# **EW700 Series Ultrasonic Heat Meters**

# DN15...40 FOR HEATING AND CHILLED WATER APPLICATIONS

## PRODUCT DATA



# **Design and Materials**

EW700 Series heat meters consist of:

- Electronic energy calculator with 8-digit LCD display
- Ultrasonic flow sensor with internal assembly made of PPO™ and mirrors made of stainless steel
- Brass flow sensor housing with external threads according to ISO228 on inlet and outlet and suitable externally threaded tailpieces with union nuts and sealings
- Temperature sensors for supply and return pipeline with suitable brass fittings

# **Application**

Honeywell EW700 Series ultrasonic heat meters are used for energy measurement of heating or chilled water in residential and small commercial heating and air conditioning systems.

They are available in DN15...40 and have an electronic energy calculator with separate register for heating and cooling energy. They are fitted with an M-Bus interface for integration into M-Bus networks.

EW700 Series heat meters have MID approval.

### **Features**

- · Fully resistant to external magnetic fields
- Robust ultrasonic flow sensor
- M-Bus interface as standard

# **Specifications**

Medium Heating or chilled water

Medium temperature 4...95°C

Operating pressure max. 16bar

Measuring process Electronic compact heat and

chilled water meter with ultrasonic

flow measurement

Display LCD, 8-digit kWh, MWh, GJ

**Temperature sensors** Pt1000 with 2-wire leads

Battery lifetime10 yearsInterfacesM-Bus, IrDAApprovalsMID Class 2

## Flow Data

Table 1. Flow data

DN size		15	20	25	32	40			
Flow rates according to MID									
Minimum (qi)	l/h	30	50	70	120	200			
Pemanent (qp)	m³/h	1.5	2.5	3.5	6	10			
Masimum (qs)	m³/h	3	5	7	12	20			
Dynamic range (qp/qi)		50:1	50:1	50:1	50:1	50:1			
Additional data									
Pressure drop at qp	mbar	184	207	148	139	111			

## **Function**

- Calculator: the meter is equipped with a fully electronic energy calculator with separate registers for heating and chilled water energy. It has an eight digit LCD with three decimal places.
  - Calculator and flow sensor are connected by a permanently fixed cable with a length of 1m
- Flow sensor: the ultrasonic technology of the flow sensor combines high measuring accuracy with long term stability and low starting volume
- Temperature sensors: the meter is equipped with a pair of Pt1000 temperature sensors with a length of 1.5m each
- Interfaces: EW700 Series ultrasonic heat meters are equiped with M-Bus and IrDA interfaces as standard

# Installation

- Calming legs before or after EW700 Series water meters are not required
- All types may be installed in horizontal or vertical position
- Avoid installation at highest point of system or system part as air may be trapped in meter
- It is recommended to place a ballvalve before and after the meter for easy replacement
- During measurement meter must be completely filled with water

# **Dimensions and OS-Numbers**

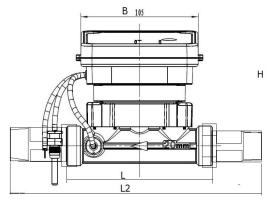


Fig. 1.

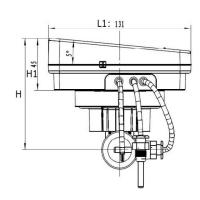


Fig. 2.

Table 2. Dimensions and OS-Numbers

DN Size	15	20	25	32	40
Length L	110	130	160	180	200
Length L1	131	131	131	131	131
Length L2	203	235	280	300	330
Whidth B	105	105	105	105	105
Height H	94	96.5	99	102.5	106.5
Height H1	45	45	45	45	45
Threads meter	G3/4"	G1"	G1 1/4"	G1 1/2"	G2"
Thread tailpiece	1/2"	3/4"	1"	1 1/4"	1 1/2"
Thread temp. sensor fitting	M10 x 1mm				

OS-No.	EW7001AM1200	EW7001AM2000	EW7001AM2600	EW7001AM3900	EW7001AM4400
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NOTE: All dimensions in mm unless stated differently

### **Environmental and Combustion Controls**

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