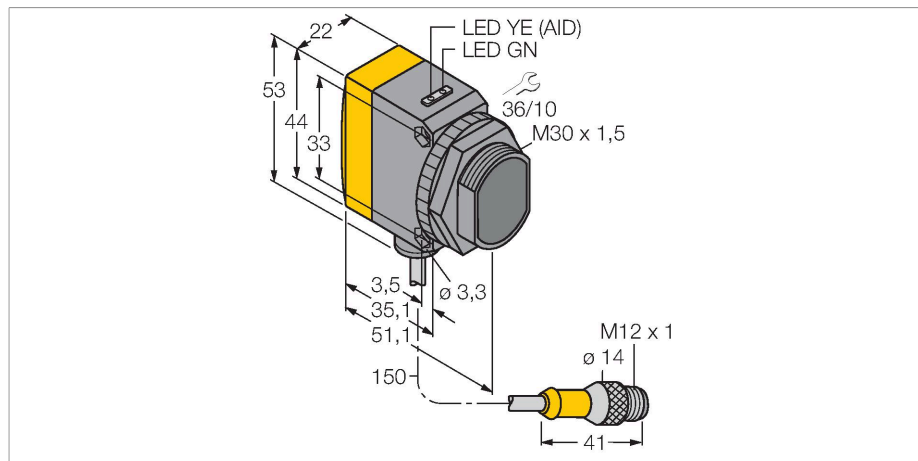


# QS30RRXH2OQ5

## Photoelectric Sensor – Opposed Mode Sensor (Emitter/Receiver)

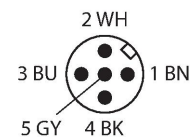
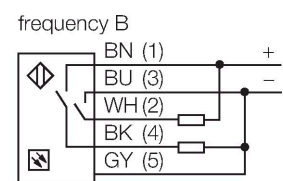
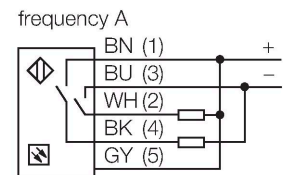
### For Water Detection



## 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	QS30RRXH2OQ5
ID	3079178
<b>Optical data</b>	
Function	Opposed mode sensor
Operating mode	Receiver
Range	0...4000 mm
<b>Electrical data</b>	
Operating voltage	10...30 VDC
Residual ripple	< 10 % U <sub>ss</sub>
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
<b>Mechanical data</b>	
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 <sup>2</sup>
Ambient temperature	-20...+60 °C

## 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
<b>Tests/approvals</b>	
Approvals	CE

## Accessories

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

## Accessories

Dimension drawing	Type	ID	
	<p><b>WKC4.5T-2/TEL</b></p>	<p><b>6625028</b></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 <a href="http://www.turck.com">www.turck.com</a></p>

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 <a href="http://www.turck.com">www.turck.com</a>

