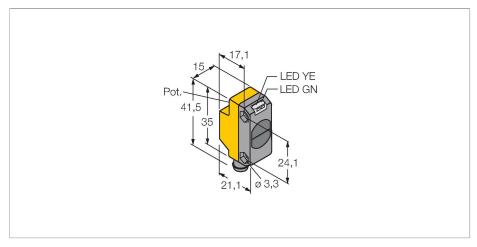
QS18VN6RBQ7 Photoelectric Sensor – Opposed Mode Sensor (Emitter/ Receiver)



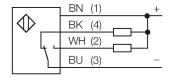
Technical data

Туре	QS18VN6RBQ7	
ID	3066439	
Optical data		
Function	Opposed mode sensor	
Operating mode	Receiver	
Range	03000 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	
Output function	NO/NC, NPN	
Current output	100 mA	
Switching frequency	≤ 400 Hz	
Readiness delay	≤ 100 ms	
Response time typical	< 0.75 ms	
Mechanical data		
Design	Rectangular, QS18	
Dimensions	27.7 x 15 x 41.5 mm	
Housing material	Plastic, ABS	
Lens	plastic, Acrylic	
Electrical connection	Connector, M8 × 1, PVC	
Number of cores	4	
Ambient temperature	-20+70 °C	
Protection class	IP67	

Features

- Male connector, M8 × 1, 4-pin
- Protection class IP67
- ■LED all-round visible
- Operating voltage: 10...30 VDC
- ■NPN switching output, changeover

Wiring diagram

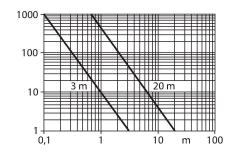




Functional principle

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.

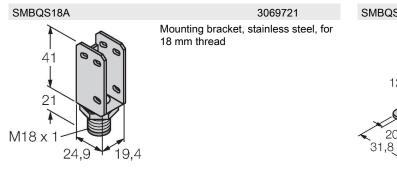
Excess gain curve
Excess gain in relation to the distance (type 6EB/RB)

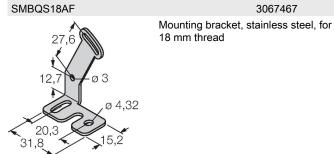


Technical data

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

Accessories





Accessories

Dimension drawing	Туре	ID	
M8 x 1 o 9.6 9 33.5 -50	PKG4M-2/TEL	6625061	Connection cable, female M8, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com
M8 x 1 7 0 9.5 16.5 16.5	PKW4M-2/TEL	6625067	Connection cable, female M8, angled, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com