

QS186LEQ5 Photoelectric Sensor – Laser Emitter



Technical data

Туре	QS186LEQ5		
ID no.	3071324		
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	Cable with connector, M12 × 1, 0.15 m, PVC		
Number of cores	4		
Ambient temperature	-10+50 °C		



Features

- Cable with male end, M12 × 1, 4-pin, PVC,
- 150 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.



Technical data

Protection class	IP67	
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

SMB18A	3033200	SMB18AFAM10	3012558
ø 18.5 ø 4.6 R 24.2 	Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread	16 51 0 19,8	Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm
SMBQS18A	3069721	SMB18SF	3052519
41 21 M18 x 1 24,9 19,4	Mounting bracket, stainless steel, for 18 mm thread	11,7 50,8 11,7 43,2 36,1 25,4	Mounting bracket, PBT black, for sensors with 18 mm thread, rotatable
Accessories			
Dimension drawing	Туре	ID no.	
M12 x 1 e 15 5 14 + 115 + + 115 + + 2	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
	WKC4.4T-2/TEL	6625025	Connection cable, female M12, angled, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com