

## Opto Electronic Level Switch

Limit Switch in stainless steel 316Ti with cable or plug for detecting the level of liquid media

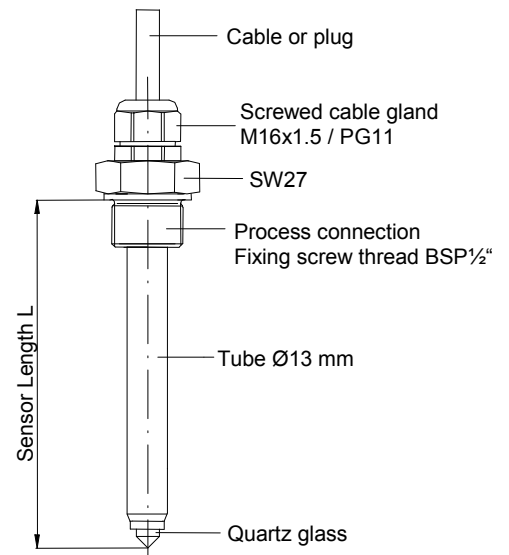
### OPG 02

#### Characteristics

- ▶ No moving parts
- ▶ Reasonable prices
- ▶ Simple to install
- ▶ Mounting direction: any
- ▶ High reliability
- ▶ Long service life
- ▶ Measuring accuracy  $\pm 0,5$  mm
- ▶ Electrical connection:  
cable connection or plug
- ▶ Output PNP
- ▶ Closer or Opener
- ▶ Adjustable sensitivity for any application  
( e.g. foam detection )
- ▶ Sensor length:  
min. 65 mm, max. 3000 mm

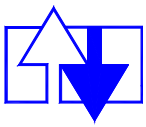


#### Dimensions



#### Areas of application

- Plant construction
- Machine tools
- Chemicals and Pharmaceuticals
- Hydraulics
- Machine construction
- Water treatment etc.



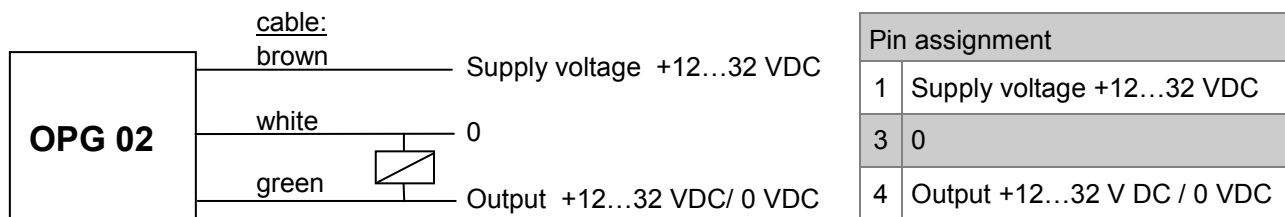
### Operating Principle

The electro-optic sensor contains an infrared LED and a light receiver.

Light from the LED is directed into a prism which forms the tip of the sensor. With no liquid present, light from the LED is reflected within the prism to the receiver.

When rising liquid immerses the prism, the light is refracted out into the liquid, leaving little or no light reach the receiver. Sensing this change, the receiver actuates electronic switching within the unit to operate an external alarm or control circuit.

### Connection diagram

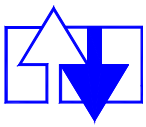


### Technical Data

<b>Max. pressure</b>	2,5 MPa	<b>Min. distance sensor tip to any opposite wall</b>	> 10 mm
<b>Ambient temperature</b>	-25°C to +70°C	<b>Mounting direction</b>	any
<b>Operating temperature</b>	-30°C to +100°C	<b>Process connections</b>	BSP 1/2", other types on request
<b>Measuring accuracy</b>	± 0,5 mm	<b>Sensor length L</b>	min. 65 mm max. 3000 mm
<b>Material housing</b>	stainless steel 316Ti		
<b>Material prism</b>	quartz glass		

### Electrical Data

<b>Supply voltage</b>	12...32 V DC	<b>Electrical connection</b>	cable PVC and PUR
<b>Supply current max.</b>	40 mA		3 x 0,25 mm <sup>2</sup> or coupler plug or plug M12, other types on request
<b>Switch point number</b>	1		
<b>Output</b>	PNP Transistor		
<b>Switch function</b>	closer or opener		
<b>Protection</b>	IP65		



### Product overview / order table

**OPG 02**

**Process connection**  
 A Fixing screw thread BSP1/2"  
 X Other types on request

**Electrical connection**  
 2P Connection cable: 2 m PVC 3 x 0,25 mm<sup>2</sup>, Standard  
 └─ other cable length: dimensions in m  
 2U Connection cable: 2 m PUR 3 x 0,25 mm<sup>2</sup>, Standard  
 └─ other cable length: dimensions in m  
 W Coupler plug, DIN 43650  
 M12 Plug M12  
 X Other types on request

**Switch function**  
 S Closer (in medium closed, 12 – 32 V DC)  
 O Opener (in medium open, 0 V DC)



**Sensitivity**  
 A Sensitivity not adjustable (**please specify the medium**)  
 T Sensitivity adjustable (with poti)

**Sensor length L**  
 Dimensions in mm (length from sealing face of process connection,  
 L min.=65 mm, L max.=3000 mm)

OPG 02

Example:  
 Process connection BSP1/2", 3m PVC cable, closer, sensitivity not adjustable, length 500 mm: OPG 02 A 3P S A 500

### Accessories: Circular plugs M12

Type		Order number	Design
Female plug M12 with	2 m PVC cable	K12PVC 2	
	5 m PVC cable	K12PVC 5	
	2 m PUR cable	K12PUR 2	
	5 m PUR cable	K12PUR 5	
Female plug M12, angle type with	2 m PVC cable	W12PVC 2	
	5 m PVC cable	W12PVC 5	
	2 m PUR cable	W12PUR 2	
	5 m PUR cable	W12PUR 5	

Colour	
1	brown
3	blue
4	black

### Distributore esclusivo per l'Italia:

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