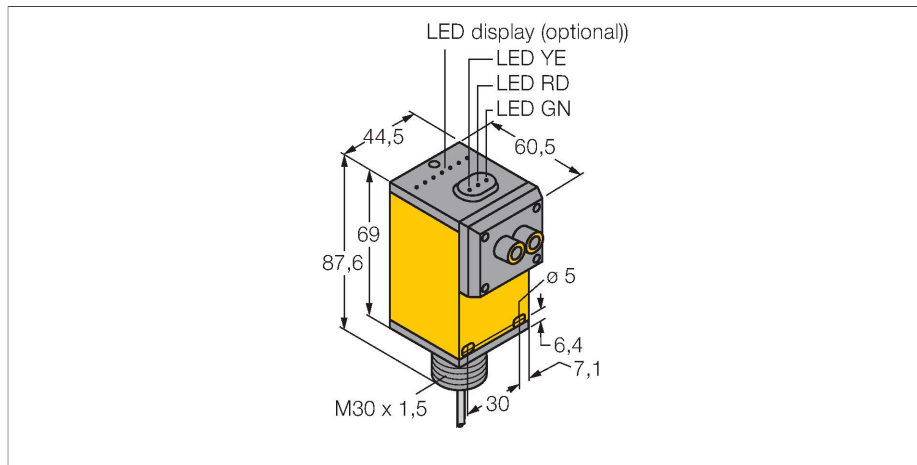


# Q45VR3FP

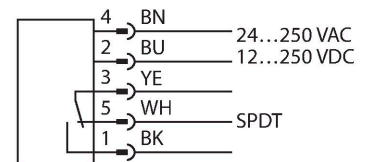
## Photoelectric Sensor – Photoelectric Sensor for Plastic Fibers



### 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: 12...250 VDC or 24...250 VAC
- Relay output, changeover (SPDT)
- Light or dark operation, adjusted via selector switch

### Wiring diagram



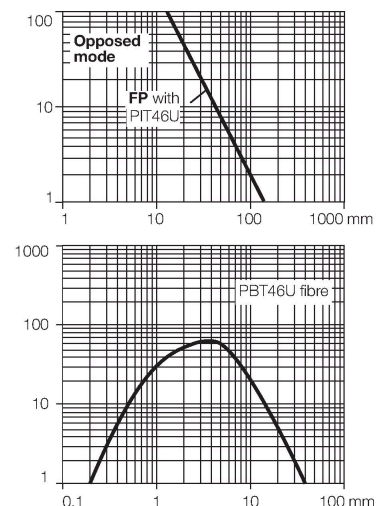
### Technical data

Type	Q45VR3FP
ID	3053978
<b>Optical data</b>	
Function	Fiber optic sensor
Operating mode	Plastic fiber
Fiber-optic type	plastic
Light type	Red
Wavelength	660 nm
<b>Electrical data</b>	
Operating voltage	12...250 VDC
Operating voltage	24...250 VAC
Output function	Complementary contact, Relay output
Switching frequency	≤ 33 Hz
Readiness delay	≤ 100 ms
Response time typical	< 15 ms
Setting option	Potentiometer
<b>Mechanical data</b>	
Design	Rectangular, Q45
Dimensions	60.5 x 44.5 x 87.6 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Acrylic
Electrical connection	Cable, 2 m, PVC
Number of cores	5
Core cross-section	0.34 mm <sup>2</sup>
Ambient temperature	-25...+55 °C
Relative humidity	0...90 %
Protection class	IP67

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

## Accessories

<p><b>SMB30A</b></p>	<p><b>3032723</b></p> <p>Mounting bracket, rectangular, stainless steel, for sensors with 30mm thread</p>	<p><b>SMB30FAM10</b></p>	<p><b>3011185</b></p> <p>Mounting bracket, stainless steel, for M10 x 1.5 thread, thread length 30 mm</p>
<p><b>SMB30SC</b></p>	<p><b>3052521</b></p> <p>Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable</p>	<p><b>PFK-B</b></p>	<p><b>3093520</b></p> <p>Adapter set with 4 adapters per set to connect plastic optical fibers to Q45 fiber-optic sensors</p>

## Accessories

Dimension drawing	Type	ID	
<p>Nickel plated brass</p> <p>2x <math>\varnothing 2,2</math></p> <p>M6 x 0,75</p> <p><math>\varnothing 4</math></p> <p>2x <math>\varnothing 1</math> fibre</p>	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

Dimension drawing	Type	ID	
	PIT46U	3026034	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

