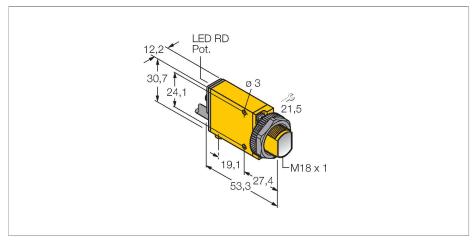


SM312FPGMHS Photoelectric Sensor – Photoelectric Sensor for Plastic Fibers



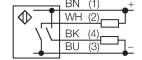
Technical data

Туре	SM312FPGMHS
ID	3050382
Optical data	
Function	Fiber optic sensor
Operating mode	Plastic fiber
Fiber-optic type	plastic
Light type	Green
Wavelength	525 nm
Electrical data	
Operating voltage	1030 VDC
Residual ripple	< 10 % U _{ss}
DC rated operational current	≤ 150 mA
No-load current	≤ 25 mA
Output function	NO contact, PNP/NPN
Switching frequency	≤ 500 Hz
Readiness delay	≤ 100 ms
Overcurrent release	> 220 mA
Mechanical data	
Design	Rectangular, Mini Beam
Dimensions	53.3 x 12.3 x 30.7 mm
Housing material	Plastic, PBT, Yellow
Electrical connection	Cable, 2 m, PVC
Number of cores	4
Core cross-section	0.5 mm²
Ambient temperature	-20+70 °C
Protection class	IP67
Switching state	LED, Red

Features

- Cable, PVC, 2 m
- ■Protection class IP67
- Sensitivity adjusted via potentiometer
- Alignment indicator
- Operating voltage: 10...30 VDC
- Switching output, bipolar
- Light/dark operation

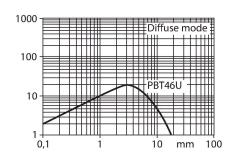
Wiring diagram



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

Excess gain indication LED, red, flashing

Tests/approvals

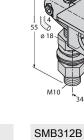
Approvals CE, cURus, CSA

Accessories

Ø 18.5 Ø 4.6 R 24.2 Ø 4.6

3033200

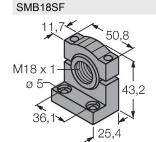
Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread



SMB18AFAM10

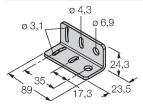
3012558

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



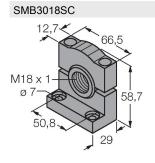
3052519

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



3312B 3025519

Mounting bracket, stainless steel, for MINI-BEAM NAMUR



3053952

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