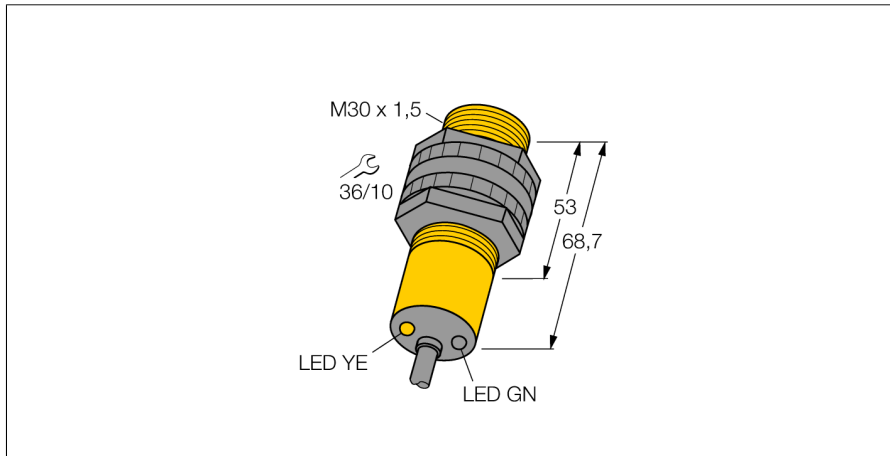
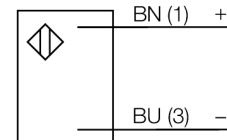


**Photoelectric sensor
opposed mode sensor (emitter)
S306E**



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

Wiring diagram

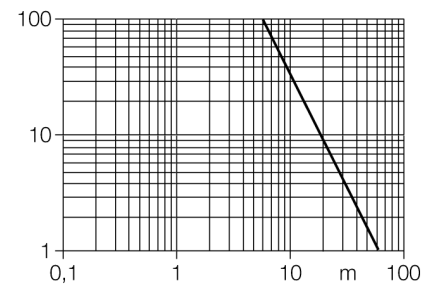


Functional principle

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



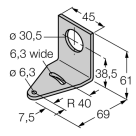
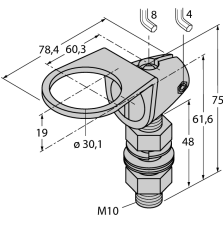
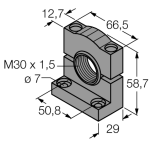
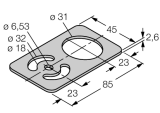
Type code	S306E
Ident no.	3032341
Operating mode	opposed mode sensor (emitter)
Light type	IR
Wavelength	950 nm
Range	0...60000 mm
Ambient temperature	-40...+70 °C
Operating voltage	10...30VDC
Residual ripple	< 10 % U _s
No-load current I ₀	≤ 20 mA
Design	cylindrical/threaded, S30
Dimensions	68.7 mm
Housing diameter	30 mm
Housing material	plastic, PBT
Lens	plastic, Lexan
Connection	cable
Cable length	2 m
Cable cross section	2 x 0.5 mm ²
Protection class	IP67
Power-on indication	LED green

Photoelectric sensor
opposed mode sensor (emitter)
S306E

TURCK

Industrial
Automation

Accessories

Type code	Ident no.	Description	Dimension drawing
SMB30A	3032723	Mounting bracket, stainless steel, for sensors with 30 mm thread	 <p>Technical drawing of the SMB30A mounting bracket. Dimensions include: outer diameter $\varnothing 30,5$, inner diameter $\varnothing 6,3$, width 6,3, height 45, mounting hole diameter $\varnothing 6,3$, distance from mounting hole to center $38,5$, total height 61, bottom width 7,5, radius R 40, and total width 69.</p>
SMB30FAM10	3011185	Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 mm	 <p>Technical drawing of the SMB30FAM10 mounting bracket. Dimensions include: mounting hole diameter $\varnothing 30,1$, hole offset 19, hole diameter 78,4, hole width 60,3, hole depth 8, hole width 4, total height 75, distance from hole to center 61,6, and thread length 48. The thread is labeled M10.</p>
SMB30SC	3052521	Mounting bracket, PBT black; for 30 mm thread; with 4 screws M5 x 0.8	 <p>Technical drawing of the SMB30SC mounting bracket. Dimensions include: mounting hole diameter $\varnothing 30,1$, hole offset 12,7, hole diameter 66,5, hole width 7, hole depth 50,8, and hole width 29.</p>
SMBAMS30P	3073135	Mounting bracket, stainless steel, for sensors with 30 mm thread	 <p>Technical drawing of the SMBAMS30P mounting bracket. Dimensions include: mounting hole diameter $\varnothing 31$, hole offset 45, hole diameter $\varnothing 6,53$, hole diameter $\varnothing 32$, hole diameter $\varnothing 18$, hole width 2,6, hole width 25, and hole width 85.</p>