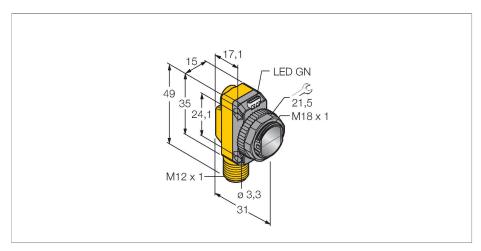


QS186LEQ8 Photoelectric Sensor – Laser Emitter



Technical data

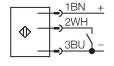
Туре	QS186LEQ8
ID	3070253
Optical data	
Function	Opposed mode sensor
Operating mode	Laser Emitter
Light type	Red
Wavelength	650 nm
Laser class	<u>A</u> 1
Range	015000 mm
Electrical data	
Operating voltage	1030 VDC
Residual ripple	< 10 % U _{ss}
DC rated operational current	≤ 100 mA
No-load current	≤ 35 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Readiness delay	≤ 0.25 s
Readiness delay	≤ 250 ms
Mechanical data	
Design	Rectangular with thread, QS18
Dimensions	Ø 18 x 31 x 15 x 35 mm
Housing material	Plastic, ABS
Lens	plastic, PMMA
Electrical connection	Connector, M12 × 1, PVC
Number of cores	4
Ambient temperature	-10+50 °C
Protection class	IP67

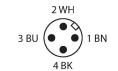


Features

- Male M12 × 1, 4-pin
 Protection class IP67
 LED all-round visible
 Male M12 × 1
- ■Laser class 1

Wiring diagram





Functional principle

Opposed mode sensors consist of an emitter and a receiver. They are installed opposite to each other whereby the emitted light aims 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 objects. The high light/dark contrast and the very high excess gain are typical for this function mode and enable operation over large distances and under difficult conditions.

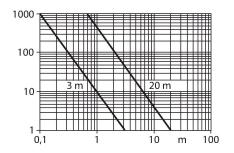
Activation

By connecting the control input (PIN 2 WH) to ground (-) the laser beam is turned on. The laser beam is turned off again by feeding 10 ... 30 VDC to the control input or by nonconnecting the wire.

Technical data

Special features	Laser
Power-on indication	LED, Green
Excess gain indication	LED
Tests/approvals	
MTTF	530 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE

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



Accessories

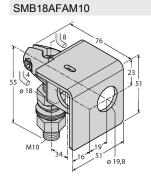
SMB18A

Mounting b stainless st mm thread

Action of the image of

Mounting bracket, rectangular, stainless steel, for sensors with 18

3033200

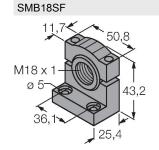


3012558 Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm

M18 x 1 24,9 19,4

Mounting bracket, stainless steel, for 18 mm thread

3069721



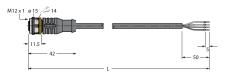
3052519 Mounting bracket, PBT black, for sensors with 18 mm thread, rotatable

Accessories

SMBQS18A

Dimension drawing Type ID

RKC4.4T-2/TEL 6625013



Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com



