

Optical Level Control Unit

LC-PH up to 120 bar

SUITABLE FOR CO₂ SYSTEMS

Main Features

- 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
- **No need for calibrations on the field**
- **Direct mounting** onto various types of compressors (M20x1.5 or 1"1/8 – 18 UNEF adapter) and tanks (1/2" NPT adapter), etc...
- **Customizable delays** on request
- **Integrated status LED** available on request
- **Revolutionary connectivity capabilities**
- **Unit conform to directives 2014/30/UE and 2014/35/UE.**

Application Description

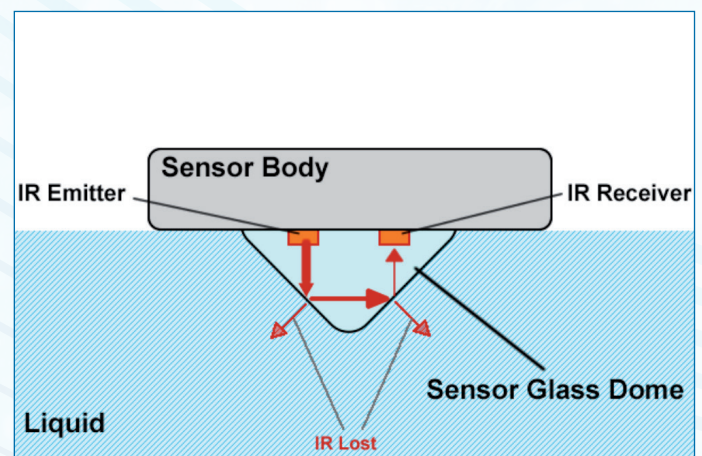
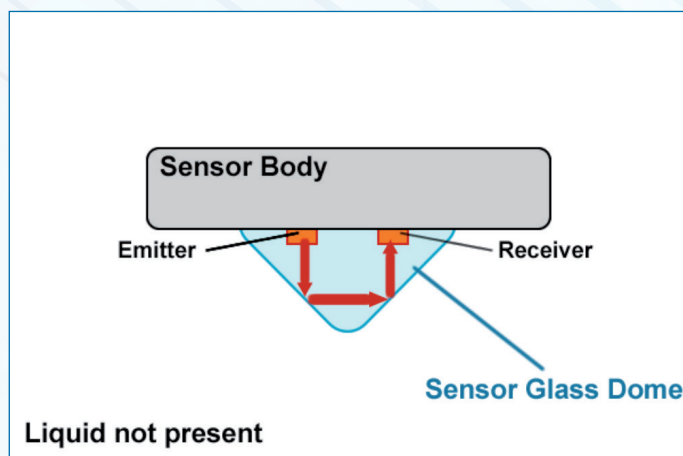
The optical level switch LC-PH has been designed for use in level monitoring applications for the control of low viscosity liquids. It comprises an optical sensor and an output switch. It is realized in two parts to let it possible to replace the electronics without the needing of emptying or depressurizing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

Typical customizable functions: Activation Delay, Deactivation delay, others, ...

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 (± 10%)	230VAC@50Hz / 115VAC@60Hz / 24 VAC@50/60Hz / 24VDC depending on selected model
ELECTRONIC PROTECTIONS	Transient over voltage protection
ELECTRICAL CONNECTION	3 wires cable, 1m length / M12x1 Connector
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 / PA glass fibre reinforced
ENCLOSURE PROTECTION CLASS	IP 65
WORKING TEMPERATURE RANGE	-40°C ÷ +125°C
MAX PRESSURE	120 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

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)
1/2 NPT	LC-PH7071000101A	LC-PH7071010101A	LC-PH707D000101A	LC-PH707D010101A
3/4 NPT	LC-PHA071000101A	LC-PHA071010101A	LC-PHA07D000101A	LC-PHA07D000101A
1" NPT	LC-PHB071000101A	LC-PHB071010101A	LC-PHB07D000101A	LC-PHB07D010101A
M20X1,5	LC-PH6071000101A	LC-PH6071010101A	LC-PH607D000101A	LC-PH607D010101A
1" 1/8 UNEF	LC-PH8071000101A	LC-PH8071010101A	LC-PH807D000101A	LC-PH807D010101A
1" 1/4 RLK	LC-PHC071000101A	LC-PHC071010101A	LC-PHC07D000101A	LC-PHC07D010101A

Program interfaces available. See pag. 8 for details.

	THREAD	DIMENSIONS B (MM)
	1/2 NPT	24
	3/4 NPT	22
	1" NPT	27,9
	M20 X 1,5	18,1
	1 - 1/8" UNEF	19
	1" 1/4 RLK	30

Mechanical Dimensions

