EN.IO.AS.01
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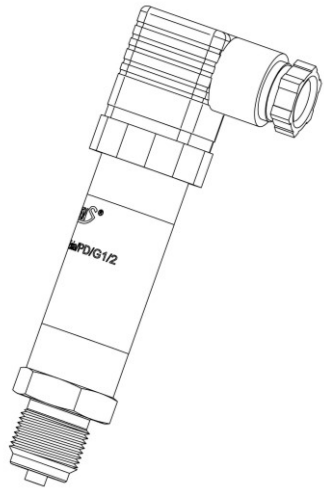
USER'S MANUAL

PRESSURE TRANSMITTER

AS



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1. APPLICATIONS AND MAIN FEATURES.

1.1 The AS series pressure transmitter are designed to measure pressure in that usage, where the overpressure or the pressure pulsation's can appear.
Transmitters may be applied in: water supply systems, heat engineering, compressors, compressed air supply systems.

1.2. The transmitters comply with the requirements of EU directives according to the Declaration of Conformity.

2. USER KIT

Transmitters are delivered in single and/or multiple packs together with a "Product Certificate" which also is as a guarantee card and with the User's Manual.

3. IDENTIFYING MARKS. ORDERING PROCEDURE.

The rating plate of transmitter contains at least the following information:
name of manufacturer, type, serial number, measuring range, output signal, supply voltage.
In order should give: sign the type of transmitter (AS), measuring range, output signal, supply voltage.

4. TECHNICAL DATA

4.1. Measurement ranges: 0 ÷ 1 bar; 0 ÷ 2,5 bar, 0 ÷ 6 bar; 0 ÷ 10 bar;
0 ÷ 16 bar; 0 ÷ 25 bar;

4.2. Metrological parameters

Accuracy	0,4%	Thermal compensation range	0...70 ºC
Hysteresis, repeatability	0,05%	Thermal error	0,2% / 10 ºC
Overpressure limit	4 x range	Long-term stability	0,5% / year

4.3. Electrical parameters

Electrical supply: 8...36VDC and output signal 4...20 mA (two wire transmission).
Electrical supply: 13...30VDC and output signal 0...10 V (three wire transmission).

Special version:
Electrical supply: 24 VAC and output signal 0...10 V in three wire system with ADP-1 type electrical connector only.

Load resistance (for current output) $R[\Omega] \leq \frac{Usup.[V]-8\ V}{0{,}02\ A}$

Load resistance (for voltage output) $R[\Omega] \geq 20k\ \Omega$

4.4. Operating conditions:

Operating temperature range (ambient temp.)	-25 ÷ 80 ºC
Medium temperature range	-25 ÷ 120ºC – direct measurement -25 ÷ 170ºC – measurement using radiator or a impulse line
Insulation strength testing voltage	110 VDC

4.5. Construction Materials*:*

Diaphragm and process connector	1.4404/1.4435 (316L)
Casing for electronic parts	1.4301 (304)
PD type electrical connector	itamide

4.6. Protection Rating of Case – IP65.

4.7. Electrical Connectors.

a). Electrical connector PD-type applied for transmitters with:
- electrical supply 8...36VDC and output signal 4...20mA
- electrical supply 13...30VDC and output signal 0...10V.

b). Special electrical connector ADP-1-type applied for transmitters with:
- electrical supply 24VAC and output signal 0...10V.

5. INSTALLATION AND MECHANICAL CONNECTIONS

5.1. AS series transmitters are equipped with M (M20x1,5), G1/2 or 1/2 NPT process connectors and can be easily assembled to simple 1/2" valve.
For medium temperature above 120°C is necessary to use transmitter with RM (RG) process connector or apply temperature isolation with impulse line using.

5.2. Electrical connectors make in accordance with Fig. 2a for DC supply or Fig. 2b for AC supply.
In environments with big electromagnetic noise line type strand or strand in shield is recommended.
Isolate transmitter signal lines from power electrical supply lines or from big electrical energy receivers.
The devices used together with the transmitters should be resistant to electromagnetic interference from the transmission line in accordance with compatibility requirements.
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6. ZERO AND MEASUREMENT RANGE POSITION SETTING

Demontage (unscrew) the transmitter electrical connector to get access to potentiometers knobs. Power the transmitter in accordance with its technical parameters. Supply a pressure signal equal to the lower limit of the measurement range, and regulate the output signal equal to 4mA (0V) by turning the “zero” potentiometer. Turn the knob to the right to increase the output signal. After the zero position has been set, supply a pressure signal equal to the upper range limit, and use the “range” potentiometer to adjust the output current (voltage) equal to 20mA (10V). Recheck the zero position, and repeat the procedure if necessary.

Note:
Potentiometers can be used to adjust the zero and the range position by up to 10%.
For transmitters with 0...10V output you should set „zero” on 0,05V value (transmitters not achieve 0V output signal value).

7. EXPLOITATION

Protect transmitters before mechanical damage and flooding. Don’t admit to come into being the residue on the diaphragm.

8. GUARANTEE

Manufacturer warrants under the conditions specified in the Product Certificate which is also a guarantee card.

9. SCRAPPING, DISPOSAL

Waste or damaged transmitters should be dismantled and disposed of in accordance with Directive (2012/19/EC) on waste electrical and electronic equipment (WEEE) or returned to the manufacturer.

10. FIGURES

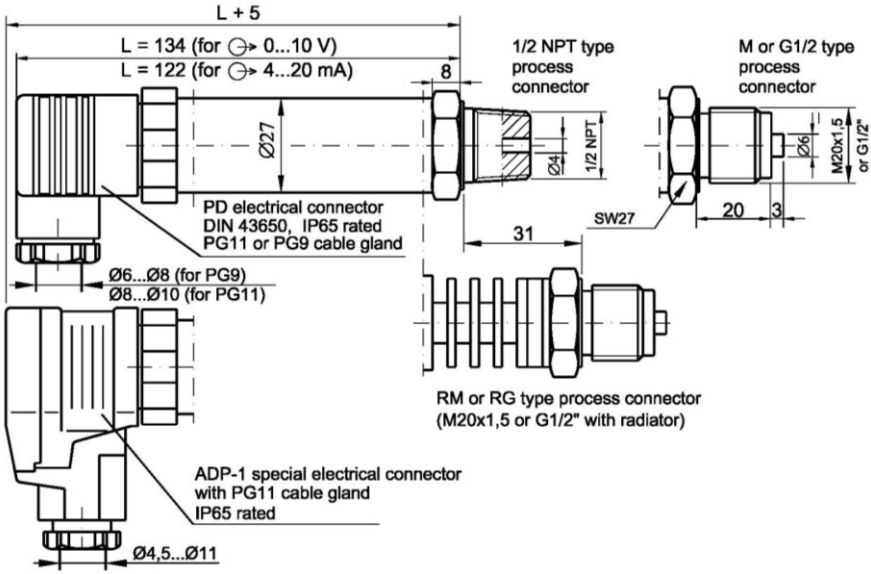


Fig.1. AS series pressure transmitter.

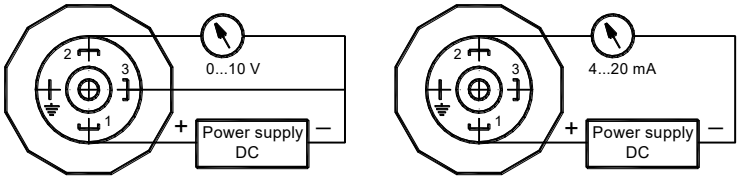
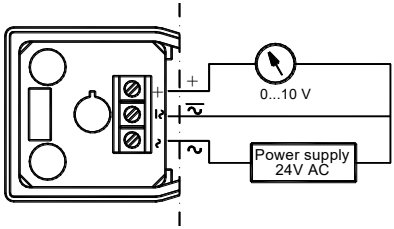


Fig.2a. Transmitter wiring diagrams for DC voltage supply.



Note:
(In case of transmitter repair by the manufacturer's service, transmitter should delivers with connector together.)

Fig.2b. Transmitter wiring diagram for AC voltage supply.