



## Heat-Meter Multi-jet flow Volumess VI for installation points A1

- 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 <sup>3</sup> /h	0.6	1.5	2.5
	Low flow threshold	l/h	3.5	4.0	5.5
	Minimum flow $q_i$	l/h	12	30	50
	Maximum flow $q_s$	m <sup>3</sup> /h	1.2	3	5
Pressure drop $\Delta p$ at $q_p$		bar	0.1	0.2	0.24
Pressure drop $\Delta p$ 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 $\leq$ 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 <sup>3</sup> , m <sup>3</sup> /h (kWh, GJ, MMBTU, Gcal); unit of energy can be set when the amount of energy is still $\leq$ 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**

2 tariff registers  
Storage of maximum values

Protection class  
CE  
EMC

**Temperature sensors (2-wire technique)**

Platinum precision resistor

Diameter  
Length of cable  
Installation

**Weight**

Weight (basic version)

**Dimensions**

Pulse cable length (only separable version)  
Calculator housing (H x W x D)  
Thread

selectable yearly reading date;

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

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

IP65  
yes  
EN 1434

Pt 1000

5; 5,2; 6; AGFW 27,5; 38; Nadelfühler 3,5 x 75

1,5; 3; 6

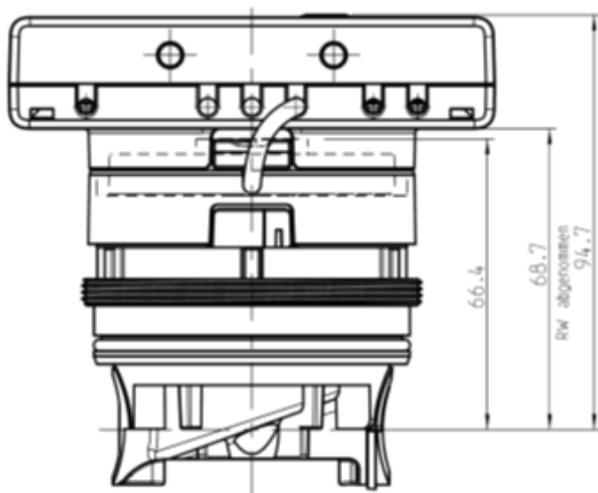
asymmetrical; symmetrical

kg 0.955

m 0.50

mm 75 x 110 x 34.5

M77 x 1.5





pressure drop [mbar]

**pressure drop VoluMess VI - A1**

