

T186EQP Photoelectric Sensor – Opposed Mode Sensor (Emitter)

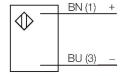
Type	Technical data	
Optical data Function Opposed mode sensor Operating mode Emitter Light type IR Wavelength 950 nm Range 020000 mm Electrical data Operating voltage 1030 VDC Residual ripple < 10 % U₂ Readiness delay ≤ 100 ms Mechanical data Design Rectangular with thread, T18 Dimensions Ø 18 x 30 x 30 mm Housing material Plastic, Thermoplastic material Lens plastic, Polycarbonate Electrical connection Cable with connector, M12 x 1, 0.15 m, PVC Number of cores 4 Ambient temperature -40+70 °C Protection class IP67 IP69 Special features Chemical-resistant Encapsulated Wash down Power-on indication LED Tests/approvals	Туре	T186EQP
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Housing material Lens plastic, Polycarbonate Electrical connection Cable with connector, M12 × 1, 0.15 m, PVC Number of cores 4 Ambient temperature Protection class IP67 IP69 Special features Chemical-resistant Encapsulated Wash down Power-on indication LED, Green Excess gain indication LED Tests/approvals	Design	Rectangular with thread, T18
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Protection class IP67 IP69 Special features Chemical-resistant Encapsulated Wash down Power-on indication LED, Green Excess gain indication LED Tests/approvals	Number of cores	4
Special features Chemical-resistant Encapsulated Wash down Power-on indication LED, Green Excess gain indication LED Tests/approvals	Ambient temperature	-40+70 °C
Encapsulated Wash down Power-on indication Excess gain indication LED Tests/approvals	Protection class	
Excess gain indication LED Tests/approvals	Special features	Encapsulated
Tests/approvals	Power-on indication	LED, Green
	Excess gain indication	LED
Approvals CE, UL, CSA	Tests/approvals	
	Approvals	CE, UL, CSA



Features

- Cable with male end M12 × 1, 4-pin, PUR, 150 mm
- ■Protection class IP67
- ■Ambient temperature: -40 °C...+70 °C
- Operating voltage: 10...30 VDC

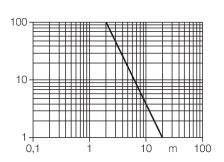
Wiring diagram



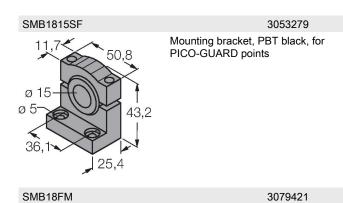
Functional principle

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



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

