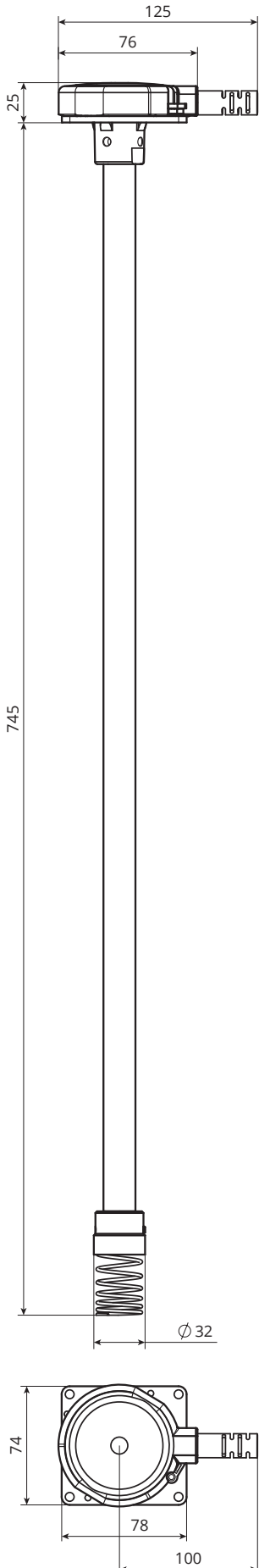


## Siensor AF107



The Siensor AF107 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 AF107 measures fuel level, converts received value into an analog or frequency signal and then transmits data to the terminal via RS-232 or RS-485 interface, which indicates it in litres or percentage.

Siensor AF107 is a reliable sensor featuring a long-term service. The manufacturer's limited warranty is valid for five years from date of purchase. Siensor AF107 provides flexible configuration of limit values and output signal properties. Output signal does not depend on power supply voltage and therefore the sensor can be integrated with any navigation terminal, which has a frequency or voltage measurement input.

Siensor AF107 is compatible with most liquid types. On request, it is possible to order the product with the length of a measuring part different from the original one. Data processing algorithms enable high-accuracy detection of fuel filling, draining and consumption.

### Features and Benefits

- High-accuracy linear indication even in harsh service conditions (-40 to +80°C)
- Sufficient protection of analog and frequency outputs against short circuit, noise, power failure and connection errors
- Compatibility with most liquid types
- Allows trimming of a measuring part 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 AF107

### Technical Specifications

- Length of measuring section, mm: 700
  - Relative reduced measuring error: max  $\pm 1.0$
  - Additional relative reduced measuring error caused by temperature change over the entire operating temperature range, %: max 1.2
  - Power supply voltage, V: 7-45
  - Power consumption, W:
    - typical – 0.6
    - maximum – 0.9
    - at analog output short circuit – max 1.6
  - Measurement interval, sec: 1
  - Galvanic isolation strength is no less than, V: 250
  - Operating temperature, °C: -40 to +80
  - Extended temperature range, °C\*: -55 and +80
  - Minimum allowable temperature, °C\*\*: -60
  - Maximum allowable temperature, °C\*\*: +85
  - Dust and water protection: IP69
- \* - the sensor can take measurements, but with reduced accuracy  
\*\* - the temperature at which the sensor retains its features

### Analog output

- Output voltage range, V: 0...20
- DA conversion width, bit: 12
- Analog output load resistance, Ohm: max 2000
- Output ripple, %: max 0.15

### Frequency output

- Output modulation, %: frequency-pulse
- Output frequency range, Hz: 30...2000
- Maximum frequency output load current in the "open collector" mode, mA: 300
- Internal pull-up resistance to positive power supply voltage, Ohm: 1500