

Adjusting the measuring range on Micaflex P, PD och FD fr.o.m ver 3.x

P/PD/FD

Mi-274gb / 2008-10-20

General

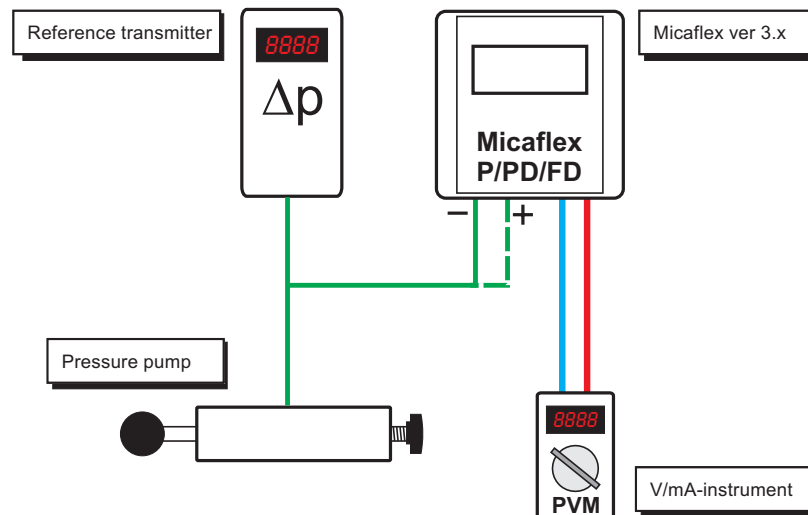
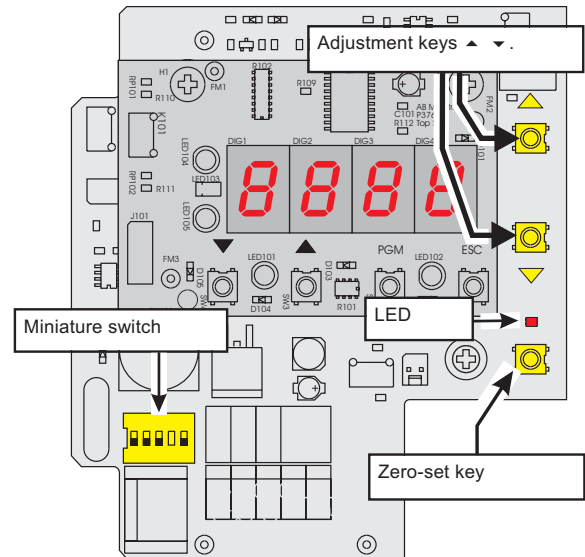
The measuring range can be adjusted to correct a measuring deviation on Micaflex PD/FD ver 3.x if the transmitter no longer remain within specifications.

Note! This adjustment should not be used for changing the measuring range of the unit.

Depending on the set measuring application, the adjustment is carried out in different ways using transmitters with a measuring range that begin at zero (0) Pa, eg. 0...500 Pa, or transmitters that uses zero-crossing ranges, eg. -50...+50 Pa.

Connect the necessary instruments for adjustment acc. to figure below for best results. Remove the front cover on the transmitter to access the adjustment keys on the printed circuit board (PCB) inside the unit.

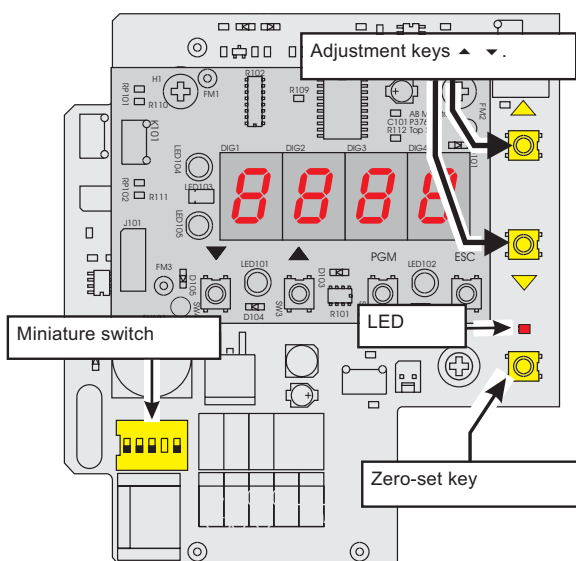
Turn off any set damping during adjustment.



Adjusting a transmitter with measuring range that begin on 0 Pa

- 1 Remove the pressure tubes on the transmitter and connect a V/mA-instrument to the selected output. If the miniature switch no 3 is in position "OFF", the voltage output should be connected. If the miniature switch is in position "ON" the mA-output should be connected.
- 2 Take a note of how the damping is set (miniature switch no 4 and 5) and then place both switches in position "OFF".
- 3 Press and keep down the zero-setting key until the LED goes off. Release the key and the zero-adjustment is done.
- 4 Connect a pressure pump together with a reference transmitter to the positive [+] connection.
- 5 Place the miniature switch no 2 in position "ON" to activate the adjustment keys.
- 6 Increase the pressure to the transmitters max. range and adjust the output signal using the adjustment keys ▼ and ▲ until the signal is 10 Volt or 20 mA.
The factory settings can be restored if both adjustment keys ▼ and ▲ are pressed down simultaneous for approx. 1 second.
- 7 After finished adjustment, place the miniature switch no 2 in position "OFF" and reset the damping to earlier.
- 8 A less precise adjustment can be performed if a pressure pump is not available using only a reference transmitter to adjust against. This adjustment can be performed over the entire measuring range but it is recommended that the pressure used is more than half the measuring range. The adjustment is done in the same way as described above using the adjustment keys.

Note ! Any adjustments will result in a no longer valid certification protocol.



Adjusting a transmitter with a measuring range passing 0 Pa, i.e. zero-crossing.

- 1 Remove the pressure tubes on the transmitter and connect a V/mA-instrument to the selected output. If the miniature switch no 3 is in position "OFF", the voltage output should be connected. If the miniature switch is in position "ON" the mA-output should be connected.
- 2 Take a note of how the damping is set (miniature switch no 4 and 5) and then place both switches in position "OFF".
- 3 Connect a pressure pump together with a reference transmitter to the negative [-] connection.
- 4 Place the miniature switch no 2 in position "ON" to activate the adjustment keys.
- 5 Increase the pressure to the transmitters min. pressure.
i.e.. -50 Pa if the measuring range of the transmitter is -50...+50 Pa.
The pressure reference transmitter will indicate a positive pressure of +50 Pa.
Press the ▼-key to store the value.
- 6 Adjust the pressure to 50% of the measuring range. With a measuring range of -50...+50 Pa or other similar symmetric range, 50% will correspond to zero (0) Pa, i.e. deflated transmitter.
- 7 Press down the zero-set key to store the value.
- 8 Connect the pressure pump together with the reference transmitter to the positive [+] connection. Increase the pressure to the transmitters max. pressure acc. to the example.
- 9 Press the ▲-key to store the value.
- 10 The factory settings can be restored if both adjustment keys ▼ and ▲ are pressed down simultaneous for approx. 1 second
- 11 After finished adjustment, place the miniature switch no 2 in position "OFF" and reset the damping to earlier.

Note ! Any adjustments will result in a no longer valid certification protocol.

Note ! Do not mistake the arrow keys, ▼ ▲, on the display unit in Micaflex PD and FD with the adjustments keys on the main PCB which are referred to in the instruction.

AB Micatrone
Åldermansvägen 3
SE-171 48 SOLNA
SWEDEN

Telephone: +46 8-470 25 00
Fax: +46 8-470 25 99
Internet: www.micatrone.se
E-mail: info@micatrone.se