EW100 Series

Singlejet Water Meters

DN15 - 20 for Cold and Warm Drinking Water Applications

APPLICATION

EW100 Series compact singlejet dry measuring drinking water meters are used for volume measurement of cold or warm water in residential or non-residential drinking water systems.

Standard applications are multi-family houses, offices and administrative buildings.

The meters are typically used by private building owners and property associations or from building maintenance companies and housing estate agents.

They are available in sizes DN15 to DN20and have a mechanical counter.

EW1100 water meters are suitable for cold water up to 30 °C (easily to be identified by a blue flow indicator).

EW1101 water meters are suitable for warm water up to 90 °C (easily to be identified by a red flow indicator).

APPROVALS

- MID (approval number TCM 142/10 - 4794)
- CE
- WRAS
- Germany: KTW, W270
- France: ACS
- Italy: Law no. 31/1, Decree no. 174/2004
- Great Britain: WRAS
- Poland: Poland sanitary certificate
- Romania: Rumanian sanitary certificate

SPECIAL FEATURES

The meter can be integrated into a Honeywell Home RF system of Walk-By or AMR Network or into a M-Bus System

- Communication modules retrofittable in the field
  - RF AMR / Walk-By S-Mode
  - RF AMR* / Walk-By C-Mode
  - M-Bus
- Suitable for horizontal and vertical installation
- No upstream and downstream straight pipe requirements
- Compact design
- Protection against external magnetic fields
- Internal components are made of anhygroscopic, anti-scaling and hard-wearing plastic materials
- Rotatable counter

* according OMS

TECHNICAL DATA

Media	
Medium:	Drinking water
Connections/Sizes	
Nominal sizes:	DN15 - DN20
Nominal flow Q_3:	2.5 - 4 m^3/h
Operating temperatures	
Medium temperature: EW1000: EW1001:	 max. 50 °C max. 90 °C
Ambient temperature:	5 - 55 °C
Storage temperature:	1 - 55 °C
Specifications	
Environment:	clean, dry and dust free
Max. ambient relative humidity:	95 % (non condensing)

Specifications	
Max. operating pressure:	PN16
Material body:	Hot forged brass
Internal components:	Plastic materials
Protection class:	IP65
Environmental class:	B (fixed meter, indoors)
Optional interfaces:	• RF AMR / Walk-By S-Mode • RF AMR* / Walk-By C-Mode • M-Bus according to EN13757-2/3
Measuring process:	Mechanical dry counter with impeller and singlejet volume measurement
Display:	8-digit roller counter
Display unit:	m^3

* according OMS

FLOW DATA

Nominal size diameter:	DN	15	20
Flow rates			
Minimum (Q_1) (horizontal):	l/h	31.25	50
Minimum (Q_1) (vertical):	l/h	62.5	100
Permanent (Q_3):	**m^3/h**	**2.5**	**4.0**
Overload (Q_4):	m^3/h	3.13	5.0
Dynamic range (Q_3/Q_1) (horizontal):		80:1	80:1
Dynamic range (Q_3/Q_1) (vertical):		40:1	40:1
Additional flow data			
Starting flow:	l/h	10	12
Pressure loss class (Δ P @ Q_3):		DP63	DP40

CONSTRUCTION

Number	Component
1	8-digit roller counter
2	Cover for clip on modules
3	Outlet with plastic cover
4	Flow arrow
5	Inlet with sieve with plastic cover
6	Flow sensor housing
7	Counter housing
8	Transparent cover

METHOD OF OPERATION

Counter

- The meter can be read from a single line 8-digit roller counter with m^3. The counter unit can be rotated for better readibility. The roller counter has five places and three decimal places

Flow Sensor

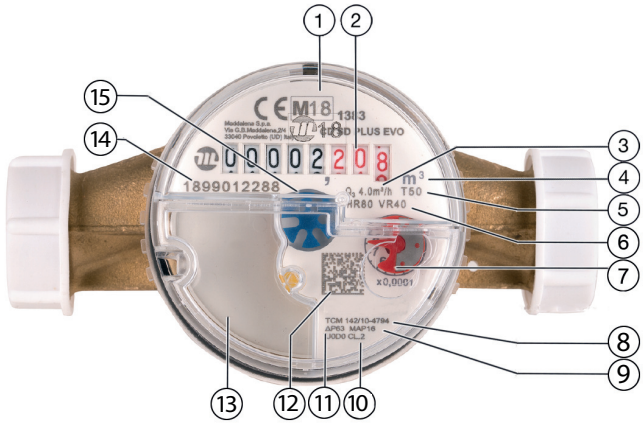
- The singlejet technology of the flow sensor combines high measuring accuracy with long term stability. The impeller is connected to the counter by a magnetic coupling

Interfaces

- EW100 Serieswater meters can be retrofitted with a clip on RF or M-Bus module. For more details on interfaces see chapter “Communication and Readout” below

FRONT PANEL CONTENTS

EW100 Top View Layout



Number	Element
1	CE mark
2	Roller counter
3	Nominal flow
4	Unit
5	Temperature class
6	Dynamic range
7	0.0001 x unit dial
8	MID approval number
9	Maximum static pressure
10	Flow profile resistance class
11	Differential pressure at nominal flow
12	Barcode
13	Cover for retrofit module
14	Serial number
15	Flow indicator Colour coding: • EW1000: Blue (cold water) • EW1001: Red (warm water)

EWA100C RF Module Top View Layout

Number	Element
1	Transparent housing
2	OS Number (order number)
3	IrDA port for use with opto head
4	CE mark and wheelie bin symbol
5	Serial number as barcode and clear text
6	IrDA interface indicator
7	RF antenna

EWA100C M-Bus Module Top View Layout

Number	Element
1	Serial number as barcode and clear text
2	CE mark and wheelie bin symbol
3	Housing
4	OS Number (order number)

TRANSPORTATION AND STORAGE

EW100 Series is a precision measuring instrument and must be treated accordingly.

The following parameters apply during transportation and storage:

- Units should only be transported in their original packaging
- Keep parts in their original packaging and unpack them shortly before use
- Appropriate lifting gear must be used where applicable
- Units should be handled carefully right way up and must not be dropped
- Units should be stored in a clean, dry and dust free environment

INSTALLATION GUIDELINES

Setup requirements

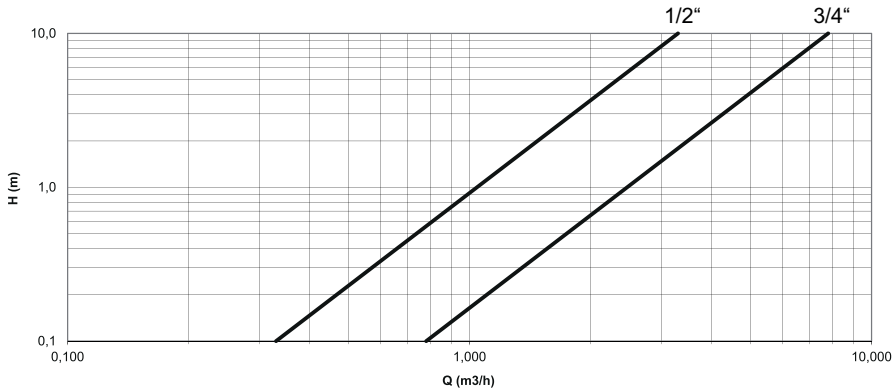
- Observe the correct flow direction. Flow direction is indicated on the housing of the flow sensor
- Calming legs before or after EW100 Series water meters are not required
- All sizes may be installed in horizontal or vertical position. In vertical position the dynamic range is smaller
- Avoid installation at highest point of system as air may be trapped in the meter
- It is recommended to place a ball valve before and after the meter for easy replacement
- During measurement the meter must be completely filled with water
- It is the responsibility of the purchaser and the installers and users of this unit to ensure that it is wired or installed into a secure network which prevents any unauthorised security intrusion or any other external risk

TECHNICAL CHARACTERISTICS

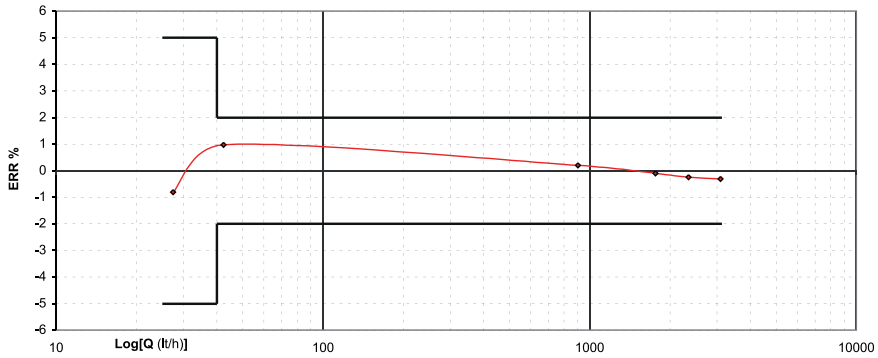
Sizing

EW100 Series water meters should be selected in such a way that typical system flow rates are between minimum flow rate (Q1) and permanent flow rate (Q3).

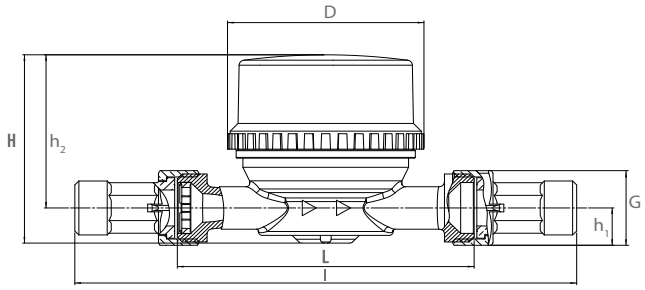
Pressure drop characteristics



Typical error curve



DIMENSIONS



Parameter			Values		
Nominal size diameter:	DN		DN15	DN15	DN20
Dimensions:	D	Counter Diameter	72.8	72.8	72.8
	G	Meter thread	3/4"	3/4"	1"
	h_1		14.5	14.5	14.5
	h_2	Height	58.7	58.7	58.7
	H		73.2	73.2	73.2
	L	Length	80	110	130
	l		160	190	228
Weight:	kg		0.45	0.45	0.50

Note: All dimensions in mm unless stated otherwise.

COMMUNICATION AND READOUT

Communication Options

EW100 Series water meters can be retrofitted with a clip on RF module or with a clip on M-Bus Module. The RF modules allow the meter to be integrated into mobile or fixed RF networks designed for remote readout of various devices.

The following modules are available

- EWA100C-RF55C for integration into C mode networks
- EWA100C-RF55S for integration into S mode networks
- EWA100C-MBUS for integration into M-Bus networks

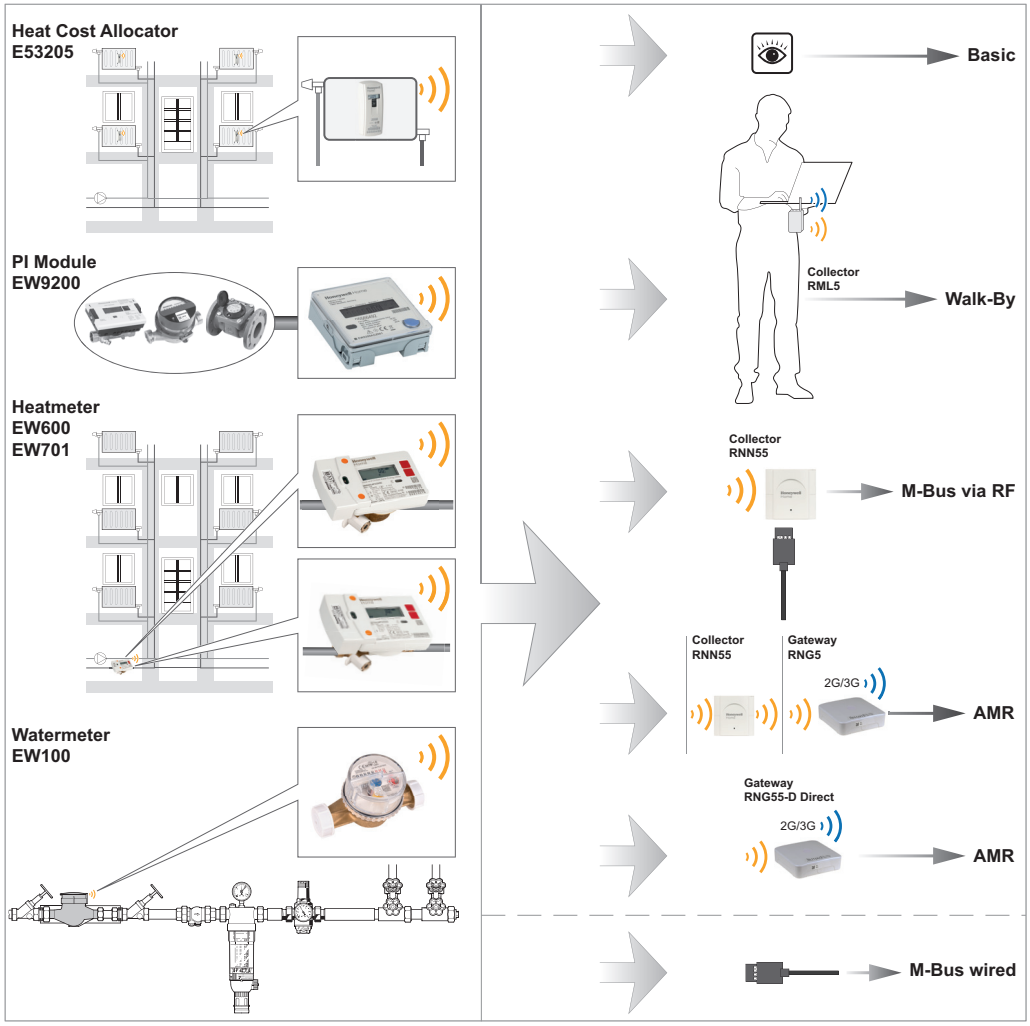
Setup

EW100 Series water meters require no setup.

SYSTEM OVERVIEW

The EW100 water meter can be integrated into various type of the systems.

For further details or variants of the systems pls contact your account manager.



ORDERING INFORMATION

The following tables contain all the information you need to make an order of an item of your choice. When ordering, please always state the type, the ordering or the part number.

EW100 - without communication module

Item:	DN size:	Nominal flow qp m^3/h:	Length mm:	Ordering Number	EAN Code:
EW100 singlejet water meter for cold drinking water applications	15	2.5	80	EW1000AZ1101	4029289072863
	15	2.5	110	EW1000AZ1201	4029289072870
	20	4	130	EW1000AZ2001	4029289072887
EW100 singlejet water meter for warm drinking water applications	15	2.5	80	EW1001AZ1101	4029289072894
	15	2.5	110	EW1001AZ1201	4029289072900
	20	4	130	EW1001AZ2001	4029289072917

Scope of Delivery

- EW100 Series water meter
- Two paper sealings
- Locking wire and seal
- Installation and setup instructions

Accessories

	Ordering Number	Description	EAN Code
	**EWA15000xx**	**Set of union nuts, sealings and externally threaded brass tailpieces (one pack per meter required)**	
	EWA1500035	For DN15, $^1/_2$" x $^3/_4$"	4029289072764
	EWA1500042	For DN20, $^3/_4$" x 1"	4029289051219
	**EWA100C**	**Clip on modules**	
	EWA100C-RF55C	RF C-Mode module for AMR / Walk-By Network	4029289081643
	EWA100C-RF55S	RF S-Mode module for AMR / Walk-By Network	4029289081650
	EWA100C-MBUS	M-Bus module for M-Bus Network	4029289083784

Associated Products

OS-No.:	Description:	EAN Code:
Associated Datacollector (fixed):		
RNN5-STD	G5 Network node (Battery supply)	5025121381420
RNN5-230V	G5 Network node (230VAC supply)	4029289083043
Associated Datacollector (mobile):		
RML5-STD	WALKBY ACT46 BLUETOOTH V.5	40 29289 081360
Associated Gateway:		
RNG5-STD	RNG5 Gateway (Battery supply)	4029289081605
RNG5-230V	RNG5 Gateway (230VAC supply)	4029289083050

For more information

homecomfort.resideo.com/europe

resideo

Ademco 1 GmbH
Hardhofweg 40
74821 MOSBACH
GERMANY
Phone: +49 6261 810
Fax: +49 6261 81309

Manufactured for and on behalf of the
Pittway Sàrl, La Pièce 4, 1180 Rolle, Switzerland
by its Authorised Representative Ademco 1 GmbH
EN0H-0427GE25 R0520
Subject to change

Honeywell Home