User Guide

PFM 100 Measuring Instrument

1 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 sub-zero temperatures. The pressure unit must at all times be stored at temperatures above 0° C.

2 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.

3 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 K_v-value.
   If the k_V 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.

4 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

5 Ordering PFM 100

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

6 Spare Part List

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

Danfoss A/S
Heating Solutions
Haarupvaenget 11
8600 Silkeborg
Denmark
Phone:+45 7488 8000
Fax: +45 7488 8100
Email: heating.solutions@danfoss.com
www.heating.danfoss.com

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss Heating Solutions and the Danfoss Heating Solutions logotype are trademarks of Danfoss A/S. All rights reserved.

Produced by Danfoss Heating Solutions © 08/2016