

DIFFERENTIAL PRESSURE TRANSDUCER PDP-1x



Catalogue card



DESCRIPTION

Differential pressure transducer PDP-1x is a stationary, contact device used to control the pressure difference. It is intended for use primarily in mines in order to control the opening, closing and sealing ventilation dam, airflow in separately ventilated wall and for signaling the level of the water in sump. It can also be used in industrial plants, where it is necessary to control the pressure. The pressure is indicated as a digital signal, and the threshold value is set individually.

On the PDP-1x housing are cable glands and connectors to connect the tubes, which supply pressure from the different pressure zones. Inside the case is a terminal used to connect the alarm or control circuit. The sensor has an two-stage output (outputs) (switching contact or contact with a diode) that can operate as switching off device UW. Thus it can become an security element of switching off the energy, turn signals or to control other electrical devices. PDP-1x may also cooperate with telemetry systems provided that the parameters of terminal of the feeder-measurement line are compatible. The sensor does not require a power supply.

PDP-1x sensor is performed in four different versions of measuring ranges (version 200, 600, 1500 and 4500) and in the following varieties:

PDP-11: variant with a single pressure switch;

PDP-12: variant with two switches, pressure switches are connected parallel (two connectors on the case);

PDP-12s: variant with two switches, each switch has separated pair of connectors (4 connectors on the case).

BASIC TECHNICAL PARAMETERS

Differential pressure transducer PDP-1x

	20 ÷ 4500 Pa (0,2 – 45 mbar)
Measurement range	version 200: 20 ÷ 200 Pa version 600: 40 ÷ 600 Pa version 1500: 100 ÷ 1500 Pa version 4500: 500 ÷ 4500 Pa
Switching accuracy	version 200: for setting 20 Pa: ± 5 Pa, for setting 200Pa: ± 20 Pa version 600: for setting 40 Pa: ± 5 Pa, for setting 600Pa: ± 30 Pa version 1500: for setting 100 Pa: ± 10 Pa, for setting 1500Pa: ± 50 Pa version 4500: for setting 500 Pa: ± 50 Pa, for setting 4500Pa: ± 200 Pa
Pressure entry	Two or four connector (+/-), Ø outer of the tube 8 mm
Cable entry	One or two cable glands for cable Ø 6÷13mm
Output circuits	Switching contact or contact with a diode, the switching threshold set to rotation scale; for version PDP-12 and PDP-12s: the ability to set two independent pressure thresholds, two separate switching contacts.
Working position	Connectors directed downward or to the left
Working temperature range	from -10 °C to + 40 °C
Permissible working humidity	to 95% without condensation
Permissible differential pressure	50 kPa (0,5 bar)
Atmospheric pressure	800... 1100 hPa
External dimensions (without cable and cover)	PDP-11: 160 x 160 x 91 mm PDP-12, PDP-12s: 260 x 160 x 91 mm
Weight	PDP-11: 1,9 kg PDP-12, PDP-12s: 3,0 kg
Casing internal protection	IP-54

EXPLOSION-PROOF MARK



I M1 Ex ia I, II 2G Ex ia IIC T6

EC type examination certificate: TEST 13 ATEX 0024X