

Q45VR2FP W/30

Photoelectric Sensor – Photoelectric Sensor for Plastic Fibers



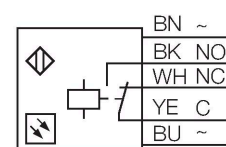
Technical data

Type	Q45VR2FP W/30
ID	3038465
Optical data	
Function	Fiber optic sensor
Operating mode	Plastic fiber
Fiber-optic type	plastic
Light type	Red
Wavelength	660 nm
Electrical data	
Operating voltage	90...250 VAC
No-load current	≤ 50 mA
Output function	Complementary contact, Relay output
Readiness delay	≤ 100 ms
Response time typical	< 15 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, 9 m, PVC
Number of cores	5
Core cross-section	0.34 mm ²
Ambient temperature	-40...+70 °C
Relative humidity	0...90 %
Protection class	IP67
Special features	keep/defer

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: 90...250 VAC
- Relay output, changeover (SPDT)
- 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

SMB30A 3032723

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

SMB30FAM10 3011185

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

SMB30SC 3052521

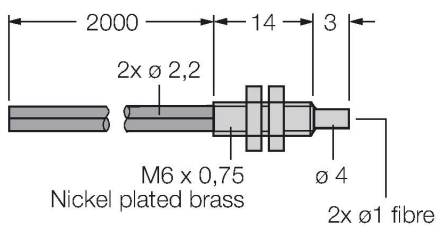
Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable

PFK-B 3093520

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

Accessories

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



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

