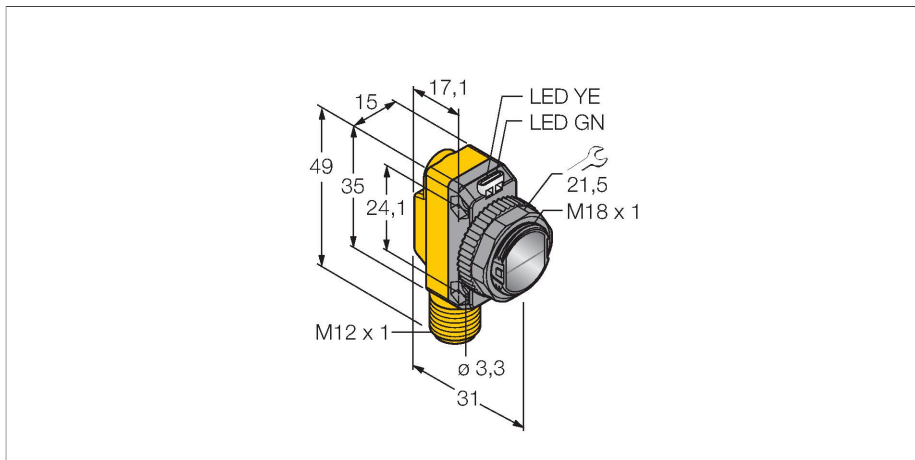


QS186LE211Q8

Photoelectric Sensor – Laser Emitter



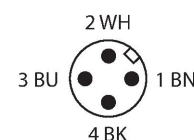
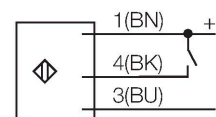
Technical data

Type	QS186LE211Q8
ID	3075965
Optical data	
Function	Opposed mode sensor
Operating mode	Laser Emitter
Light type	IR
Wavelength	650 nm
Laser class	▲ 2
Range	0...15000 mm
Electrical data	
Operating voltage	10...30 VDC
Residual ripple	< 10 % U _{ss}
DC rated operational current	≤ 100 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Readiness delay	≤ 10 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	Connector, M12 × 1, PVC
Number of cores	4
Ambient temperature	-10...+50 °C
Protection class	IP67
Special features	Laser
Power-on indication	LED, Green

Features

- Male M12 × 1, 4-pin
- Protection class IP67
- Light shaping: vertical bar
- Operating voltage: 10...30 VDC

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 10 ... 30 VDC to the control input or by non-connecting the wire. Excess gain curve

