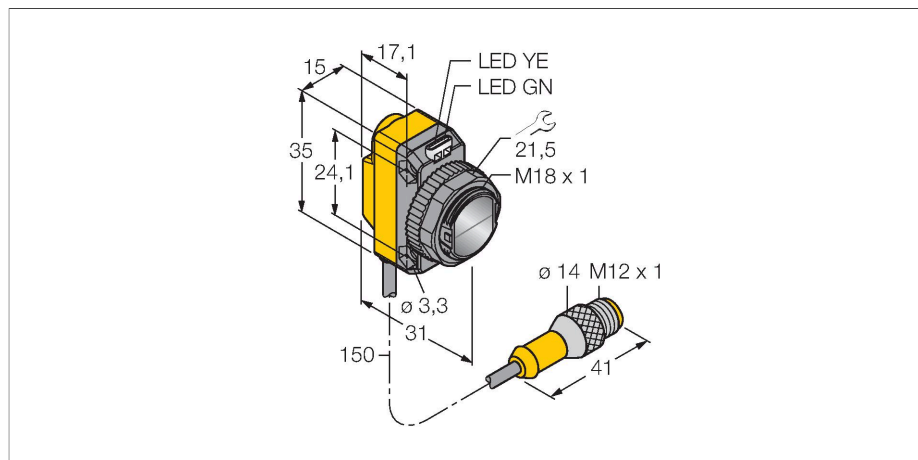


# QS186LE2Q5

## Photoelectric Sensor – Laser Emitter



### Technical data

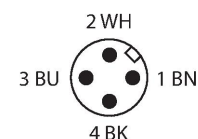
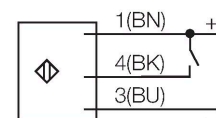
Type	QS186LE2Q5
ID	3075954
<b>Optical data</b>	
Function	Opposed mode sensor
Operating mode	Laser Emitter
Light type	IR
Wavelength	650 nm
Laser class	▲ 2
Range	0...15000 mm
<b>Electrical data</b>	
Operating voltage	10...30 VDC
Residual ripple	< 10 % U <sub>ss</sub>
DC rated operational current	≤ 100 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Readiness delay	≤ 0.01 s
Readiness delay	≤ 10 ms
<b>Mechanical data</b>	
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
Protection class	IP67



### Features

- Cable with male end, M12 × 1, 4-pin, PVC, 150 mm
- Protection class IP67
- LED all-round visible
- Cable with male end M12 × 1
- Laser class 2

### Wiring diagram



### Functional principle

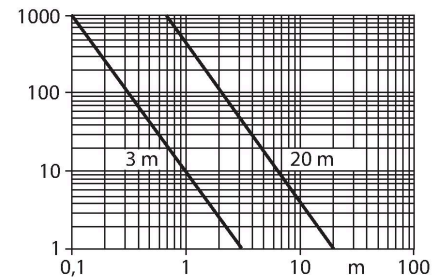
Opposed mode sensors consist of an emitter and a receiver. They are installed opposite to each other whereby the emitted light aims directly at the receiver. When an object interrupts or weakens the light beam, the sensor switches. Opposed mode sensors are the most reliable photoelectric sensors for 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

## Technical data

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

10 ... 30 VDC to the control input or by non-connecting the wire.  
 Excess gain curve  
 Excess gain in relation to the distance (type 6EB/RB)



## Accessories

**SMB18A** 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** 3052519

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

## Accessories

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 <a href="http://www.turck.com">www.turck.com</a>

## Dimension drawing

## Type

WKC4.4T-2/TEL

## ID

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](http://www.turck.com)

