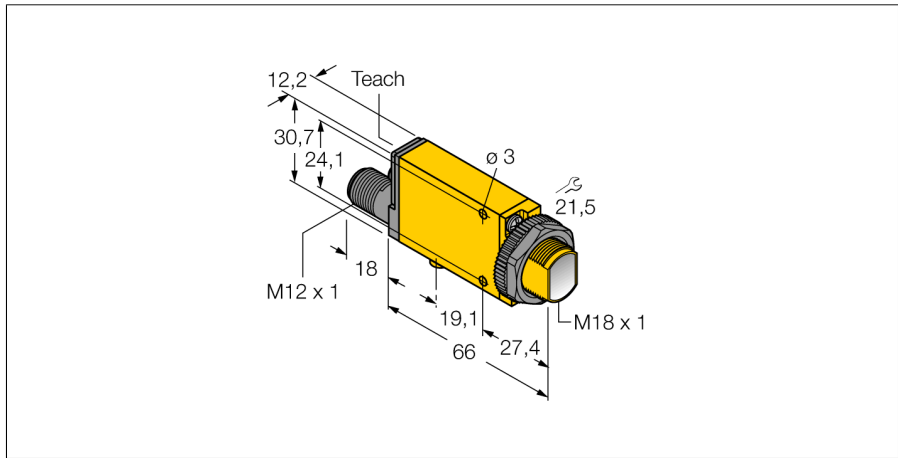
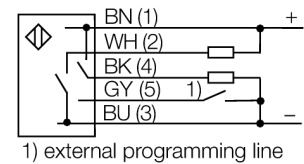


**Photoelectric sensor
base unit for glass fibers
SME312FQD**



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

Wiring diagram



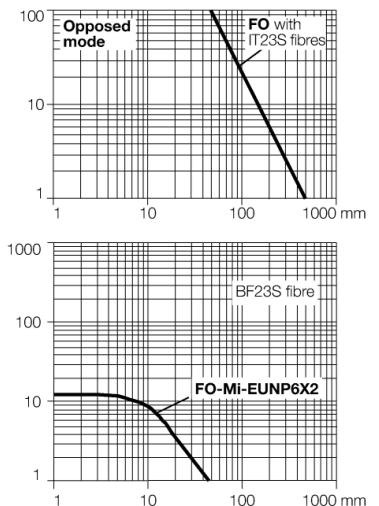
Type code	SME312FQD
Ident no.	3053714
Operating mode	fibres optic sensor
Light type	IR
Wavelength	880 nm
Ambient temperature	-20...+70 °C
Operating voltage	10...30VDC
Residual ripple	< 10 % U _s
No-load current I ₀	≤ 45 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO contact, PNP/NPN
Switching frequency	1 kHz
Readiness delay	≤ 100 ms
Overcurrent release	> 220 mA
Design	rectangular, Mini Beam Expert
Dimensions	84 x 12.3 x 30.7 mm
Housing material	plastic, PBT, yellow
Lens	plastic, acrylic
Connection	male, M12 x 1
Protection class	IP67
Power-on indication	LED green
Switching state	LED yellow
Excess gain indication	LED red flashing

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



**Photoelectric sensor
base unit for glass fibers
SME312FQD**

TURCK

Industrial
Automation

Accessories

Type code	Ident no.	Description	Dimension drawing
SMB18A	3033200	Mounting bracket, 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, PTB black steel, for sensors with 18 mm thread	
SMB312B	3025519	Mounting bracket, stainless steel, for MINI-BEAM NAMUR	
SMB3018SC	3053952	Mounting bracket, PTB black, for sensors with 18 mm thread	

**Photoelectric sensor
base unit for glass fibers
SME312FQD**

Wiring accessories

Type code	Ident no.	Description	Dimension drawing
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	

Function accessories

Type code	Ident no.	Description	Dimension drawing
BT23S	3017276	Glass fiber, sensing mode: Diffuse mode, threaded sleeve (brass), bundle diameter 3.2 mm, flexible stainless steel sheath, ambient temperatures -140 °C ...+250 °C	
IT23S	3017355	Glass fiber, sensing mode: Opposed mode, threaded sleeve (brass), bundle diameter 3.2 mm, flexible stainless steel sheath, ambient temperatures -140 °C ...+250 °C	