QS30RRXH2O W/30
Photoelectric Sensor – Opposed Mode Sensor (Emitter/Receiver)
For Water Detection
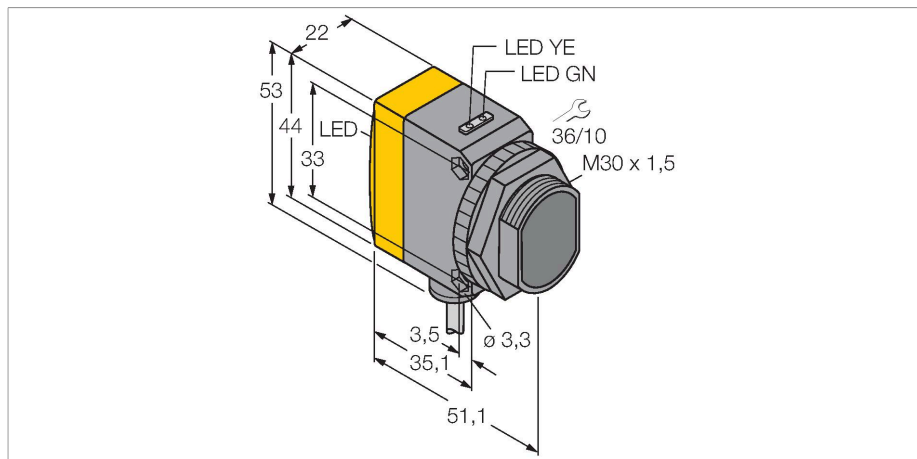

Technical data

Type	QS30RRXH2O W/30
ID	3079177
Optical data	
Function	Opposed mode sensor
Operating mode	Receiver
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
Output function	NO contact, dark 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, 9 m, PVC
Number of cores	5
Core cross-section	0.5 mm^2
Ambient temperature	-20…+60 °C

Features

■ 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, dark operation

Wiring diagram
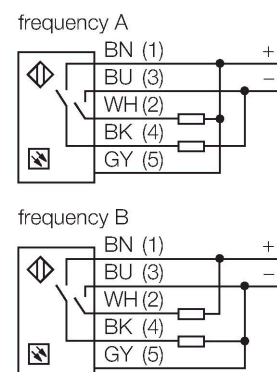
Functional principle

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.

Technical data

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
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