

User guide

PFM 100 Measuring Instrument

Application



The PFM 100 is used for measuring the differential pressure on both sides of a valve in hydronic systems.

The set consists of:

- One PFM 100 Measuring Instrument.
- Two hoses with couplings.
- Two needles incl. ball valves.

Flow and pressure can be displayed in various units, which you can choose from in the menu.

The PFM 100 can communicate with you in one of 10 possible languages.

Please note that the pressure unit must not be exposed to subzero temperatures. The pressure unit must at all times be stored at temperatures above 0° C.

Functions



ON / OFF button.



Menu button.

Used for navigating through the menu options. Press to enter the menu. Press and hold to exit the menu.



Confirmation button.

Press to select the marked item.

Usage

1. Connect the hoses to the valve.
2. Air the hoses.
3. Connect the valve to the PFM 100.
4. Zero adjust.
 - From the main menu select the Zeroing option in order to correct the static pressure influence.
 - To reset the device to zero follow the instruction on the display.
5. Type in the Kv-value.

If the kV value of the measured valve is known, it can be entered in the PFM 100 to display the valve flow.

 - From the main menu select the Kv value option.
 - Press the Confirmation button to go through the sequence of numbers.
 - Press the Menu button to increase / decrease the numbers.
 - Press and hold the Confirmation button to save and exit the menu.
6. Read off the flow in the display of the PFM 100.

Technical Specifications

Type	Specifications
Pressure sensor	Piezo resistive true differential
Pressure range	10 bar
Max. overpressure	Positive side: 15 bar Negative side: 10 bar
Non-linearity and hysteresis error	0.15% of pressure range
Temperature error	1.5% over ambient and medium temperature
Medium temperature	-5 to 90°C
Ambient temperature	-5 to 50°C
Storage temperature	-5 to 50°C
Pressure connection	R21 quick couplers
Batteries	2 x AA NiMH rechargeable
Power consumption	Max. 55 mA
Display	128 x 64 monochromatic, backlight
Keyboard	3 keys
Pressure units	11
Flow units	11, incl. US units
k _v -range	0 to 99999, with 0.1 step
Dimensions	94 x 218 x 35 mm
Weight	600 g, incl. batteries
Cover	IP65
Calibration validity	12 months

Ordering

No.	Type	Set / pcs	Danfoss code no.
1	FPM 100 Measuring Instrument	1	003L8260

Accessories

No.	Type	Set / pcs	Danfoss code no.
1	Measuring hose, 2 x 1.5 m	1 set	003L8261
2	Needle	1 pcs	003L8262
3	Quick coupling	1 pcs	003L8263
4	Filters	1 set	003L8264
5	Strap	1 pcs	003L8265
6	ASV-I/M measuring KIT for PFM100	1 set	003L8274
7	Δp tool for pump optimization	1 pcs	013G7861

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