

**Microprocessor based differential pressure- and flow transmitter with control function and input for external temperature sensor**

**MF-PFTT**

Md-1318gb / 2008-03-04

**Micaflex PFTT functions:**

- ✓ **Temperature compensated air flow measurement**
- ✓ **Input for Pt-100/Pt-1000 or volt/mA**
- ✓ **Automatic cleaning of MFS flow sensors (Purging function)**
- ✓ **Two analogue outputs, freely programmable**
- ✓ **PI-controller included**
- ✓ **Calibration protocol**



**Application**

MF-PFTT is a programmable transmitter and controller for pressure and flow with input for temperature SPC.

The flow measurement can be recalculated to normal flow, m<sup>3</sup> at 0 °C, or flow at the actual temperature.

The actual value from a temperature sensor is possible to get as a scalable volt or mA-signal to one of the output terminals.

MF-PFTT also includes a function for automatic cleaning with compressed air of flow sensors or pressure connections. For this function one of the analogue outputs is used to control a relay in the purging unit.

During purging the latest output of actual value/control signal is frozen.

**Design**

An alphanumeric 2-line display with 32 characters for information in clear text.

Setting and programming are made with four keys on the front.

Zero setting and calibration of the pressure sensor are also performed with the keys.

The pressure sensor is available in seven measure ranges. Special ranges as an option. The pressure range is possible to scale to a lower range.

Calibration protocol of the pressure measurement is included as standard.

**Output**

MF-PFTT has two analogue outputs programmable for actual value of pressure/flow or temperature, control for pressure/flow or purging function.

**Input**

Analogue input for temperature sensor signal, volt/mA or Pt-100 /Pt-1000.

**Power supply**

MF-PFTT is designed for supply voltage 24 VAC or 20...32 VDC.

For other supply voltages or for galvanic separation there are transformers (external) available as an option.

**Installation**

MF-PFTT is designed to be placed on a wall or recessed through a panel or door. When selecting recessed mounting, a mounting kit, MFM-PANEL, is required.

## Technical data

Display: Alphanumeric LCD,  
2 rows, 2 x 16 characters

Pressure range: -50...+50 Pa  
0...100 Pa  
0...200 Pa  
0...500 Pa  
0...1 kPa  
0...2 kPa  
0...5 kPa  
Other ranges  
available as option

Measure error:  $< \pm 0,5 \%$  of pressure range

Temperature drift:  $< \pm 0,5 \%$  /10 °C

Damping: 0...9 sec.

Input: Temperature sensor:  
Pt-100 / Pt-1000  
Active temperature sensor:  
0/2...10 VDC, 0/4...20 mA

Output: Two analogues outputs:  
0/2...10 VDC, 0/4...20 mA  
selectable- and scalable

Purging-  
function: 20 mA / 12 VDC  
indicated with red LED on  
the front panel marked "Clean".

Ambient temp: 0...50 °C

Power supply: 24 VAC  $\pm 15 \%$   
20...32 VDC

Power  
consumption: 3,8 VA

Housing class: IP 65

El.- connection,  
- one wire : 1 x 2,5 mm<sup>2</sup> / terminal  
- flexible wire : 1 x 1,5 mm<sup>2</sup> / terminal

Cable entry: 3 x M16x1.5mm  
(cable conn. not included)

Dimensions: WxHxD 122 x 120 x 90 mm

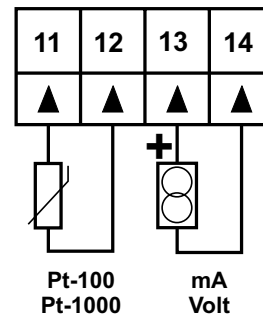
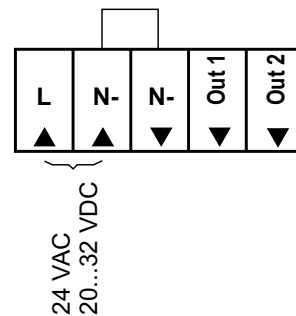
Applied EU  
directives:

|     |                                |
|-----|--------------------------------|
| EMC | SS-EN 50081-1<br>SS-EN 50082-2 |
| LVD | SS-EN 610101-1                 |

## Accessories

- Mounting kit VR-DR
- HT-plastic tubing 8/6 yellow, per meter or roller 50 m
- Manifold valve 2-TK
- MFM-PANEL (wall/cabin-door) mounting kit
- MFM-DIN rail
- Purging unit
- External transformer 24, 115, 230 VAC
- Temperature sensor

## Electrical connection



## Service

Zero setting is recommended every 6:th month.

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