

LEVEL - LIQUID LEVEL MEASUREMENT

B.4

OPTO ELECTRONIC LEVEL SWITCHES

MODELS

OPG 02

Limit Switch in stainless steel 1.4571 with cable or plug for detecting the level of liquid media.



TECHNICAL SPECIFICATIONS

Max. pressure	2.5 Mpa
Ambient temperature	-25°C to +70°C
Operating temperature	-30°C to +100°C temporary up to max. +150°C
Material housing	stainless steel 1.4571
Measuring accuracy	± 0.5mm
Min. distance sensor tip to any opposite wall	> 10mm
Material prism	quartz glass
Mounting direction	any
Process connections	BSP 1/2", other types on request
Sensor length L	Min. 65mm / Max. 3000 mm

CHARACTERISTICS

- No moving parts
- Reasonable prices
- Simple to install
- Long service life
- High reliability
- Electrical connection:
cable connection or plug
- Measuring accuracy ± 0.5mm
- Sensor length: min. 65mm to max. 3000mm
- Mounting direction: any
- Output PNP
- Closer or Opener
- Adjustable sensitivity for any application(e.g. foam detection)

OPG 05

Limit Switch in stainless steel for detecting the level of liquid media / high temperature version.



TECHNICAL SPECIFICATIONS

Max. pressure	10 MPa
Ambient temperature	-30°C to +80°C
Operating temperature	-40°C to +170°C > +170°C on request
Measuring accuracy	± 0,5 mm
Material housing	parts contacting the medium: in stainless steel 1.4571
Material prism	quartz glass
Min. distance sensor tip to any opposite wall	> 10 mm
Mounting direction	any
Process connections	BSP 1/2" other types on request

CHARACTERISTICS

- Compact construction
- Reasonable prices
- Operating temperature: +170°C > +170°C on request
- Max. pressure: 10 MPa
- Mounting direction: any
- Measuring accuracy ± 0,5 mm
- Electrical connection: cable connection or plug
- Output PNP
- Closer or Opener
- Adjustable sensitivity for any application

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.

AREAS OF APPLICATION

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