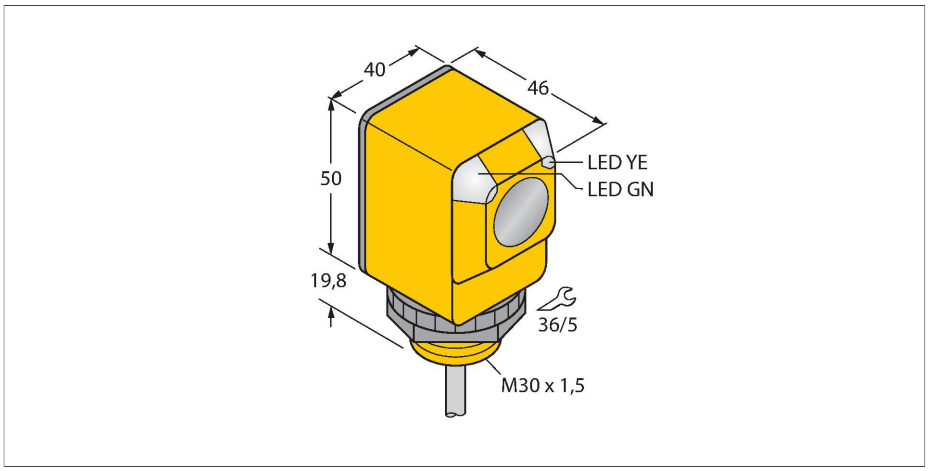
Q406E
Photoelectric Sensor – Opposed Mode Sensor (Emitter)



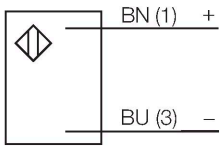
Technical data

Type	Q406E
ID no.	3032375
Optical data	
Function	Opposed mode sensor
Operating mode	Emitter
Light type	IR
Wavelength	950 nm
Range	0…60000 mm
Electrical data	
Operating voltage	10…30 VDC
Residual ripple	< 10 % U_{ss}
Readiness delay	≤ 100 ms
Mechanical data	
Design	Rectangular, Q40
Dimensions	Ø 30 x 46 x 40.1 x 69.8 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Polycarbonate
Electrical connection	Cable, 2 m, PVC
Number of cores	2
Core cross-section	0.5 mm^2
Ambient temperature	-40…+70 °C
Protection class	IP67
Special features	Encapsulated
Power-on indication	LED, Green
Excess gain indication	LED
Tests/approvals	
Approvals	CE, UL, CSA

Features

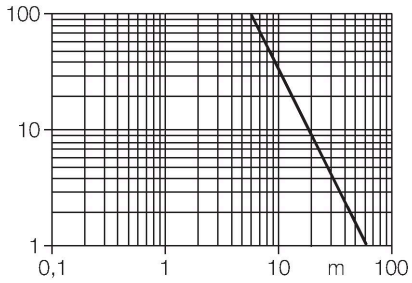
- Cable, 2 m
- Protection class IP67
- Ambient temperature: -40…+70 °C
- Operating voltage: 10…30 VDC

Wiring diagram



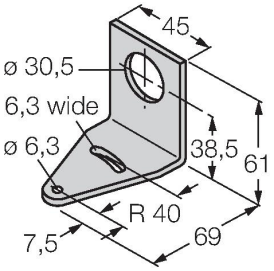
Functional principle

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



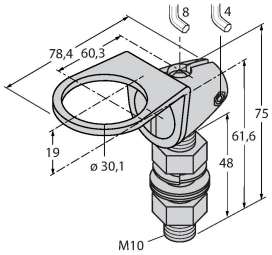
Accessories

SMB30A	3032723



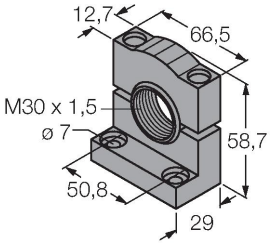
Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread

SMB30FAM10	3011185



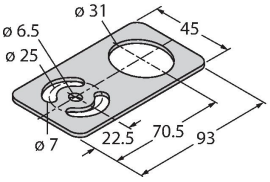
Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 mm

SMB30SC	3052521



Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable

SMBAMS30P	3073135



Mounting bracket, stainless steel, for sensors with 30 mm thread