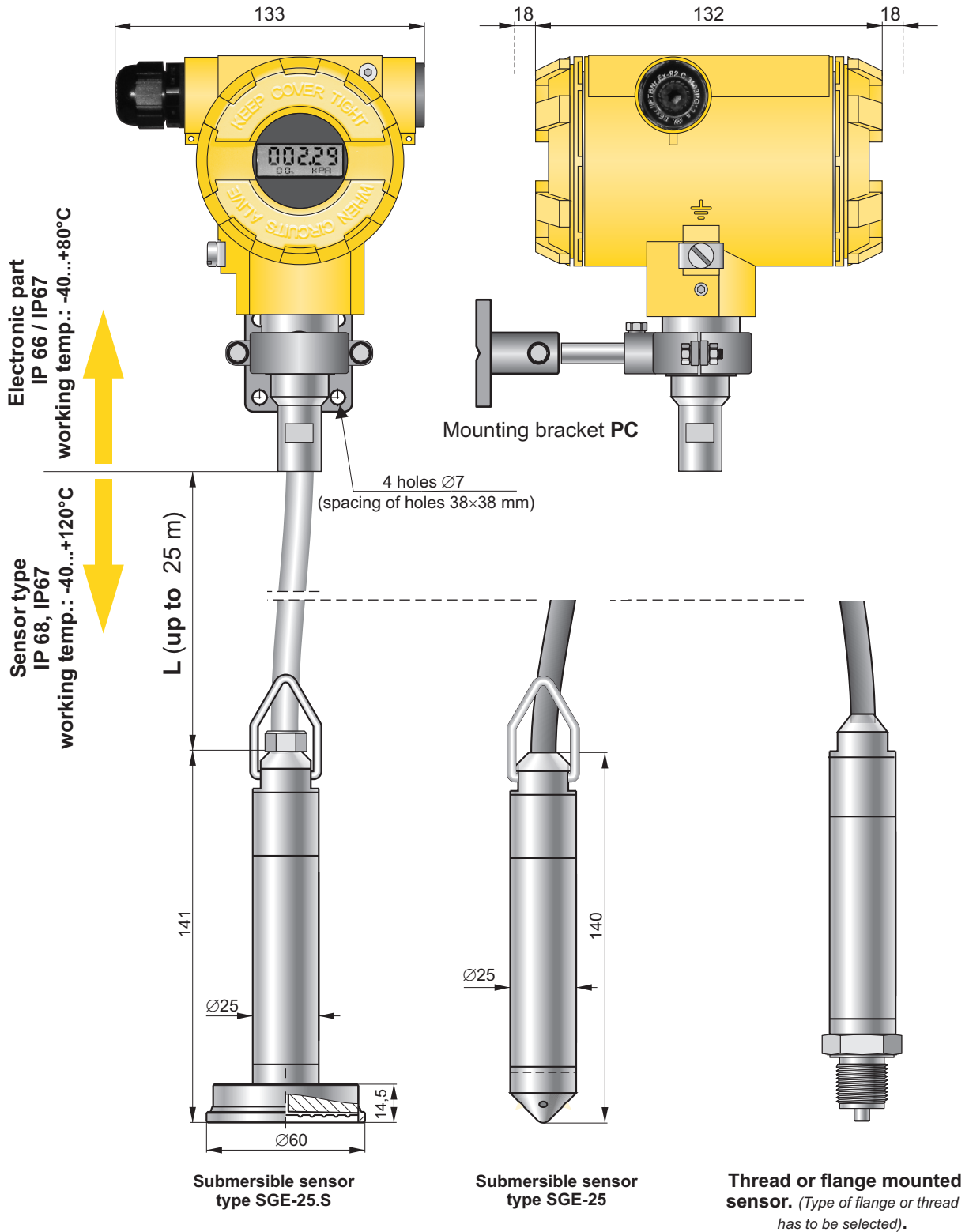


# Smart level probe type APC-2000ALW/L

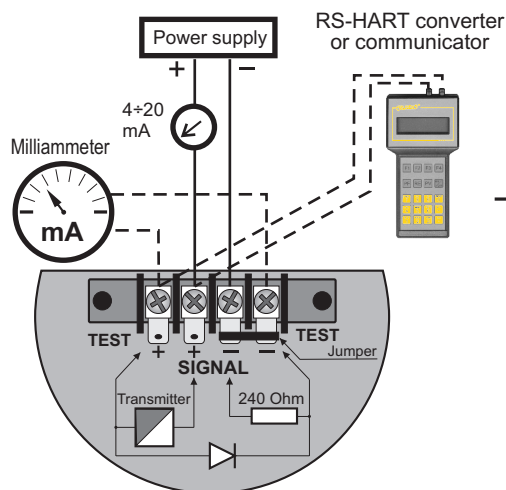
- ✓ Programmable zero shift, range and damping ratio
- ✓ 4...20 mA output signal + HART protocol
- ✓ Accuracy 0.1%
- ✓ Local display



### APC-2000ALW/L function:

- ☑ 4...20 mA output signal + HART protocol,
- ☑ Possibilities of the adjusting both zero point and of the start and end of the measuring range, characteristic etc. with the display panel keys,
- ☑ Configurable display 5 digits with illumination (working temperature range -40...+85°C)

### Electrical diagrams



### Application

The APC-2000ALW/L level probe is applicable to measure liquid levels in tanks, deep wells or piezometers.

The APC-2000ALW/L probe is applicable to measure levels of liquids containing contaminants or suspensions. A typical use for this probe is the measurement of levels of liquid waste in intermediate pumping stations, fermentation chambers, settling tanks etc. Because in submersible part of level probe is mounted only measuring sensor level probe can be use for measurement hot liquids max. 120°C.

### Configuration

The following metrological parameters can be configured:

- ◆ The units of pressure;
- ◆ Start and end-points of set range;
- ◆ damping time constant;
- ◆ inverted characteristic (output signal 20 + 4 mA).

### Communication

The communication standard for data interchange with the probe is the Hart protocol.

Communication with the probe is carried out with:

- KAP-03 communicator
- Raport 2 software or other Hart communication devices.

### Measuring range

No	Nominal range (FSO)	Min. set range	Overpressure limit
1	0...20 m H <sub>2</sub> O	2 m H <sub>2</sub> O	0...200 m H <sub>2</sub> O
2	0...10 m H <sub>2</sub> O	1 m H <sub>2</sub> O	0...100 m H <sub>2</sub> O
3	0...2,5 m H <sub>2</sub> O	0,5 m H <sub>2</sub> O	0...25 m H <sub>2</sub> O

\*other measuring ranges on request

### Technical data\*

#### Metrological parameters

Accuracy	±0,1%
Long-term stability	0,16% for 2 years
Thermal error	? < ±0,1% (FSO) / 10°C max. ±0,4% (FSO) in the whole compensation range
Thermal compensation range	-25...120°C -40...80°C special version
Output actualization time	0,5 s
Additional electronic damping	0...60 s.
Error due to supply voltage changes	0,002% (FSO) / V

\* more information about technical data available in user's manual.

#### Electrical parameters

Power supply	12...55 V DC
Additional voltage drop when display illumination switched on	3 V
Output signal	4...20 mA 2-wires + Hart protocol
Resistance required for communication	min. 240 Ω

$$R[\Omega] = \frac{U_{ZAS}[V] - 12V^*}{0,0225A}$$

\* - 15 V when display illumination switched on

#### Operating conditions

Operating temperature range (ambient temp.)	-40...85°C
Medium temperature range:	
Version with polyurethane cable	-40...80°C
Version with PTFE shield	-40...120°C

### Ordering code

APC-2000ALW/L / / / / / / / / L = ... m. /

Sensor type: SGE-25,  
SGE-25.S, SGE-25.S.Tytan,  
selected thread of flange type\*

Special version:  
(-40)- compensation range: -40...80C

Nominal range

Set range

Cable type: PU - polyurethane  
PTFE - teflon cable shielding

Length of cable (max. 25m)

Mounting bracket:

PC

F: flange type connection

**Example:** Level probe APC-2000ALW/L, mounting element PC, submersible element SGE-25, nominal range 0 + 10 m. H<sub>2</sub>O, set range 0 + 6 mH<sub>2</sub>O, cable material PU, cable length 12 m.

APC-2000ALW/L/SGE-25/ 0 + 10 m H<sub>2</sub>O / 0 + 6 m H<sub>2</sub>O /PU/ L = 12 m./PC

\*sensor with thread or flange process connection. Available are all process connections offered in Aplisens S.A.: M., G1/2", 1/2"NPT, CG1", CM30, CG1/2" and all flange connections acc. to chapter III in product catalogue 2013/2014