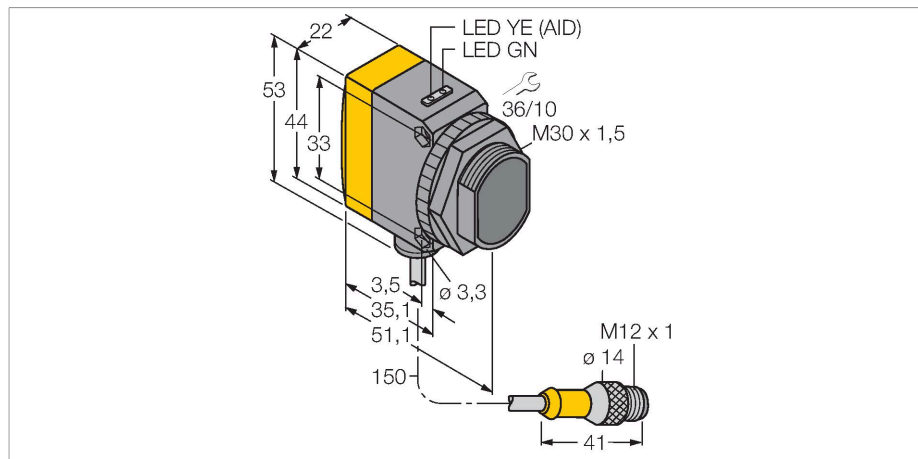


QS30RRH2OQ5

Photoelectric Sensor – Opposed Mode Sensor (Emitter/Receiver)

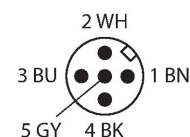
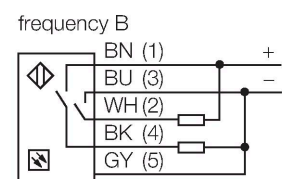
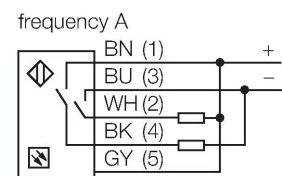
For Water Detection



Features

- Male M12 × 1, 5-pin
- 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

Type	QS30RRH2OQ5
ID	3079172
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 51.5 x 22 x 57 mm
Housing material	Plastic, Thermoplastic material, Yellow
Lens	plastic, Acrylic
Electrical connection	Cable with connector, M12 × 1, 0.15 m, PVC
Number of cores	5
Core cross-section	0.5 mm ²
Ambient temperature	-20...+60 °C

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

<p>SMB30A</p>	<p>3032723</p> <p>Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread</p>	<p>SMBQS30L</p>	<p>3002809</p> <p>Mounting bracket, stainless steel, for QS30 series</p>
<p>SMB30MM</p>	<p>3027162</p> <p>Mounting bracket, rectangular, stainless steel, for sensors with 30 mm thread, wide holes for accurate alignment</p>	<p>SMB30SC</p>	<p>3052521</p> <p>Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable</p>

Accessories

<p>Dimension drawing</p>	<p>Type</p> <p>WKC4.5T-2/TEL</p>	<p>ID</p> <p>6625028</p>	<p>Connection cable, female M12, angled, 5-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com</p>
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Dimension drawing	Type	ID	
	RKC4.5T-2/TEL	6625016	Connection cable, female M12, straight, 5-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com