

T186E

Photoelectric Sensor – Opposed Mode Sensor (Emitter)



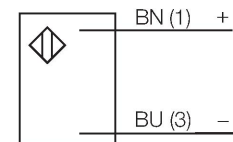
Technical data

Type	T186E
ID	3032468
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
Mechanical data	
Design	Tube, T18
Dimensions	Ø 18 x 30 x 30 x 41.5 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 IP69
Special features	Chemical-resistant Encapsulated Wash down
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

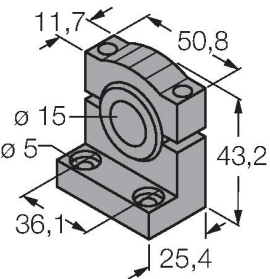
Technical data

Tests/approvals	
Approvals	CE, UL, CSA



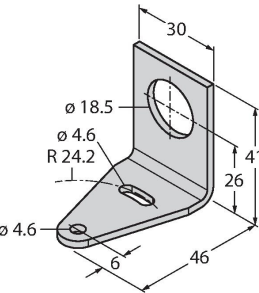
Accessories

SMB1815SF	3053279
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Mounting bracket, PBT black, for PICO-GUARD points

SMB18A	3033200
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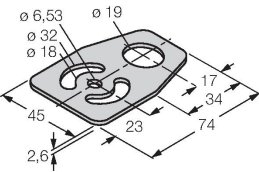


Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread

SMB18FM	3079421
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mounting bracket, black, M22 x1.5 mm, male thread, female thread M18 x 1, for sensors with 18 mm thread

SMBAMS18P	3073134
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Mounting bracket, stainless steel, for sensors with 18 mm thread