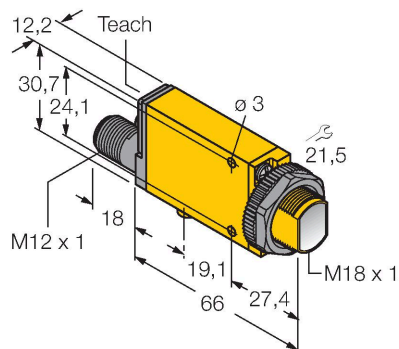


SME312FQD

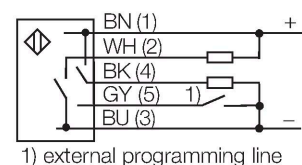
Photoelectric Sensor – Photoelectric Sensor for Glass Fibers



Features

- Male M12 × 1, 5-pin
- Protection class IP67
- Teach-in function
- Operating voltage: 10...30 VDC
- Switching output, bipolar
- Light/dark operation

Wiring diagram



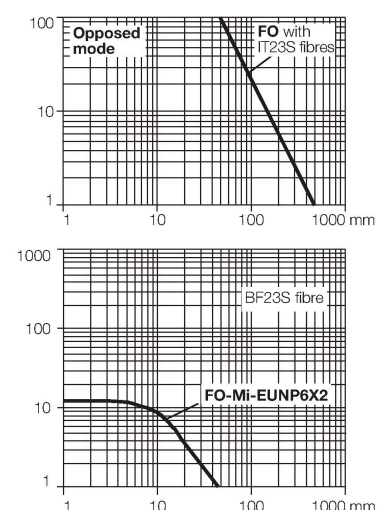
Technical data

Type	SME312FQD
ID	3053714
Optical data	
Function	Fiber optic sensor
Operating mode	Glass fiber
Fiber-optic type	glass
Light type	IR
Wavelength	880 nm
Electrical data	
Operating voltage	10...30 VDC
Residual ripple	< 10 % U _{ss}
No-load current	≤ 45 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO contact, PNP/NPN
Switching frequency	1 kHz
Readiness delay	≤ 1000 ms
Response time typical	< 0.5 ms
Overcurrent release	> 220 mA
Setting option	Push Button Remote Teach
Mechanical data	
Design	Rectangular with thread, Mini Beam Expert
Dimensions	84 x 12.3 x 30.7 mm
Housing material	Plastic, Thermoplastic material, Yellow
Lens	plastic, Acrylic
Electrical connection	Connector, M12 × 1, PVC

Functional principle

Glass or plastic fibers are the optimum choice for high-temperature applications and limited spaces. They 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.

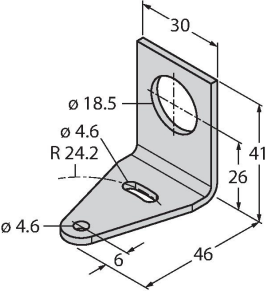
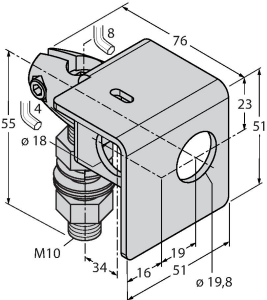
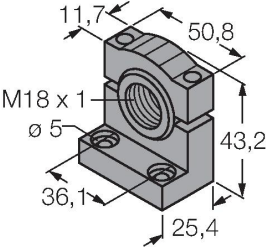
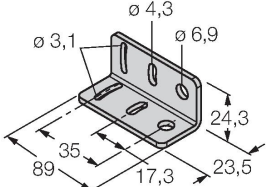
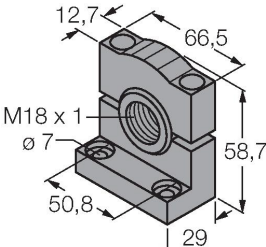
Excess gain curve
Excess gain in relation to distance



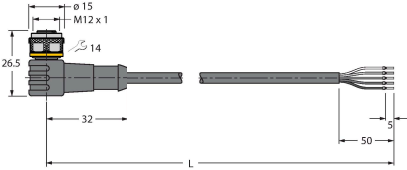
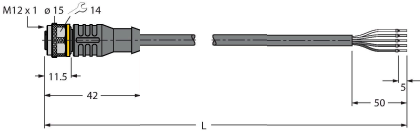
Technical data

Number of cores	5
Ambient temperature	-20...+70 °C
Relative humidity	0...90 %
Protection class	IP67
Special features	Wash down
Power-on indication	LED, Green
Switching state	LED, Yellow
Excess gain indication	LED, red, flashing
Tests/approvals	
Approvals	CE, cURus

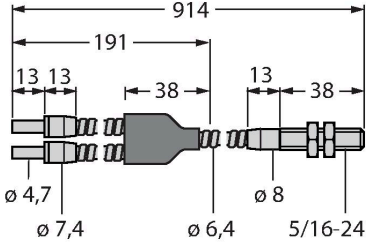
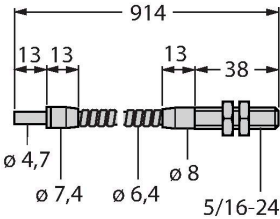
Accessories

SMB18A 	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
SMB18SF 	3052519 Mounting bracket, PBT black, for sensors with 18 mm thread, rotatable	SMB312B 	3025519 Mounting bracket, stainless steel, for MINI-BEAM NAMUR
SMB3018SC 	3053952 Mounting bracket, PTB black, for sensors with 18 mm thread		

Accessories

Dimension drawing	Type	ID	
	WKC4.5T-2/TEL	6625028	Connection cable, female M12, angled, 5-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com
	RKC4.5T-2/TEL	6625016	Connection cable, female M12, straight, 5-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com

Accessories

Dimension drawing	Type	ID	
	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