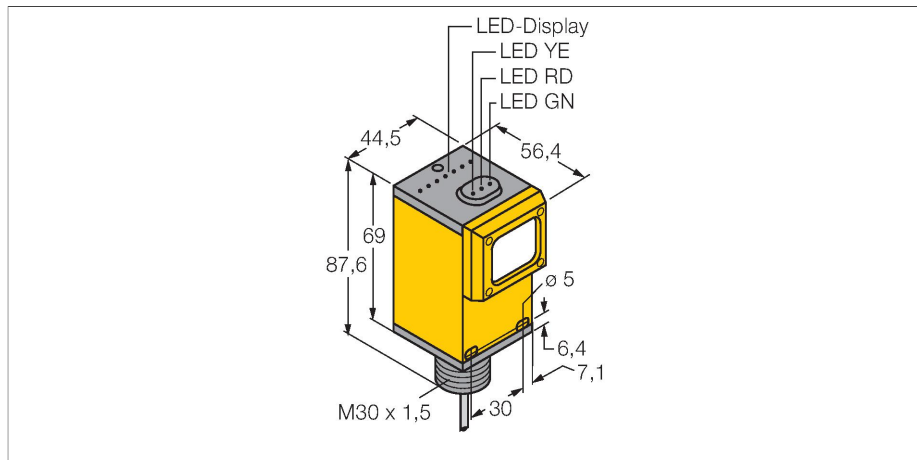


Q45BW13FV

Photoelectric Sensor – Photoelectric Sensor for Glass Fibers



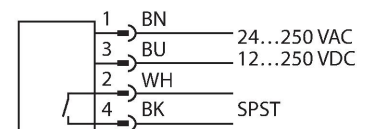
Technical data

Type	Q45BW13FV
ID no.	3053990
Optical data	
Function	Photoelectric sensor for glass fibers
Fiber-optic type	glass
Light type	IR
Wavelength	880 nm
Electrical data	
Operating voltage	12...250 VDC
Operating voltage	24...250 VAC
Output function	NO contact, Relay output
Switching frequency	≤ 33 Hz
Readiness delay	≤ 100 ms
Response time typical	< 2 ms
Setting option	Potentiometer
Mechanical data	
Design	Rectangular, Q45
Dimensions	56.4 x 44.5 x 87.6 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Acrylic
Electrical connection	Cable, 2 m, PVC
Number of cores	4
Core cross-section	0.34 mm ²
Ambient temperature	-25...+55 °C
Relative humidity	0...90 %
Protection class	IP67
Special features	keep/defer

Features

- Cable, PVC, 2 m
- Protection class IP67
- Sensitivity adjusted via potentiometer
- Operating voltage: 12...250 VDC or 24...250 VAC
- Relay output, NO (SPST)
- Light or dark operation, adjusted via selector switch

Wiring diagram



Functional principle

Glass or fibre optic sensors are the optimum choice for high temperature or space restricted applications. Fibre optics transfer the light from the sensor to a remote object. Individual fibre optics are used for opposed mode sensing, whereas bifurcated fibre optics are suited for retro-reflective or diffuse mode operation.

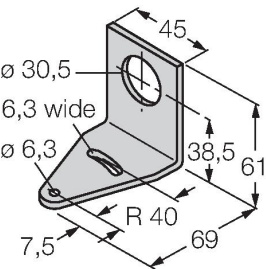
Excess gain curve
Excess gain in relation to the distance

Technical data

	Wash down
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green
Excess gain indication	LED, red
Tests/approvals	
MTTF	67 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE, cURus, CSA

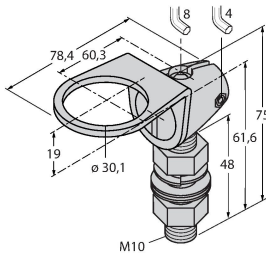
Accessories

SMB30A3032723



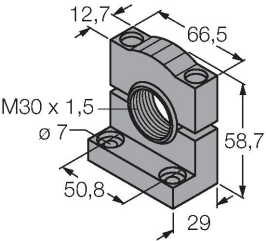
Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread

SMB30FAM103011185



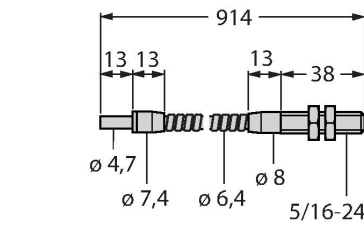
Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 mm

SMB30SC3052521



Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable

Accessories

Dimension drawing	Type	ID no.	
	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

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

