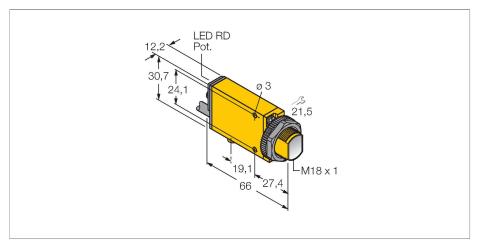


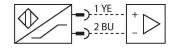
MI9E W/30 Photoelectric Sensor – Opposed Mode Sensor (Emitter)



Features

- Cable, PVC, 9 m
- ■Protection class IP67
- Operating voltage: 5...15 VDC (NAMUR)

Wiring diagram



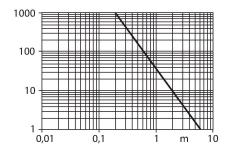
Technical data

ID 3040142 Optical data Function Opposed mode sensor Operating mode Emitter Light type IR Wavelength 880 nm Range 06000 mm Electrical data Operating voltage 515 VDC Voltage Nom. 8.2 VDC No-load current ≤ 2.1 mA Readiness delay ≤ 0 ms Setting option Potentiometer Mechanical data Design Rectangular with thread, Mini Beam Dimensions Ø 18 x 66 x 12.3 x 30.7 mm Housing material Plastic, Thermoplastic material, Yellow plastic, Acrylic Electrical connection Cable, 9 m, PVC Number of cores 2 Core cross-section 0.5 mm² Ambient temperature -40+70 °C Protection class IP67 Special features Encapsulated	Туре	MI9E W/30
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Range 06000 mm Electrical data Operating voltage 515 VDC Voltage Nom. 8.2 VDC No-load current ≤ 2.1 mA Readiness delay ≤ 0 ms Setting option Potentiometer Mechanical data Design Rectangular with thread, Mini Beam Dimensions Ø 18 x 66 x 12.3 x 30.7 mm Housing material Plastic, Thermoplastic material, Yellow Lens plastic, Acrylic Electrical connection Cable, 9 m, PVC Number of cores 2 Core cross-section 0.5 mm² Ambient temperature -40+70 °C Protection class IP67	Light type	IR
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Operating voltage 515 VDC Voltage Nom. 8.2 VDC No-load current ≤ 2.1 mA Readiness delay ≤ 0 ms Setting option Potentiometer Mechanical data Posign Dimensions Ø 18 x 66 x 12.3 x 30.7 mm Housing material Plastic, Thermoplastic material, Yellow Lens plastic, Acrylic Electrical connection Cable, 9 m, PVC Number of cores 2 Core cross-section 0.5 mm² Ambient temperature -40+70 °C Protection class IP67	Range	06000 mm
Voltage Nom. 8.2 VDC No-load current ≤ 2.1 mA Readiness delay ≤ 0 ms Setting option Potentiometer Mechanical data Potentiometer Design Rectangular with thread, Mini Beam Dimensions Ø 18 x 66 x 12.3 x 30.7 mm Housing material Plastic, Thermoplastic material, Yellow Lens plastic, Acrylic Electrical connection Cable, 9 m, PVC Number of cores 2 Core cross-section 0.5 mm² Ambient temperature -40+70 °C Protection class IP67	Electrical data	
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Setting option Potentiometer Mechanical data Design Rectangular with thread, Mini Beam Dimensions Ø 18 x 66 x 12.3 x 30.7 mm Housing material Plastic, Thermoplastic material, Yellow Lens plastic, Acrylic Electrical connection Cable, 9 m, PVC Number of cores 2 Core cross-section 0.5 mm² Ambient temperature -40+70 °C Protection class IP67	No-load current	≤ 2.1 mA
Mechanical dataDesignRectangular with thread, Mini BeamDimensionsØ 18 x 66 x 12.3 x 30.7 mmHousing materialPlastic, Thermoplastic material, YellowLensplastic, AcrylicElectrical connectionCable, 9 m, PVCNumber of cores2Core cross-section0.5 mm²Ambient temperature-40+70 °CProtection classIP67	Readiness delay	≤ 0 ms
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Housing material Plastic, Thermoplastic material, Yellow Lens plastic, Acrylic Electrical connection Cable, 9 m, PVC Number of cores 2 Core cross-section 0.5 mm² Ambient temperature -40+70 °C Protection class IP67	Design	Rectangular with thread, Mini Beam
Lens plastic, Acrylic Electrical connection Cable, 9 m, PVC Number of cores 2 Core cross-section 0.5 mm² Ambient temperature -40+70 °C Protection class IP67	Dimensions	Ø 18 x 66 x 12.3 x 30.7 mm
Electrical connection Cable, 9 m, PVC Number of cores 2 Core cross-section Ambient temperature Protection class Protection class	Housing material	Plastic, Thermoplastic material, Yellow
Number of cores 2 Core cross-section 0.5 mm² Ambient temperature -40+70 °C Protection class IP67	Lens	plastic, Acrylic
Core cross-section 0.5 mm² Ambient temperature -40+70 °C Protection class IP67	Electrical connection	Cable, 9 m, PVC
Ambient temperature -40+70 °C Protection class IP67	Number of cores	2
Protection class IP67	Core cross-section	0.5 mm ²
	Ambient temperature	-40+70 °C
Special features Encapsulated	Protection class	IP67
	Special features	Encapsulated

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





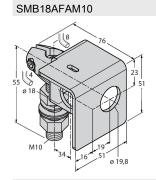
Technical data

Tests/approvals	
MTTF	853 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE, FM, CSA
Ignition protection category	Ex ia IIC T5 Ga
Ex approval acc. to conformity certificate	FM12ATEX0094X

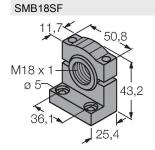
Accessories

SMB18A 0 18.5 0 4.6 R 24.2 0 4.6 0 4.6 46

3033200 Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread



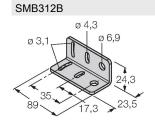
3012558 Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm



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

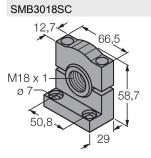
3052519

3053952



Mounting bracket, stainless steel, for MINI-BEAM NAMUR

3025519



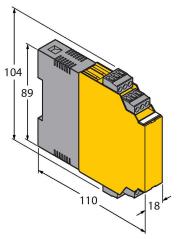
Mounting bracket, PTB black, for sensors with 18 mm thread



Accessories

Dimension drawing Type ID

IM1-22EX-R 7541231



Isolating switching amplifier, 2-channel; 2 relay outputs; input NAMUR signal; selectable ON/OFF mode for wirebreak and short-circuit monitoring; adjustable output mode (NO / NC mode); removable terminal blocks; width 18 mm; universal power supply

unit