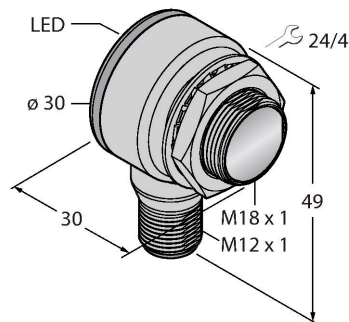


TM186EQ8

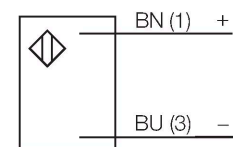
Photoelectric Sensor – Opposed Mode Sensor (Emitter)



Features

- M12 × 1 male connector, 4-pin
- Protection classes IP67/IP69K
- Ambient temperature: -40 °C...+70 °C
- Metal housing
- Operating voltage: 10...30 VDC

Wiring diagram



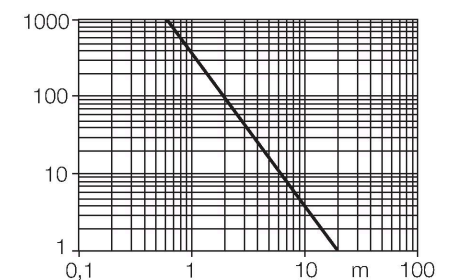
Technical data

Type	TM186EQ8
ID no.	3042007
Optical data	
Function	Opposed mode sensor
Operating mode	Emitter
Light type	Red
Wavelength	625 nm
Range	0...20000 mm
Electrical data	
Operating voltage	10...30 VDC
Residual ripple	< 10 % U _{ss}
No-load current	≤ 25 mA
Readiness delay	≤ 100 ms
Response time typical	< 1.5 ms
Mechanical data	
Design	Rectangular with thread, TM18
Dimensions	Ø 18 x 30 x 30 x 49 mm
Housing material	Metal, Zinc Die-Cast with Nickel-Plating
Lens	plastic, Polycarbonate
Electrical connection	Connectors, M12 × 1, PVC
Number of cores	4
Ambient temperature	-40...+70 °C
Protection class	IP67 IP69
Special features	Encapsulated Wash down
Power-on indication	LED, Green
Excess gain indication	LED

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

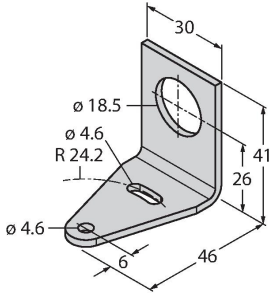


Technical data

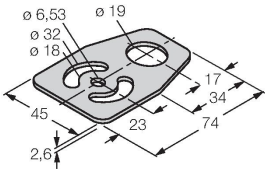
Tests/approvals	
Approvals	CE, UL

Accessories

SMBT18Y	3069554	mounting bracket, rectangular, for sensors with 18 mm thread, 15.3 mm cable feedthrough or M12 x 1 male	SMB18A	3033200	Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread
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SMBAMS18P	3073134	Mounting bracket, stainless steel, for sensors with 18 mm thread
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Accessories

Dimension drawing	Type	ID no.	
	RKC4.4T-2/TEL	6625013	Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com
	WKC4.4T-2/TEL	6625025	Connection cable, female M12, angled, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com