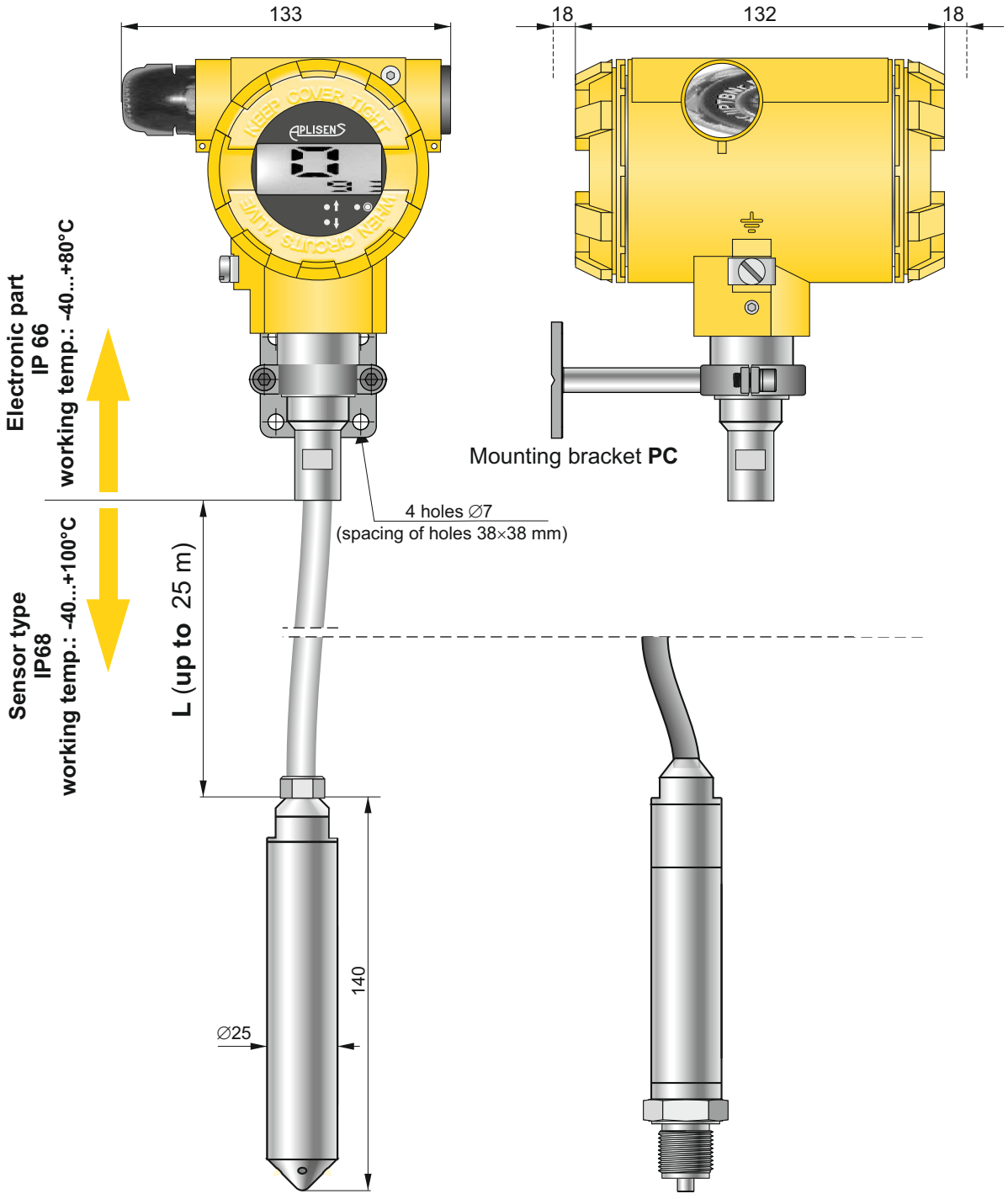
Smart level transmitter type APC-2000ALW/L

- ✓ **Programmable zero shift, range and damping ratio**
- ✓ **4...20 mA output signal + HART protocol**
- ✓ **Accuracy 0,16%**
- ✓ **Local display**
- ✓ **Intrinsic safety certificate (ATEX, IECEx)**



Submersible sensor type SGE-25

Thread or flange mounted sensor
(Type of flange or thread has to be selected)

APC-2000ALW/L function:

- ☑ 4…20 mA output signal + HART protocol,
- ☑ Configurable display 5 digits with illumination (working temperature range –40…+85°C)

Measuring range

No	Nominal range (FSO)	Min. set range	Overpressure limit
1	0...20 m H_2O	2 m H_2O	0...200 m H_2O
2	0...10 m H_2O	1 m H_2O	0...100 m H_2O
3	0...2,5 m H_2O	0,5 m H_2O	0...25 m H_2O

**other measuring ranges on request*

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. 100°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.

Technical data*

Metrological parameters

Accuracy ≤±0,16%

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...100°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 10...55 VDC (Exia: 10,5…30 VDC)

Output signal 4...20 mA 2-wires + Hart protocol

Resistance required for communication min. 240 Ω

Load resistance

$$R[\Omega] = \frac{U_{ZAS}[V] - 10V}{0{,}0225A}$$

Operating conditions

Operating temperature range (ambient temp.) -40...85°C

Medium temperature range:

PU, ETEFE-R version: 0...40°C
ETFE version: 0...80°C
ETFE+PTFE version: 0...100°C

Ordering procedure

Model	Code	Description
APC-2000ALW/L		Smart level probe
Sensor type	/SGE-25……	
Versions, certificates	/Exia……	II 1/2G Ex ia IIB T4/T5 Ga/Gb II 1D Ex ia IIIC T105°C Da IECEx Ex ia IIC T4/T5 Ga/Gb Ex ia IIIC T105 C Da
	/-40…80°C……	Compensation range -40...80°C
Nominal measuring range	/0…2,5 m H2O……	0…2,5 m H2O / 0,5 m H2O
	/0…10 m H2O……	0…10 m H2O / 1 m H2O
	/0…20 mH2O……	0…20 mH2O / 2 m H2O
Measuring set range	/…+… [required units]	Calibrated range in relation to 4mA and 20mA output
	/PU……	Polyurethane cable (medium temp. up to 40°C)
	/PU PZH……	Polyurethane, halogen free cable with hygienic certification (medium temp. up to 40°C)
	/ETFE……	ETFE cable (not suitable for mineral oil products, medium temp. up to 80°C)
	/ETFE-R……	ETFE cable with Viton/silicon sealing (suitable for mineral oil products, medium temp. up to 40°C)
	/ETFE + PTFE……	ETFE cable with PTFE shielding (medium temp. up to 100°C)
Cable	L=…m	Cable length (max. 25m)
Accessories	/PC……	Mounting bracket PC type for for fitting on a wall
	/PCR……	Mounting bracket PC type for for fitting on a 2" pipe