

MicaFlex Microcontroller-based differential pressure and flow transmitter with digital indication

MF-FD

version 3.x

md-1328gb / 2009-03-16

Application

MF-FD is a pressure transmitter designed for flow measuring.

- ✓ Output signal in Volt and mA
- ✓ Selectable flow linear display and output or pressure linear display and output
- ✓ Forced output signal
- ✓ Easy One-Key zero-setting
- ✓ Selectable damping
- ✓ Calibration certificate attached



Pressure connections

Pressure connections should be made with Micatrone mounting kits for safe and tight function. Connect the measurement outputs with HT-plastic tube 8/6 mm.

Display unit

MF-FD is fitted with a 4-digit LED display.

Zero adjustment

Press down the "zero-setting"-button until the LED turns off. Release the button and the zero-setting is finished.

Output signal setting

The Volt/mA-output signal has different terminals. Set Volt/mA signal by miniature switch, connect to selected terminal.

Setting of damping

The MF-FD offers a possibility to set different damping (time constant). At delivery the damping is set to 1,50 seconds damping.

Forced output signal

Depending on the selected output signal, 0...10 volt or 4...20 mA, the max output signal is obtained when miniature switch no 1 is set to position "ON". This function can be used to check the receiving system

Adjusting the measuring range

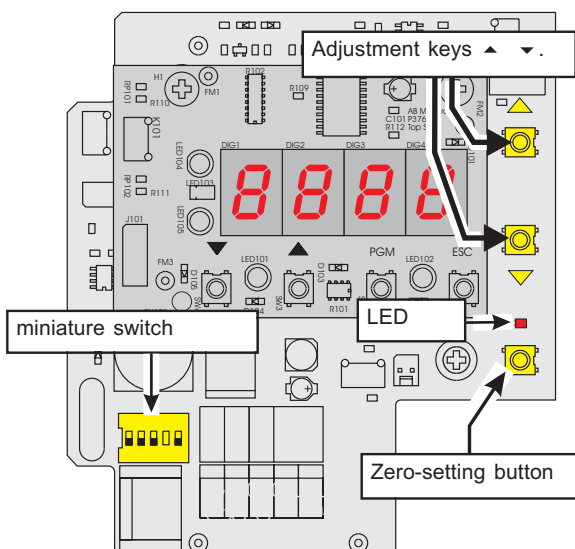
The measuring range can be adjusted to correct a measuring deviation. Instruction can be found on our web site, www.micatrone.se.

Programming, flow indication

MF-FD is programmable with 4 keys on the display unit and include programmable parameters for flow indication, number of decimals and the alarm function. For flow indication, values below 9999 can be displayed, decimal point can be set for up to 3 decimals, e.g. 9.999.

Alarm function

MF-FD include a visual alarm indicated by a flashing display on alarm state if this function is activated. By using an optional plug-in module, a potential-free changing relay output can be obtained. Alarm can be set for high or low flow/pressure. A time delay can be set for 0...600 seconds.



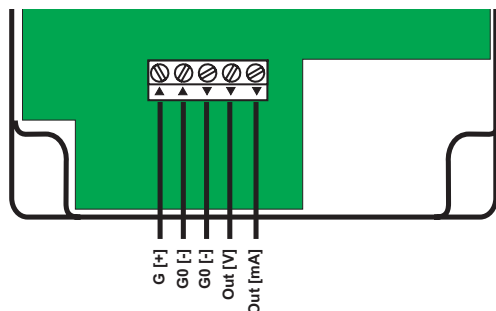
Technical data

Supply voltage:	24 ± 15% VAC, 20...32 VDC 24, 115, 230 (with transformer), 50/60 Hz
Power cons.:	Max. 3 VA (24VAC) Max 6 VA (230VAC)
Range:	0...50 Pa 0...100 Pa 0...200 Pa 0...500 Pa 0...1 kPa 0...2 kPa 0...5 kPa Other ranges on request.
Max. load:	≤ 50 kPa
Output signal:	4...20 mA max R _L = 400 Ω 0...10 Volt R _i = 0 Ω
Ambient temp.:	0...55°C
Accuracy:	Max error ± 0,5% of the full range plus ± 0,5 Pa.
Temp.drift:	Max. 0,5 % per 10°C
Damping:	Selectable; 0.05, 0.7, 1.5 or 2.2 s
Degree of protec.:	IP 65
El. connections,	
-rigid cable:	1 x 2.5 mm ² / terminal
-flexible cable:	1 x 1.5 mm ² / terminal
Cable entries:	2 st threaded holes M16x1,5 (cable glands not attached)
Pressure. conn.:	8/6 mm HT-plastic tube
Dimensions:	WxHxD = 122x120x90 mm
Weight:	0,53 kg

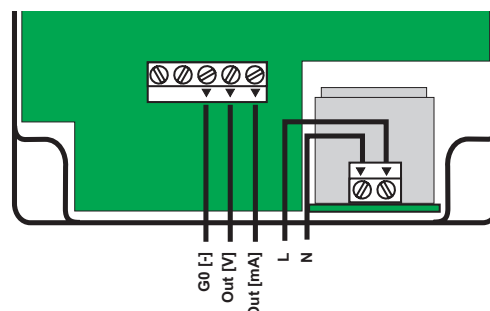
EU Compliances:

EMC	SS-EN 50081-1 SS-EN 50082-2
LVD	SS-EN 610101-1

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



Connection with transformer (Transformers available for 24/115/230 VAC)



Service

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

Cleaning

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

Transformer (Optional)

The output signal is normally NOT galvanically separated to 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.

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 Mounting kit for DIN-rail**
- **MFM-L1 ver 3, Alarm module**
- **Transformer 24, 115, 230 VAC, built in**

ROHS
COMPLIANT

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