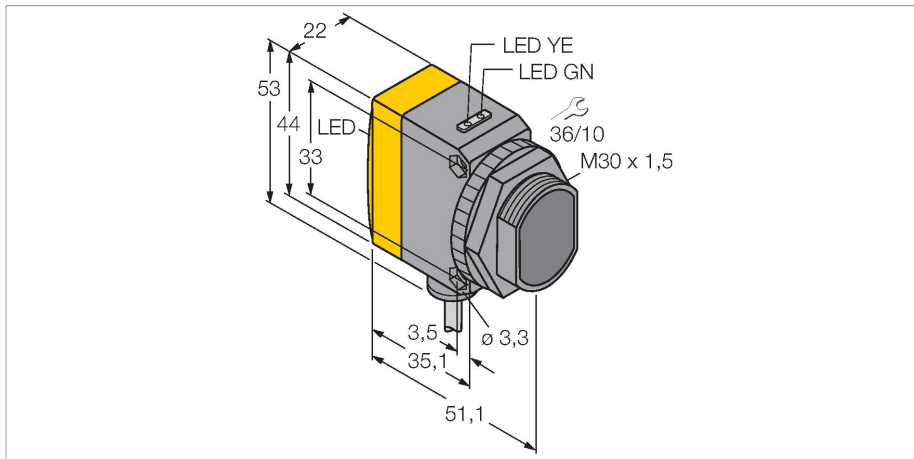


QS30ARH2O

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



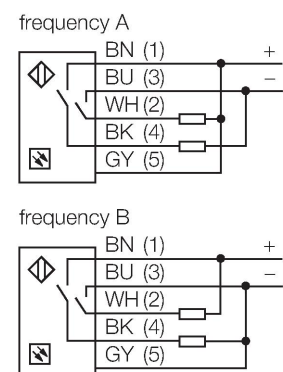
Technical data

Type	QS30ARH2O
ID	3079167
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, 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

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



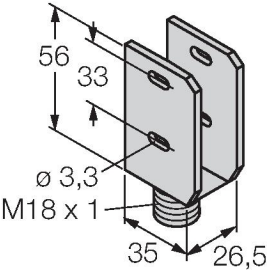
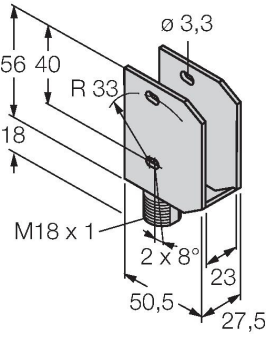
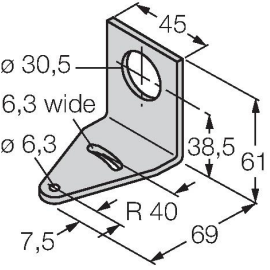
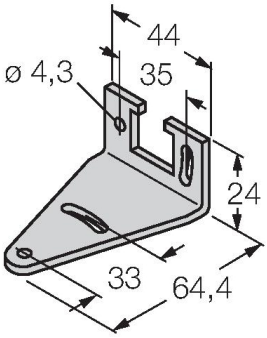
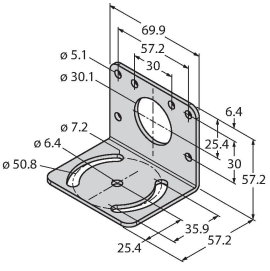
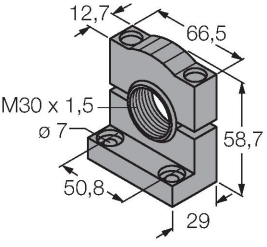
Functional principle

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	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 	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	SMB30SC 	3052521 Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable