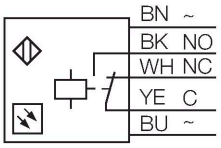
Technical data

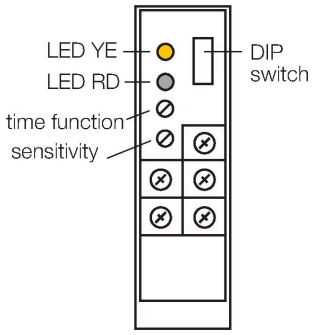
Type	LOP4.6M-BR85-RVDZ5X2
ID	7700704
Function	Retroreflective sensor with polarizing filter
Light type	Red
Wavelength	680 nm
Range	80…4600 mm
Operating voltage	12…240 VDC
Operating voltage	24…240 VAC
DC rated operational current	≤ 3000 mA
AC rated operational current	≤ 3000 mA
Output function	NO/NC, Relay output
Switching frequency	≤ 25 Hz
Max. AC switching capacity	2 VA
Design	Rectangular, Q85
Dimensions	85 x 25 x 65 mm
Housing material	Plastic, ABS, Yellow
Lens	acrylic, plastic
Electrical connection	Terminal chamber
Ambient temperature	-25…+55 °C
Protection class	IP67
Switching state	LED, Yellow
Excess gain indication	LED, red, flashing

Features

- 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

Wiring diagram

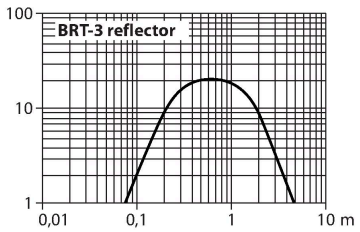




Functional principle

Retroreflective sensors have emitter and receiver incorporated in the same housing. The light beam of the emitter is directed towards a reflector which returns the light back to the receiver. A target is captured when it interrupts this beam. Retroreflective sensors feature some of the advantages of opposed mode sensors, such as good contrast and high excess gain. Furthermore, only one device has to be installed and wired. Devices without polarizing filter have a smaller sensing range and are more susceptible to disturbances caused by shiny objects.

Excess gain curve
Excess gain in relation to distance



Accessories

Dimension drawing	Type	ID	
	T-BRT-3	7700369	Round reflector, reflection coefficient 1.0, material acrylic, ambient temperature -20 … +60 °C