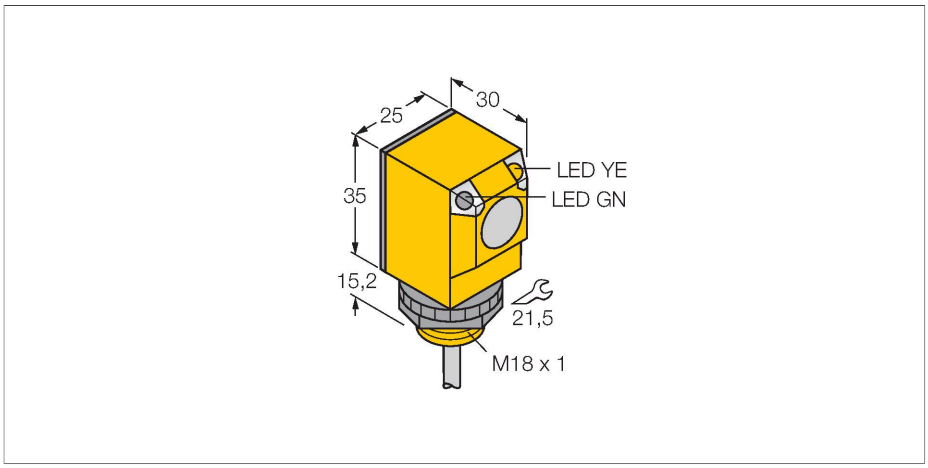
Q256E W/30'
Photoelectric Sensor – Opposed Mode Sensor (Emitter)



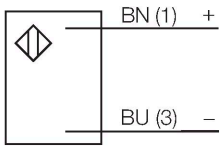
Technical data

Type	Q256E W/30'
ID	3033866
Optical data	
Function	Opposed mode sensor
Operating mode	Emitter
Light type	IR
Wavelength	950 nm
Range	0…20000 mm
Electrical data	
Operating voltage	10…30 VDC
Residual ripple	< 10 % U_{ss}
Readiness delay	≤ 100 ms
Response time typical	< 3 ms
Mechanical data	
Design	Rectangular, Q25
Dimensions	Ø 18 x 30 x 25 x 50.2 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Polycarbonate
Electrical connection	Cable, 9 m, PVC
Number of cores	2
Core cross-section	0.5 mm^2
Ambient temperature	-40…+70 °C
Protection class	IP69
Special features	Chemical-resistant Encapsulated
Power-on indication	LED, Green
Excess gain indication	LED

Features

- Cable, 2 m
- Protection class IP67
- Ambient temperature: -40…+70 °C
- Operating voltage: 10…30 VDC

Wiring diagram

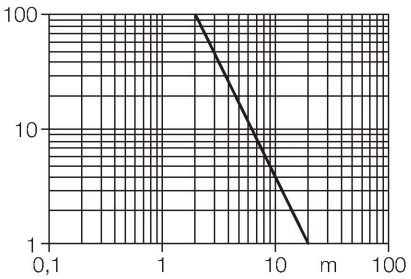


Functional principle

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

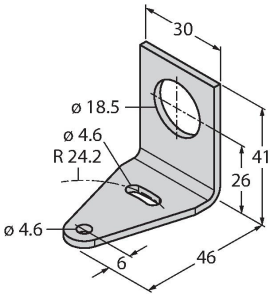
Technical data

Tests/approvals	
Approvals	CE, UL, CSA



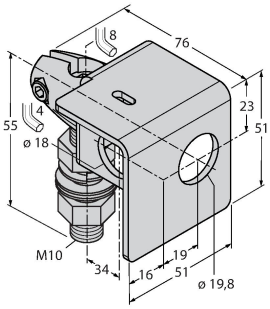
Accessories

SMB18A 3033200



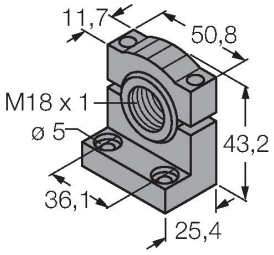
Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread

SMB18AFAM10 3012558



Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm

SMB18SF 3052519



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