NEW

Smart temperature transmitter
type APT-28

✓ **Programmable measuring range**
✓ **Output signal 4 ÷ 20 mA**
✓ **Stainless steel casing**

Application and construction

Smart temperature transmitter type APT-28 is designed for temperature measurement in range from -50 to +80°C (up to +140°C in special version). Resistance signal from RTD element is converted to standard 4…20mA output signal. Casing of transmitter is made in stainless steel. Standard electrical connection is DIN EN 175301-803 connector with ingress protection class IP 65.

Configuration

Transmitter is delivered with measuring range according to customer's order, however it can be change by user. For configuration user will need: PC computer, RS converter, APT-28 converter and AT software. Beside changes of measuring range customer will be able to proceed calibration of the transmitter and make correction of output characteristic. Configuration is available only in transmitters with PD and ALW electrical connection.

Electrical connections

PD type
**IP65**

PM12 type
IP67
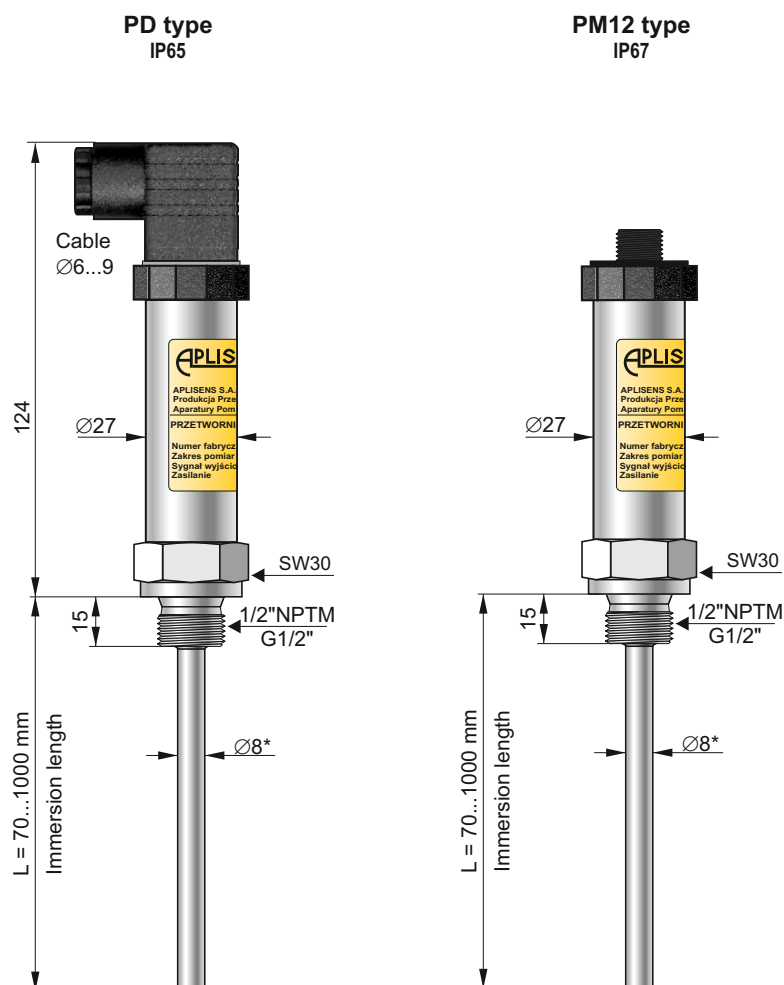
* - other diameters on request

Electrical connection type ALW

Aluminum casing with programable local display. The design of the casing enables the use of a local display, rotation of the display, rotation of the casing by 0–340° relative to the sensor.
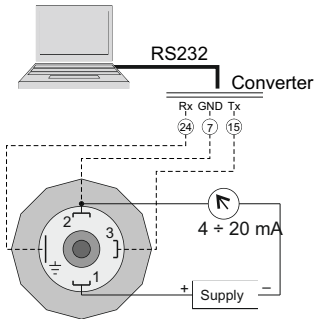Electrical connection DIN EN 175301-803, IP65.

Display with backlight allows to read:
- measured temperature in user units or % of measuring range
- current in output loop in mA
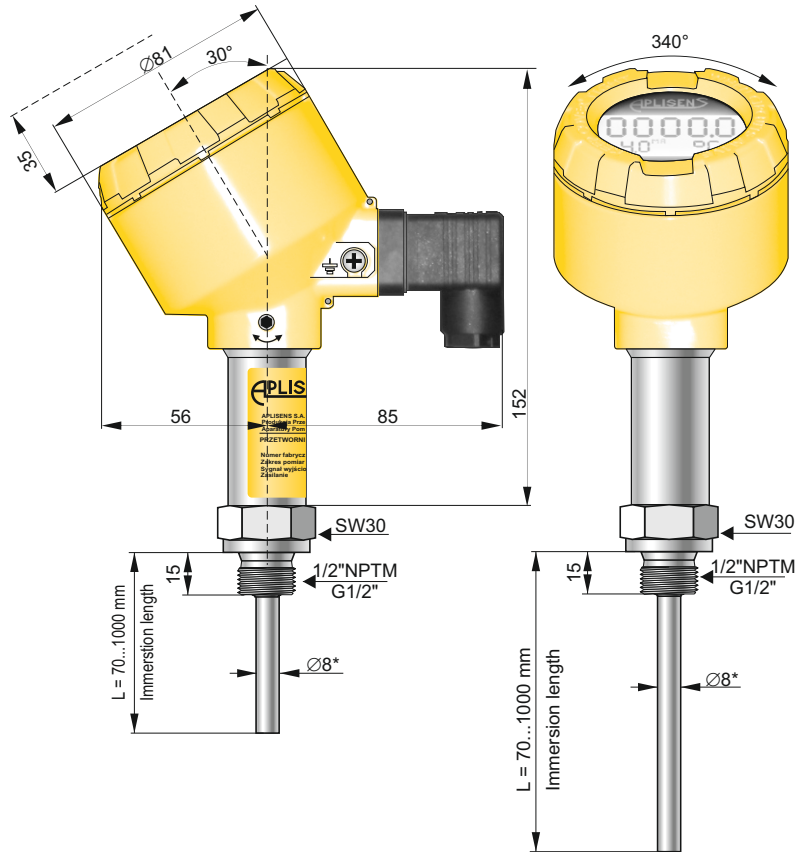
Technical data

Measuring range	-50...+80°C
Minimal width of measuring range	30°C
Transmitter accuracy	±0,16%
Sensor accuracy	±(0,15 + 0,002·|t|)°C
	|t| – absolute value of the measured temperature °C
Error due to ambient temp. changes	0,1% / 10°C
Error due to supply voltage changes	0,1%
Output signal	4 ÷ 20 mA, 2-wires
Power supply U_{zas}	7...29 V DC
APT-28/ALW	10…29 V DC
Additional voltage drop when backlight is on	3V

Load resistance

$$R[\Omega] \leq \frac{U_{zas}[V] - 7\,V}{0,023\,A}$$

Alarm signal	3,8 mA or 23 mA
	factory setting: 23 mA
Ambient temperature	-25...+80°C
Materials: sensor shield and process connection	ss321
casing	ss304
Ingres protection class	PD – IP65, PM12 – IP67

Electrical diagrams

Ordering procedure

APT-28/___/L = ... mm/___/___/__÷__°C/___

Electrical connection: **PD** (connector DIN EN 175301-803)
PM12 (connector M12x1)
ALW (with display)
Immersion length: **L=...mm**
Diameter of sensor: **8 mm** (other on request)
Connection thread: **G1/2"**, **1/2"NPT**, **M20x1,5**
Measuring range
Alarm signal: **3,8** or **23 mA**