



Heat-meter Multi-jet flow Volumess VI for installation points IST, TE1, M60

- Detection of back flow
- Measuring cycle temperature, dynamic: 2 / 60 s
- Outlet flow and inlet flow can be set on site
- Detachable calculator unit, pulse cable length 50 cm (optional)

Communication interfaces:

- wireless M-Bus
- wireless M-Bus + 3 pulse inputs
- M-Bus
- M-Bus + 3 pulse inputs
- 1 pulse output
- 2 pulse outputs
- LoRa





Technical data:

Flow sensor

| Measuring method | | bidirectional inductive scanning system | | | |
|---|--------------------|---|--|------|------|
| Sizes | Nominal flow q_p | m ³ /h | 0.6 | 1.5 | 2.5 |
| | Low flow threshold | l/h | 3.5 | 4 | 5.5 |
| | Minimum flow q_i | l/h | 12 | 30 | 50 |
| | Maximum flow q_s | m ³ /h | 1.2 | 3 | 5 |
| Pressure drop Δp at q_p | | bar | 0.1 | 0.2 | 0.24 |
| Pressure drop Δp at q_s | | bar | 0.4 | 0.74 | 0.92 |
| Dynamic range q_i/q_p | | | 1:50 | 1:50 | 1:50 |
| Accuracy class (MID) | | | class 3 | | |
| Nominal pressure PN | | bar | 16 | | |
| Temperature range medium heat | | °C | 15 – 90 | | |
| Temperature range medium cooling (q_p 1.5 and q_p 2.5) | | °C | 5 – 50 | | |
| Point of installation | | | outlet flow and inlet flow; can be set when the amount of energy is still ≤ 10 kWh | | |
| Mounting position | | | any position | | |
| Protection class | | | IP65 | | |
| Medium | | | water; optional, without approval*: water with a propylene glycol or ethylene glycol percentage rate of 20 %, 30 %, 40 % or 50 % (* type and concentration of glycol can be set at any time) | | |

Calculator unit

| | | |
|---|-------|---|
| Temperature range medium heat | °C | 0 – 150 |
| Temperature range medium cooling (q_p 1.5 and q_p 2.5) | °C | 0 – 50 |
| Ambient temperature in the field | °C | 5 – 55 at 95 % relative humidity |
| Transport temperature | °C | -25 – 70 (for maximal 168 h) |
| Storage temperature | °C | -25 – 55 |
| Temperature difference range $\Delta\Theta$ heat | K | 3 – 100 |
| Temperature difference range $\Delta\Theta$ cooling | K | -3 – -50 |
| Minimum temperature difference $\Delta\Theta$ heat | K | > 0.05 |
| Minimum temperature difference $\Delta\Theta$ cooling | K | < -0.05 |
| Minimum temperature difference $\Delta\Theta$ HC heat / cooling | K | > 0.5 / < -0.5 |
| Resolution temperature | °C | 0.01 |
| Measuring cycle temperature; dynamic | s | 2 / 60; using a power pack: 2 s permanent |
| Display | | LCD - 8 digits + special characters |
| Decimal places | | up to 3 after comma |
| Units | | MWh, kW, m ³ , m ³ /h (kWh, GJ, MMBTU, Gcal); unit of energy can be set when the amount of energy is still ≤ 10 kWh |
| Interfaces | | optical interface (M-Bus protocol); optional: wireless M-Bus; wireless M-Bus + 3 pulse inputs; M-Bus; M-Bus + 3 pulse inputs; 1 pulse output; 2 pulse outputs; LoRa |
| Power supply | | exchangeable 3 V lithium battery; all types prepared for 3 V power pack (input voltage 230 V / 24 V) |
| Estimated lifetime | years | 10 (no option: 1 pulse output); 6+1 |
| Data storage | | nonvolatile memory |





Reading dates

selectable yearly reading date;

2 tariff registers

15 monthly and semimonthly values via display or wireless M-Bus (compact mode); 24 monthly and semimonthly values via optical interface or M-Bus

Storage of maximum values

can be set individually; adding up energy or time flow, power and temperatures (inlet, outlet, $\Delta\Theta$), plus the respective maximum values of the last 15 months

Protection class

IP65

CE

yes

EMC

EN 1434

Temperature sensors (2-wire technique)

Platinum precision resistor

Pt 1000

Diameter

mm

5; 5,2; 6; AGFW 27,5; 38; needle sensor 3,5 x 75

Length of cable

m

1,5; 3; 6

Installation

asymmetrical; symmetrical

Weights

Weight (basic version, kg)

Type I

Type T

Type M

Calculator not detachable

0.655

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Calculator detachable

0.700

0.780

0.700

Dimensions

Pulse cable length (only separable version)

m

0.50

Calculator housing (H x W x D)

mm

75 x 110 x 34.5

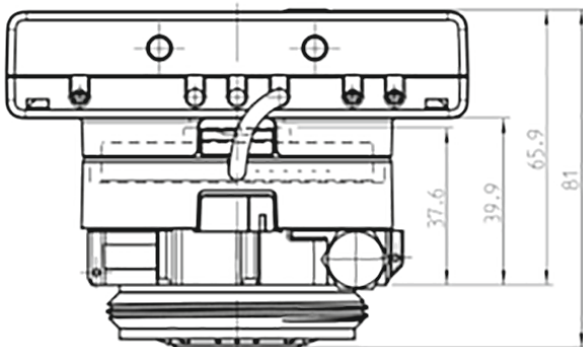
Thread

Type I: 2"

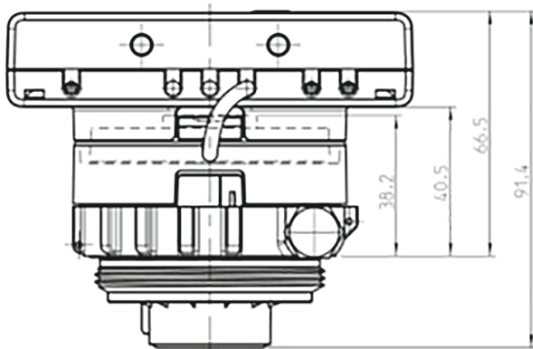
Type T: M62 x 2

Type M: M60 x 1.5

VoluMess VI - I



VoluMess VI - T



VoluMess VI - M

