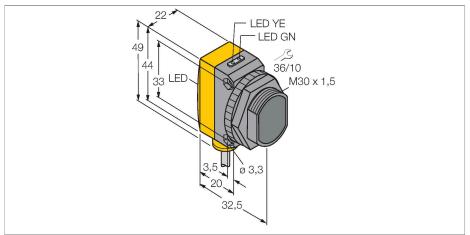
QS30E W/30' Photoelectric Sensor – Opposed Mode Sensor (Emitter)



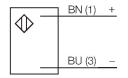


ID no. 3073203	Туре	QS30E W/30'
Function Opposed mode sensor Operating mode Emitter Light type IR Wavelength 875 nm Range 060000 mm Electrical data Operating voltage 1030 VDC Residual ripple <10 % U _{ss} No-load current ≤70 mA Short-circuit protection yes Reverse polarity protection yes Readiness delay ≤100 ms Response time typical <5 ms Mechanical data Design Rectangular with thread, QS30 Dimensions Ø30 x 35 x 22 x 49 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 mm² Ambient temperature -20+70 °C Protection class IP67	ID no.	3073203
Operating mode Emitter Light type IR Wavelength 875 nm Range 060000 mm Electrical data Operating voltage 1030 VDC Residual ripple <10 % U₂, No-load current ≤70 mA Short-circuit protection yes Reverse polarity protection yes Readiness delay ≤100 ms Response time typical <5 ms Mechanical data Design Rectangular with thread, QS30 Dimensions Ø30 x 35 x 22 x 49 mm Housing material Plastic, Thermoplastic material, Yellow plastic, Acrylic Electrical connection Cable, 9 m, PVC Number of cores 2 Core cross-section 0.5 mm² Ambient temperature -20+70 °C Protection class IP67	Optical data	
Light type IR Wavelength 875 nm Range 060000 mm Electrical data Operating voltage 1030 VDC Residual ripple <10 % U₂ No-load current ≤70 mA Short-circuit protection yes Reverse polarity protection yes Readiness delay ≤100 ms Response time typical <5 ms Mechanical data Design Rectangular with thread, QS30 Dimensions Ø30 x 35 x 22 x 49 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 mm² Ambient temperature -20+70 °C Protection class IP67	Function	Opposed mode sensor
Wavelength 875 nm Range 060000 mm Electrical data 060000 mm Operating voltage 1030 VDC Residual ripple < 10 % U₅s	Operating mode	Emitter
Range 060000 mm Electrical data Operating voltage 1030 VDC Residual ripple < 10 % U₅ No-load current ≤ 70 mA Short-circuit protection yes Reverse polarity protection yes Readiness delay ≤ 100 ms Response time typical <5 ms Mechanical data Design Rectangular with thread, QS30 Dimensions Ø 30 x 35 x 22 x 49 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 mm² Ambient temperature -20+70 °C Protection class IP67	Light type	IR
Electrical data Operating voltage 1030 VDC Residual ripple < 10 % U _{ss} No-load current ≤ 70 mA Short-circuit protection yes Reverse polarity protection yes Readiness delay ≤ 100 ms Response time typical <5 ms Mechanical data Design Rectangular with thread, QS30 Dimensions Ø 30 x 35 x 22 x 49 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 mm² Ambient temperature -20+70 °C Protection class IP67	Wavelength	875 nm
Operating voltage 1030 VDC Residual ripple < 10 % U ss	Range	060000 mm
Residual ripple < 10 % U₃₅	Electrical data	
No-load current ≤ 70 mA Short-circuit protection yes Reverse polarity protection yes Readiness delay ≤ 100 ms Response time typical <5 ms Mechanical data Design Rectangular with thread, QS30 Dimensions Ø 30 x 35 x 22 x 49 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 mm² Ambient temperature -20+70 °C Protection class IP67	Operating voltage	1030 VDC
Short-circuit protection yes Reverse polarity protection yes Readiness delay ≤ 100 ms Response time typical < 5 ms	Residual ripple	< 10 % U _{ss}
Reverse polarity protection yes Readiness delay ≤ 100 ms Response time typical < 5 ms	No-load current	≤ 70 mA
Readiness delay ≤ 100 ms Response time typical < 5 ms	Short-circuit protection	yes
Response time typical <5 ms Mechanical data Design Rectangular with thread, QS30 Dimensions Ø 30 x 35 x 22 x 49 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 mm² Ambient temperature -20+70 °C Protection class IP67	Reverse polarity protection	yes
Mechanical dataRectangular with thread, QS30DimensionsØ 30 x 35 x 22 x 49 mmHousing materialPlastic, Thermoplastic material, YellowLensplastic, AcrylicElectrical connectionCable, 9 m, PVCNumber of cores2Core cross-section0.5 mm²Ambient temperature-20+70 °CProtection classIP67	Readiness delay	≤ 100 ms
DesignRectangular with thread, QS30DimensionsØ 30 x 35 x 22 x 49 mmHousing materialPlastic, Thermoplastic material, YellowLensplastic, AcrylicElectrical connectionCable, 9 m, PVCNumber of cores2Core cross-section0.5 mm²Ambient temperature-20+70 °CProtection classIP67	Response time typical	< 5 ms
Dimensions Ø 30 x 35 x 22 x 49 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 mm² Ambient temperature -20+70 °C Protection class IP67	Mechanical data	
Housing material Plastic, Thermoplastic material, Yellow Lens plastic, Acrylic Electrical connection Cable, 9 m, PVC Number of cores 2 Core cross-section 0.5 mm² Ambient temperature -20+70 °C Protection class	Design	Rectangular with thread, QS30
Lens plastic, Acrylic Electrical connection Cable, 9 m, PVC Number of cores 2 Core cross-section 0.5 mm² Ambient temperature -20+70 °C Protection class IP67	Dimensions	Ø 30 x 35 x 22 x 49 mm
Electrical connection Cable, 9 m, PVC Number of cores 2 Core cross-section 0.5 mm² Ambient temperature -20+70 °C Protection class IP67	Housing material	Plastic, Thermoplastic material, Yellow
Number of cores 2 Core cross-section 0.5 mm² Ambient temperature -20+70 °C Protection class IP67	Lens	plastic, Acrylic
Core cross-section 0.5 mm² Ambient temperature -20+70 °C Protection class IP67	Electrical connection	Cable, 9 m, PVC
Ambient temperature -20+70 °C Protection class IP67	Number of cores	2
Protection class IP67	Core cross-section	0.5 mm²
	Ambient temperature	-20+70 °C
Power-on indication LED, Green	Protection class	IP67
	Power-on indication	LED, Green



Features

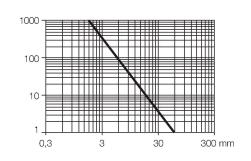
- Cable, PVC, 9 m
 Protection class IP67
 LED all-round visible
 Operating voltage: 10...30 VDC
- Wiring diagram



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



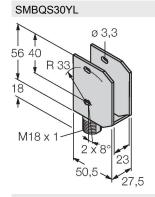
Technical data

Error indication	LED, green
Excess gain indication	LED
Tests/approvals	
MTTF	402 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE

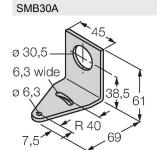
Accessories

SMBQS30Y 56 33 M18 x 1 35 26,5

3002811 Protective housing, stainless steel, for QS30 series



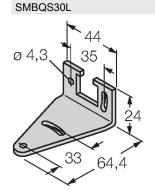
3072741 Protective housing with safety glas panel, stainless steel, for QS30 series



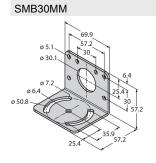
Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread

3032723

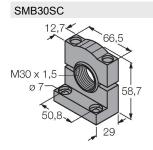
3027162



3002809 Mounting bracket, stainless steel, for QS30 series



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



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

3052521