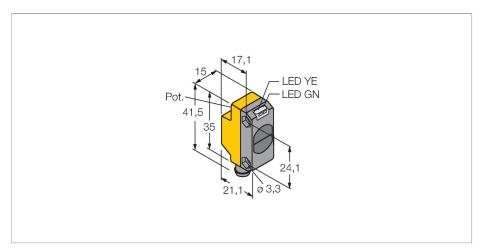
QS18VN6RBQ7 Photoelectric Sensor – Opposed Mode Sensor (Emitter/ Receiver)



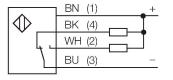
Technical data

Туре	QS18VN6RBQ7		
ID no.	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	Connectors, 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

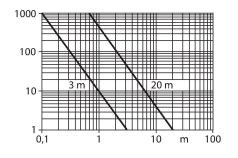




Functional principle

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.

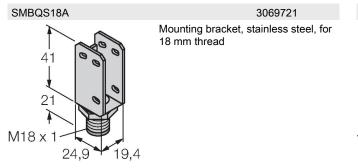
Excess gain curve
Excess gain in relation to the distance (type 6EB/RB)

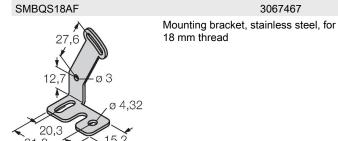


Technical data

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 no.	
M8x1 e 9.6	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	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