

# **Level transmitter**

# PULCE - SG197







## Level transmitter

### PULCE - SG197



The design of our instruments has always been characterized by great simplicity. Easy to install, easy to use and easy to maintain.

Based on this philosophy, many years ago, we adhere to the motto

#### «What is not there can not fail or require maintenance»

developing a level transmitter that could have great technical features minimizing the construction complexity. With more than 2,000 installations worldwide and a list maintenance for over twenty years, PULCE SG191 has shown that **simplicity** was just the best way to go. So in designing the new PULCE SG197 we kept the inspiring guideline: the simplicity. SG197 is entirely produced in Italy, individually tested to guarantee maximum reliability over time and with a big technological heart.

#### Easy operation:

The operation is based on the constant searching for a forces' balance between the weight of the reducer unit - engine balancing and the not floating sensing element. This allows to obtain a reliable and accurate measure even in the presence of turbulence in the liquid, foams or changing temperature, pressure or dielectric constant of the product. No need for customization or setup on the tank linked to the chemical and physical conditions of the liquid. **Simplicity** is accompanied by high accuracy of measurement that allowed us to obtain the Ministerial Decree for use in relation with third parties.

#### **Easy installation:**

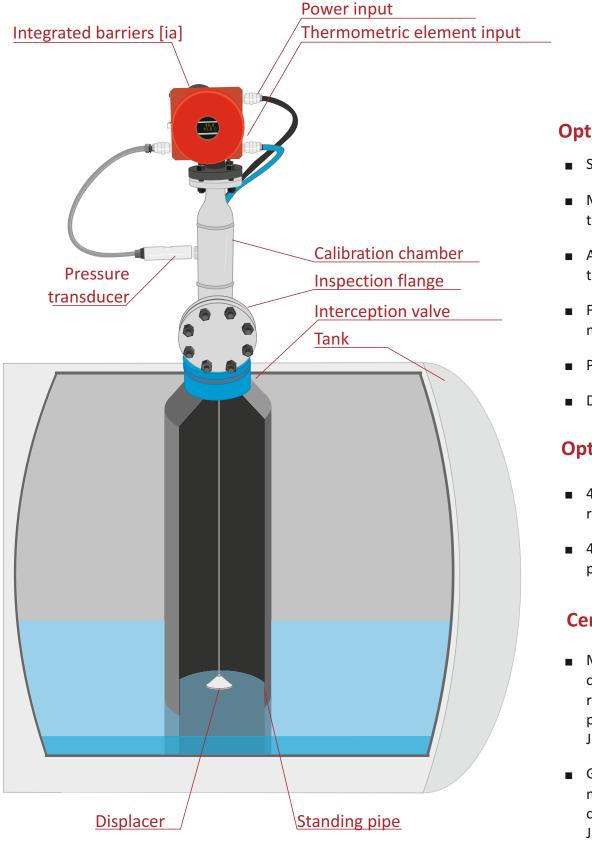
Faithful to the philosophy of **simplicity** we designed the instrument so that its structure would guarantee the complete separation between the process side and the electronic side, without any external sealing element. We integrated in it the safety barriers to reduce the cost of installation by eliminating external boxes or flameproof enclosures.

It is the gathering point for all information related to storage: a single instrument has many features and allows you to transfer the physical quantities processed to multiple remote systems using only two traditional wires. There is no need for expensive certified or low impedance cables.

There are also different options such as temperature probes, single or multiple, medium or punctate, pressure transducer, probe detection of the "foot water" and determining the density.

### **Typical of Installation**

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### **Optional Input**

- Single Temperature
- Multiple point temperature
- Average multiple temperature
- Foot of water measurment
- Pressure measurment
- Density measurment

#### **Optional Output**

- 4 programmable allarm relays
- 4:20 mA output proportional to the level

#### **Certifications**

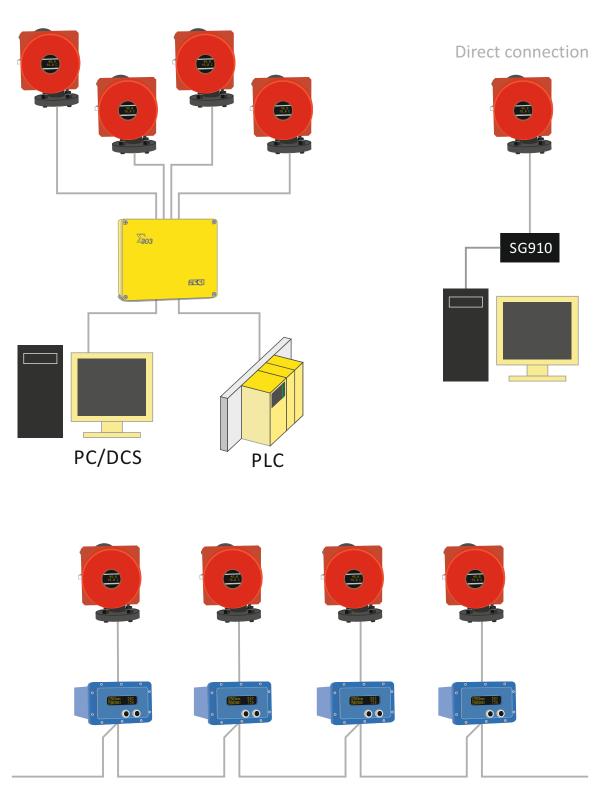
- Ministerial Decree for commitment in relationship with third parties n°17322 of 18 July 2005
- Granting of metrological conformity n°42 of 29 January 2019

### **Electric Connections**

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#### Connection with SEGI concentrators



Connection with bus
RS485 with protocol MODBUS

#### Main technical features

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Power supply system

Power supply: 48 or 115 or 230 V +/- 20% 50Hz 25VA Cable entries: 3 entrances of ¾" GK UNI 6125 or NPT

Measurement Element

Sensitive element: PTFE (std) displacer - diameters 40, 50, 55, 60, 80mm

Displacer suspension wire : AISI 316 L, Phinox, Hasteloy, Monel, Titanium

Measuring drum: "Anticorodal 100", AISI 316; Titanium

Measuring range: 6,5; 15; 23 e 33m

Accuracy: +/-0,5mm su 23.000mm (+/-0,000022%)

**Materials** 

Processor side body: "Anticorodal 100" UNI 3571 ANSI 6082 or AISI 304L, 316, 321

Trasmission side body: Silicon magnesium aluminum casting GalSi 7 Mg 0,3 Processor attack: 2" ANSI 150 o 300 RF or DN 50 PN 40 UNI 2284

Operating pressure: max 40 bar

Mechanical protection case: IP67, watertight for immersion

Room temperature: -20...+55°C

Certificates

Metric-fiscal use: Ministerial Decree 17322 for uses up to 23m in height Protection mode: Ex db [ia Ga] IIB Ga/Gb (Certificato IMQ 12 ATEX 018)

Input/Output

Trasmission: serial in current loop, 2 separate SEGI protocol lines

Inputs: Temperature (single, multispot, multiple media), pressure and

foot of water, all of them intrinsically safe.

Outputs: 4 alarm contacts from configurable safety relays; Analog

4...20mA proportional to the level.

Configuration: Total from a serial line indifferently



