

QS30VR3LPQMA

Photoelectric Sensor – Retroreflective Sensor with Polarizing Filter



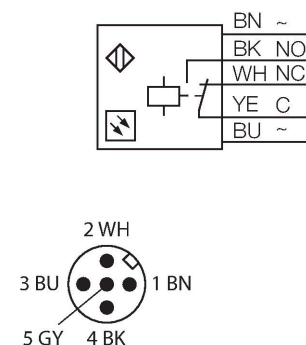
Technical data

Type	QS30VR3LPQMA
ID no.	3073072
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 with connector, 1/2", 0.15 m, PUR
Number of cores	5
Ambient temperature	-20...+70 °C
Protection class	IP67

Features

- Cable with male end M12 × 1, 5-pin, PUR, 150 mm
- 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

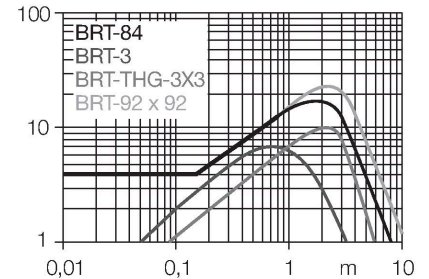
Retro-reflective sensors incorporate emitter and receiver in the same compact housing. The light beam of the emitter is directed towards a reflector which returns the light back to the receiver. An object is detected when it interrupts this beam. Retro-reflective sensors incorporate some of the advantages 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

Technical data

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

disadvantage when shiny objects have to be detected.

Excess gain curve
Excess gain in relation to the distance



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

