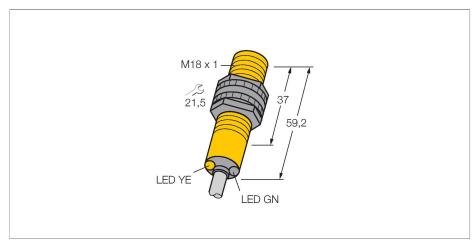
# S183E W/30 Photoelectric Sensor – Opposed Mode Sensor (Emitter)





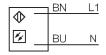
#### Technical data

_	
Type	S183E W/30
ID no.	3030828
Optical data	
Function	Opposed mode sensor
Operating mode	Emitter
Light type	IR
Wavelength	950 nm
Range	020000 mm
Electrical data	
Operating voltage	20250 VAC
Readiness delay	≤ 100 ms
Mechanical data	
Design	Threaded barrel, S18
Dimensions	Ø 18 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Polycarbonate
Electrical connection	Cable, 9 m, PVC
Number of cores	2
Core cross-section	0.5 mm <sup>2</sup>
Ambient temperature	-40+70 °C
Protection class	IP67 IP69
Special features	Encapsulated Wash down
Power-on indication	LED, Green
Excess gain indication	LED
Tests/approvals	
Approvals	CE, UL, CSA

#### **Features**

- ■Cable, 2 m
- ■Protection class IP67
- ■Ambient temperature: -40...+70 °C
- Operating voltage: 20...250 VAC

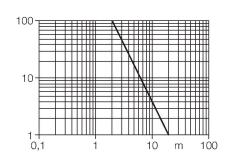
### Wiring diagram



## Functional principle

Opposed mode sensors consist of an emitter and receiver. They are installed opposite 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. An excellent contrast between light and dark conditions and an extremly high excess gain are typical of this sensing mode, thus allowing operation over larger distances and under difficult conditions. Excess gain curve

Excess gain in relation to the distance

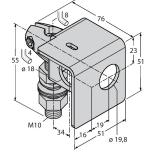


3033200

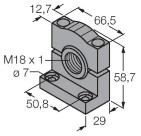
Ø 18.5 Ø 4.6 R 24.2 Ø 4.6 Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread SMB18AFAM10

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

