

Optical Level Control Unit

ROTALOCK RLK02



Some advantages of this solution:

- The absence of mechanical moving parts ensures **High reliability**
- Well consolidated steel with fused glass technology ensures **no leakage** and good chemical compatibility
- Electronic sensor **can be easily replaced** without emptying and/or depressurizing the plant due to the two parts design
- **Extended working temperature range**
- **No need for calibrations on the field**
- Rotalock 1" 3/4 - 12 UNF and Rotalock 2" 1/4 - 12 UNF available
- Unit conform to directives 2014/30/UE and 2014/35/UE.

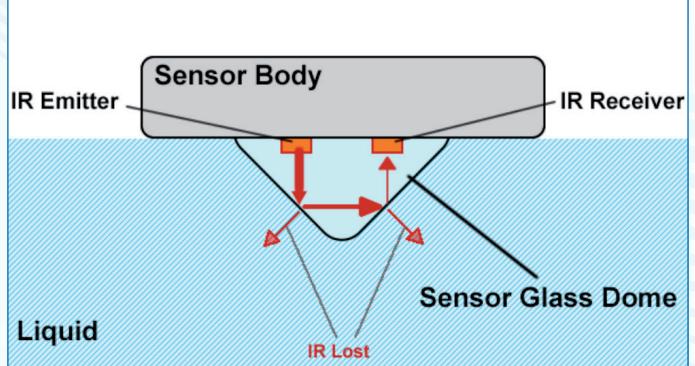
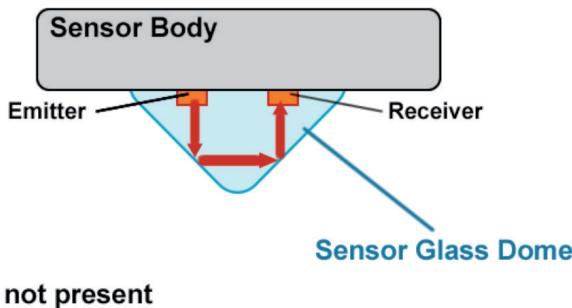
Application Description

The optical level switch has been designed for use in level monitoring applications for the control of low viscosity liquids. It comprises an optical sensor and an output switch. It is realized in two parts to let it possible replacing the electronics without the needing of emptying or depressurizing the plant.

The sensor is suitable as minimum or maximum alarm.

Delays can be introduced in order to satisfy particular needing or avoid false alarms.

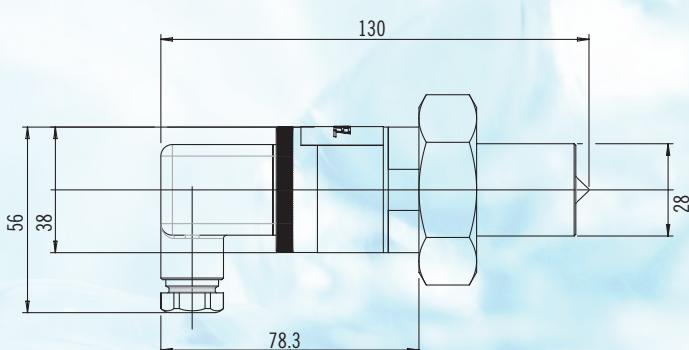
Operating Principle



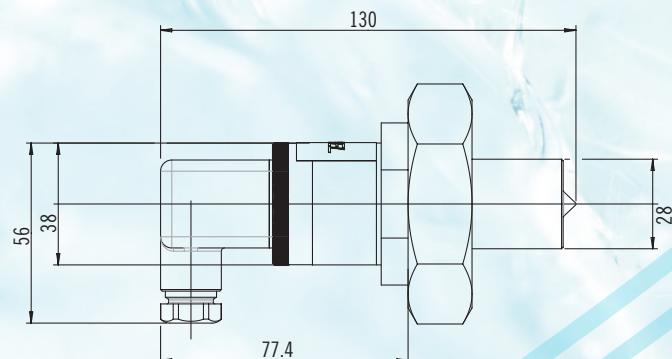
The sensor contains an infrared-ray emitter and an optical receiver. In air (liquid not present), all the light emitted is reflected – internally – by the dome and then redirected to the receiver. When the liquid reaches the sensor dome, a big amount of the light emitted is lost in the liquid and the sensor senses its presence.

SUPPLY VOLTAGE ($\pm 10\%$)	230VAC@50Hz / 115VAC@60Hz / 24 VAC@50/60Hz / 24VDC depending on selected model
ELECTRONIC PROTECTIONS	Transient over voltage protection
ELECTRICAL CONNECTION	EN 175301-803A connector (EX DIN 43650 size A)
OUTPUT SIGNAL	Solid state output Normally Open or Normally Closed in air.
SUPPLY CURRENT	20mA max. during normal operation
OUTPUT MAX. CURRENT	Up to 100 mA
HOUSING MATERIAL	Nickel plated steel
ENCLOSURE PROTECTION CLASS	IP 65
WORKING TEMPERATURE RANGE	-40°C ÷ +125°C
MAX PRESSURE	46 bar (for higher pressures, please contact the supplier)
TORQUE TIGHTEN	50 Nm for adapter installation on the system. Hand Screw with strength the sensor to the adapter

Mechanical Dimensions



**RLK02 ROTALOCK
1" 3/4 - 12 UNF**



**RLK02 ROTALOCK
2" 1/4 - 12 UNF**

Note. - Quotes in mm.

Ordering Codes

Power supply/ Adapters	24VAC/DC Normally Open (in air)	24VAC/DC Normally Closed (in air)	230VAC Normally Open (in air)	230VAC Normally Closed (in air)
1" - 3/4 ROTALOCK	RLK02007100001001A00	RLK02007101001001A00	RLK02007D00001001A00	RLK02007D01001001A00
2" - 1/4 ROTALOCK	RLK02107100001001A00	RLK02107101001001A00	RLK02107D00001001A00	RLK02107D01001001A00