

Microprocessor based differential pressure transmitter

- Pressure measurement
- Control
- Flow measurement

Datasheet: MD-1292Gb_2001-03-22
Supersedes:

MicaFlex MF-PFT

Application

MF-PFT is a programmable differential pressure transmitter for pressure- or flow measurement. MF-PFT also includes a PI-controller for control of frequency converter or actuator, for applications where more sophisticated control functions are not necessary.

- Two outputs for volt or mA, programmable for actual value and for control
- Visible alarm function
- Includes PI-controller

With each MF-PFT follows a calibration protocol.

Installation

MF-PFT is designed to be placed on a wall or recessed mounting through a wall or cabin-door. When recessed mounting, a mounting kit, MFM-Panel is used.

Design

MF-PFT is equipped with an alphanumeric 2-line display with 32 signs. Setting and programming is made with four keypads on the front. Two parameters may be displayed simultaneously.

MF-PFT has two analogue outputs which via the menu system may be used for output of actual pressure/flow value or control.

The output is possible to set between 0/2...10 VDC or 0/4...20 mA.

The output is possible to scale from 10...100 % of the selected range.

Power supply

MF-PFT is designed for power supply 24 VAC or 20...32 VDC.

For other supply voltages or for galvanic separation a transformer (internal) is available as accessory.

Alarm

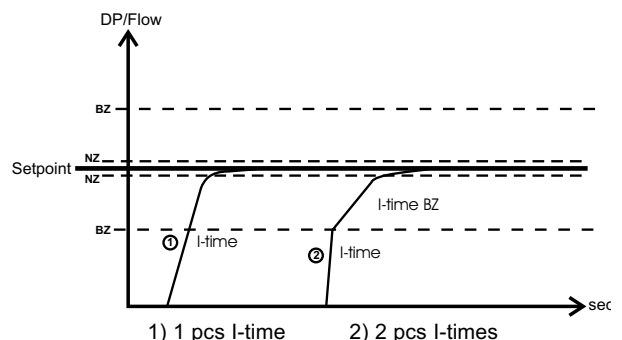
MF-PFT is as standard equipped with a visible alarm for pressure or flow. Normal status is indicated by a green LED and alarm with a red LED.

Red diode is lit when preset alarm level is exceeded and after preset time delay the diode will change to flashing.



Control function

MF-PFT has a PI-controller specially developed for pressure or flow control. The P-function may be switched off, this is recommended in order to avoid the risk of oscillating. To achieve a stable control the neutral zone may also be programmed. Two programmable I-times makes it possible to achieve less risk of oscillating when the controller goes into the neutral zone. Within a programmable zone (BZ) a longer I-time is possible to set and outside a shorter. This is very useful when you want to avoid system oscillating coming from small pressure or flow changes in a room or similar, but at the same time there is a demand for a quick response if the pressure or flow passes a critical limit.



Technical data

Indicator: Alphanumeric, 2-line, 32 signs

Pressure range: -50...+50 Pa
0...100 Pa
0...200 Pa
0...500 Pa
0...1 kPa
0...2 kPa
0...5 kPa
Other pressure ranges available on request

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

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

Damping: 0...9,9 sec.

Output: Two analogue outputs
0/2...10 VDC, 0/4...20 mA
selectable and scaleable

Ambient temperature: 0...50 °C

Alarm: Two separate alarms,
(visible) high & low
Red alarm indication

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

Power consumption: 3 VA

Housing-class: IP 65, ABS plastic
EI-connection: Max 2 x 1.5 mm² per terminal

Cable-entry: 2 pcs Pg 11 / Pr 18,6
(cable conn. not included)

Dimensions: WxHxD 120 x 122 x 90mm

Weight: 0,7 kg

Service

Check the zero-point every 6 months.

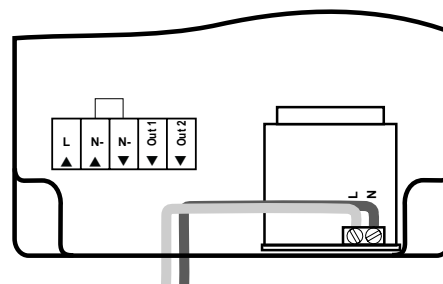
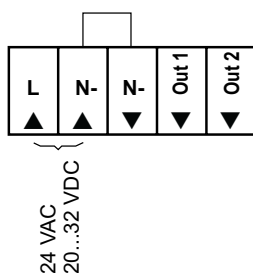
Accessories

- 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
- Mounting kit for DIN-rail
- Transformer 24, 115, 230 VAC, built in

Electrical connection:

24 VAC, 20...32 VDC (Standard)

With built in transformer:
24, 115, 230 VAC



AB Micatrone
Dalvägen 8
SE-169 56 SOLNA
SWEDEN

Telephone: +46 8470 25 00
Telefax: +46 883 27 80
Internet: www.micatrone.se
E-mail: info@micatrone.se