

# Product Information

## LC 102 - Level Controller 102

### Tank contents indicator with remaining volume check



#### Tank contents measurement up to 9.999 litres

LC 102 is an electronic instrument for indication of tank contents in litres and percentage of tank volume. All common tank shapes are supported. The measurement is done contactless using 40 kHz ultrasonic pulses. The installation is very easy, the probe is connected via a 5 m connection cable.

LC 102 is maintenance free, highly reliable, and is supplied permanently from a mains adapter.

LC 102 is a direct replacement for the mechanical gauges.

#### Features

- Display of remaining empty tank volume
- Precise digital display
- Contact-less measurement
- Easy installation
- Multiple measurements for best stability



LC 102 evaluates the propagation time of ultra-sonic pulses to detect the fluid level in the tank. Thus mechanical ageing problems cannot arise. All tank forms in common use are supported like cubic, cylindrical tanks, in horizontal or vertical position. From this information the tank contents in litres is calculated, also the average demand per day and the remaining time period based on average demand is derived.

#### Applications:

- Heating oil, water tanks, rainwater tanks, waste oil tanks, ...

#### LC 102 provides the following values:

- Tank contents in litres up to 9.999 litres
- Tank contents in percent of volume
- Remaining empty tank volume in litres – how many litres can be refuelled
- Distance to the fluid surface in cm
- Average demand in litres/day
- Remaining time period in days based on average demand

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#### Technical specification

Dimensions (l x w x h):	110 x 85 x 55 mm
Weight:	Screw thread: 1.5 inch (6/4") and 2 inch app. 500 g
Housing:	colour black, oil resistive
Protection:	IP 20 as per EN 60529
Display:	indoor usage only, in cellars, tank rooms etc. LC-display 51 mm x 35 mm, 2 lines with 4 digits, 12 and 14 mm high
Temperature range:	-10°C ... +45°C
Power supply:	mains adapter 230 V AC with Euro plug

LC 102 is CE-marked and manufactured conform to ROHS requirements.

#### Measurement method:

Principle:	Ultra-sonic pulses, 40 kHz, pulse duration: 20 ms
Range:	20 cm ... 250 cm (distance to the fluid surface)
Uncertainty:	±1 cm

#### Installation:

Screw sensor into tank thread 1.5 inch (6/4") and 2 inch  
Connect housing wire with sensor plug / (plug diameter 10mm)

#### Operating modes:

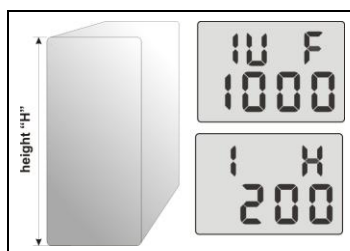
##### Standard mode:

Every 24 hours a measurement is taken, the tank contents in litres and volume percentage will be displayed permanent.

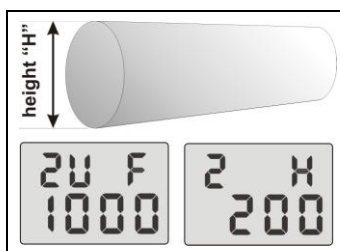
##### Manual measurement mode:

A button press initiates a single measurement, an actual tank content is displayed afterwards.

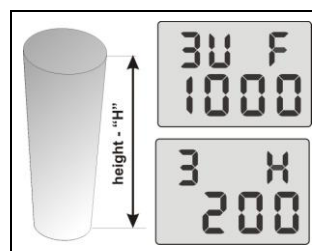
#### Tank types: Type 1



#### Type 2



#### Type 3



#### Order reference:

LC 102 tank contents indicator

Order No.: ST001003

#### Scope of delivery:

LC 102, wall mounting set, mains adapter 230 V AC with Euro plug, measuring sensor with 5 m connection cable, operating instructions

DESIGN & DEVELOPMENT BY



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