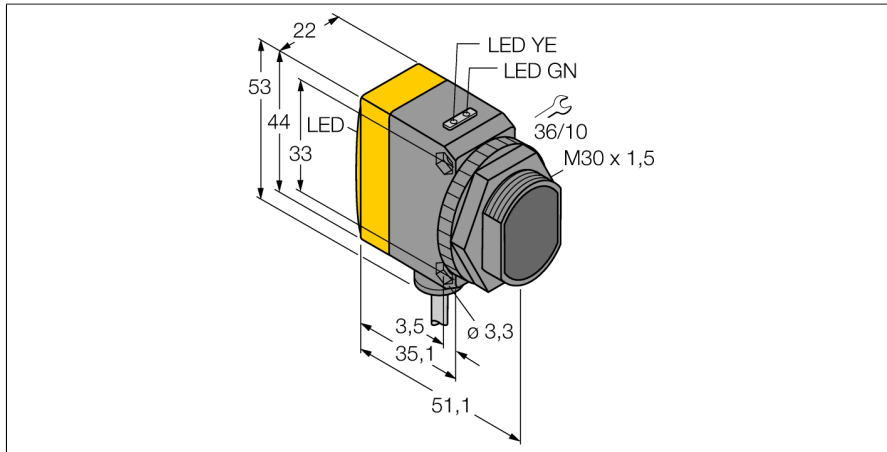


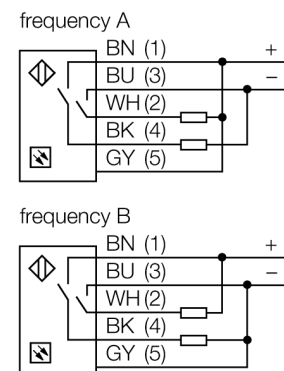
Photoelectric Sensor Opposed Mode Sensor (Emitter/Receiver) For Water Detection QS30ARXH2O



Type	QS30ARXH2O
ID	3079173
Optical data	
Function	Opposed mode sensor
Operating mode	Receiver
Range	0...4000 mm
Electrical data	
Operating voltage U_n	10...30 VDC
Residual ripple	< 10 % U_n
DC rated operating current I_n	≤ 100 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO contact, light operation, PNP/NPN
Readiness delay	≤ 100 ms
Response time typical	< 1 ms
Mechanical data	
Design	Rectangular with thread, QS30
Dimensions	Ø 30 x 54.3 x 22 x 53 mm
Housing material	Plastic, Thermoplastic material, Yellow
Lens	plastic, Acrylic
Electrical connection	Cable, 2 m, PVC
Number of cores	5
Core cross-section	0.5 mm ²
Ambient temperature	-20...+60 °C
Protection class	IP67
Special features	
	Encapsulated Water detection
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green, Flashing
Excess gain indication	Bargraph, yellow, flashing

- Cable, PVC, 9 m
- Protection class IP67
- LED all-round visible
- Selectable operating frequency, protection against crosstalk
- Operating voltage: 10...30 VDC
- Switching output, bipolar, light operation

Wiring Diagram



Functional principle

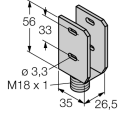
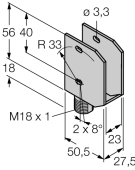
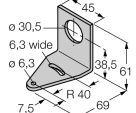
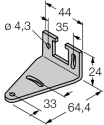
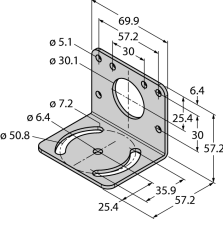
The opposed mode sensor incorporates an emitter and a receiver. The emitter emits light in the near IR range with a wavelength of 1450 nm, which approximates one of the absorption edges of water. The resulting high contrast ratio leads to a particularly high sensitivity with water or media containing water as opposed to transparent media.

Tests/approvals

Approvals

CE

Accessories

Type code	Ident no.		Dimension drawing
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	

Accessories

Type code	Ident no.		Dimension drawing
SMB30SC	3052521	Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable	