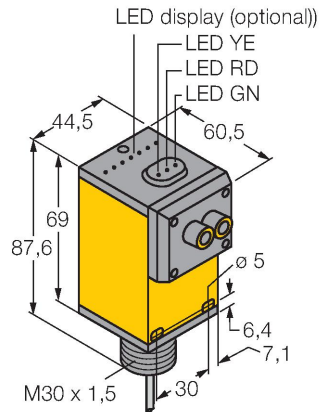


Q45AD9FP W/30

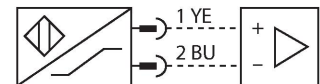
Photoelectric Sensor – Photoelectric Sensor for Plastic Fibers



Features

- Cable, PVC, 2 m
- Protection class IP67
- Sensitivity adjusted via potentiometer
- Adapter set PFK-B for connecting plastic optical fibers are available separately
- Operating voltage: 5...15 VDC
- NAMUR output: dark ≤ 1.2 mA ; light ≥ 2.1 mA
- Acc. to EN 60947-5-6 (NAMUR)

Wiring diagram



Technical data

Type	Q45AD9FP W/30
ID	3040822
Optical data	
Function	Fiber optic sensor
Operating mode	Plastic fiber
Fiber-optic type	plastic
Light type	Red
Wavelength	660 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	60.5 x 44.5 x 87.6 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Acrylic
Electrical connection	Cable, 9 m, PVC
Number of cores	2
Core cross-section	0.34 mm ²
Ambient temperature	-40...+70 °C
Relative humidity	0...90 %

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

Protection class	IP67
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
Ex approval acc. to conformity certificate	FM12ATEX0094X

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

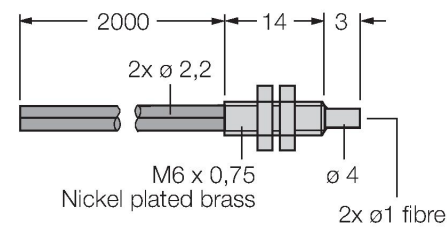
PFK-B3093520

Adapter set with 4 adapters per set to connect plastic optical fibers to Q45 fiber-optic sensors

Accessories

Dimension drawing	Type	ID	
104, 89, 110, 18	IM1-22EX-R	7541231	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

Dimension drawing	Type	ID	
	PBT46U	3025967	Plastic fiber-optic sensor, operating mode: Diffuse mode, threaded sleeve M3 x 0.75 mm, field wireable wire without end tip, polyethylene sheath, ambient temperatures -30 °C...+70 °C



PIT46U	3026034
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Plastic fiber-optic sensor, operating mode: Opposed mode, threaded sleeve M3 x 0.5 mm, field wireable wire without end tip, polyethylene sheath, ambient temperatures -30 °C...+70 °C

