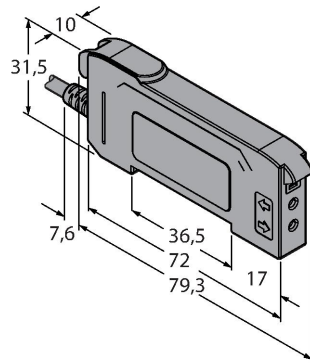


DF-G2-KD-2M

Photoelectric Sensor – Photoelectric Sensor for Plastic Fibers



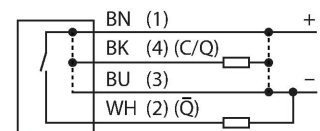
Technical data

Type	DF-G2-KD-2M
ID	3097700
Optical data	
Function	Fiber optic sensor
Operating mode	Plastic fiber
Light type	Red
Wavelength	635 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
Communication protocol	IO-Link
Output function	NO contact, PNP
Output 2	Switching output
Current output	100 mA
Switching frequency	50 kHz
Readiness delay	≤ 500 ms
Response time typical	< 0.05 ms
Setting option	Push Button Remote Teach
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

Features

- Cable 2 m
- Visible red light
- Programming via teach cable or multi-function button
- Operating voltage: 10...30 VDC
- IO-Link
- 2 × PNP output, changeover contact
- 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.

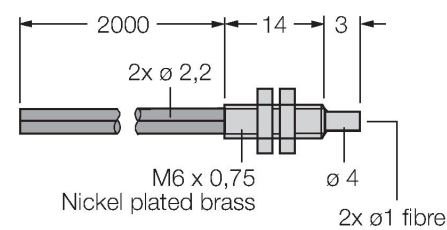
Technical data

Function Pin 4	IO-Link
Function Pin 2	DI
Maximum cable length	20 m
Profile support	Smart Sensor Profil
Included in the SIDI GSDML	Yes
Mechanical data	
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
Relative humidity	0...90 %
Protection class	IP50
Special features	keep/defer
Switching state	LED, Yellow
Excess gain indication	Dual Digital Displays
Tests/approvals	
Approvals	CE, cULus listed

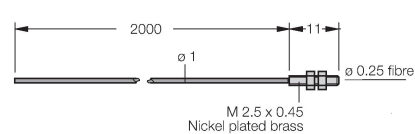
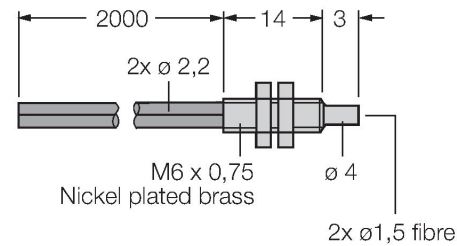
Accessories

Dimension drawing	Type	ID	
2000 ø 1 11 2 x ø 0.25 fibre M3 x 0.5 Nickel plated brass	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
	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
2000 ø 1 11 M3 x 0,5 Nickel plated brass 2x ø 0,5 fibre			

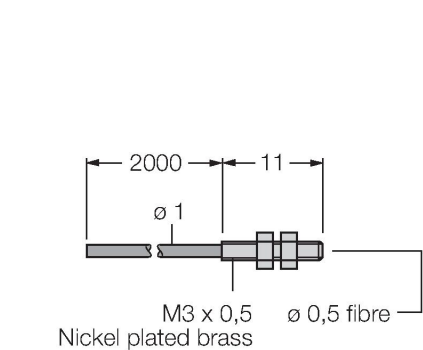
Dimension drawing	Type	ID	
	PBT46U	3025967	Plastic fiber-optic sensor, operating mode: Diffuse mode, threaded sleeve M3 x 0.75 mm, field wireable wire without end tip, polyethylene sheath, ambient temperatures -30 °C...+70 °C



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
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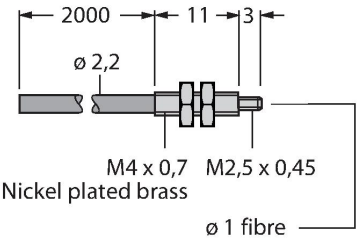


PIT16U	3039983	Plastic fiber-optic sensor, operating mode: Opposed mode, threaded sleeve M3 x 0.5 mm, field wireable wire without end tip, polyethylene sheath, ambient temperatures -30 °C...+70 °C
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PIT26U	3026079	Plastic fiber, sensing mode: Opposed mode, threaded bush M3 x 0.5 mm, preassembled wire without end tip, polyethylene jacket, ambient temperatures -30 °C...+70 °C
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Dimension drawing	Type	ID	
	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
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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

