

# SMU315F

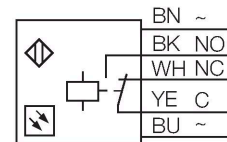
## Photoelectric Sensor – Photoelectric Sensor for Glass Fibers



### Features

- Cable, PVC, 2 m
- Protection class IP67
- Sensitivity adjusted via potentiometer
- Alignment indicator
- Operating voltage: 24...240 VDC or 24...240 VAC
- Relay output

### Wiring diagram



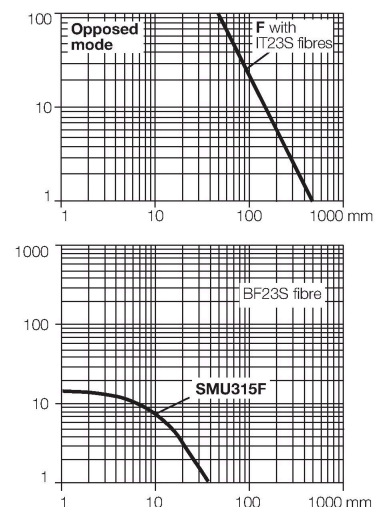
### Technical data

Type	SMU315F
ID no.	3052577
<b>Optical data</b>	
Function	Photoelectric sensor for glass fibers
Fiber-optic type	glass
Light type	IR
Wavelength	880 nm
<b>Electrical data</b>	
Operating voltage	24...240 VDC
Operating voltage	24...240 VAC
DC rated operational current	≤ 3000 mA
AC rated operational current	≤ 3000 mA
Output function	NO/NC, Relay output
Switching frequency	≤ 25 Hz
Readiness delay	≤ 1000 ms
Response time typical	< 20 ms
Max. DC switching capacity	1 W
Setting option	Potentiometer
<b>Mechanical data</b>	
Design	Rectangular with thread, Mini Beam
Dimensions	81 x 12.3 x 30.7 mm
Housing material	Plastic, Thermoplastic material, Yellow
Electrical connection	Cable, 2 m, PVC
Number of cores	5
Core cross-section	0.5 mm <sup>2</sup>
Ambient temperature	-20...+55 °C
Relative humidity	0...90 %

### Functional principle

Glass or plastic fibers are the optimum choice for high-temperature applications and limited spaces. Optical fibers transfer the light from the sensor to a remote object. Individual fibers are used for opposed sensing mode, whereas bifurcated fibers are suited for diffuse sensing mode.

Excess gain curve  
Excess gain in relation to distance



## Technical data

Protection class	IP67
Special features	Wash down
Switching state	LED, Red
Excess gain indication	LED, red, flashing
<b>Tests/approvals</b>	
Approvals	CE, cURus, CSA

## Accessories

<p><b>SMB18A</b></p>	<p><b>3033200</b></p> <p>Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread</p>	<p><b>SMB18AFAM10</b></p>	<p><b>3012558</b></p> <p>Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm</p>
<p><b>SMB18SF</b></p>	<p><b>3052519</b></p> <p>Mounting bracket, PBT black, for sensors with 18 mm thread, rotatable</p>	<p><b>SMB312B</b></p>	<p><b>3025519</b></p> <p>Mounting bracket, stainless steel, for MINI-BEAM NAMUR</p>
<p><b>SMB3018SC</b></p>	<p><b>3053952</b></p> <p>Mounting bracket, PTB black, for sensors with 18 mm thread</p>		

Accessories

Dimension drawing	Type	ID no.	
	BT23S	3017276	Glass fiber, sensing mode: Diffuse mode, threaded sleeve (brass), bundle diameter 3.2 mm, flexible stainless steel jacket, ambient temperatures -140...+250 °C

	IT23S	3017355	Glass fiber, sensing mode: Opposed mode, threaded sleeve (brass), bundle diameter 3.2 mm, flexible stainless steel jacket, ambient temperatures -140...+250 °C
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