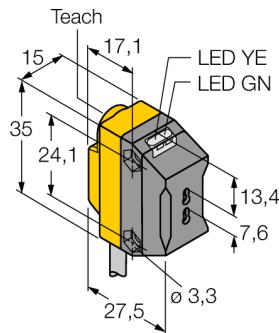


Photoelectric Sensor

Photoelectric Sensor for Plastic Fibers

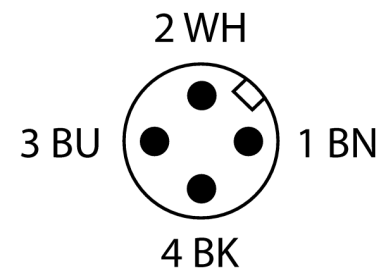
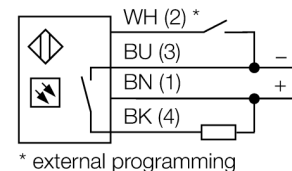
QS18EN6FPQ5



Type	QS18EN6FPQ5
ID	3075725
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
DC rated operating current I_s	≤ 100 mA
No-load current I_0	≤ 35 mA
Reverse polarity protection	yes
Output function	NO contact, NPN
Switching frequency	≤ 833 Hz
Readiness delay	≤ 100 ms
Response time typical	< 0.6 ms
Setting option	Push Button Remote Teach
Mechanical data	
Design	Rectangular, QS18
Housing material	Plastic, Thermoplastic material
Electrical connection	Cable with connector, M12 $\times$ 1, 0.15 m, PVC
Number of cores	4
Ambient temperature	-20...+70 °C
Relative humidity	0...95%
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
Alarm display	LED yellow Flashing

- Cable with male end, M12 $\times$ 1, 4-pin, PVC, 150 mm
- Protection class IP67
- LED all-round visible
- Sensitivity adjusted via teach button
- Operating voltage: 10...30 VDC
- NPN switching output
- Light or dark operation

Wiring Diagram



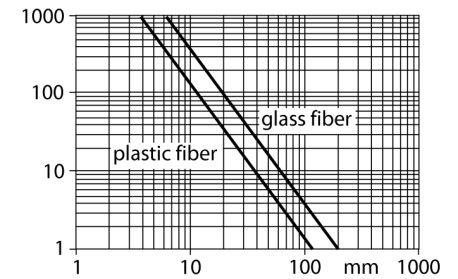
Functional principle

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 fiber-optics are used for opposed mode sensing, whereas bifurcated fiber-optics are suited for diffuse mode operation.

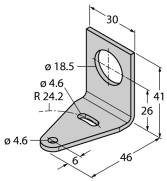
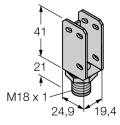
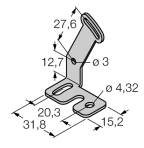
Tests/approvals	
Approvals	CE, cURus

Excess gain curve

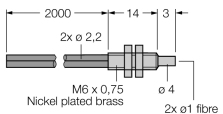
Excess gain depending on range of opposed mode sensors (type F with fiber-optics IT23S and type FP with fiber-optics PIT46U)



Accessories

Type code	Ident no.		Dimension drawing
SMB18A	3033200	Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread	
SMBQS18A	3069721	Mounting bracket, stainless steel, for 18 mm thread	
SMBQS18AF	3067467	Mounting bracket, stainless steel, for 18 mm thread	

Function accessories

Type code	Ident no.		Dimension drawing
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	