Opto-Electronic Level Switch OG 01

Limit switch for liquid media

- Compact and small
- High reliability
- Installation in any position
- No moving parts

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Features

- Small and compact
- No moving parts
- Excellent price-performance ratio
- Easy installation
- Installation in any position
- High reliability
- Long lifetime
- Accuracy: ± 0.5 mm
- Electrical connection: cable or plug
- Function display LED
- PNP transistor output
- Normally open or normally closed
- Response sensitivity adaptable to measurement task

Principle of operation

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

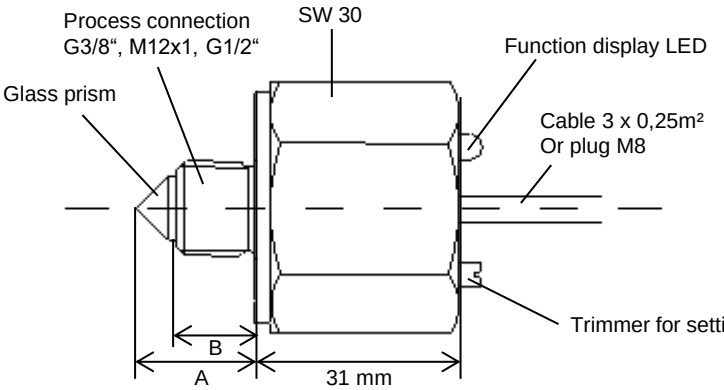
The LED light is directed into a prism that forms the tip of the sensor. As long as the tip is not immersed in liquid, the light within the prism is reflected to the receiver.

If the liquid rises in the container and surrounds the tip, the light is refracted by the liquid and no longer or only weakly reaches the receiver, which responds to this change and initiates a switching process.

Application

- Plant construction
- Machine tools
- Chemistry and pharmaceutical industry
- Hydraulic
- Mechanical engineering
- Water technology, etc.

Dimensions



Dimension A		B
G3/8“:	17 mm	10 mm
M12x1:	17 mm	10 mm
G1/2“:	27 mm	20 mm

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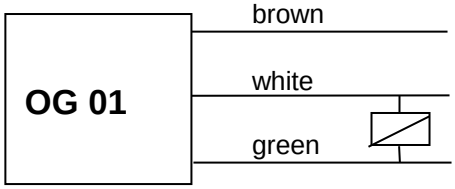
Technical data	
Max. pressure	1 MPa
Ambient temperature	-25°C to +70°C
Medium temperature	-30°C to +100°C max. +150°C 15 minutes
Accuracy	± 0,5 mm
Housing	Stainless steel 316 Ti
Material of glass prism	Quartz glass
Min. distance reflective surface to the prism	> 10 mm
Mounting position	any
Mounting thread	G3/8“, M12x1, Other versions on request

Electrical data	
Operating voltage	12 – 32 V DC
Current consumption max.	40 mA
Number of switching points	1
Output	DC PNP (200mA), reverse polarity protected
Function	Normally open or normally closed
Protection	IP65
Switching status display	1 LED
Electrical connection	PVC, PUR-cable 3 x 0,25 mm² or plug M8, Other versions on request

Electrical connection



Plug M8	
1	Supply 12…32 V DC
3	0
4	Output 12…32 V DC

Important instructions!
Technical changes and errors reserved.
Pictures can be similar.
The operating instructions belonging to this device must be observed! Download at www.schmidt-messtechnik.com.

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Ordering information

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Process connection
A Thread G 3/8“
B Thread M12 x 1 mm
X other versions on request

Electrical connection
2P Cable outlet 2 m PVC cable 3 x 0,25 mm², standard
└ Indication in m if other lengths of cable
2U Cable outlet 2 m PUR cable 3 x 0,25 mm², standard
└ Indication in m if other lengths of cable
M8 Cable outlet M8
X other versions on request

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

Responsiveness
A Responsiveness not adjustable (**Please indicate the medium!**)
T Responsiveness adjustable by trimmer (adjustable to measuring task)

OG 01				

Example: Process connection G3/8“, 3 m PVC-cable, normally open, permanently set, medium water: OG 01 A 3P S A

Accessories: Round plug connector M8

Type		ID-No.	Design
Connection plug M8 with	2 m PVC-cable	KPVC 2	
	5 m PVC-cable	KPVC 5	
	2 m PUR-cable	KPUR 2	
	5 m PVC-cable	KPUR 5	
Angle plug M8 with	2 m PVC-cable	WPVC 2	
	5 m PVC-cable	WPVC 5	
	2 m PUR-cable	WPUR 2	
	5 m PVC-cable	WPUR 5	

Coulour coding

1	brown
3	blue
4	black

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