

Optical Level Switch Model LP



- ◆ Pressure: max. 10 bar
- ◆ Temperature: max. 85 °C
- ◆ Material:
(Sensor): Polysulfone
(Housing): Polypropylene
or Stainless Steel
- ◆ Connection: G 1/2

**Cost Effective
Measurement Technology**

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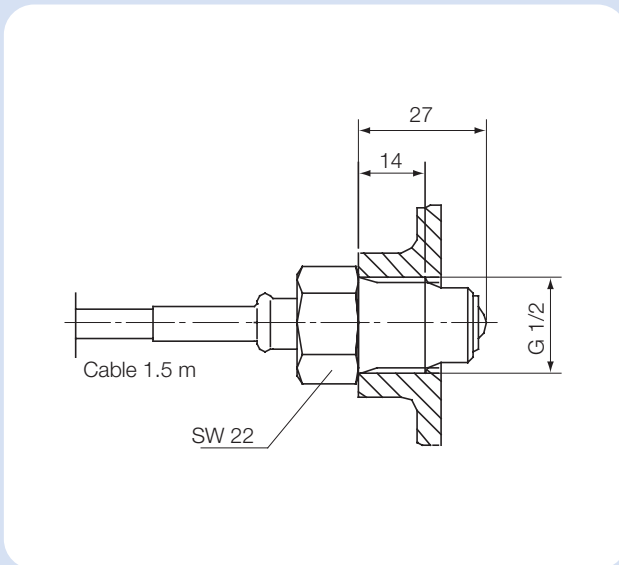
Optical Level Switch Model LP

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Description

The INTERIN optical level sensors of model LP have been developed for monitoring **transparent** liquids. Due to the very small dimensions, very slight switching hysteresis and high repeatability, the instruments are also suited for service in small vessels. The optical sensor is situated in a robust housing. It comprises a plastic hollow hemisphere, in which the infrared diode is fitted as a transmitter and a semiconductor as a receiver. When the sensor is not wetted by liquid, the infrared light is reflected fully from the surface of the hemisphere to the receiver. As soon as the sensor is covered with liquid, the refractive index on the boundary layer changes and most of the light escapes into the liquid. Less light then reaches the receiver, which allows switching to take place. The level probe should not be fitted with the sensor pointing downwards, as errors can occur due to drops of liquid sticking to it.

Dimensions



Technical Details

Housing:	LP-1402: Polypropylene LP-1202: Stainless steel (1.4301)
Sensor:	Polysulfone
Operating temperature:	-20 to +85°C
Operating pressure:	10 bar
Output:	PNP, max. 200 mA
Power supply:	19.2 - 28.8 V _{DC}
Repeatability:	± 1 mm
Hysteresis:	± 1 mm (depending on liquid)
Response time:	50 µs (with rising level) 1 s (with falling level) depending on viscosity
Protection type:	IP 68

Applications

- ◆ Motor vehicle industry
- ◆ Leakage protection
- ◆ Medical technology
- ◆ Beverage vending machines

Order Details (Example: LP-1402)

Connection female	Supply	Polypropylene Version Order No.	Stainless Steel Version Order No.
G 1/2	19.2 - 28.8 V _{DC}	LP-1402	LP-1202