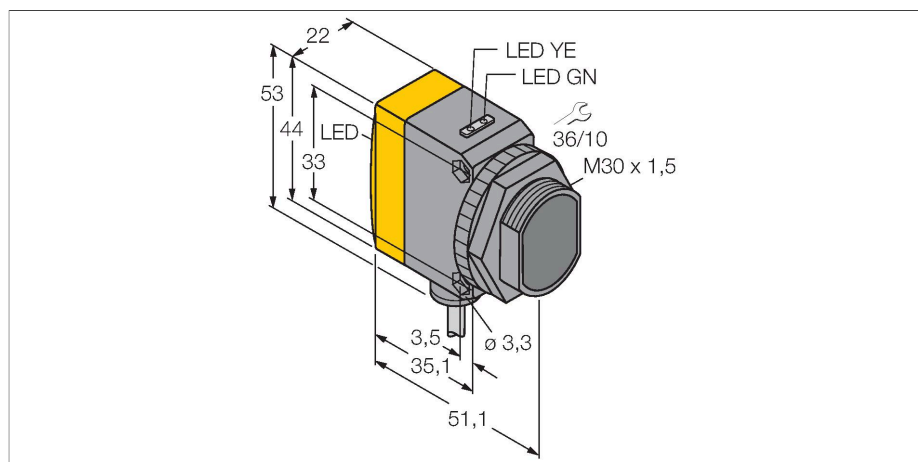


# QS303E

## Photoelectric Sensor – Opposed Mode Sensor (Emitter)



### Technical data

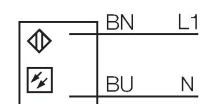
Type	QS303E
ID no.	3072971
<b>Optical data</b>	
Function	Opposed mode sensor
Operating mode	Emitter
Light type	IR
Wavelength	875 nm
Range	0...60000 mm
<b>Electrical data</b>	
Operating voltage	12...250 VDC
Operating voltage	24...250 VAC
No-load current	≤ 70 mA
Readiness delay	≤ 100 ms
Response time typical	< 15 ms
<b>Mechanical data</b>	
Design	Rectangular with thread, QS30
Dimensions	Ø 30 x 51.5 x 22 x 44 mm
Housing material	Plastic, Thermoplastic material, Yellow
Lens	plastic, Acrylic
Electrical connection	Cable, 2 m, PVC
Number of cores	2
Core cross-section	0.5 mm <sup>2</sup>
Ambient temperature	-40...+70 °C
Protection class	IP67
Power-on indication	LED, Green
Excess gain indication	LED



### Features

- Cable, PVC, 2 m
- Protection class IP67
- LED all-round visible
- Operating voltage: 12...250 VDC or 24...250 VAC

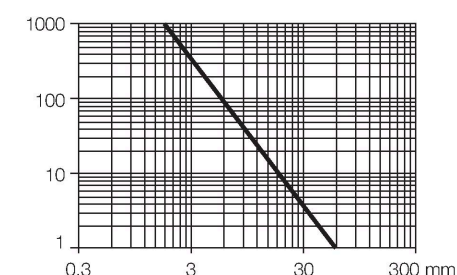
### Wiring diagram



### Functional principle

Opposed mode sensors consist of an emitter and receiver. They are installed opposite to each other so that the light from the emitter is aimed directly at the receiver. When an object interrupts or weakens the light beam, the sensor switches. Large distance operation is possible due to an excellent light/dark contrast and an extremely high excess gain.

Excess gain curve  
Excess gain in relation to the distance



## Technical data

### Tests/approvals

MTTF 402 years acc. to SN 29500 (Ed. 99) 40 °C

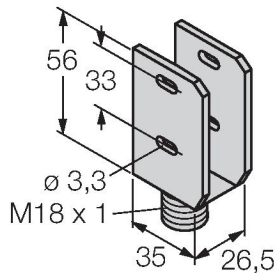
Approvals CE

## Accessories

### SMBQS30Y

3002811

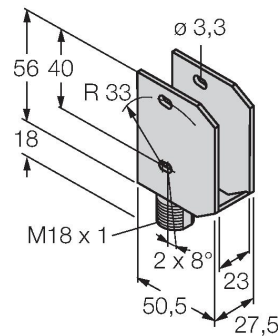
Protective housing, stainless steel, for QS30 series



### SMBQS30YL

3072741

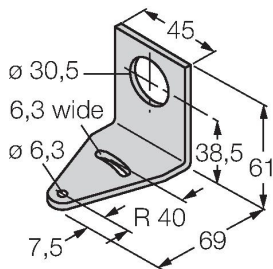
Protective housing with safety glass panel, stainless steel, for QS30 series



### SMB30A

3032723

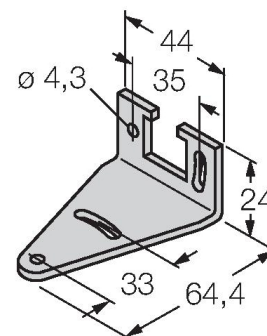
Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread



### SMBQS30L

3002809

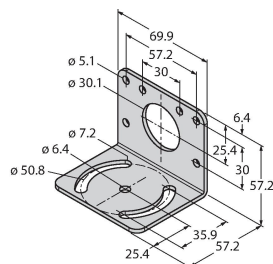
Mounting bracket, stainless steel, for QS30 series



### 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

