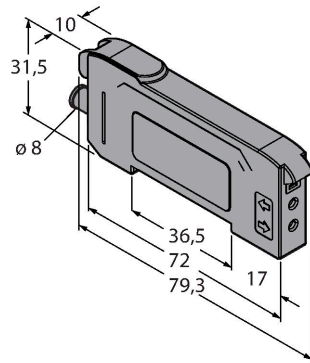


DF-G1-PS-Q7

Photoelectric Sensor – Photoelectric Sensor for Plastic Fibers



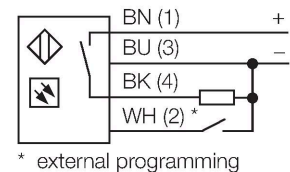
Technical data

Type	DF-G1-PS-Q7
ID no.	3019359
Optical data	
Function	Photoelectric sensor for plastic fibers
Light type	Red
Wavelength	660 nm
Electrical data	
Operating voltage	10...30 VDC
Residual ripple	< 10 % U _{ss}
DC rated operational current	≤ 40 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO/NC, PNP
Switching frequency	5 kHz
Readiness delay	≤ 500 ms
Response time typical	< 0.2 ms
Setting option	Push Button Remote Teach
Mechanical data	
Design	Rectangular, DF-G1
Dimensions	79.3 x 10 x 33 mm
Housing material	Plastic, Thermoplastic material, Black
Electrical connection	Connectors, M8 x 1, PVC
Number of cores	4
Ambient temperature	-10...+55 °C
Relative humidity	0...90 %
Protection class	IP50

Features

- 8 mm connector, 4-pin
- Visible red light
- Programming via teach cable or multi-function button
- Operating voltage: 10...30 VDC
- PNP output
- Light/dark operation

Wiring diagram



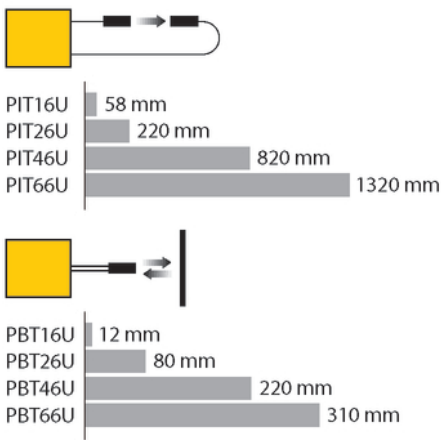
Functional principle

Glass or fiber optics are the optimum choice for high temperature or space restricted applications. Fiber 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.

Technical data

Special features	keep/defer Crosstalk protection
Switching state	LED, Yellow
Excess gain indication	Dual Digital Displays
Tests/approvals	
Approvals	CE, cULus listed

Excess Gain Curve



Accessories

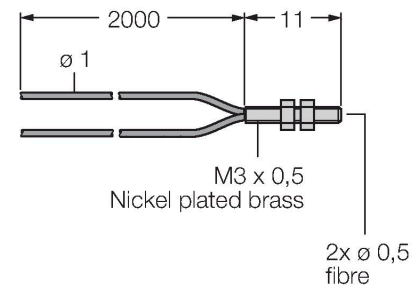
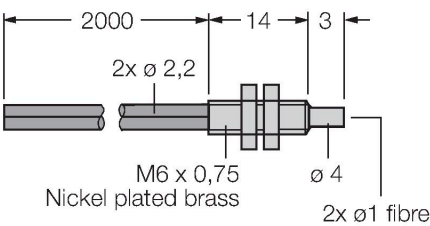
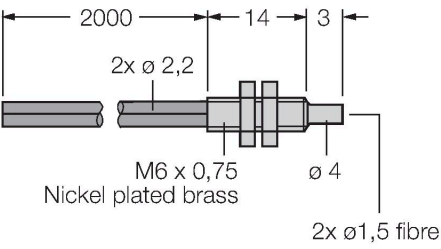
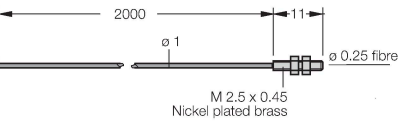
DIN-35-70	3026604	DIN-35-105	3030470
DIN rail, width 35 mm, length 70 mm		DIN rail, width 35 mm, length 105 mm	
DIN-35-140	3026605		
DIN rail, width 35 mm, length 140 mm			

Accessories

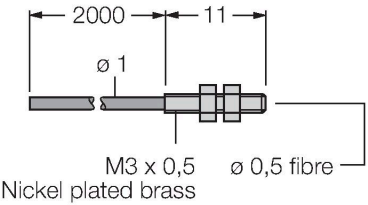
Dimension drawing	Type	ID no.	
Technical drawing of the PKG4S-2/TEL cable connector. It shows a side view with dimensions: a diameter of 8.4 mm at the top, a length of 32.1 mm for the main body, and a total length L. The bottom view shows a 50 mm distance from the end of the cable to the connector body.	PKG4S-2/TEL	6627370	Connection cable, female Ø M8, straight, 4-pin, snap-on type, cable length: 2 m, jacket material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com
Technical drawing of the PKW4S-2/TEL cable connector. It shows a side view with dimensions: a diameter of 8.1 mm at the top, a length of 16.1 mm for the main body, and a total length L. The bottom view shows a 50 mm distance from the end of the cable to the connector body.	PKW4S-2/TEL	6627373	Connection cable, Ø 8 mm female, snap-on type, angled, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com

Accessories

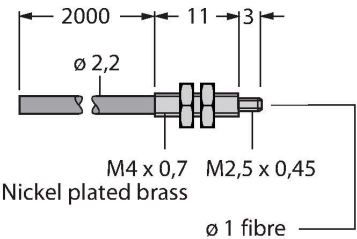
Dimension drawing	Type	ID no.	
Technical drawing of the PBT16U plastic fiber-optic sensor. It shows a side view with dimensions: a length of 2000 mm for the main body, a diameter of 1 mm for the fiber, and a total length L. The bottom view shows a 11 mm distance from the end of the cable to the sensor body. The sensor is made of M3 x 0.5 Nickel plated brass and has 2 x Ø 0.25 fibre.	PBT16U	3042822	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

Dimension drawing	Type	ID no.	
	PBT26U	3026080	Plastic fiber, sensing mode: Diffuse mode, threaded bush M3 x 0.75 mm, preassembled wire without end tip, polyethylene jacket, ambient temperatures -30 °C...+70 °C
	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
	PBT66U	3039982	Plastic fiber-optic sensor, operating mode: Diffuse mode, threaded sleeve M6 x 0.75 mm, pre-assembled wire without end tip, polyethylene sheath, ambient temperatures -30 °C...+70 °C
	PIT16U	3039983	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

Dimension drawing	Type	ID no.	
	PIT26U	3026079	Plastic fiber, sensing mode: Opposed mode, threaded bush M3 x 0.5 mm, preassembled wire without end tip, polyethylene jacket, 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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PIT66U	3039899	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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