

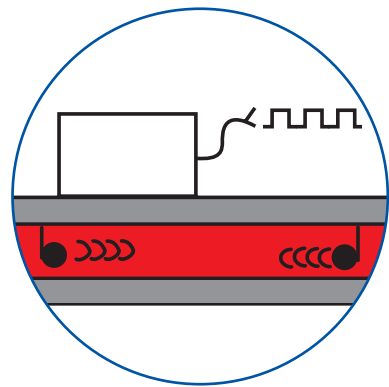
# MIMAS

## Ultrasonic metering device for district heating networks

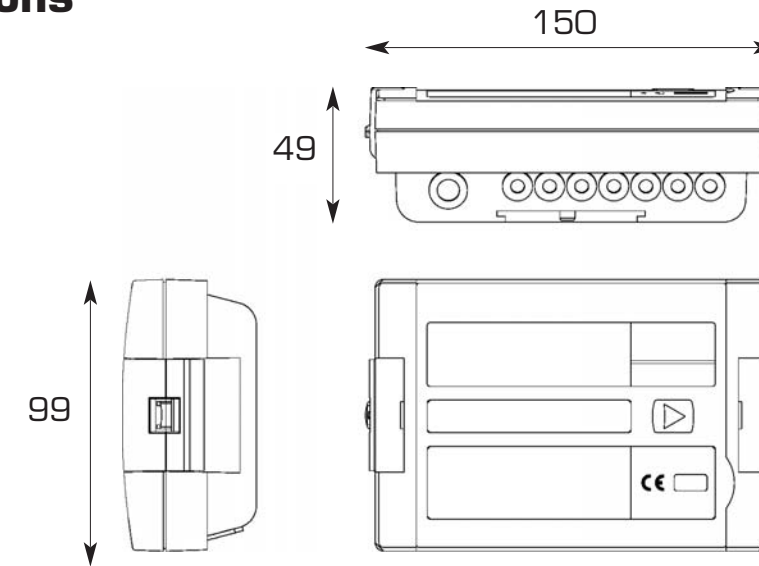
Mimas is an ultrasonic metering tube for heating meters. The principle used is based on measuring the transit time. Mimas has class C approval in all positions.

The ultrasonic technology gives it a number of benefits - low head loss, large metering dynamics, low start flowrate etc. Mimas is also insensitive to suspended particles, as it is entirely static. It offers a wide temperature range (0 - 150°C). It is available in a flanged version in all sizes DN 25 to 80 and a threaded version in sizes DN 25 and 40.

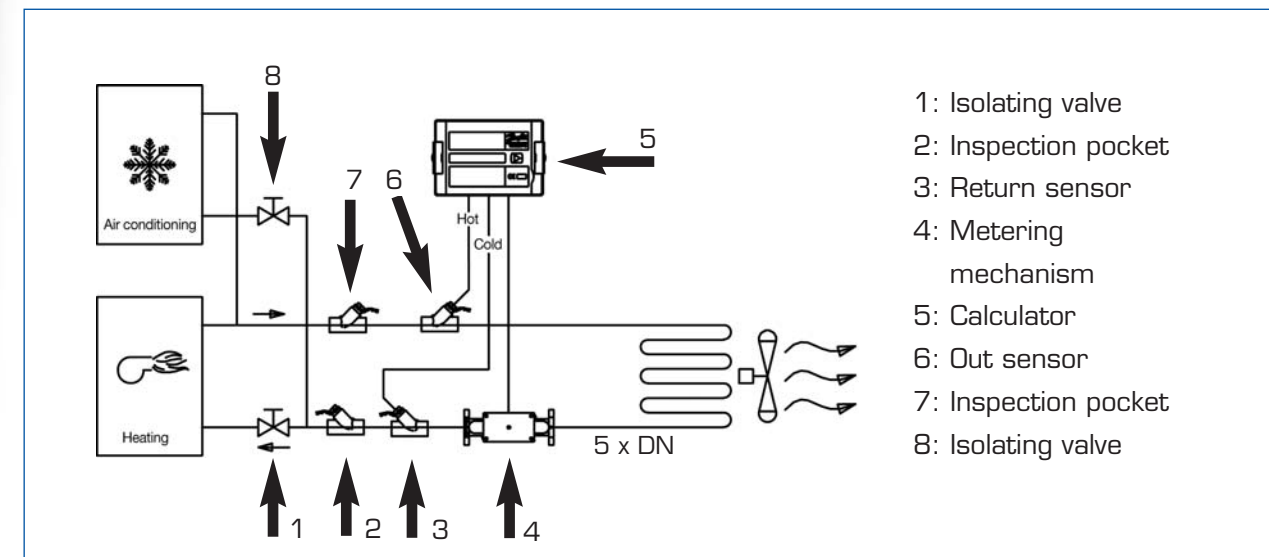
Mimas can be powered by the 230-V mains, a long-life cell (8-10 years) or directly by the Mimas calculator (compact version; see interior pages).



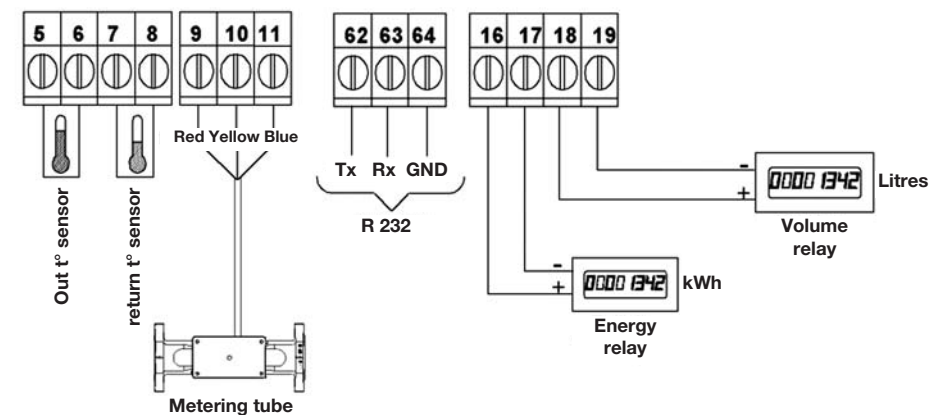
### Dimensions



### Installation diagram



### Calculator wiring diagram



Distributed by :

If you have any question, please do not hesitate to contact us :



**HEAD OFFICE** B.P. 10160 - 67 rue du Rhône - 68304 Saint-Louis Cedex - France  
 Tel. +33 (0)3.89.69.54.00 - Fax +33 (0)3.89.69.72.20  
 Web: www.sappel.com - E-mail: info@sappel.com

**EXPORT** B.P. 10160 - 67 rue du Rhône - 68304 Saint-Louis Cedex - France  
 Tel. +33 (0)3.89.69.54.21 - Fax +33 (0)3.89.69.54.22  
 E-mail: export@sappel.com

Non contractual document. Please have the features specified before ordering.

Ingénieur P. BEILER S.A. - 68330 Huingange

## Technical characteristics of the metering tube

DESCRIPTION	Mimas					
	25	32	40	50	65	80
Nominal Diameter	25	32	40	50	65	80
<b>METERING RANGE (m<sup>3</sup>/h)</b>						
Metrology class	Classe C (from 20°C) - all positions					
Installation position	All positions*					
Minimum constructor flowrate Const. Q <sub>min</sub> (m <sup>3</sup> /h)	0.012	0.012	0.02	0.03	0.05	0.08
Minimum approved flowrate Appr. Q <sub>min</sub> (m <sup>3</sup> /h)	0.06	0.06	0.10	0.15	0.25	0.40
Permanent flowrate Q <sub>p</sub> (m <sup>3</sup> /h)	6	6	10	15	25	40
Overload flowrate Q <sub>s</sub> (m <sup>3</sup> /h)	9	9	20	30	50	80

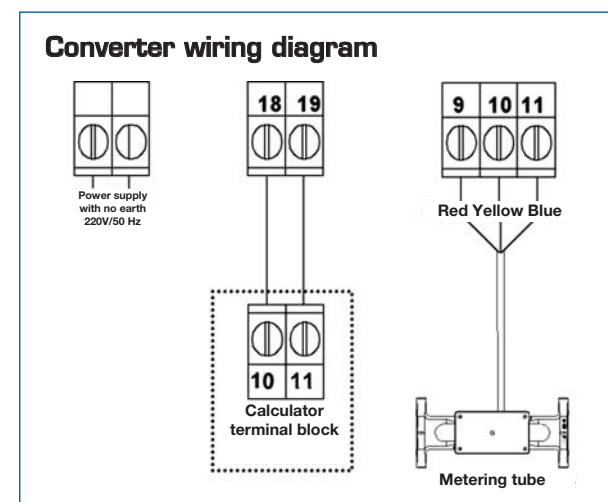
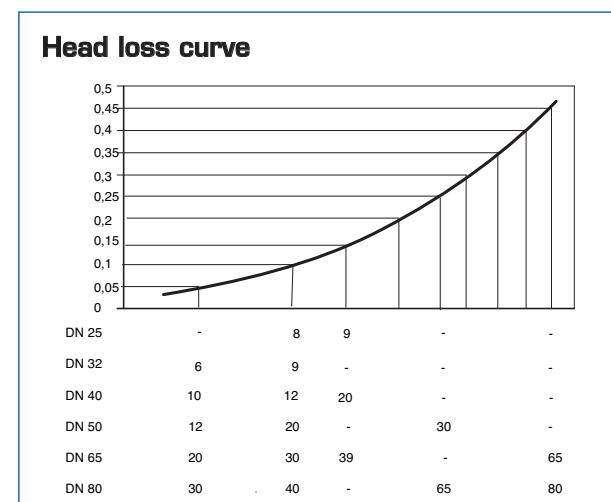
\* If temperature > 120°C install head down

### HEAD LOSS

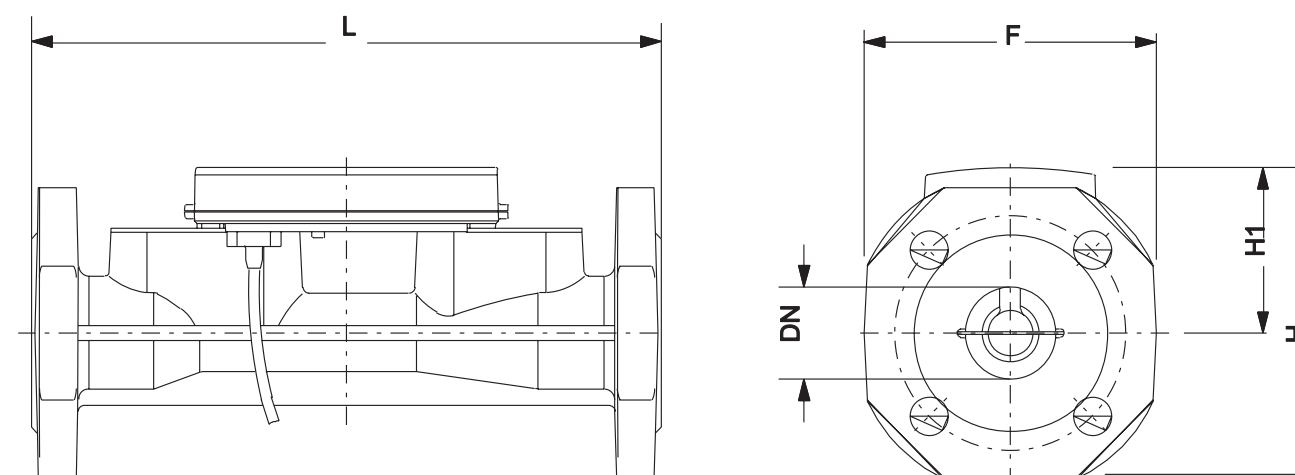
Kvs (Δ P = Q <sup>2</sup> /Kvs <sup>2</sup> )	24	27	48	60	95	125
	24	27	48	60	95	125

### DIMENSIONS, MASS AND CONNECTIONS

Length L	mm	260	260	300	270	300	300
Width (Flange) F	mm	100	125	138	147	170	188
Height H1	mm	78	78	78	91	91	91
Height H	mm	128	140	147	165	176	189
Connections	Flange	Flange PN 16 / 25					
	threaded	G1"1/4	-	G2"	-	-	-
Mass in kg	Flange	5.2	6,1	7.9	8.5	10.8	12.6
	threaded	3.6	-	3.6	-	-	-



### Dimensions



## Also available in compact version with calculator



## Technical specifications of the calculator

### METROLOGY

Use	Heating, air-conditioning or bidirectional
Approval no.	F-03-G-125 (complies with EN 1434)
Accuracy class	Accuracy class1 according to decree 76.1327 of Dec.10/12/76

### TEMPERATURE RANGE

Approved (actual) temperature range	0°C - 150°C (0°C - 170°C)
Approved (actual) heating ΔT range	3°C - 150°C (0.2°C - 150°C)
Approved (actual) air-conditioning ΔT range	2°C - 20°C (0.2°C - 60°C)

### TEMPERATURE SENSORS

Pt 500 sensors	Two prewired wires, 3 or 10 metres
----------------	------------------------------------

### CALCULATOR

Pulse input	According to metering tube DN
Computation principle	Variable K
Installation	On outward or return pipe (depending on program)
Heat-conveying liquid	Water
NPN open-collector transistor output	Energy and volume (potential-free semiconductor 50 V; 100mA)
Serial link	RS232 wire connection with M-Bus protocol 300 baud speed, no parity, 1 stop bit
Optical link	Optical output on front (M-Bus protocol)

### DISPLAY

Energy display unit	KWh or MWh (over 8 digits)
Volume display unit	m <sup>3</sup> (over 8 digits)
1 line with 8 alphanumerical characters	
The drop-down menu is used to select the required display (energy, volume, flowrate, power, temperatures etc.)	

### POWER SUPPLY

Power supply	Replaceable lithium cell, life 8 years
Data protection	Backed up in EEPROM

### TEMPERATURE

Ambient temperature	5°C à 55°C
Storage temperature	-25°C à 70°C

### ENVIRONMENT

Degree of protection	IP 54
EEC compatibility	Complies with the Electromagnetic Compatibility directive