

QS30VR3LP W/30

Photoelectric Sensor – Retroreflective Sensor with Polarizing Filter



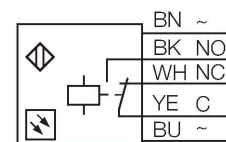
Technical data

Type	QS30VR3LP W/30
ID no.	3073198
Optical data	
Function	Retroreflective Sensor
Operating mode	Polarized
Reflector included in delivery	no
Light type	Red polarized
Wavelength	630 nm
Range	0...8000 mm
Electrical data	
Operating voltage	12...250 VDC
Operating voltage	24...250 VAC
No-load current	≤ 35 mA
Output function	NO/NC, Relay output
Switching frequency	≤ 250 Hz
Readiness delay	≤ 100 ms
Response time typical	< 15 ms
Mechanical data	
Design	Rectangular with thread, QS30
Dimensions	Ø 30 x 51.5 x 22 x 44 mm
Housing material	Plastic, Thermoplastic material, Yellow
Lens	plastic, Acrylic
Electrical connection	Cable, 9 m, PVC
Number of cores	5
Core cross-section	0.5 mm ²
Ambient temperature	-20...+70 °C

Features

- Cable, PVC, 9 m
- Protection class IP67
- LED all-round visible
- Sensitivity adjusted via potentiometer
- Operating voltage: 12...250 VDC or 24...250 VAC
- Relay output, changeover

Wiring diagram



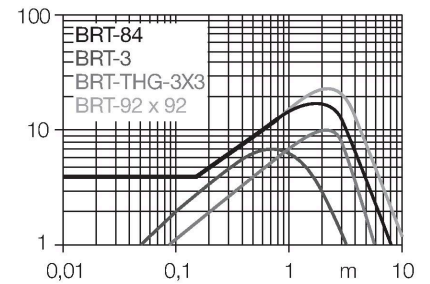
Functional principle

Retro-reflective sensors incorporate emitter and receiver in the same 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

Protection class	IP67
Power-on indication	LED, Green
Switching state	LED, Yellow
Excess gain indication	LED, yellow, flashing
Tests/approvals	
Approvals	CE



Accessories

SMBQS30Y 3002811

Protective housing, stainless steel, for QS30 series

SMBQS30YL 3072741

Protective housing with safety glass panel, stainless steel, for QS30 series

SMB30A 3032723

Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread

SMBQS30L 3002809

Mounting bracket, stainless steel, for QS30 series

SMB30MM 3027162

Mounting bracket, rectangular, stainless steel, for sensors with 30 mm thread, wide holes for accurate alignment

SMB30SC 3052521

Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable

Accessories

Dimension drawing	Type	ID no.	
	BRT-84	3058979	Round reflector, reflection coefficient 1.4, material acrylic, ambient temperature -20 ... +60 °C

