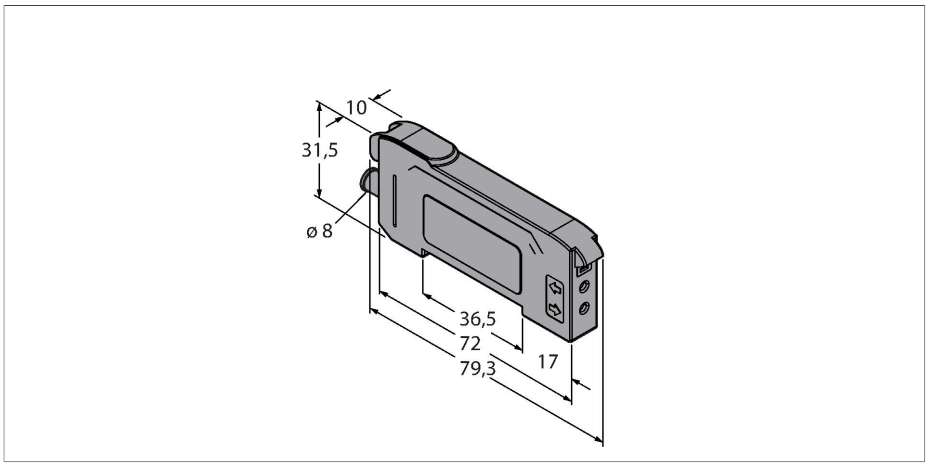
DF-G1-NS-Q7
Photoelectric Sensor – Photoelectric Sensor for Plastic Fibers



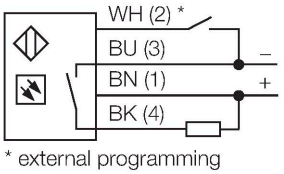
Technical data

Type	DF-G1-NS-Q7
ID	3019354
Optical data	
Function	Fiber optic sensor
Operating mode	Plastic fiber
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, NPN
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	Connector, M8 × 1, PVC
Number of cores	4
Ambient temperature	-10…+55 °C
Relative humidity	0…90 %

Features

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

Wiring diagram



* external programming

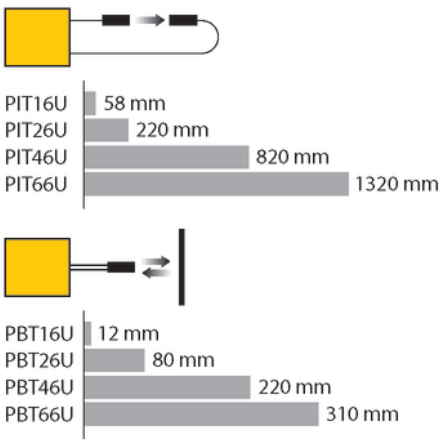
Functional principle

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

Protection class	IP50
Special features	keep/defer
Switching state	LED, Yellow
Excess gain indication	Dual Digital Displays
Tests/approvals	
Approvals	CE, cULus listed

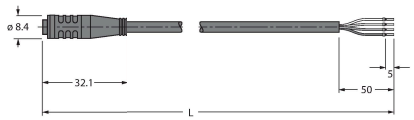
Excess Gain Curve



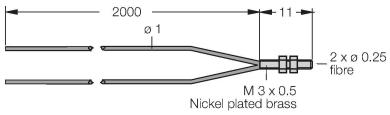
Accessories

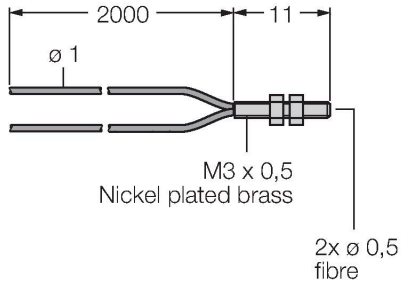
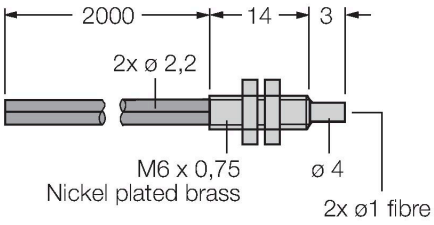
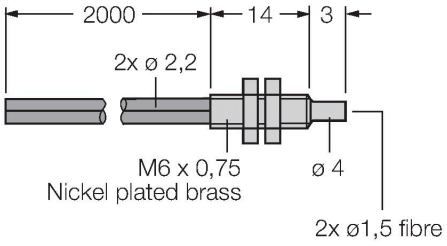
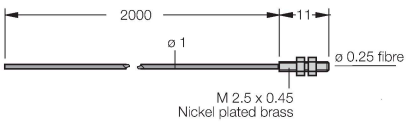
DIN-35-70	3026604	DIN-35-105	3030470
DIN rail, width 35 mm, length 70 mm		DIN rail, width 35 mm, length 105 mm	
DIN-35-140	3026605		
DIN rail, width 35 mm, length 140 mm			

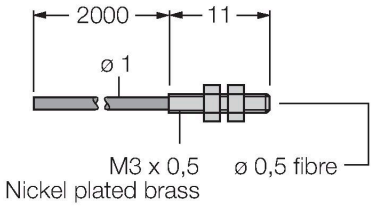
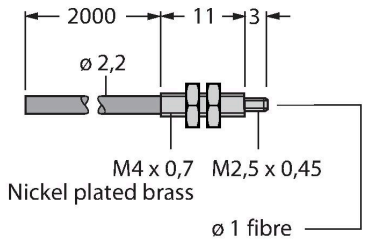
Accessories

Dimension drawing	Type	ID	
	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
	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	
	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	
	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	
	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
			
	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