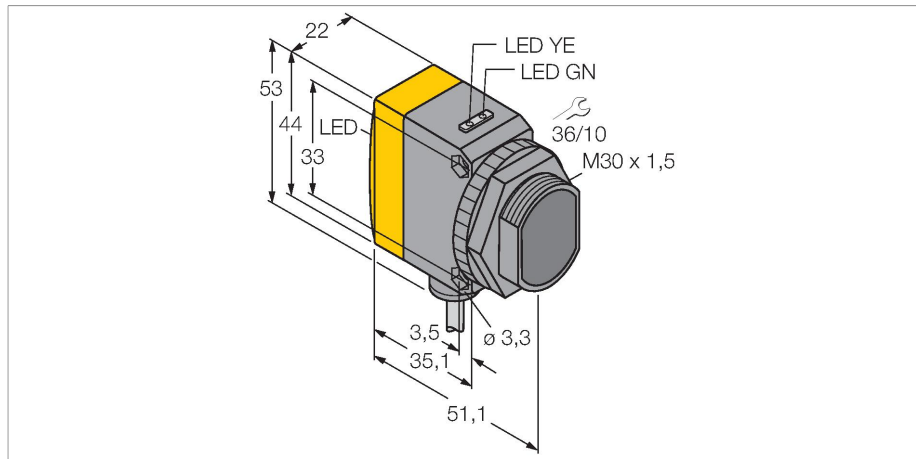


QS30RRH2O

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



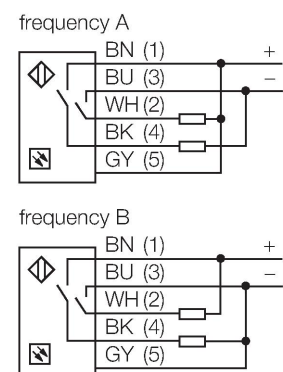
Technical data

Type	QS30RRH2O
ID no.	3079170
Optical data	
Function	Opposed mode sensor
Operating mode	Receiver
Range	0...2000 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, 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, 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	Water detection
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green, Flashing
Excess gain indication	LED, yellow, flashing
Tests/approvals	
Approvals	CE

Accessories

SMBQS30Y

56
33
35
26,5
ø 3,3
M18 x 1

3002811

Protective housing, stainless steel, for QS30 series

SMBQS30YL

56
40
18
27,5
ø 3,3
M18 x 1
R 33
2 x 8°
50,5
23

3072741

Protective housing with safety glass panel, stainless steel, for QS30 series

SMB30A

45
6,3
6,3
38,5
61
69
7,5
R 40
ø 30,5

3032723

Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread

SMBQS30L

44
35
24
64,4
33
ø 4,3

3002809

Mounting bracket, stainless steel, for QS30 series

SMB30MM

69,9
57,2
30
6,4
25,4
57,2
25,4
35,9
ø 5,1
ø 30,1
ø 7,2
ø 6,4
ø 50,8

3027162

Mounting bracket, rectangular, stainless steel, for sensors with 30 mm thread, wide holes for accurate alignment

SMB30SC

12,7
66,5
58,7
29
50,8
ø 7
M30 x 1,5

3052521

Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable