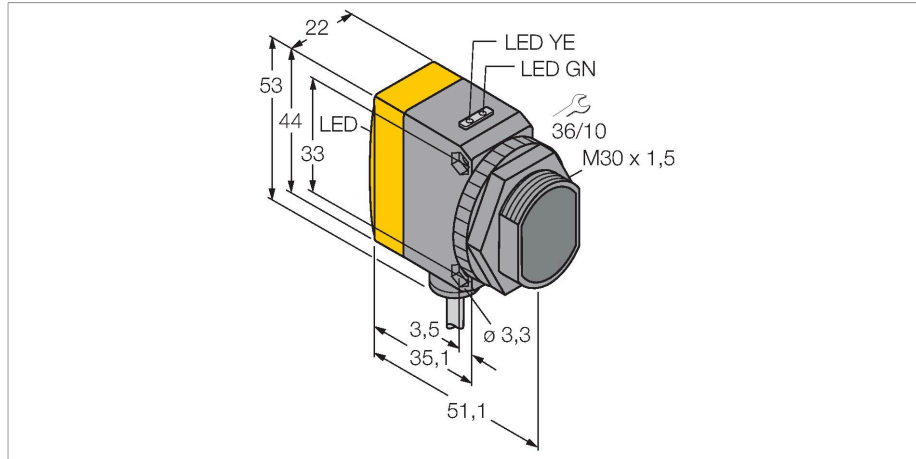# QS30ARXSH2O
Photoelectric Sensor – Opposed Mode Sensor (Emitter/ Receiver)
For Water Detection
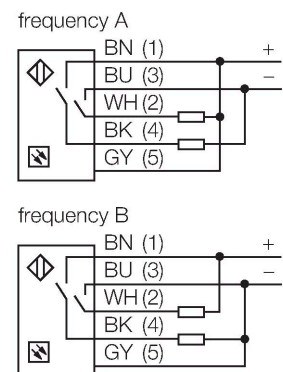

Technical data

Type	QS30ARXSH2O
ID no.	3083301
Optical data	
Function	Opposed mode sensor
Operating mode	Receiver
Range	0…8000 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, light operation, PNP/NPN
Readiness delay	≤ 100 ms
Response time typical	< 10 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

Features

- Cable, PVC, 2 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.

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