



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	4.0	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/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 $\leq 10 \text{ kWh}$			
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 $\leq 10 \text{ kWh}$
Interfaces		optical interface (M-Bus protocol); optional: wireless M-Bus; wireless M-Bus + 3 pulse inputs;
Power supply		M-Bus; M-Bus + 3 pulse inputs; 1 pulse output; 2 pulse outputs; LoRa 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

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

Temperature sensors (2-wire technique)

Platinum precision resistor

Pt 1000

Diameter

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

Length of cable

1,5; 3; 6

Installation

asymmetrical; symmetrical

Weight

Weight (basic version)

kg

0.955

Dimensions

Pulse cable length (only separable version)

m

0.50

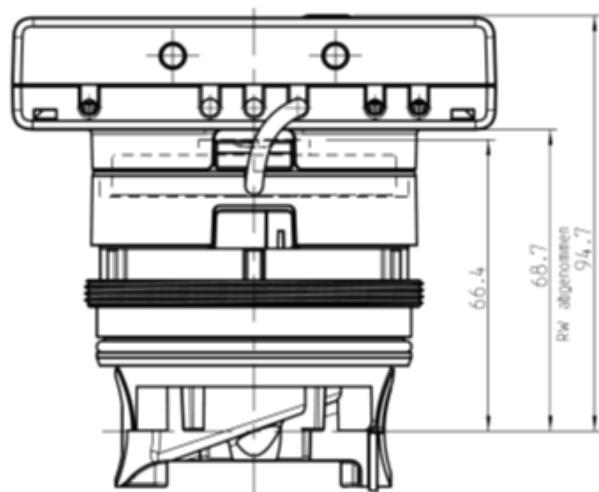
Calculator housing (H x W x D)

mm

75 x 110 x 34,5

Thread

M77 x 1,5





pressure drop [mbar]

pressure drop VoluMess VI - A1

