QS30EXH2O
Photoelectric Sensor – Opposed Mode Sensor (Emitter)
For Water Detection
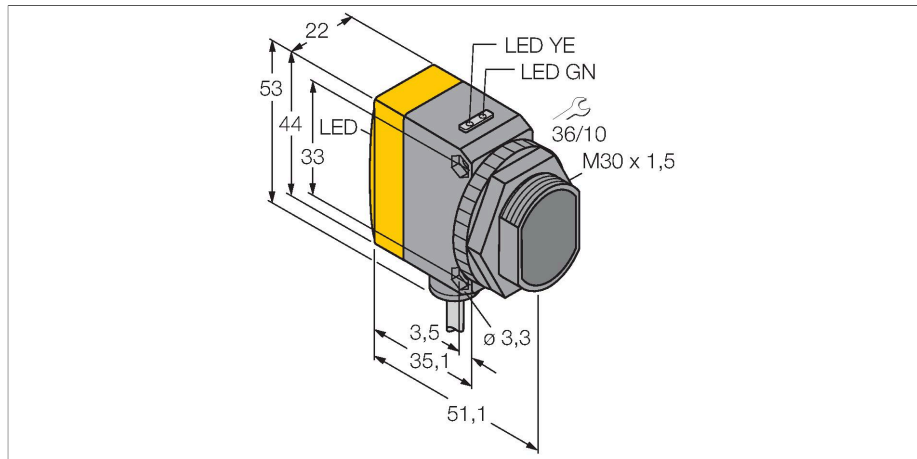
## Technical data

Type	QS30EXH2O
ID	3079164
Optical data	
Function	Opposed mode sensor
Operating mode	Emitter
Light type	IR
Wavelength	1450 nm
Range	0…4000 mm
Electrical data	
Operating voltage	10…30 VDC
Residual ripple	< 10 % U_{ss}
DC rated operational current	≤ 100 mA
Short-circuit protection	yes
Reverse polarity protection	yes
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	4
Core cross-section	0.5 mm^2
Ambient temperature	-20…+60 °C
Protection class	IP67

Features

- Cable, PVC, 2 m
- Protection class IP67
- LED all-round visible
- Selectable operating frequency, protection against crosstalk
- Emitter LED, switchable
- Operating voltage: 10…30 VDC

Wiring diagram

frequency A

frequency B
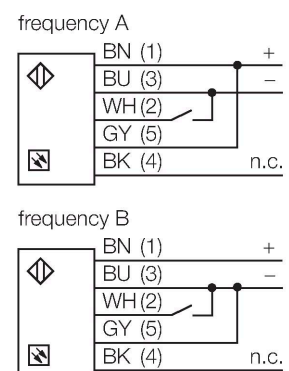
Functional principle

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.

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QS30EXH2O | 19-01-2022 02-22 | Technical modifications reserved

Technical data

Special features	Encapsulated Water detection
Power-on indication	LED, Green
Error indication	LED, green
Excess gain indication	LED
Tests/approvals	
Approvals	CE

Accessories

SMBQS30Y	**3002811**

Protective housing, stainless steel, for QS30 series

SMBQS30YL	**3072741**

Protective housing with safety glas 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