

# DF-G2G-PS-2M

## Photoelectric Sensor – Photoelectric Sensor for Plastic Fibers



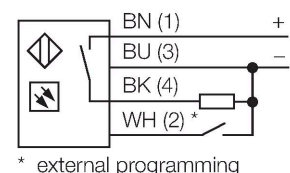
### Technical data

Type	DF-G2G-PS-2M
ID	3087636
<b>Optical data</b>	
Function	Fiber optic sensor
Operating mode	Plastic fiber
Light type	Green
Wavelength	525 nm
<b>Electrical data</b>	
Operating voltage	10...30 VDC
Residual ripple	< 10 % U <sub>ss</sub>
DC rated operational current	≤ 40 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Output function	NO contact, PNP
Current output	100 mA
Switching frequency	50 kHz
Readiness delay	≤ 500 ms
Response time typical	< 0.01 ms
Setting option	Push Button Remote Teach
<b>Mechanical data</b>	
Design	Rectangular, DF-G1
Dimensions	79.3 x 10 x 33 mm
Housing material	Plastic, Thermoplastic material, Black
Electrical connection	Cable, 2 m, PVC
Number of cores	4
Ambient temperature	-10...+55 °C

### Features

- Cable 2 m
- Visible green
- Programming via teach cable or multi-function button
- Operating voltage: 10...30 VDC
- PNP output
- Light/dark operation

### Wiring diagram



### Functional principle

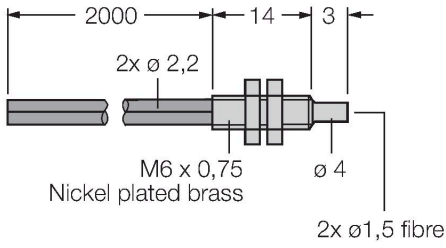
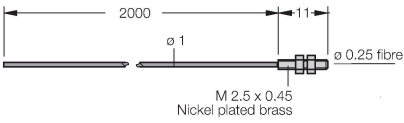
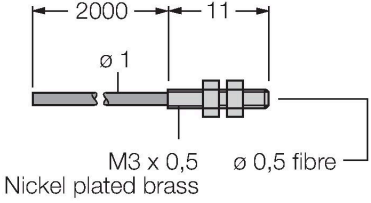
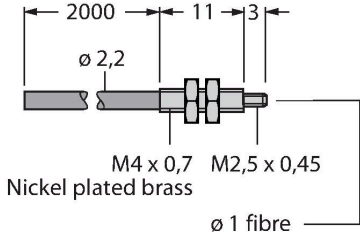
Glass or plastic fibers are the optimum choice for high-temperature applications and limited spaces. Optical fibers transfer the light from the sensor to a remote object. Single optical fibers are suited for opposed sensing mode, while bifurcated optical fibers are best suited for diffuse sensing mode.

## Technical data

Relative humidity	0...90 %
Protection class	IP50
Special features	keep/defer
Switching state	LED, Yellow
Excess gain indication	Dual Digital Displays
<b>Tests/approvals</b>	
Approvals	CE, cULus listed

## Accessories

Dimension drawing	Type	ID	
<p>2000  <math>\varnothing 1</math>            11            2 x <math>\varnothing 0.25</math> fibre            M3 x 0,5            Nickel plated brass</p>	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
<p>2000  <math>\varnothing 1</math>            11            M3 x 0,5            Nickel plated brass            2x <math>\varnothing 0,5</math> fibre</p>	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
<p>2000            2x <math>\varnothing 2,2</math>            14            3            M6 x 0,75            Nickel plated brass  <math>\varnothing 4</math>            2x <math>\varnothing 1</math> fibre</p>	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

Dimension drawing	Type	ID	
 <p>2000 14 3 2x <math>\varnothing 2,2</math> M6 x 0,75 Nickel plated brass <math>\varnothing 4</math> 2x <math>\varnothing 1,5</math> fibre</p>	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
 <p>2000 11 <math>\varnothing 1</math> M 2.5 x 0.45 Nickel plated brass <math>\varnothing 0.25</math> fibre</p>	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
 <p>2000 11 <math>\varnothing 1</math> M3 x 0,5 Nickel plated brass <math>\varnothing 0,5</math> fibre</p>	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
 <p>2000 11 3 <math>\varnothing 2,2</math> M4 x 0,7 M2,5 x 0,45 Nickel plated brass <math>\varnothing 1</math> fibre</p>	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

Dimension drawing	Type	ID	
	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

