

MIC-Smart

Microwave solid flow transducer



Features

- ◆ Non-contact flow measurement of bulk solids in pipes.
- ◆ Sensor tube up to 200°C.
- ◆ Calibration and service via USB-port .
- ◆ Standard application range DN50—DN300.
- ◆ Calibration via graphical user interface.

Options

- ◆ Flow/NoFlow version with setpoint (relay output).
- ◆ Different length of sensor tube.
- ◆ MOD-BUS interface.
- ◆ CAN-BUS interface.

Descriptions

The new MIC - transducer is based on the latest microprocessor technology. The microwave transducer measures the flow of solid particles in pipes. The sensor operates maintenance free and without contact to the product. The stainless steel sensor tube (V4A) is protected with a ceramic coating. A high temperature version is available for products up to 200°C. The comfortable software allows to calibrate and service online via USB - port. An additional evaluation electronic is not required. During calibration the flow signal can be displayed on the screen of PC/Notebook.

Engineering specifications

MIC Smart

Housing

Sensor head aluminum, IP66
Sensor tube V4A with ceramic coating

Dimensions

Sensor head 115 x 90 x 82mm,
Sensor tube 150 x 19mm / 250 x 19mm.

Supply voltage

20-28 VDC, internally fused, 400mA current consumption

Inputs and output

1 x 4-20mA , alternative 0-20mA.
1 x Relays-output used as counter pulse output.

Environmental conditions

Operation temperature outside -10°C to $+55^{\circ}\text{C}$.

Operation temperature inside the pipe

150mm sensor tube -10°C to 70°C
250mm sensor tube -10°C to 120°C .

pressure inside the pipe

Max. 20bar

Weight

2.150 g.

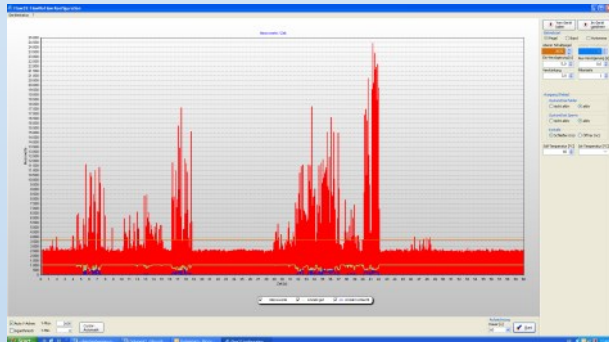
Accuracy

Depends on environmental and mounting conditions
 $\pm 3-5\%$

Available models

Part Number	Description
HW900/00150	MIC FlowNoFlow Sensor inclusive sensor tube 150mm
HW901/00150	MIC Smart Sensor inclusive sensor tube 150mm
HW901/00250	MIC Smart Sensor inclusive sensor tube 250mm

Representation of the signal profile during the calibration



Connector pin assignment

- | | |
|----------|--------------------------------|
| 1 white | isolated counter pulse contact |
| 2 brown | signal output 1: - 0/4 – 20 mA |
| 3 green | signal output 1: + 0/4 – 20 mA |
| 4 yellow | n.c. |
| 5 grey | signal output 1: - 0/4 – 20 mA |
| 6 pink | isolated counter pulse contact |
| 7 blue | Power supply GND |
| 8 red | Power supply +24 V DC |

