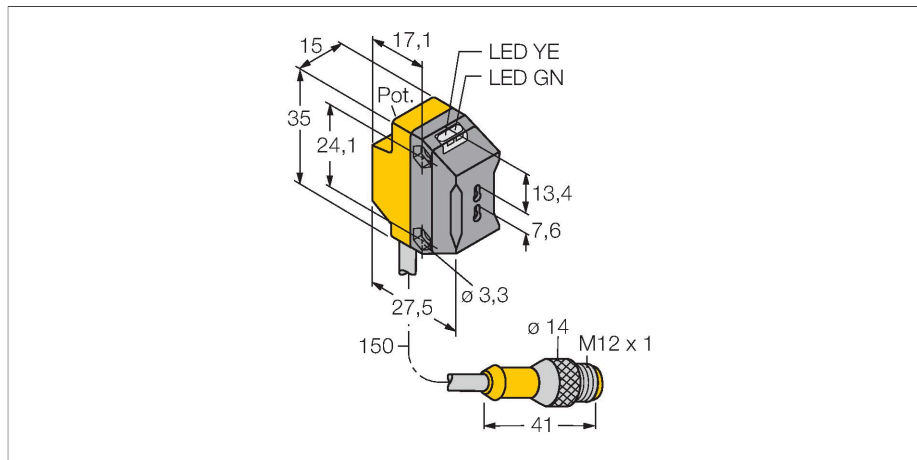


QS18VN6FPQ5

Photoelectric Sensor – Photoelectric Sensor for Plastic Fibers



Technical data

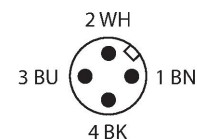
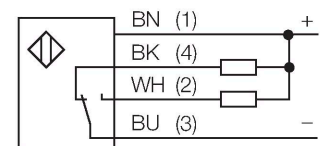
Type	QS18VN6FPQ5
ID	3069868
Optical data	
Function	Retroreflective Sensor
Operating mode	Polarized
Fiber-optic type	plastic
Light type	Red
Wavelength	660 nm
Range	3500 mm
Electrical data	
Operating voltage	10...30 VDC
Residual ripple	< 10 % U _{ss}
DC rated operational current	≤ 100 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO/NC, NPN
Current output	100 mA
Switching frequency	≤ 800 Hz
Readiness delay	≤ 100 ms
Response time typical	< 0.6 ms
Setting option	Potentiometer
Mechanical data	
Design	Rectangular, QS18
Dimensions	Ø 18 x 27.5 x 15 x 34.5 mm
Housing material	Plastic, ABS
Lens	Acrylic



Features

- Cable with male end, M12 × 1, 4-pin, PVC, 150 mm
- Protection class IP67
- LED all-round visible
- Sensitivity adjusted via potentiometer
- Operating voltage: 10...30 VDC
- NPN switching output, changeover

Wiring diagram



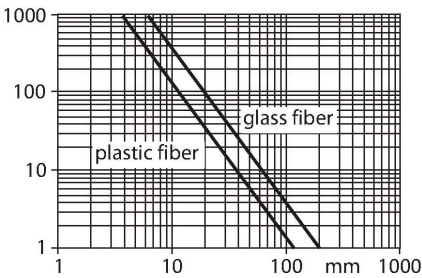
Functional principle

Glass or plastic fibers are the optimum choice for high-temperature applications and narrow spaces. Fiber optics transfer the light from the sensor to a remote object. Individual fibers are used for opposed mode sensing, whereas bifurcated fibers are suited for retroreflective or diffuse mode sensing.

Excess gain curve
Excess gain in relation to the distance for opposed mode sensor (glass fibers IT23S and plastic fibers PIT46U)

Technical data

Electrical connection	Cable with connector, M12 × 1, 0.15 m, PVC
Number of cores	4
Ambient temperature	-20...+70 °C
Protection class	IP67
Power-on indication	LED, Green
Switching state	LED, Yellow
Error indication	LED, green, Flashing
Excess gain indication	LED, yellow, flashing
Tests/approvals	
MTTF	965 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE, cURus



Accessories

SMBQS18A

3069721

Mounting bracket, stainless steel, for 18 mm thread

SMBQS18AF

3067467

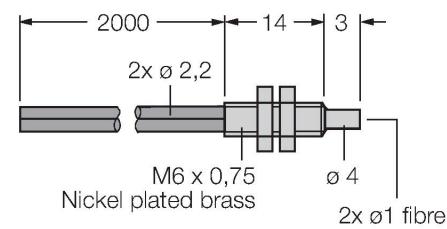
Mounting bracket, stainless steel, for 18 mm thread

Accessories

Dimension drawing	Type	ID	
	RKC4.4T-2/TEL	6625013	Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com
	WKC4.4T-2/TEL	6625025	Connection cable, female M12, angled, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com

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



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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