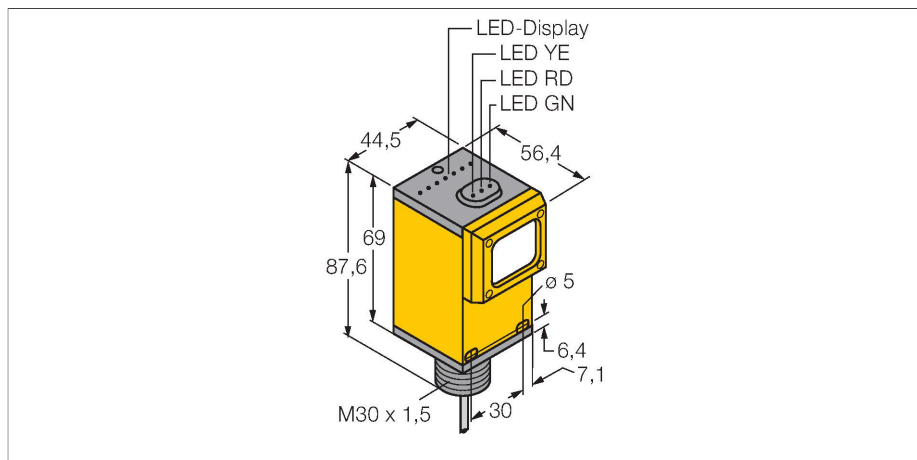


Q45AD9FV

Photoelectric Sensor – Photoelectric Sensor for Glass Fibers



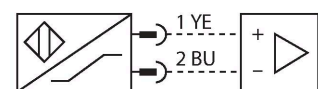
Technical data

Type	Q45AD9FV
ID no.	3058266
Optical data	
Function	Photoelectric sensor for glass fibers
Fiber-optic type	glass
Light type	IR
Wavelength	880 nm
Electrical data	
Voltage	Nom. 8.2 VDC
Current consumption non-actuated	≤ 1 mA
Actuated current consumption	≥ 2.1 mA
No-load current	≤ 2.1 mA
Output function	Light operation, NAMUR
Switching frequency	≤ 100 Hz
Response time typical	< 5 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	2
Core cross-section	0.34 mm ²
Ambient temperature	-40...+70 °C
Relative humidity	0...90 %
Protection class	IP67

Features

- Cable, PVC, 2 m
- Protection class IP67
- Sensitivity adjusted via potentiometer
- Operating voltage: 5...15 VDC
- NAMUR output: dark ≤ 1.2 mA ; light ≥ 2.1 mA
- Acc. to EN 60947-5-6 (NAMUR)

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

Special features	Wash down
Switching state	LED, Red
Excess gain indication	LED, flashing
Tests/approvals	
MTTF	67 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE, FM, CSA
Ignition protection category	Ex ia IIC T5 Ga
Ex approval acc. to conformity certificate	FM12ATEX0094X

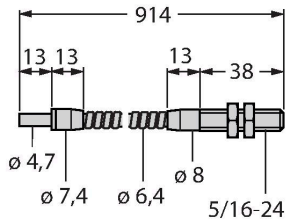
Accessories

<p>SMB30A</p>	<p>3032723</p> <p>Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread</p>	<p>SMB30FAM10</p>	<p>3011185</p> <p>Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 mm</p>
<p>SMB30SC</p>	<p>3052521</p> <p>Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable</p>		

Accessories

Dimension drawing	Type	ID no.	
	<p>IM1-22EX-R</p>	<p>7541231</p>	<p>Isolating switching amplifier, 2-channel; 2 relay outputs; input NAMUR signal; selectable ON/OFF mode for wire-break and short-circuit monitoring; adjustable output mode (NO / NC mode); removable terminal blocks; width 18 mm; universal power supply unit</p>

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



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

