

Heat meter

# Ultrasonic heat meter UHMI

**The ultrasonic heat meter for fully electronic heat measurement: economical and service-friendly.**

## Product description

The flow volume is measured according to the ultrasound open jet principle. By direct comparison of delays between ultrasound signals in flow direction and signals against the flow direction, the flow volume is calculated with ultimate accuracy, taking into account the temperature-dependency of the volume recording.

UHMI compact heat meters are extremely versatile. Suitable for house transfer stations of local and district heating systems as well as central heating systems in residential buildings where separate individual accounts are required.

The counter is equipped with an LC display screen and extensive display and storage facilities for service and statistics with 2 display functions.

## Performance features

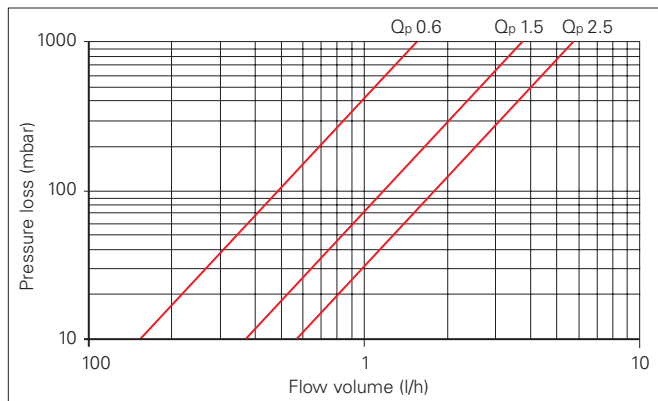
- Extremely high measurement accuracy and stability by using ultrasound technology to measure the flow volume
- No mechanical wear thanks to flow volume measurement without moving parts
- Dynamic range of 1:100 corresponding with EN 1434 (in Germany 1:50) in category 3 and into many European countries (class 2 on request)
- total dynamic range 1:500
- Integration in residential control systems (Opportunities: pulse interface for energy and volume data or m-bus)
- Optical interface integrated as standard
- Compact design, removable counter
- Temperature sensor for installation in ball valve or T-pieces sleeve
- Inlet or outlet slow-down sections are not required.



## Technical data

Surrounding conditions	corresponding with EN 1434 category A			
Protection category	IP 54			
Display	7-digit LCD			
Unit	kWh			
Nominal flow	$q_p$ (m <sup>3</sup> /h)	0.6	1.5	2.5
Max. flow	$q_s$ (l/h)	1200	3000	5000
Min. flow	$q_i$ (l/h)	6*	15*	25*
Inlet flow	(l/h)	2.4	6	10
Temperature range				
Volume transmitter	(°C)	15 to 105		
Pressure loss at	$q_p$ (mbar)	140	130	205
Nominal pressure	PN (bar)	16	16	16
Nominal width DN		15	15	20
Temperature sensor model	Pt 500, Typ PS Ø 5.2 x 45 mm			
Max. temperature differential	(K)	80		
Min. temperature differential	(K)	3		
Inlet section				
Temperature differential	(K)	0.2		
Voltage feed				
Lithium-battery	11 years			

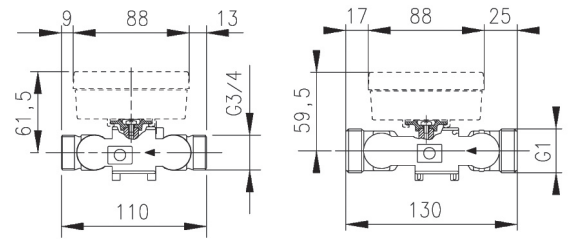
\*double value in germany



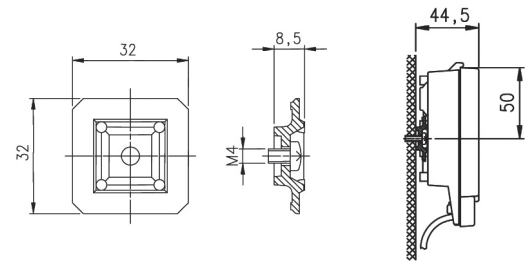
Pressure loss curve

## Dimensional sketch

Nominal flow volume	$q_p$ (m <sup>3</sup> /h)	0.6	1.5	2.5
Length volume transmitter L	(mm)	110	110	130
Height H	(mm)	61.5	61.5	59.5
Meter connection thread		G $\frac{3}{4}$ B	G $\frac{3}{4}$ B	G1B
Screw joint connection thread		R $\frac{1}{2}$	R $\frac{1}{2}$	R $\frac{3}{4}$
Length counter L2	(mm)	88	88	88
Width counter	(mm)	112	112	112
Height counter R	(mm)	44.5	44.5	44.5



counter dimensions



wall mounting