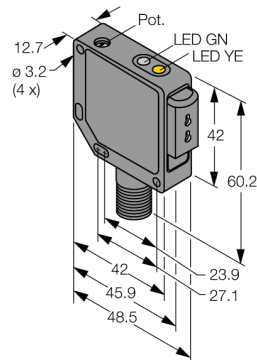


Photoelectric Sensor

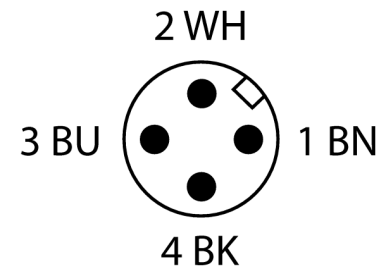
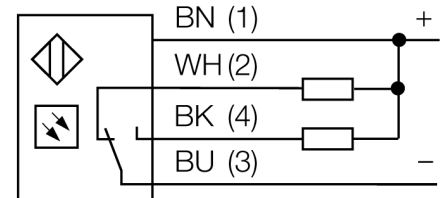
Photoelectric Sensor for Plastic Fibers

QM42VN6FPQ



- Male M12 × 1, 4-pin
- Metal housing, ZN, black
- Protection class IP67
- Sensitivity adjusted via potentiometer
- Operating voltage 10...30 VDC
- NPN switching output
- Light/dark operation

Wiring Diagram



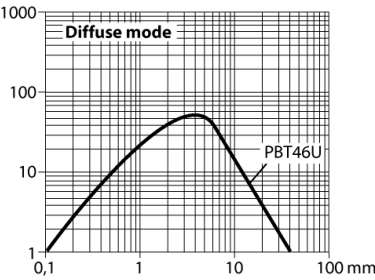
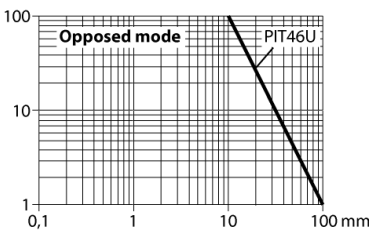
Functional principle

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 diffuse mode operation.

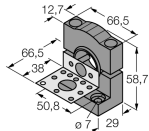
Excess gain curve

Type	QM42VN6FPQ
ID	3045786
Optical data	
Function	Fiber optic sensor
Operating mode	Plastic fiber
Fiber-optic type	plastic
Light type	Red
Wavelength	660 nm
Electrical data	
Operating voltage U_s	10...30 VDC
Residual ripple	< 10 % U_s
DC rated operating current I_s	≤ 100 mA
No-load current I_o	≤ 30 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO/NC, NPN
Readiness delay	≤ 100 ms
Response time typical	< 0.25 ms
Overcurrent release	> 150 mA
Setting option	Potentiometer
Mechanical data	
Design	Rectangular, QM42
Housing material	Metal, Zinc Alloy Die-Cast, Black-finished
Electrical connection	Connector, M12 × 1, PVC
Number of cores	4
Ambient temperature	-20...+70 °C
Relative humidity	0...90%
Protection class	IP67
Special features	
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green, Flashing
Excess gain indication	LED
Alarm display	LED yellow Flashing

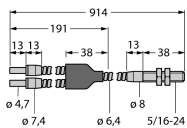
Tests/approvals	
Approvals	CE, cURus



Accessories

Type code	Ident no.		Dimension drawing
SMB30SK	3052523	Mounting bracket, PBT black, with mounting plate, stainless steel, for types with 18 mm thread, QM42/QMT42	
SMB46S	3048748	Mounting bracket, stainless steel, for QS18, QS30, MI-NI-BEAM, QM42/QMT42	
SMB46L	3048747	Mounting bracket, stainless steel, for QS18, QS30, MI-NI-BEAM, QM42/QMT42	

Function accessories

Type code	Ident no.		Dimension drawing
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	
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	