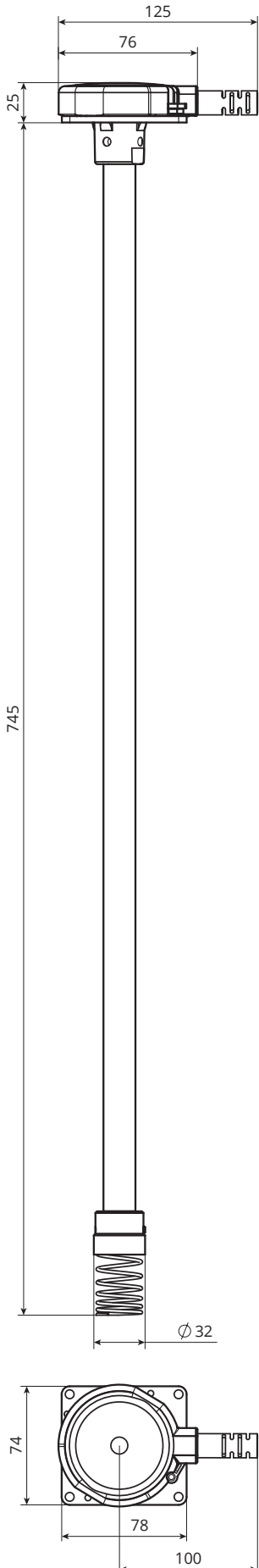


Siensor D107



The Siensor D107 liquid level sensor is an intelligent device designed for accurate measurement of fuel level in vehicle tanks and stationary reservoirs (diesel-generators, boiler plants, oil storages, etc.). Siensor D107 provides measurement of fuel level and further data transmission to the terminal via RS-232 or RS-485 interface, which indicates it in litres or percentage.

Siensor D107 has a long-term service. The manufacturer's limited warranty is valid for five years from date of purchase. Siensor D107 features reliable interference protection, high-accuracy data transmission and maximum measurement resolution. Complete galvanic isolation provides high level of data link protection. Data processing algorithms enable high-accuracy detection of fuel filling, draining and consumption.

Siensor D107 is compatible with most liquid types. On request, it is possible to order the product with the length of a measuring probe different from the original one.

Features and Benefits

- High-accuracy measurement even in harsh service conditions
- Smooth operation in harsh service conditions
- Sufficient output protection against short circuit, power failure and connection errors
- Compatibility with most liquid types
- Allows trimming of a measuring probe without calibration
- Increased maximum voltage
- The sensor design is resistant to fuel additives, waxes and pollution
- Mountable to the tank of any capacity
- Special oscillation filtering algorithm provides high-accuracy measurement of fuel level

Siensor D107

Technical Specifications

- Length of measuring section, mm: 700
- Relative reduced measurement error:
 - within the range of -60°C to + 60°C, %: max ±0.8
 - within the range of -60°C to + 80°C, %: max ±1.0
- Temperature measurement error, °C: max ±2
- Level measurement range: 1 to 4095
- Data rate, bps: 1200; 2400; 4800; 9600; 19200; 38400; 57600; 115200
- Power supply voltage, V: 7-50
- Power consumption, W: max 0.4
- Interaction interface with external devices: physical RS-232 and RS-485
- Temperature measurement range, °C: -55 to + 80
- Measurement interval: 1 sec
- Measurement range offset: 0 to 1023
- Operating temperature, °C: -40 to +80
- Extended temperature range*, °C: -55 and +80
- Dust and water protection: IP69K
- Interval of automatic data output, sec: 1 to 255
- Size of internal measurement results filter: 0 to 20

* the sensor can take measurements, but with reduced accuracy



One of the main components of Siensor D107 is a capacitance level meter, which performs linear conversion of fuel level data into electric capacitance measured by the electronic unit. The measuring probe can be modified by 20% of the original length. The electronic unit filters measured level values and converts them into a digital code. The Siensor D107 liquid level sensor is provided with galvanic isolation between power supply circuits, lines of RS-232 and RS-485 interfaces and measuring probe, which includes circuits of the housing and the capacitance level meter. Galvanic isolation strength is 2500 V.