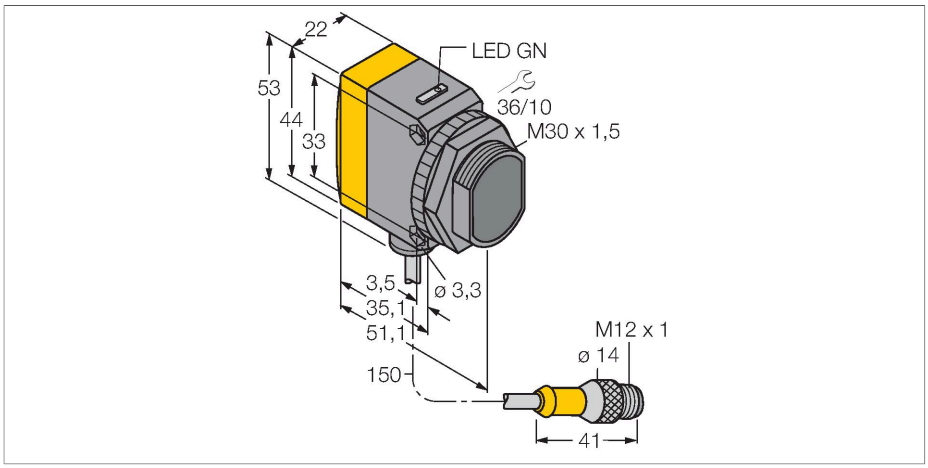
QS30EXH2OQ5
Photoelectric Sensor – Opposed Mode Sensor (Emitter) For Water Detection



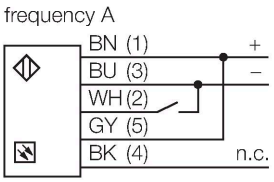
Technical data

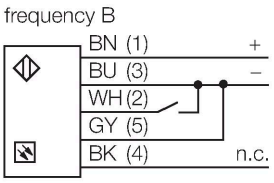
Type	QS30EXH2OQ5
ID	3079166
Optical data	
Function	Opposed mode sensor
Operating mode	Emitter
Light type	IR
Wavelength	1450 nm
Range	0…4000 mm
Electrical data	
Operating voltage	10…30 VDC
Residual ripple	< 10 % U_{ss}
DC rated operational current	≤ 80 mA
Short-circuit protection	yes
Reverse polarity protection	yes
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

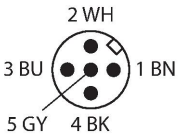
Features

- Male M12 × 1, 5-pin
- Protection class IP67
- LED all-round visible
- Selectable operating frequency, protection against crosstalk
- Emitter LED, switchable
- Operating voltage: 10…30 VDC

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.

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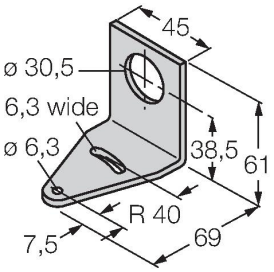
Technical data

Protection class	IP67
Special features	Encapsulated Water detection
Power-on indication	LED, Green
Error indication	LED, green
Excess gain indication	LED
Tests/approvals	
Approvals	CE

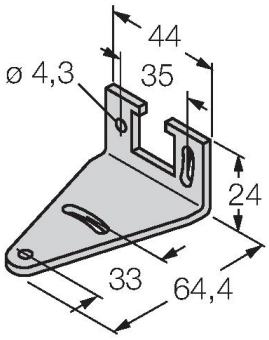
Accessories

SMB30A 3032723



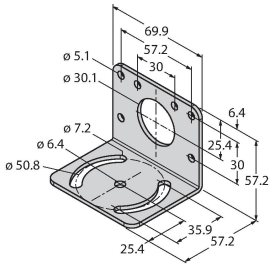
Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread

SMBQS30L 3002809



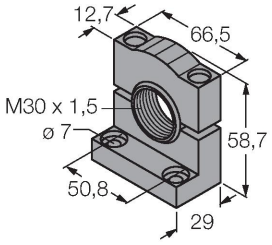
Mounting bracket, stainless steel, for QS30 series

SMB30MM 3027162



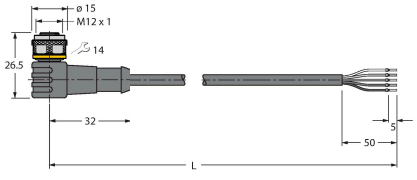
Mounting bracket, rectangular, stainless steel, for sensors with 30 mm thread, wide holes for accurate alignment

SMB30SC 3052521



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

Accessories

Dimension drawing	Type	ID	
	WKC4.5T-2/TEL	6625028	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
	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

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