

Optical Level Control Unit LC-XT / LC-XP



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
- **Unit conform to directives 2014/30/UE and 2014/35/UE.**

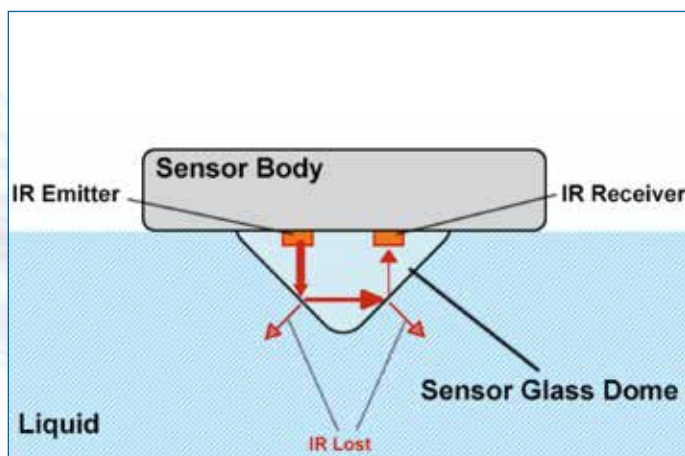
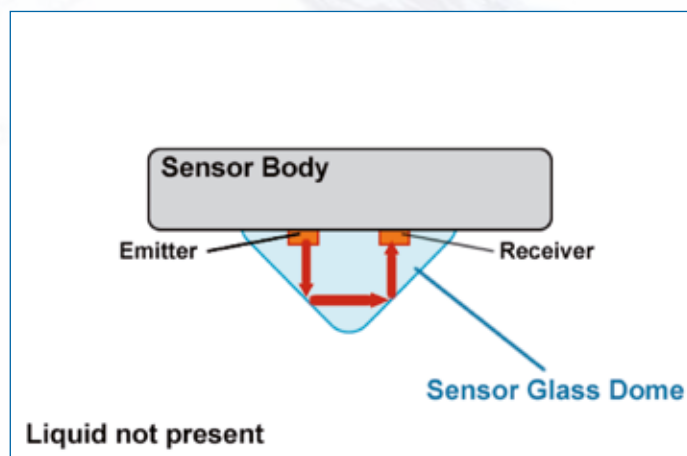
Application Description

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 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.

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.

Technical Data

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	Stainless steel / Nickel plated steel
ENCLOSURE PROTECTION CLASS	IP 65
WORKING TEMPERATURE RANGE	-40°C ÷ +125°C
MAX PRESSURE	46 bar (LC-XT model) 120 bar (LC-XP model)
TORQUE TIGHTEN	50 Nm for adapter installation on the system. Hand Screw with strength the sensor to the adapter

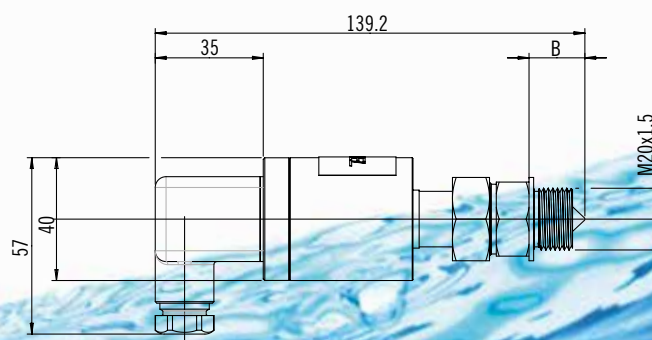
Ordering Codes

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-XT707100001001A00 LC-XP707100001001A00	LC-XT707101001001A00 LC-XP707101001001A00	LC-XT707D00001001A00 LC-XP707D00001001A00	LC-XT707D01001001A00 LC-XP707D01001001A00
3/4 NPT	LC-XTA07100001001A00 LC-XPA07100001001A00	LC-XTA07101001001A00 LC-XPA07101001001A00	LC-XTA07D00001001A00 LC-XPA07D00001001A00	LC-XTA07D01001001A00 LC-XPA07D01001001A00
1" NPT	LC-XTB07100001001A00 LC-XPB07100001001A00	LC-XTB07101001001A00 LC-XPB07101001001A00	LC-XTB07D00001001A00 LC-XPB07D00001001A00	LC-XTB07D01001001A00 LC-XPB07D01001001A00
M20X1,5	LC-XT607100001001A00 LC-XP607100001001A00	LC-XT607101001001A00 LC-XP607101001001A00	LC-XT607D00001001A00 LC-XP607D00001001A00	LC-XT607D01001001A00 LC-XP607D01001001A00
1" 1/8 UNEF	LC-XT807100001001A00 LC-XP807100001001A00	LC-XT807101001001A00 LC-XP807101001001A00	LC-XT807D00001001A00 LC-XP807D00001001A00	LC-XT807D01001001A00 LC-XP807D01001001A00
1" 1/4 RLK	LC-XTC07100001001A00	LC-XTC07101001001A00	LC-XTC07D00001001A00	LC-XTC07D01001001A00

Different Activation and Deactivation Delays available on request.

	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



EXAMPLE

Note. - Quotes in mm.