

Micaflex PFT ver 3. Pressure- and Flow transmitter with control output

MF-PFT ver 3.x

APPLICATION

MF-PFT is a programmable microprocessor controlled transmitter/controller for measurement and control of differential pressure or flow. With the four keys on the front panel it is possible to access all functions, make settings and scaling the output signal. The double row, 2x16 character, LCD with backlight displays functions and values.

MOUNTING

MF-PFT is designed for wall mounting but can be fitted with an optional frame kit, MFM-PANEL, for recessed mounting on wall or through a cabinet door.

OUTPUT SIGNAL

MF-PFT has two analogue output signals which can be used for pressure, flow or control signal. Each output has three terminals, one for Volt DC, one for mA DC and one common zero. The outputs allow both the Volt and mA signals to be used simultaneously.

If the unit is fitted with built-in automatic zero-setting module MFM-ZP, it is connected to output 2 (Volt or mA). It is still possible to use the free output signal on output 2 for the selected source.

SUPPLY VOLTAGE

MF-PFT is connected to 24 VAC or 20...32 VDC. Built-in transformer is optional.

ALARM

MF-PFT has two alarms, each independent of the other. The alarm is acoustic with beeper and visual with LED indication for pressure or flow, high or low alarm level and manual or automatic reset.

CERTIFICATE

Traceable certificate of calibration included.



ACCESSORIES:

- ✓ Modbus RTU data communication module with RS-485 interface
- ✓ Module for automatic zero setting
- ✓ Separate display unit for remote placement up to 30m beyond main unit. Two separate display units can be connected to the same main unit
- ✓ Mounting kit for recessed mounting
- ✓ Transformer internal or external 230 VAC
- ✓ Mono block valve for manual zero setting and control

TECHNICAL DATA:

Display: Alphanumeric LCD
2 row, 2x16 characters
with backlight

Power supply: 24 ± 15% VAC
20...32 VDC

Pwr consumption: 5 VA (24 VAC)
2,5 W (24 VDC)

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

Measurement error: < ± 0,5 % of the pressure
range ± 0,5 Pa

Temperature drift: < ± 0,5 % /10 °C

Damping: 0,0...9,9 sec.

Output signal: Two analogue outputs,
0/2...10 VDC, 0/4...20 mA
selectable and scalable.
Both mA and Volt output
can be used simultaneously

Ambient temp: 0...50°C

Alarm: Two separate alarms for
high & low level, alarm
indication with red LED and
buzzer (joint)

Degree of protection: IP 65, ABS plastic

EI-connection: 1 x 2,5 mm² / terminal

Cable entries: 4 pcs M16x1.5mm
(cable glands not included)

Dimensions: WxHxD = 122x120x90 mm

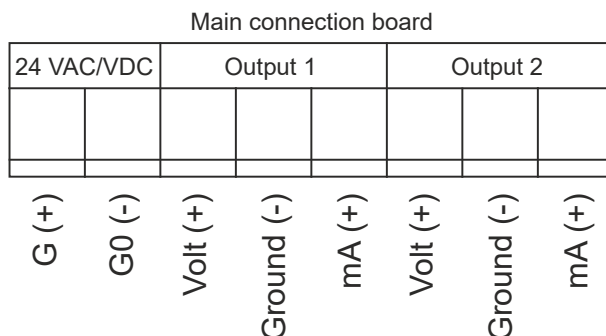
Weight: 0,81 kg

MAINTENANCE:

Check zero settings every 6:th. month.

EMC/LVD/RoHS II:

AB Micatrone declare under sole responsibility that MF-PFT is in conformity with the essential requirements in the EMC-, the LVD- and the RoHS II directive. The full text of Manufacturers declaration of conformity is available on Micatrone's website.

ELECTRICAL CONNECTION:

AB Micatrone
Aldermansvagen 3
SE-171 48 SOLNA
SWEDEN

Telephone: +46 8-470 25 00

Internet: www.micatrone.com

E-mail: info@micatrone.se

**Micaflex PFC ver 3.
Pressure- and Flow controller with output
for actual value and control**

**MF-PFC
ver 3.x**

APPLICATION

MF-PFC is a programmable microprocessor controlled transmitter/controller for measurement and control of differential pressure or flow. With the four keys on the front panel it is possible to access all functions, make settings and scaling the output signal. The double row, 2x16 character, LCD with backlight displays functions and values.

MOUNTING

MF-PFC is designed for wall mounting but can be fitted with an optional frame kit, MFM-PANEL, for recessed mounting on wall or through a cabinet door.

OUTPUT SIGNAL

MF-PFC has two analogue output signals which can be used for pressure, flow or control signal. Each output has three terminals, one for Volt DC, one for mA DC and one common zero. The outputs allow both the Volt and mA signals to be used simultaneously. If the unit is fitted with built-in automatic zero-setting module MFM-ZP, it is connected to output 2 (Volt or mA). It is still possible to use the free output signal on output 2 for the selected source.

INPUTS

SPD voltage-free contact and SPC 0/2..10 VDC or 0/4...20mA.

SUPPLY VOLTAGE

MF-PFC is connected to 24 VAC or 20...32 VDC.

ALARM

MF-PFC has two alarms, each independent of the other. The alarm is acoustic with beeper and visual with LED indication for pressure or flow, high or low alarm level and manual or automatic reset.

CERTIFICATE

Traceable certificate of calibration included.



ACCESSORIES:

- Modbus RTU data communication module with RS-485 interface
- Module for automatic zero setting
- Separate display unit for remote placement up to 30m beyond main unit. Two separate display units can be connected to the same main unit
- Mounting kit for recessed mounting
- Transformer external 230 VAC
- Mono block valve for manual zero setting and control

TECHNICAL DATA:

Display:	Alphanumeric LCD 2 row, 2x16 characters with backlight
Power supply:	24 ± 15% VAC 20...32 VDC
Pwr consumption:	Max 3 VA (24VAC)
Pressure range:	-50...+50 Pa 0...50 Pa 0...100 Pa 0...200 Pa 0...500 Pa 0...1 kPa 0...2 kPa 0...5 kPa other ranges available on request
Measurement error:	< ± 0,5 % of the pressure range ± 0,5 Pa
Temperature drift:	< ± 0,5 % /10 °C
Damping:	0,0...9,9 sec.
Output signal:	Two analogue outputs, 0/2...10 VDC, 0/4...20 mA selectable and scalable. Both mA and Volt output can be used simultaneously
Inputs:	SPD voltage-free contact. SPC 0/2..10 VDC, 0/4...20mA
Ambient temp:	0...50°C

Alarm:	Two separate alarms for high & low level. Alarm indication with red LED and buzzer (joint)
Degree of protection:	IP 65, ABS plastic
EI-connection:	1 x 2,5 mm ² / terminal
Cable entries:	4 pcs M16x1.5mm (cable glands not included)
Dimensions:	WxHxD = 122x120x90 mm
Weight:	0,86 kg

MAINTENANCE:

Check zero settings every 6:th. month.

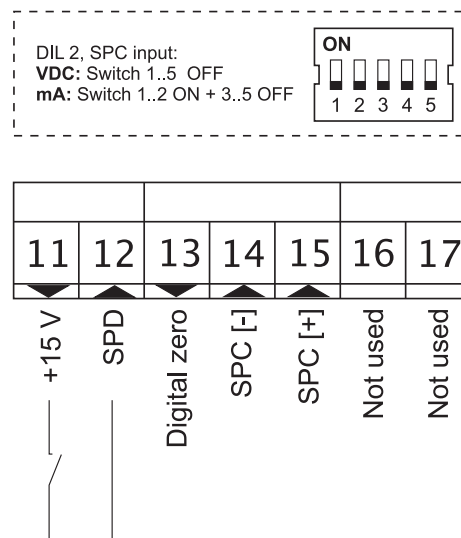
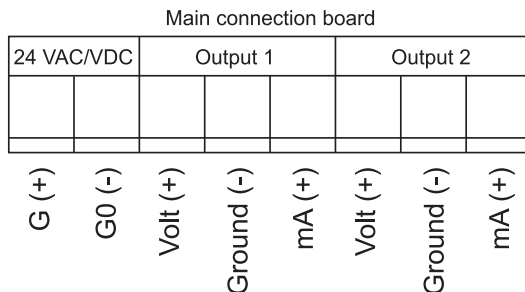
ACCESSORIES:

- Modbus RTU data communication module with RS-485 interface
- Module for automatic zero setting
- Separate display unit for remote placement up to 30m beyond main unit. Two separate display units can be connected to the same main unit
- Mounting kit for recessed mounting
- Transformer external 230 VAC
- Mono block valve for manual zero setting and control

EMC/LVD/RoHS II:

AB Micatrone declare under sole responsibility that MF-PFC is in conformity with the essential requirements in the EMC-, the LVD- and the RoHS II directive. The full text of Manufacturers declaration of conformity is available on Micatrones website.

ELECTRICAL CONNECTION:



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Micaflex PD ver 4.1 Differential Pressure transmitter for low pressure applications

MF-PD ver 4.1

- ✓ Accurate, stable and repeatable low differential pressure measurement
- ✓ Easy to read 4 digit display
- ✓ Output signal in Volt and mA
- ✓ Easy One-Key zero-setting
- ✓ Two selectable measuring ranges, full range or half range
- ✓ Selectable damping for smooth output signal
- ✓ Calibration certificate included
- ✓ Negative or Positive indication of pressure
- ✓ User calibration in 5 points



APPLICATION

The Micaflex PD (MF-PD) is a low differential pressure transmitter specifically aimed towards HVAC control. Measurement ranges start as low as a 50 Pa full span. The transmitters can have their analogue signal trimmed for half range where appropriate, further driving this differential pressure to cleanroom pressure monitoring type applications.

All Micaflex differential pressure transmitters are manufactured in an ISO 9001-compliant environment and are supplied with calibration certificates. Accuracy is within 0,5% of the full range plus 0,5 Pa. Analogue output signals are user selectable for 0-10V or 4-20mA.

MF-PD is designed for vertical wall mounting but can be fitted with an optional frame kit, MFM-PANEL, for recessed mounting on wall or through a cabinet door.

MF-PD is connected to 24 VAC or 20...32 VDC.

Traceable certificate of factory calibration included. MF-PD can be user calibrated (field calibration) in five measuring points if a pressure source and reference instrument are available.

ACCESSORIES

(combined built-in accessories are limited)

- Modbus RTU data communication module with RS-485 interface, built-in
- Alarm module, built-in
- Mounting kit for recessed mounting
- Transformer 230 VAC, built-in or external
- Mono block valve with easy access for reference pressure control.

ELECTRICAL CONNECTION

Main connection board				
24 VAC/VDC		Output		
G (+)	G0 (-)	G0 (-)	Out (V)	Out (mA)

TECHNICAL DATA:

Supply voltage:	24 ± 15% VAC, 20...32 VDC 230 VAC (with transformer) 50/60 Hz
Power consumption:	Max 4 VA (24 VAC) Max 2 W (24 VDC) Max 8 VA (230 VAC)
Range:	-50...+50 (-25...+25) Pa 0...50 (0...25) Pa 0...100 (0...50) Pa 0...200 (0...100) Pa 0...500 (0...250) Pa 0...1 (0...0,5) kPa 0...2 (0...1,0) kPa 0...5 (0...2,5) kPa Other ranges on request. Measuring range in brackets at half the measuring range.
Overload:	Max 50 kPa
Accuracy:	< ± 0,5 % of the full range plus ± 0,5 Pa (Min. ± 1 Pa)
Temperature drift:	< ± 0,5 % /10 °C
Damping:	Selectable time constants of 0.05, 0.7, 1.5 and 2.2 s.
Output signal:	4...20 mA max $R_L = 400 \text{ Ohm}$ 0...10 Volt $R_i = 0 \text{ Ohm}$ Both mA and Volt signal can be used simultaneously. 0 ... 20 mA can be ordered. Inverted signal can be ordered.
Ambient temp.:	0...50°C

Degree of protec.:	IP 65, ABS plastic
EI. connections, - solid conductor:	1 x 2,5 mm ² / terminal
- stranded conductor:	1 x 1,5 mm ² / terminal
Cable entries:	2 pcs threaded holes M16x1,5 (cable glands not included)
Pressure. conn.:	8/6 mm HT-plastic tube
Dimensions:	WxHxD = 122x120x90 mm
Weight:	0.77 kg



CE and UKCA conformity

AB Micatrone declare under sole responsibility that this product is in conformity with the essential requirements in CE and UKCA directives at time of sale. The full text of Manufacturers declaration of conformity is available on Micatrone´s website.

Service

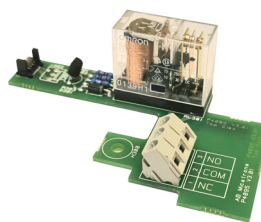
MF-PD normally needs no service, but we recommend to check the zero point once a year.

RELATED KEY PRODUCTS:

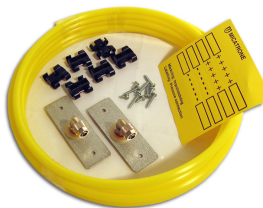
Flow measurement with Micaflex FD:



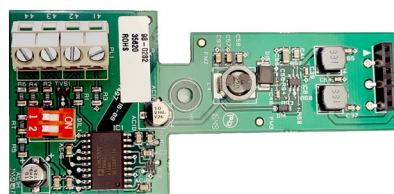
Alarm module MFM-L1:



Pressure connection kit VR-DR:



Modbus RTU for PD/FD:



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