

Micaflex P ver 4 Differential pressure transmitter for low pressure applications

MF-P ver 4

NOTE !

Read through the entire manual before you begin installation and programming.

APPLICATION

Micaflex P (MF-P) is a pressure transmitter designed for measuring of low positive, negative and differential pressure.

MOUNTING

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

MF-P is screwed to the wall using four screws, max \varnothing 4mm. Location of screw holes are shown on the back of the enclosure.

PRESSURE CONNECTIONS

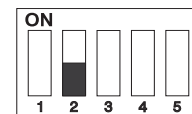
Pressure connection can be made with mounting kit VR-DR or HT-plastic tube 8/6 mm. See figure on page 2 for correct pressure connection.

OUTPUT SIGNAL SELECTION

Volt and mA signal have different wiring terminals. Verify that the correct output is connected.

ZERO ADJUSTMENT

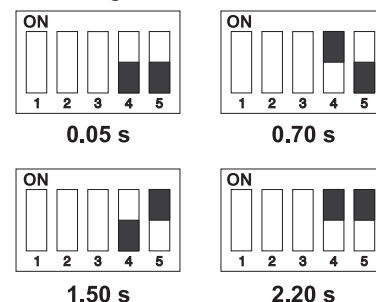
Switch on the main supply and wait at least 60 sec. Set the manifold valve in position calibration (if there is no valve, loosen the pressure tubes from the MF-P). Remove the cover to access the Zero-setting key on the main circuit board. Check that the miniature switch no 2 is in position "OFF".



Press down the Zero-setting key, the LED starts flashing. Keep the key pressed until the LED turns off. Release the key and the zero-setting is finished.

SETTING OF DAMPING

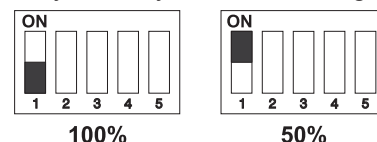
MF-P offers a possibility to set different damping (time constant). At delivery of MF-P, the damping is set to 1,5 seconds damping. Setting is adjusted with the miniature switch no 4 and 5 (the switch is situated on the bottom left edge of the main circuit board).



HALF MEASURING RANGE

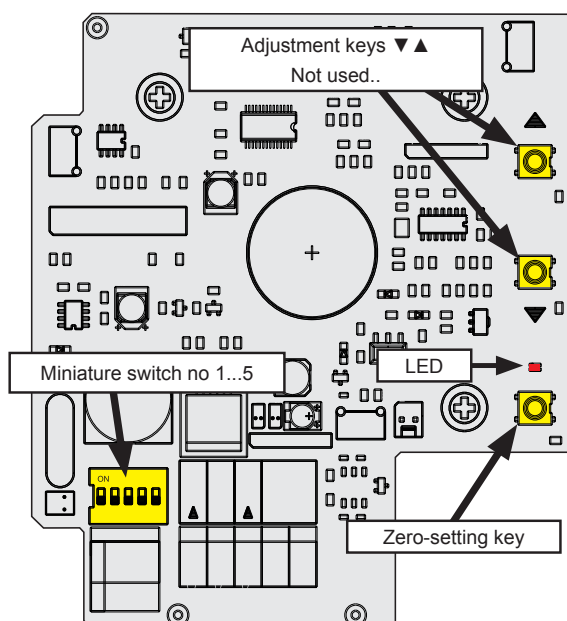
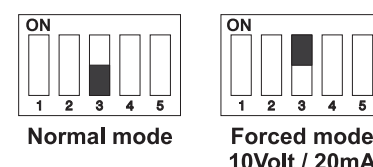
Set the miniature switch no 1 in position "OFF" for full measuring range (100%) or in position "ON" for half measuring range (50%).

The accuracy is always for the full range.



FORCED OUTPUT SIGNAL

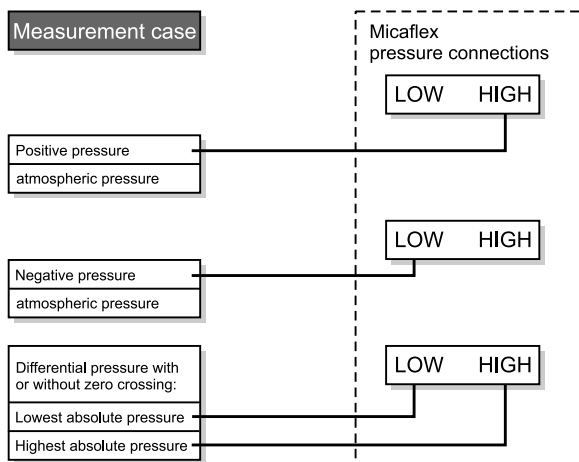
Max output signal (10 Volt and 20 mA) is obtained when miniature switch no 3 is set to position "ON". This function can be used to check the receiving system.



TECHNICAL DATA

Supply voltage:	24 ± 15% VAC, 20...32 VDC 24, 115, 230 VAC (with transformer) 50/60 Hz
Power consumption:	Max 3 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 $R_L = 0 \text{ Ohm}$ 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
El. 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:	0.72 kg

PRESSURE CONNECTION



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

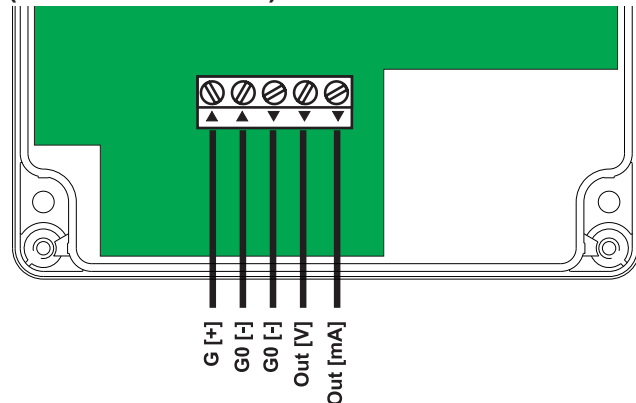
CLEANING

MF-P should be cleaned with a soft cloth and a light detergent. Do not use scouring powder or solvent.

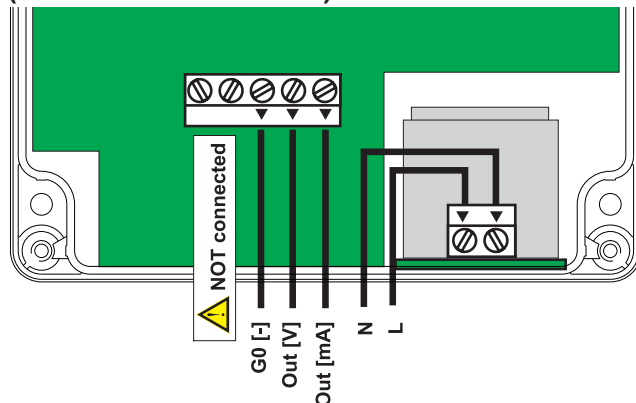
TRANSFORMER MFM-TX (OPTIONAL)

The output signal is normally not galvanically separated from the supply voltage. To obtain galvanic separation between the output signal and the supply voltage on a standard transmitter, the apparatus must be equipped with a plug-in transformer. Plug-in transformer can be obtained for 24, 115 or 230 VAC.

CONNECTION 24 VAC / 20...32 VDC (without transformer)



CONNECTION 24 / 115 / 230 VAC (with built-in transformer)



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