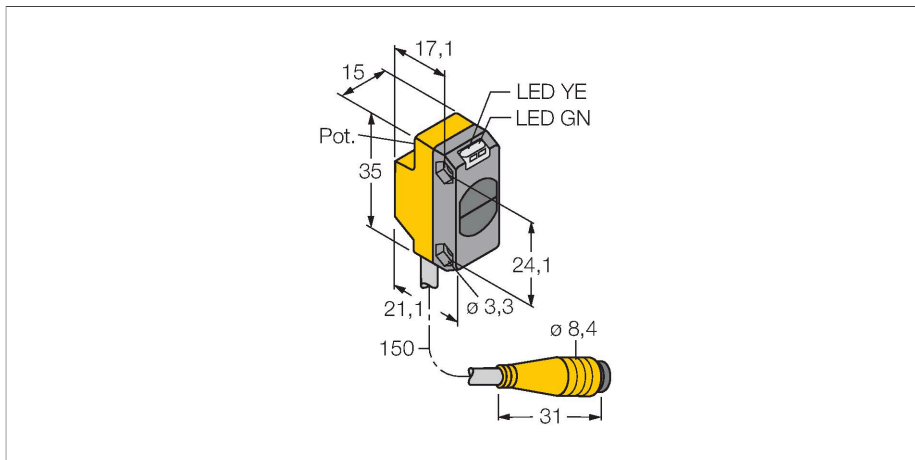


# QS186EBQ

## Photoelectric Sensor – Opposed Mode Sensor (Emitter)



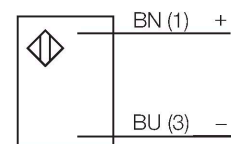
### Technical data

Type	QS186EBQ
ID no.	3061676
<b>Optical data</b>	
Function	Opposed mode sensor
Operating mode	Emitter
Light type	IR
Wavelength	940 nm
Range	0...3000 mm
<b>Electrical data</b>	
Operating voltage	10...30 VDC
Residual ripple	< 10 % U <sub>ss</sub>
DC rated operational current	≤ 100 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Readiness delay	≤ 100 ms
<b>Mechanical data</b>	
Design	Rectangular, QS18
Dimensions	27.7 x 15 x 35 mm
Housing material	Plastic, ABS
Lens	plastic, Acrylic
Electrical connection	Cable with connector, M8 × 1, 0.15 m, PVC
Number of cores	4
Ambient temperature	-20...+70 °C
Protection class	IP67
Power-on indication	LED, Green
Excess gain indication	LED

### Features

- Cable with male end, 4-pin, PVC, 150 mm, 8 mm
- 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. Opposed mode sensors are the most reliable photoelectric sensors for detection of opaque targets. The excellent light/dark contrast and the high excess gain allow operation over larger distances and under difficult conditions.

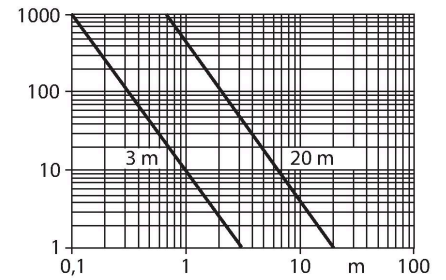
Excess gain curve  
Excess gain in relation to the distance (type 6EB/RB)

## Technical data

### Tests/approvals

MTTF 530 years acc. to SN 29500 (Ed. 99) 40 °C

Approvals CE, cURus

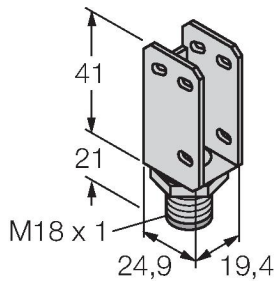


## Accessories

SMBQS18A

3069721

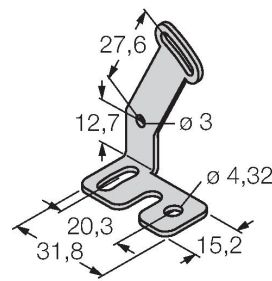
Mounting bracket, stainless steel, for 18 mm thread



SMBQS18AF

3067467

Mounting bracket, stainless steel, for 18 mm thread



## Accessories

Dimension drawing	Type	ID no.	
	PKG4M-2/TEL	6625061	Connection cable, female M8, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a>
	PKW4M-2/TEL	6625067	Connection cable, female M8, angled, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a>