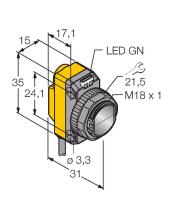


QS186LE11 Photoelectric Sensor – Laser Emitter



Technical data

Туре	QS186LE11	
ID no.	3002756	
Optical data		
Function	Opposed mode sensor	
Operating mode	Laser Emitter	
Light type	Red	
Wavelength	650 nm	
Laser class	<u>▲</u> 1	
Range	015000 mm	
Electrical data		
Operating voltage	1030 VDC	
Residual ripple	< 10 % U _{ss}	
DC rated operational current	≤ 100 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	Cable, 2 m, PVC	
Number of cores	4	
Core cross-section	0.35 mm ²	
Ambient temperature	-10+50 °C	
Protection class	IP67	



Features

Cable, PVC, 2 m Protection class IP67 LED all-round visible Operating voltage: 10...30 VDC

Wiring diagram

	BN	+
•	WH	
		√_
	BU	1
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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

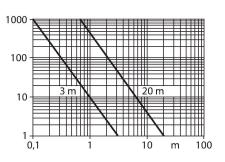
By connecting the control input (PIN 2 WH) to ground (-) the laser beam is turned on. The laser beam is turned off again by feeding 10... 30 VDC to the control input or by nonconnecting the wire. Excess gain curve

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

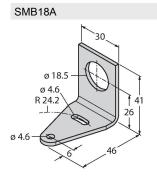


Technical data

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

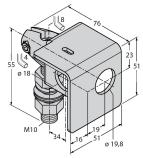


Accessories



3033200 Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread

SMB18AFAM10



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

SMBQS18A

3069721 Mounting bracket, stainless steel, for 18 mm thread SMB18SF 11,7 50,8 M18 x 1

36,1

43,2

25,4

3052519

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