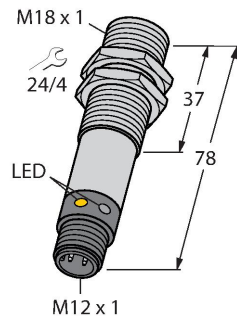


M186EQ

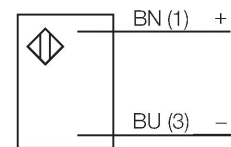
Photoelectric Sensor – Opposed Mode Sensor (Emitter)



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



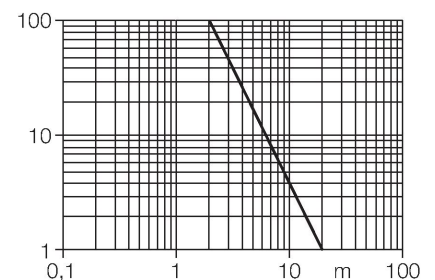
Technical data

Type	M186EQ
ID	3048347
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, M18
Dimensions	Ø 18 x 78 mm
Housing material	Metal, Stainless steel
Lens	plastic, Polycarbonate
Electrical connection	Connector, M12 × 1, PVC
Number of cores	4
Ambient temperature	-40...+70 °C
Protection class	IP69
Special features	Chemical-resistant Encapsulated Wash down Resistant to chemicals
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.

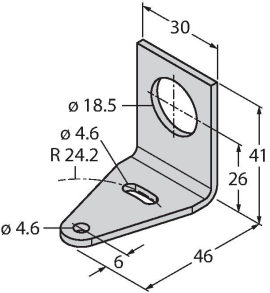
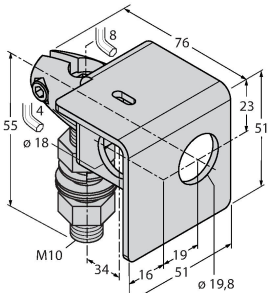
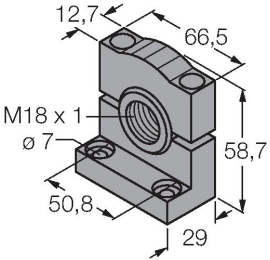
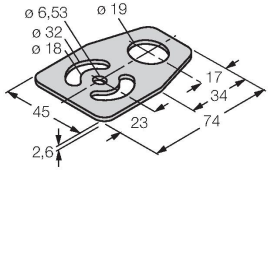
Excess gain curve
Excess gain in relation to the distance



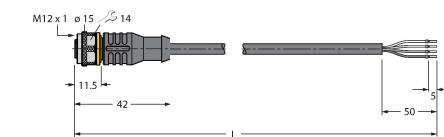
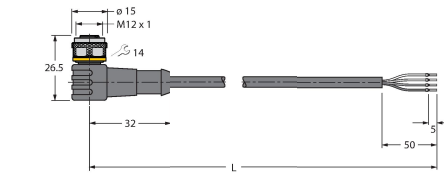
Technical data

Tests/approvals	
Approvals	CE

Accessories

SMB18A	3033200		Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread	SMB18AFAM10	3012558		Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm
SMB3018SC	3053952		Mounting bracket, PTB black, for sensors with 18 mm thread	SMBAMS18P	3073134		Mounting bracket, stainless steel, for sensors with 18 mm thread

Accessories

Dimension drawing	Type	ID	
	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