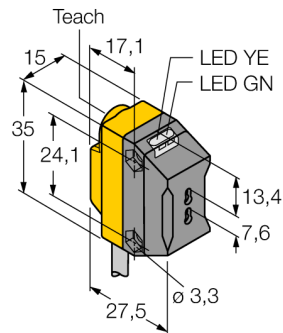


Photoelectric Sensor

Photoelectric Sensor for Plastic Fibers

QS18EK6FPQ8



Type	QS18EK6FPQ8
ID	3802857

Optical data	
Function	Fiber optic sensor
Operating mode	Plastic fiber
Fiber-optic type	Plastic
Light type	Red
Wavelength	660 nm

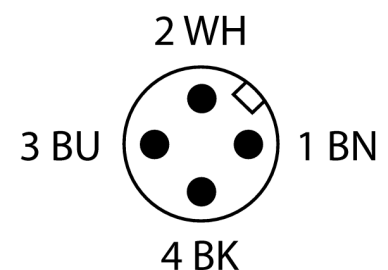
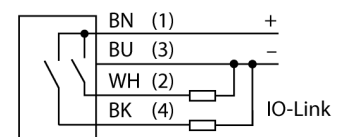
Electrical data	
Operating voltage U_s	10...30 VDC
DC rated operating current I_s	≤ 100 mA
No-load current I_o	≤ 35 mA
Reverse polarity protection	yes
Communication protocol	IO-Link
Output function	NO/NC, PNP/NPN
Switching frequency	≤ 833 Hz

IO-Link	
IO-Link specification	V 1.1
IO-Link port type	Class A
Communication mode	COM 2 (38.4 kBaud)
Process data width	16 bit
Frame type	Type_2_2
Minimum cycle time	2 ms
Function pin 4	IO-Link
Function Pin 2	DI
Maximum cable length	20 m
Profile support	Smart Sensor Profile
Included in the SIDI GSDML	Yes

Mechanical data	
Design	Rectangular, QS18
Housing material	Plastic, ABS
Electrical connection	Connector, M12 × 1
Ambient temperature	-20...+70 °C
Protection class	IP67

- Male M12 × 1; 4-pin
- Protection class IP67
- LED all-round visible
- Sensitivity adjusted via teach button
- Operating voltage: 10...30 VDC
- 1 × PNP/NPN switching output with IO-Link communication
- 1 × PNP/NPN switching output
- Transmission of process value and parametrization via IO-link

Wiring Diagram



Functional principle

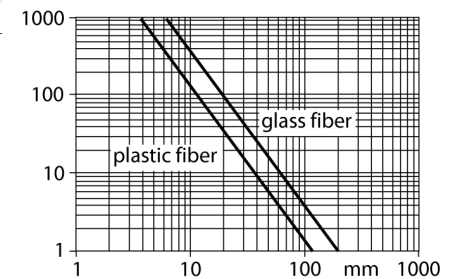
Glass or fibre optic sensors are the optimum choice for high temperature or space restricted applications. Fibre optics transfer the light from the sensor to a remote object. Individual fiber-optics are used for opposed mode sens-

Special features	Pushbutton Teach input
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green, Flashing
Alarm display	LED yellow Flashing
Tests/approvals	
Approvals	CE, cURus

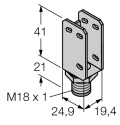
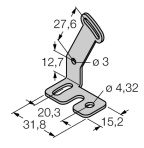
ing, whereas bifurcated fiber-optics are suited for diffuse mode operation.

Excess gain curve

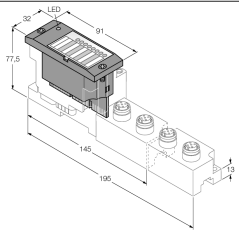
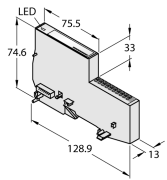
Excess gain depending on range of opposed mode sensors (type F with fiber-optics IT23S and type FP with fiber-optics PIT46U)



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
BL67-4IOL	6827386	4-channel IO-Link Master module for the modular BL67 I/O-system	
BL20-E-4IOL	6827385	IO-Link master module for the modular BL20 I/O system, 4-channel	

Function accessories

Type code	Ident no.		Dimension drawing
USB-2-IOL-0002	6825482	IO-Link Master with integrated USB port	
TBIL-M1-16DXP	6814102	16-channel I/O-hub for the connection of 16 digital PNP signals to an IO-Link master (input/output freely selectable per channel)	
TBEN-S2-4IOL	6814024	Compact multiprotocol I/O module, 4 IO-Link Master 1.1 Class A, 4 universal PNP digital channels 0.5 A	
50153501 MD 742-11-82X5-12 Leuze	100051716	16-channel I/O hub for the connection of 16 digital PNP signals to an IO-Link master (input/output freely selectable per channel)	
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	

Function accessories

Type code	Ident no.		Dimension drawing
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	