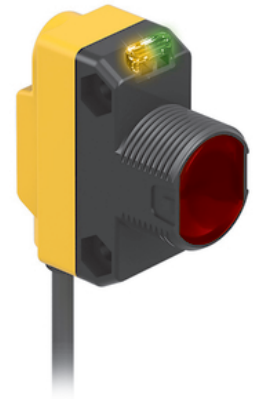
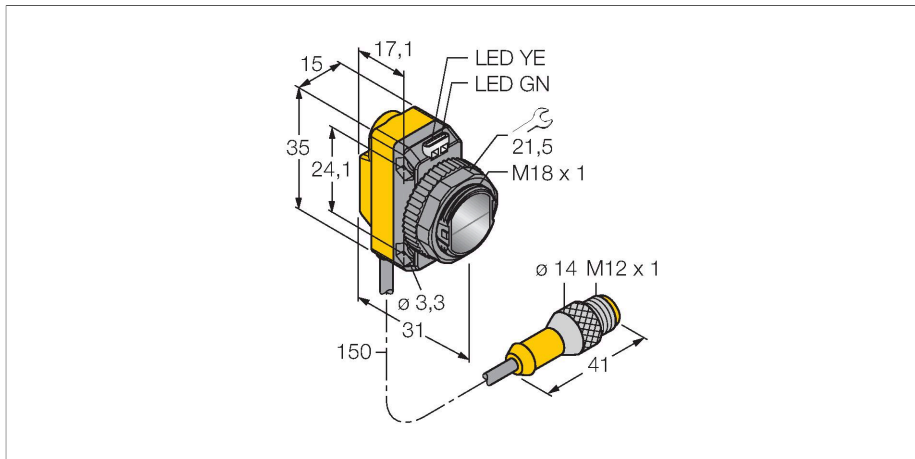


# QS18VP6RQ5

## Photoelectric Sensor – Opposed Mode Sensor (Emitter/Receiver)



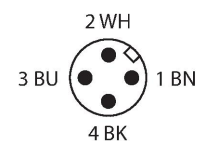
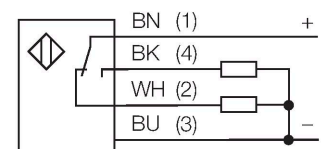
### Technical data

Type	QS18VP6RQ5
ID	3064584
<b>Optical data</b>	
Function	Opposed mode sensor
Operating mode	Receiver
Range	0...20000 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
Output function	NO/NC, PNP
Current output	100 mA
Switching frequency	≤ 400 Hz
Readiness delay	≤ 100 ms
Response time typical	< 0.75 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, Acrylic
Electrical connection	Cable with connector, M12 × 1, 0.15 m, PVC
Number of cores	4
Ambient temperature	-20...+70 °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
- PNP switching output, changeover

### Wiring diagram



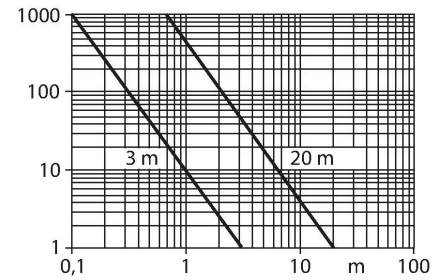
### Functional principle

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

Protection class	IP67
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green, Flashing
Excess gain indication	LED, yellow, flashing
<b>Tests/approvals</b>	
MTTF	2952 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE, cURus



## Accessories

<b>SMB18A</b> 	<b>3033200</b> Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread	<b>SMB18AFAM10</b> 	<b>3012558</b> Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm
<b>SMBQS18A</b> 	<b>3069721</b> Mounting bracket, stainless steel, for 18 mm thread	<b>SMB18SF</b> 	<b>3052519</b> 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	ID	
	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 <a href="http://www.turck.com">www.turck.com</a>