

RAY

Thermal-energy meter for heating or air conditioning (combined)

Ray is a domestic thermal energy meter.

It is especially compact and suitable for domestic metering.

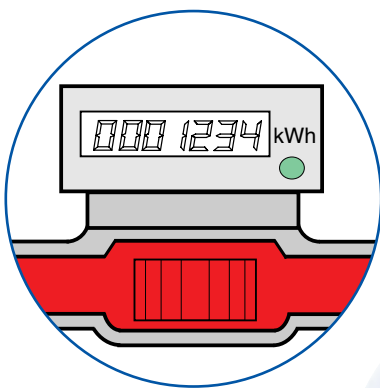
Ray features two temperature sensors, one of which is directly inserted into the hydraulic part. Installation is simplified, as there is only one sensor to install in the piping.

Ray may be equipped with an energy / volume relay output or an M-Bus link.

Ray is available in 2 versions :

- heating meter
- comined meter: for metering of heating and air conditioning.

Ray is powered by a battery with a 10-year lifetime.



Main technical characteristics

TYPE

	RAY	
Nominal diameter	15	20

METROLOGICAL CHARACTERISTICS

MID approval	DE-07-M1004-PTB030
Accuracy class	2

CHARACTERISTICS OF THE METER

Installation position	Horizontal/Vertical		
Temperature range	5°C to 90°C		
Start flowrate (m ³ /h)	0.002	0.004	0.006
Minimum flowrate Q _{min} (m ³ /h)	0.006	0.015	0.025
Nominal flowrate Q _n (m ³ /h)	0.6	1.5	2.5
Maximum flowrate Q _{max} (m ³ /h)	1.2	3	5

HEAD LOSS

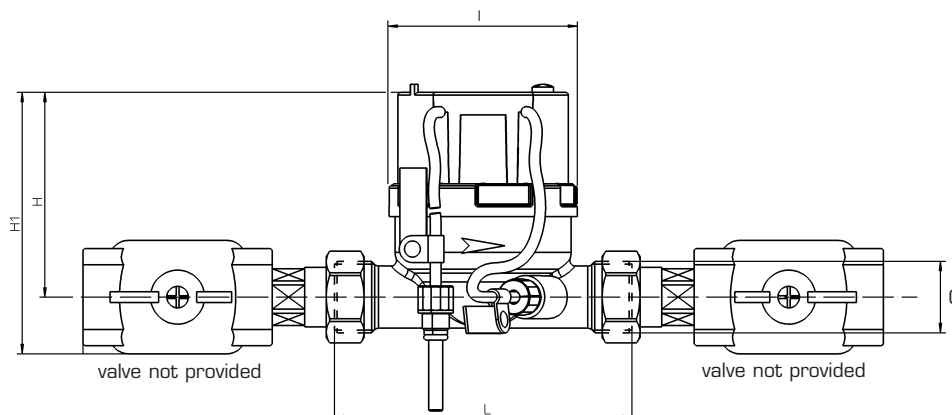
Kvs ($\Delta P = Q^2/Kvs^2$)	1.2	3	5
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CHARACTERISTICS OF THE CALCULATOR

Application	Heating or combined
Approved / actual ΔT range	0.25 to 147K / +3 to + 147K
Installation	On return line in standard version / on flow line as an option
Heat-conveying liquid	Water
Temperature sensors	Pt 500 pre-wired with 2 wires 1.5 m (flow) and 0.4 m (return)
Power supply	Lithium battery 3 VDC, 10-year lifetime
Relay outputs	Energy and volume
Serial link	Wired M-Bus link, 2400 bauds, with parity, 1 stop bit
Protection index	IP 54
CE compatibility	Complies with the directive on electromagnetic compatibility

DIMENSIONS, WEIGHT AND CONNECTIONS

Length L	mm	110	130
Length l	mm	70	70
Height H1	mm	95	95
Height H	mm	75	75
Connection	G	3/4"	1"
Weight	kg	0.9	0.99



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

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