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

**Base model OPG05**
Product overview shown below

**Technical Data**
- Operating pressure: max. 25 bar
- Ambient temperature: -30 to +80°C
- Liquid temperature: -40 to +170°C
- Accuracy: ± 0.5 mm
- Material housing: stainless steel 1.4305
- Prism material: quartz glass
- min. distance sensor tip to reflecting wall: > 10 mm
- Mounting direction: any
- Process connections: BSPP 1/2", other types on request

**Electrical Data**
- Supply voltage: 12...32 VDC
- Supply current max.: 40 mA
- Switch points: 1
- Output: PNP Transistor, reverse polarity protected
- Function: close or open
- Protection rating: IP65
- Indication of active output: 1 LED
- Electrical connection: cable PVC, PUR, 3 x 0.25 mm² or plug M12, angular plug, 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 by the liquid, leaving little or no light reaching the receiver. Sensing this change, the receiver initiates a switching process.

**Connection diagram**

### Pin assignment M12

<table>
<thead>
<tr>
<th>Pin</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Supply voltage 12...32 VDC</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>Output 12...32 VDC</td>
</tr>
</tbody>
</table>

### Angular Plug DIN 43650

<table>
<thead>
<tr>
<th>Pin</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Supply voltage 12...32 VDC</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>Output 12...32 VDC</td>
</tr>
</tbody>
</table>

With reservation of technical modifications
Product overview / order table

OGP05

Process connection
A  Connection thread BSPP1/2"
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
W  Angular plug DIN 43650
M12 Plug M12
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)

Example: Process connection BSPP1/2", 2 m PVC cable, closer, sensitivity not adjustable, medium water: OPG05-A2PSA

Characteristics
▪ Small and compact
▪ Excellent price / performance ratio
▪ Liquid temperature up to +175°C
▪ Max. Pressure 25 bar
▪ Mounting direction: any
▪ High reliability
▪ Measuring accuracy ± 0.5 mm
▪ Electrical connection: cable connection, plug M12 or angular plug
▪ Output PNP
▪ Close or Open
▪ Adjustable sensitivity for any application

Areas of application
▪ Plant construction
▪ Machine tools
▪ Chemicals and Pharmaceutics
▪ Hydraulics
▪ Machine construction
▪ Water treatment etc.

Accessories: Circular plugs M12

<table>
<thead>
<tr>
<th>Type</th>
<th>Order number</th>
<th>Design</th>
<th>Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female plug M12 with</td>
<td>K12PVC 2</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>K12PVC 5</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>K12PUR 2</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>K12PUR 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female plug M12, angle type with</td>
<td>W12PVC 2</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>W12PVC 5</td>
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<tr>
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<td>W12PUR 2</td>
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</tbody>
</table>

With reservation of technical modifications
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Bachofen AG, CH-8610 Uster, Switzerland
Phone +41 44 944 11 11, Fax +41 43 399 15 00
info@trimod.ch, www.trimod.ch

Printed in Switzerland