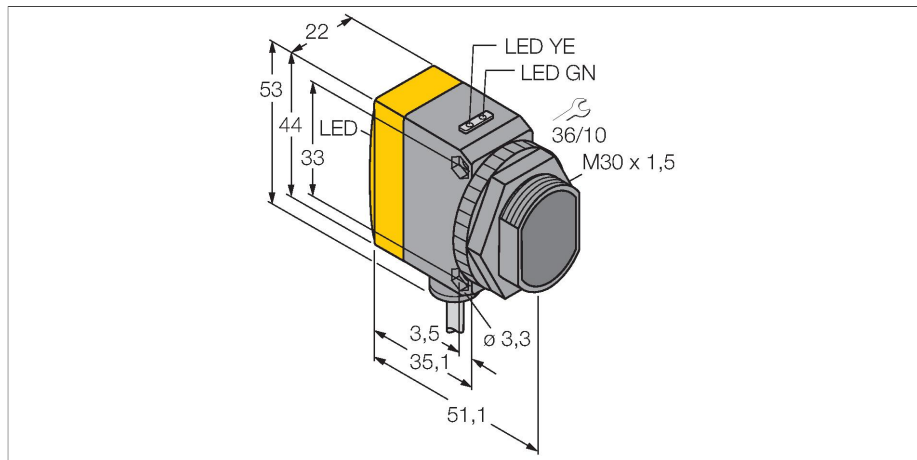


QS303E

Photoelectric Sensor – Opposed Mode Sensor (Emitter)



Technical data

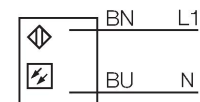
Type	QS303E
ID	3072971
Optical data	
Function	Opposed mode sensor
Operating mode	Emitter
Light type	IR
Wavelength	875 nm
Range	0...60000 mm
Electrical data	
Operating voltage	12...250 VDC
Operating voltage	24...250 VAC
No-load current	≤ 70 mA
Readiness delay	≤ 100 ms
Response time typical	< 15 ms
Mechanical data	
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 ²
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

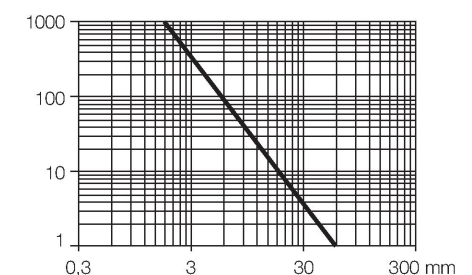
Wiring diagram



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

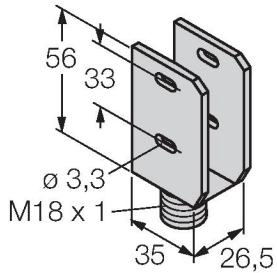
Approvals CE

Accessories

SMBQS30Y

3002811

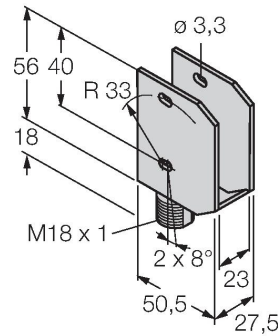
Protective housing, stainless steel, for QS30 series



SMBQS30YL

3072741

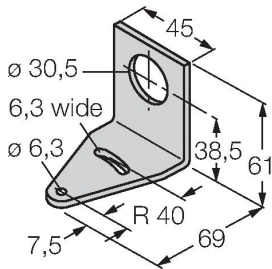
Protective housing with safety glass panel, stainless steel, for QS30 series



SMB30A

3032723

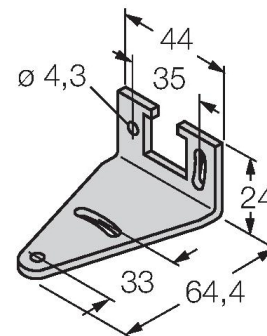
Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread



SMBQS30L

3002809

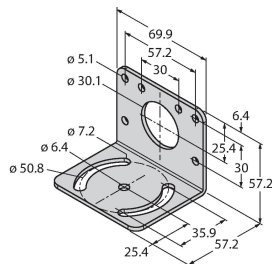
Mounting bracket, stainless steel, for QS30 series



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

