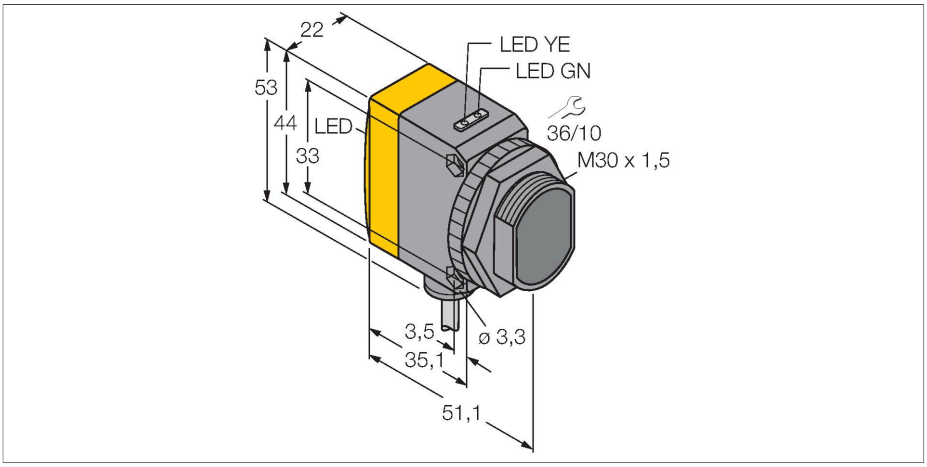
QS303E W/30'
Photoelectric Sensor – Opposed Mode Sensor (Emitter)



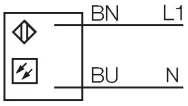
Technical data

Type	QS303E W/30'
ID no.	3073210
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, 9 m, PVC
Number of cores	2
Core cross-section	0.5 mm^2
Ambient temperature	-20…+70 °C
Protection class	IP67
Power-on indication	LED, Green
Excess gain indication	LED

Features

- Cable, PVC, 9 m
- Protection class IP67
- LED all-round visible
- Operating voltage: 12…250 VDC or 24… 250 VAC

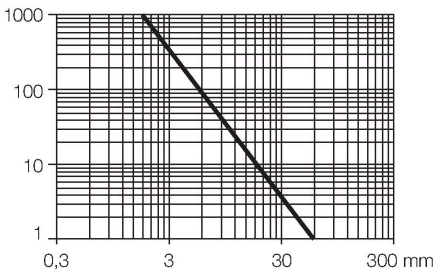
Wiring diagram



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

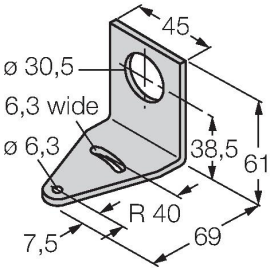


Technical data

Tests/approvals	
MTTF	402 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE

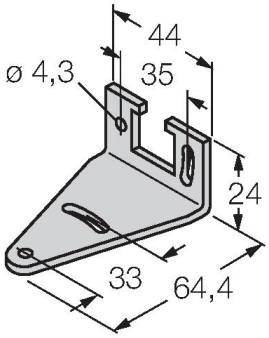
Accessories

SMB30A 3032723



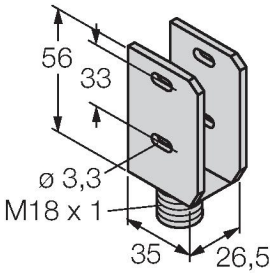
Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread

SMBQS30L 3002809



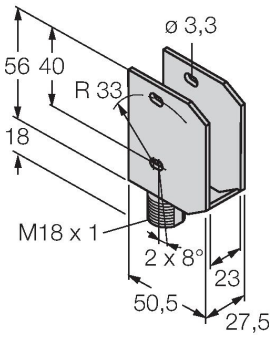
Mounting bracket, stainless steel, for QS30 series

SMBQS30Y 3002811



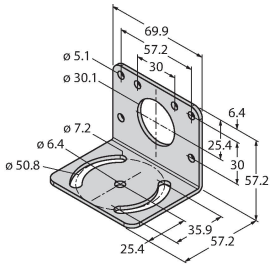
Protective housing, stainless steel, for QS30 series

SMBQS30YL 3072741



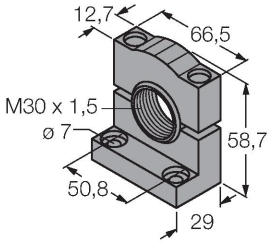
Protective housing with safety glas panel, stainless steel, for QS30 series

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