

The optoelectronic Senlux Besta level switches are used for the level control of liquids. They may be installed either vertically or horizontally.

Base model OPG01

Product overview shown below

Technical Data

Operating pressure	max. 10 bar
Ambient temperature	-25 to 70°C
Liquid temperature	-30 to 100°C; max. +150°C 15 during max. minutes
Measuring accuracy	± 0.5 mm
Material housing	stainless steel 1.4305
Material prism	quartz glass
min. distance sensor tip to reflecting wall	> 10 mm
Mounting direction	any
Process connections	BSP3/8", M12x1 mm in 304 BSP 1/2" in Ti316 other types on request

Electrical Data

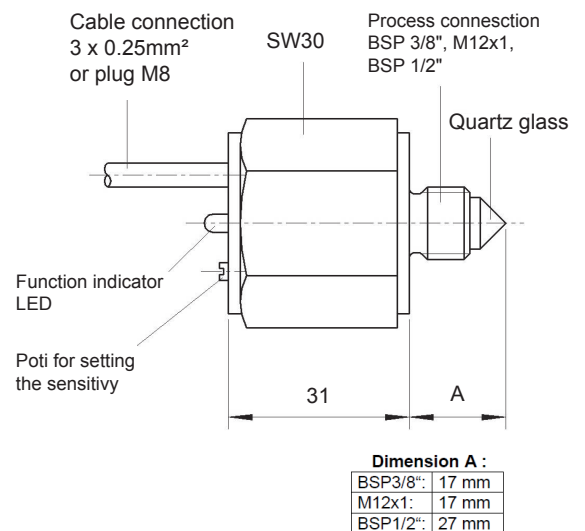
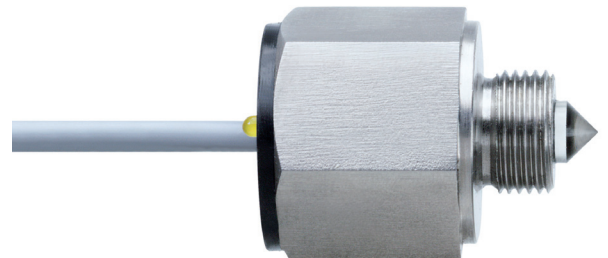
Supply voltage	12...32 VDC
Supply current max.	40 mA
Switch point number	1
Output	PNP Transistor, reverse polarity protected
Switch function	close or open
Enclosure	IP65
Indication of active output	1 LED
Electrical connection	cable PVC, PUR 3 x 0.25 mm ² or plug M8, other types on request

Operating Principle

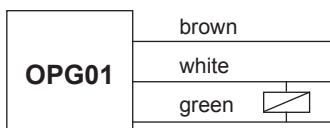
The optoelectronic sensor contains an infrared LED and a light receiver.

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



Supply voltage +12...32 VDC
0
Output +12...32 VDC

Pin assignment	
1	Supply voltage +12...32 VDC
3	0
4	Output +12...32 VDC

Product overview / order table

OPG01

Process connection

- A Connection thread BSP3/8"
- B Connection thread M12 x 1 mm, stainless steel 304
- C Fixing screw thread BSP1/2", stainless steel Ti316
- X Other types on request

Electrical connection

- 2P Connection cable: 2 m PVC 3 x 0.25 mm², Standard
 └─other cable length: dimensions in m
- 2U Connection cable: 2 m PUR 3 x 0.25 mm², Standard
 └─other cable length: dimensions in m
- M8 Plug M8
- X Other types on request

Switch function

- S Closer (in medium closed, 12 - 32 VDC)
- O Opener (in medium open, 0 VDC)

Sensitivity

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

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Example: Process connection BSP3/8", 2 m PVC cable, closer, sensitivity not adjustable, medium water: OPG01-A2PSA

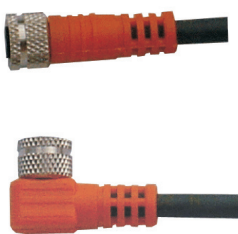
Characteristics

- Compact construction
- No moving parts
- Excellent price / performance ratio
- Easy to install
- Mounting direction: any
- High reliability
- Long service life
- Measuring accuracy ± 0.5 mm
- Electrical connection: cable connection or plug
- Optical switch condition check via the LED
- Output PNP
- Close or Open
- Adjustable sensitivity for any application

Areas of application

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

Accessories: Circular plugs M8

Type		Order number	Design	Colour	
Female plug M8 with	2 m PVC cable	K8PVC 2		1	brown
	5 m PVC cable	K8PVC 5		3	blue
	2 m PUR cable	K8PUR 2		4	black
	5 m PUR cable	K8PUR 5			
Female plug M8, angle type with	2 m PVC cable	W8PVC 2			
	5 m PVC cable	W8PVC 5			
	2 m PUR cable	W8PUR 2			
	5 m PUR cable	W8PUR 5			