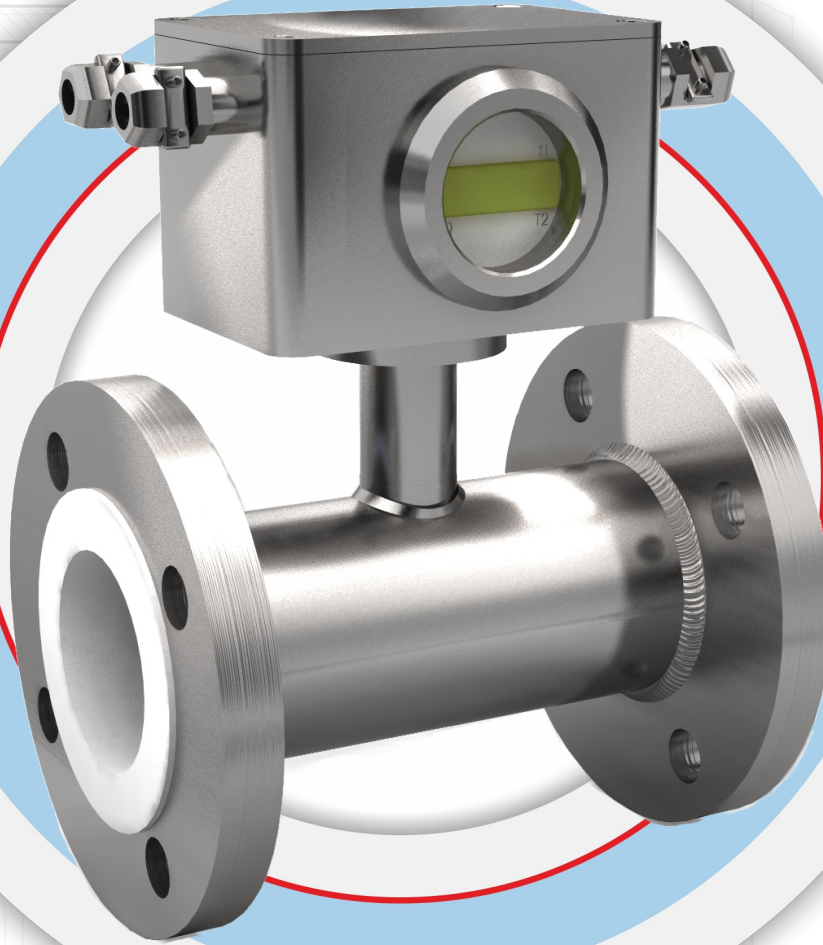


PI Induction Flow Meters



The IMKiUS' inductive flowmeter is designed to measure the liquid flow in pipelines. They do not have any internal mechanical components, which guarantee uninterrupted flow of liquid and high durability, even in the case of very polluted and aggressive liquids flowing through the flowmeter. The measurement gauge is fixed directly in the head. The real-time control system measures both the flow and, in the case the flowmeter that is equipped with two temperature sensors, the power, e.g. the power supplied to the heat exchanger. As a new feature of the latest PI-02's, in relation to PI-01, is ability to connect as many as 5 sensors, e.g. 4 temperature sensors and 1 pressure transducer.

The flow meters can transmit signals, both in a current loop (4 - 20 mA), 5 - 15 Hz frequency signal and over 485.

The flow meter is designed to work in both methane (it is intrinsically safe) and non-methane mines. The construction of the meter is protected from aggressive environment (very contaminated medium).

Technical parameters

Device type	Type of flow meter PI-01/IMK/.../DN.../PN...
Flange connections	DN50, DN100, DN150, DN200, DN250, DN300
Maximum pressure of the medium flow	PN25, PN40, PN63, PN100
Temperature of the medium	-5 °C ÷ +80 °C
Ambient temperature	-5 °C ÷ +40 °C
Storage temperature	+4 °C ÷ +60 °C
Display indications	<ul style="list-style-type: none"> - flow [l/s or other is available as well as water counter) - two or four temperature sensors and one pressure transducer - cooling/heating power [kW](as an option with temperature sensors) - medium pressure [bar]
Flow measurement ranges	DN50 – up to 20 [l/s] DN100 – up to 80 [l/s] DN150 – up to 180 [l/s] DN200 – up to 310 [l/s] DN250 – up to 500 [l/s] DN300 – up to 700 [l/s] (Availability of flow settings for a particular range)
Measurement error	Nominal range <1% The error is higher than 1% for the flow lower than 3% of the measuring range
Design	Standard or intrinsically safe (methane mines)
Data transmission	Current loop 4 ÷ 20 mA, over RS485 up to 1000m and 5 ÷ 15 Hz frequency signal
Power supply	For an explosive environment: intrinsically safe feeder 12 VDC i_a, i_b (0,5 A min., 2 A max)
Protection degree	IP67
Additional information	Directive 94/9/WE conformity (type-examination certificate) / I M1