



DO-5101 Dissolved oxygen analyzer



DO-5101 analyzer is designed to measure the dissolved oxygen concentration and temperature of the liquid to be analyzed.

The analyzer is a one-channel measuring tool that consists of barometric sensor, a wall-mounted measuring instrument.

The instrument provides a digital display and a graphical display of the measured values, their proportional conversion to standard analog output DC signals, data exchange with a computer

via digital interface RS-485, alarming the measured parameters over ranging the specified values, archiving data.

The analyzer is equipped with submersible holder or a hydraulic panel HP-5101 with flowing measuring cell for ultra-pure water analysis.

The analyzer is used in the heat and power industry, NPP, as well as in waste water treatment plants, fisheries and food processing industry.

BASIC TECHNICAL SPECIFICATION AND PARAMETERS

Dissolved oxygen concentration measuring ranges:

- with low concentration sensor 5500D.1 (0,0...1999) $\mu\text{g}/\text{dm}^3$, (0,0...2000...20000) $\mu\text{g}/\text{dm}^3$
- with standard sensor 5500D.2, 5500D.3 (0...2,000...19,99) mg/dm^3
- with standard sensor (0...200) %

Basic percentage error value limit $\pm (2,5+0,035 C)$, mg/dm^3 where C is the measured value, mg/dm^3

Analyzed liquid consumption measuring range (with hydropanel) (0,9...48) l/h

Analyzed liquid temperature range (0...+45); (-5...+85...+140(shortly)) $^{\circ}\text{C}$ /depend from sensor type

Basic percentage error value limit in temperature $\pm 0,3^{\circ}\text{C}$

Thermal compensation type automatic or manual

Atmospheric pressure variation compensation automatic

Salinity compensation with manual entry

Calibration on ambient air

Temperature sensor Pt1000

Indicator type LCD graphics

Instrument to sensor cable length max 10 m

Output signals:

- two analog, programmable (0...5), (0...20) mA or (4...20) mA
- interface RS-485 ModBus RTU communication protocol
- three discrete switching over dry contact, 240 V, 3A

Archiving interval 1 sec

Archiving time max 1 year

Power supply voltage $\sim (100..240)\text{V}$, (50..60)Hz

Power consumption max 15VA

Dust and water protection IP65

MI climatic version $T=(+5..+50)^{\circ}\text{C}$

Sensor climatic version: $T=(+5..+50); (-5..+85..+140(\text{shortly}))^{\circ}\text{C}$ /depend from sensor type

MI enclosure material ABS plastic

MI enclosure type wall-mounting

EXTERNAL WIRING

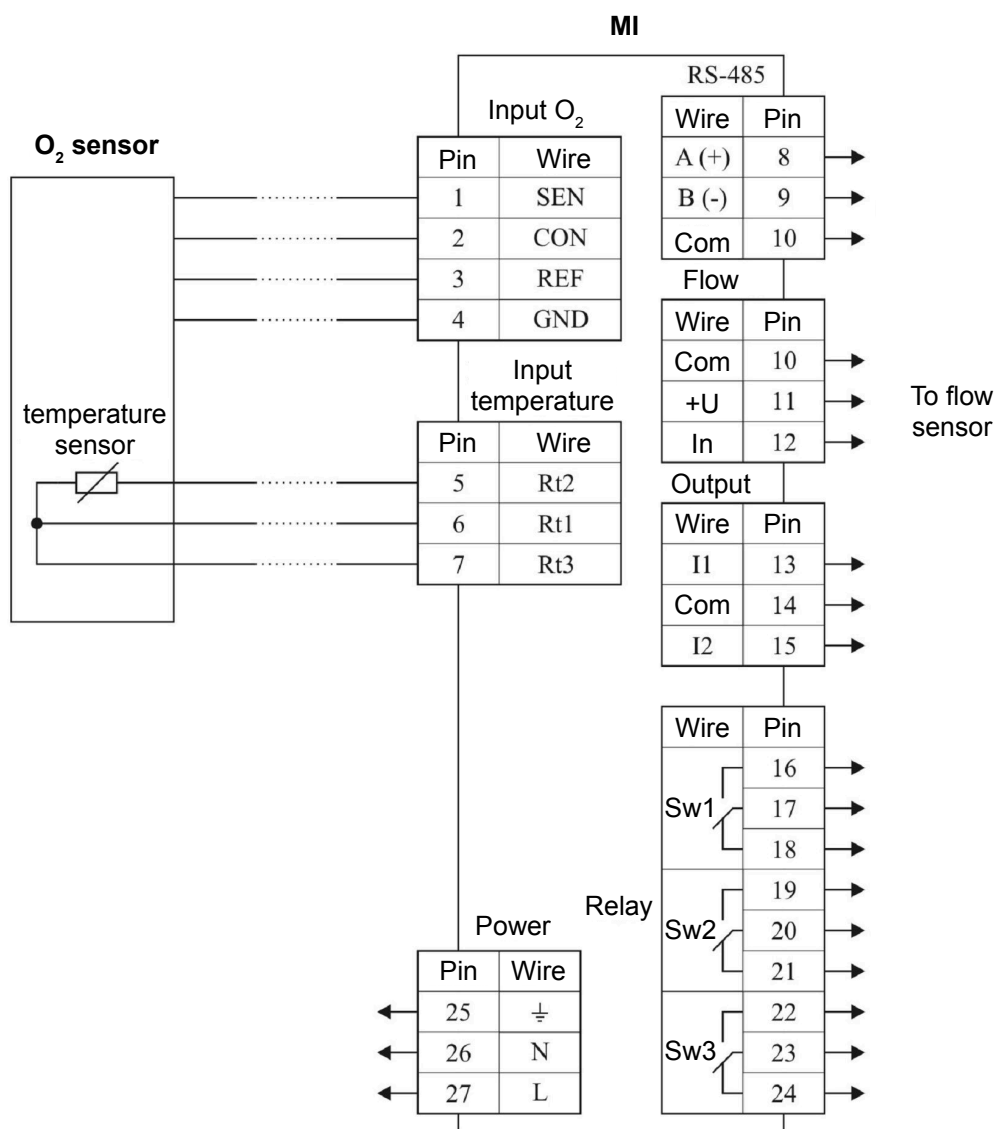


Figure 1 Connecting the sensor to the measuring instrument

ACCESSORIES

For small concentration:

- 5500D.1 small concentration sensor (SCS), resolution 0,1 µg/dm³, P<=1,5 bar;
- hydropanel HP-5101.

For standard concentration:

- 5500D.2 (P<=1,5 bar), 5500D.3 (P<=10,0 bar) standard sensor (SS), resolution 10 µg/dm³;
- holders for electrodes (look part "Holders for sensors").

Spare membrane cartridge for membrane sensors.

Cabinet for installing the analyzer, including outdoor with heating

Holders, used with DO-5101 (look part «Holders for sensors»)

EXAMPLE OF ORDER:

DO-5101

«Dissolved oxygen analyser APK-5101 with sensor. Measuring range (0...200) µg/dm³»

OVERALL AND MOUNTING DIMENSIONS

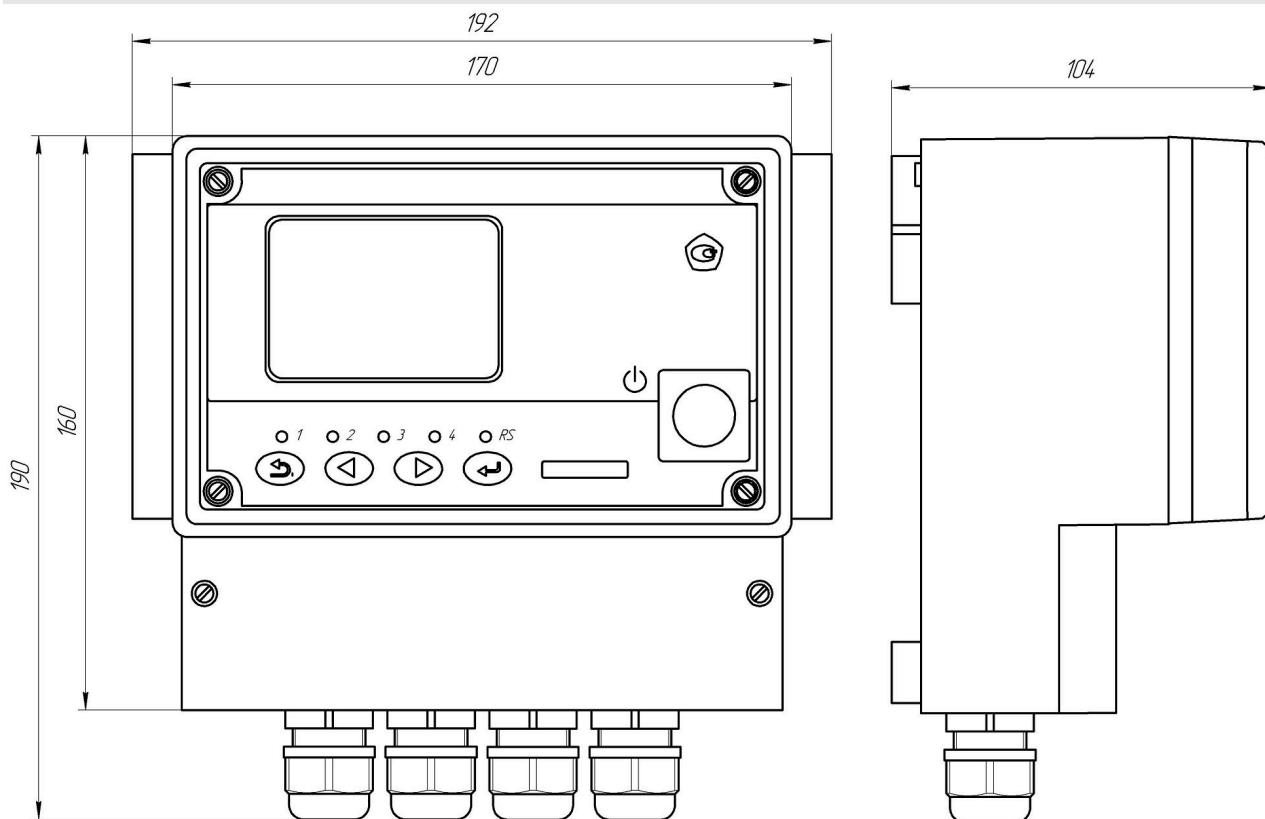
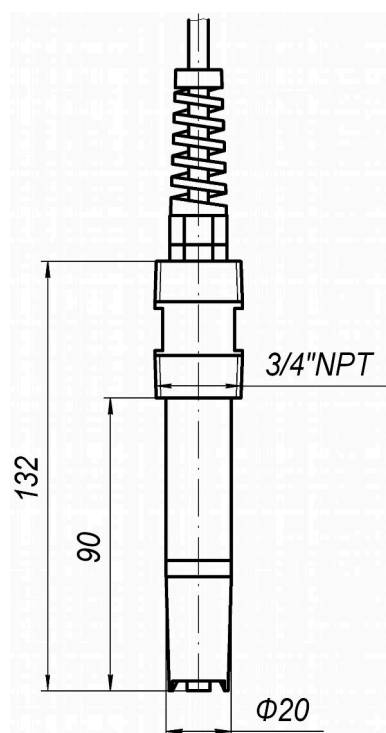
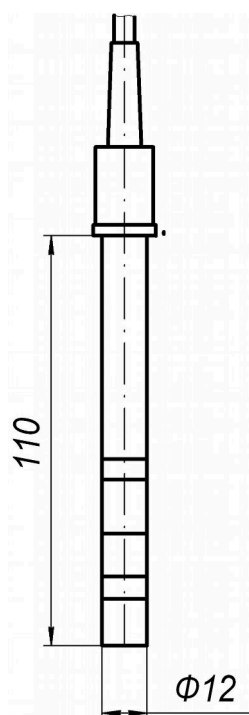


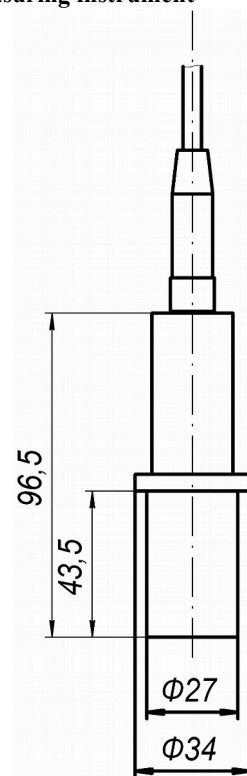
Figure 2 Overall dimensions of the ARK-5101 wall-mounted measuring instrument



5500D.2 (P ≤ 1,5 bar)



5500D.3 (P ≤ 10,0 bar)



5500D.1 (P ≤ 1,5 bar)

Figure 3 Membranes sensors of dissolved oxygen