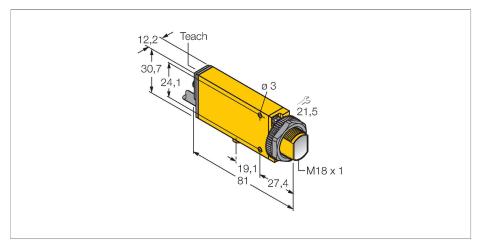
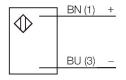
# SMA31EQD Photoelectric Sensor – Opposed Mode Sensor (Emitter)



### **Features**

- Cable, PVC, 2 m
- ■Protection class IP67
- Operating voltage: 24...240 VDC

# Wiring diagram



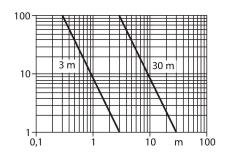
#### Technical data

Туре	SMA31EQD
ID	3026842
Optical data	
Function	Opposed mode sensor
Operating mode	Emitter
Light type	IR
Wavelength	880 nm
Range	03000 mm
Electrical data	
Operating voltage	24240 VAC
Readiness delay	≤ 300 ms
Response time typical	< 2 ms
Setting option	Potentiometer
Mechanical data	
Design	Rectangular with thread, Mini Beam
Dimensions	Ø 18 mm
Housing material	Plastic, Thermoplastic material, Yellow
Lens	plastic, Acrylic
Electrical connection	Connector, 1/2", PVC
Number of cores	3
Ambient temperature	-20+70 °C
Protection class	IP67
Special features	Encapsulated
Excess gain indication	LED
Tests/approvals	
MTTF	853 years acc. to SN 29500 (Ed. 99) 40 °C

## 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





## Technical data

Approvals

CE, cURus, CSA

3033200

3052519

3053952

#### Accessories

© 18.5 © 4.6 R 24.2 © 4.6 R 24.2 Ø 4.6

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

SMB18AFAM10

Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm

3012558

3025519

SMB18SF 11,7 50,8 M18 x 1 Ø 5 36,1 25,4

Mounting bracket, PBT black, for sensors with 18 mm thread, rotatable

SMB312B Ø 4,3 Ø 6,9 24,3 89 17,3 23,5

Mounting bracket, stainless steel, for MINI-BEAM NAMUR

SMB3018SC 12,7 66,5 M18 x 1 Ø 7 50,8 29

Mounting bracket, PTB black, for sensors with 18 mm thread