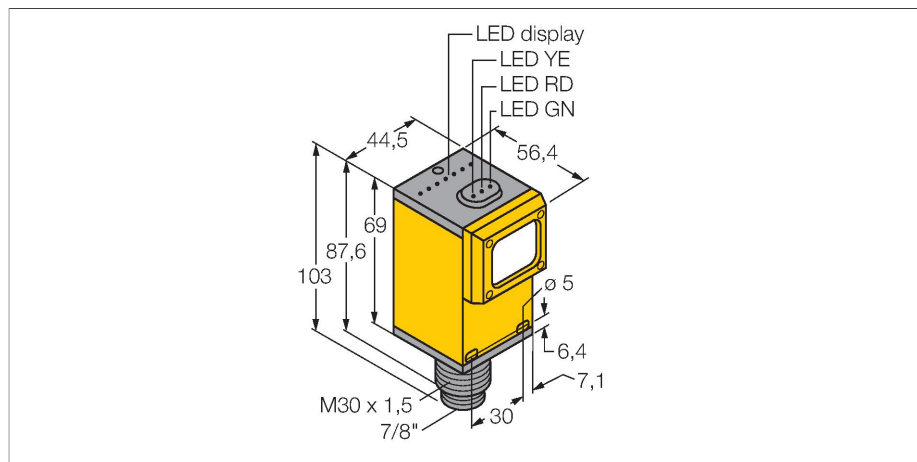


Q45BB6FPQ

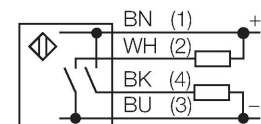
Photoelectric Sensor – Photoelectric Sensor for Plastic Fibers



Features

- Male connector 7/8"
- Protection class IP67
- Sensitivity adjusted via potentiometer
- Adapter set PFK-B for connecting plastic optical fibers are available separately
- Operating voltage: 10...30 VDC
- Switching output, bipolar
- Light or dark operation, adjusted via switch

Wiring diagram



Technical data

Type	Q45BB6FPQ
ID no.	3036730
Optical data	
Function	Photoelectric sensor for plastic fibers
Fiber-optic type	plastic
Light type	Red
Wavelength	660 nm
Electrical data	
Operating voltage	10...30 VDC
Residual ripple	< 10 % U _{ss}
No-load current	≤ 50 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO contact, PNP/NPN
Switching frequency	≤ 250 Hz
Readiness delay	≤ 100 ms
Response time typical	< 2 ms
Overcurrent release	> 220 mA
Setting option	Potentiometer
Mechanical data	
Design	Rectangular, Q45
Dimensions	56.4 x 44.5 x 101.6 mm
Housing material	Plastic, Thermoplastic material
Lens	plastic, Acrylic
Electrical connection	Connectors, 7/8", PVC
Number of cores	4
Ambient temperature	-40...+70 °C



Functional principle

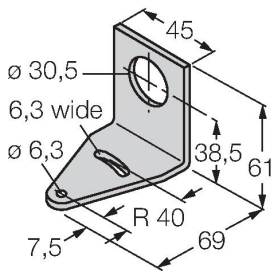
Glass or fibre optic sensors are the optimum choice for high temperature or space restricted applications. Fibre optics transfer the light from the sensor to a remote object. Individual fibre optics are used for opposed mode sensing, whereas bifurcated fibre optics are suited for retro-reflective or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

Excess gain curve
Excess gain in relation to the distance

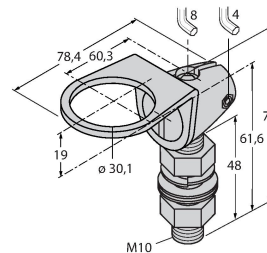
Technical data

Relative humidity	0...90 %
Protection class	IP67
Special features	keep/defer Wash down
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green, Flashing
Excess gain indication	LED, red
Tests/approvals	
MTTF	67 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE, cURus, CSA

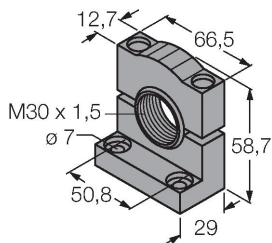
Accessories

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

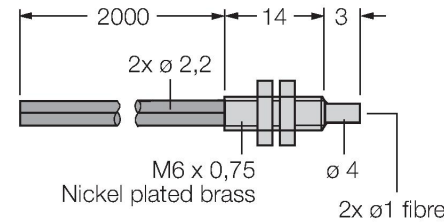
SMB30SC
3052521


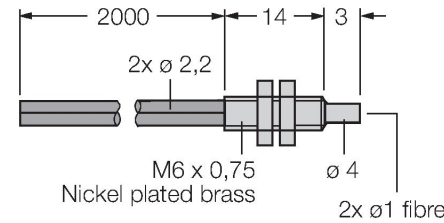
Mounting bracket, PBT black, for sensors with 30 mm thread, rotatable

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 no.	
	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	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
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