

2-wire differential pressure and flow transmitter with linearized output signal

MF-PF-2W

Mi-263gb / 2008-09-12

Application

Pressure or flow measurement with 2-wire connection in industrial applications.

Mounting

The apparatus is designed for wall mounting using hidden mounting screws. Remove the front cover, use screws with max 4 mm diameter. Measurements for mounting holes are located on the backside of the enclosure.

Connect the 2-wire loop, adjust settings of the DIL-switch if necessary.

Perform a zero setting before connecting the pressure tubes.

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.

Connect positive pressure to **[+]** connection.

Connect negative pressure to **[-]** connection.

For differential pressure measurement, ensure that the highest absolute pressure is connected to the **[+]** connection.

NOTE! Leave unused connections open to the atmosphere.

Output signal

4...20 mA, pressure or flow linearized.

Supply voltage

Supply voltage 12...28 VDC.

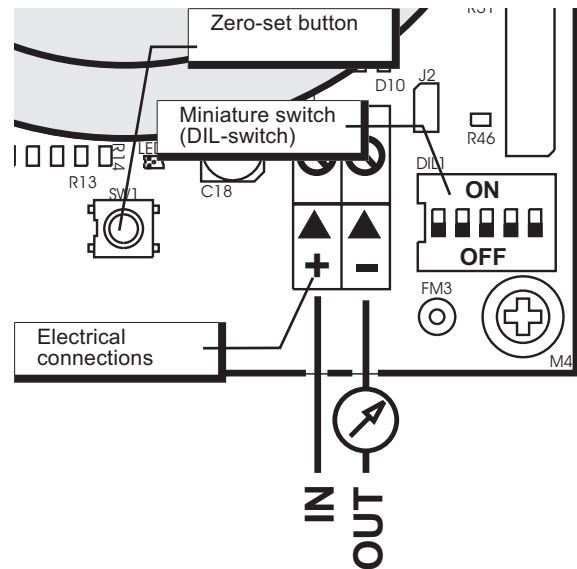
Damping

Pressure measuring is often influenced by ripple. This can be eliminated through damping of the transmitter.

The damping is possible to set for 1 or 4 seconds with the DIL-switch.

Pressure range

Check that the apparatus is marked with correct pressure range before installation.



Miniature (DIL) switch settings

Function	1	2	3	4	5
Full range	OFF	OFF	OFF		
Half range	ON	OFF	OFF		
Pressure				OFF	
Flow				ON	
Damping 1 sec.					OFF
Damping 4 sec.					ON

Zero setting

Switch on the voltage and wait at least 60 sec. Set the manifold valve in position calibration (if there is no valve, loosen the pressure tubes from the fittings).

Press the zero button and an automatic zero adjustment is done.

Reset the valve/tubes and set desired damping.

Technical data

Supply voltage:	12...28 VDC
Max load current:	100 mA
Max load:	$\frac{\text{supply voltage} - 10V}{0,020A}$
Pressure ranges:	Full range (half range) 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*) kPa 0...5 (0...2,5*) kPa
	*)Half measuring range using DIL switch. Accuracy is always in % of the full range.
	Other ranges available on request.
Overload:	Max. 50 kPa
Output:	4...20 mA
Ambient temperature:	0...55°C
Accuracy:	< ±1,0% of full pressure range (SS IEC 770)
Temp.drift:	Max. 0.5 % per 10°C
Damping:	Selectable 1 or 4 seconds.
Degree of protection:	IP 65
Electrical connections:	Max 2 x 1.5 mm ² per terminal
Cable entry:	1 threaded hole M16x1,5 (cable gland not included)
Pressure connections:	8/6 mm plastic tube
Dimensions WxHxD:	122 x 120 x 92 mm
Weight:	0,6 kg

Maintenance

MF-PF-2W does not normally need any maintenance but it is recommended to check the zero setting every 6:th month.

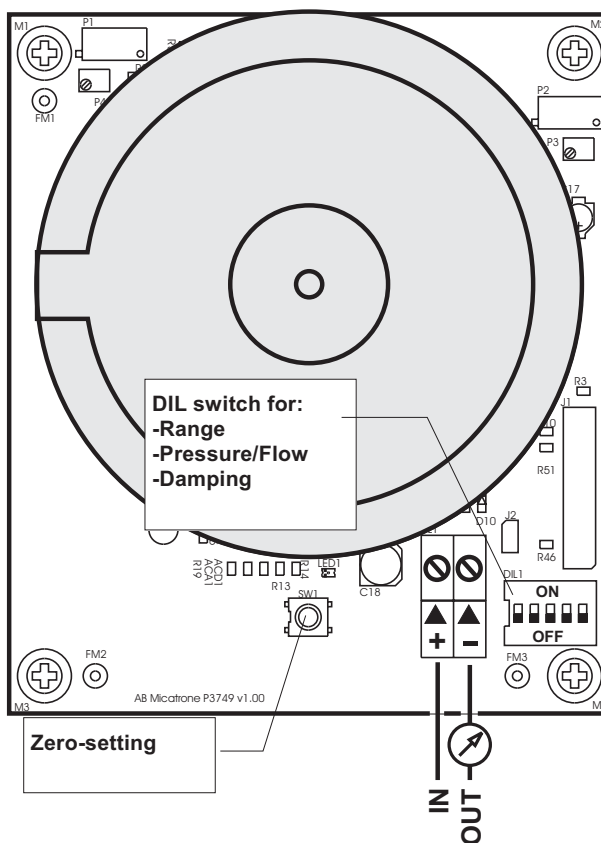
Cleaning

The enclosure can be cleaned with a soft cloth and a light detergent. Do not use scouring-powder or dissolvent.

Accessories

- Pressure connection kit VR-DR
- Block valve 2-TK/M mounted on transmitter
- Block valve 2-TK with wall brackets
- HT-tube 8/6 yellow, per meter or roll 50 meter
- MFS - Flow sensors

Electrical connections



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