GE552Y215, GE552Y216, GE552Y217

Description

The GE552 thermal energy meters are dual-mode compact volumetric meters with dry display and LCD direct reading with 8 characters+icons.
The meters are supplied with M-Bus cable and are predisposed for the installation of Wireless M-Bus card (GE552Y027), to be installed inside the meter. Centralization of consumption data available with GE552-4 (M-Bus cable) or GE552-W (Wireless M-Bus) products.

Versions and product codes

Product code	Connections	Nominal flow Qn [m³/h]	Installation centre distance [mm]
GE552Y215	3/4"	0,6	110
GE552Y216	3/4"	1,5	110
GE552Y217	1"	2,5	130

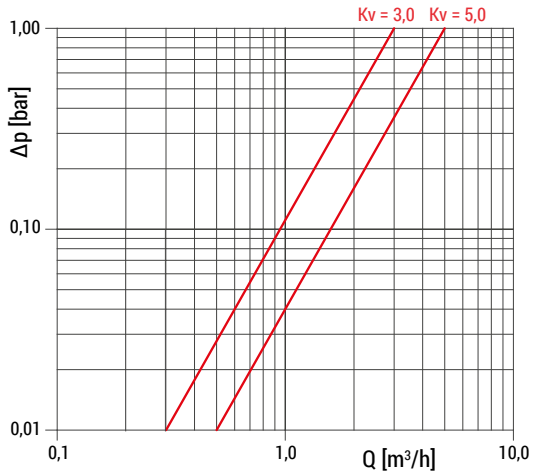
Accessories

• **GE552Y027:** Wireless M-Bus card for GE552Y215-216-217 energy meters

Technical data

Version	GE552Y215	GE552Y216	GE552Y217
Metering temperature range	Heating: 5÷90 °C Cooling: 2÷24 °C		
Nominal pressure	16 bar		
Type	Dual-mode volumetric		
Temperature range difference	Heating: 3÷70 K Cooling: 3÷20 K		
Max. metering power	650 kW		
Type of probe	PT1000		
Probe wire length	1,5 m		
Connections	3/4"	3/4"	1"
Nominal diameter	DN15	DN15	DN20
Nominal flow Qn	0,6 [m³/h]	1,5 [m³/h]	2,5 [m³/h]
Max. flow Qmax	1,2 [m³/h]	3,0 [m³/h]	5,0 [m³/h]
Min. flow Qmin	24 [l/h]	30 [l/h]	50 [l/h]
Pressure loss with Qn	< 0,25 bar	< 0,25 bar	< 0,25 bar
Display	LCD display with 8 characters+icons		
Power supply	10 years-life lithium battery		
Protection class	IP54		
Precision class	2		
H/V ratio	25/25	50/50	50/50
Environment class	A (E1; M1)		
Installation centre distance	110 mm	110 mm	130 mm

Loss of pressure



Product code	kv
GE552Y215, GE552Y216	3,0
GE552Y217	5,0

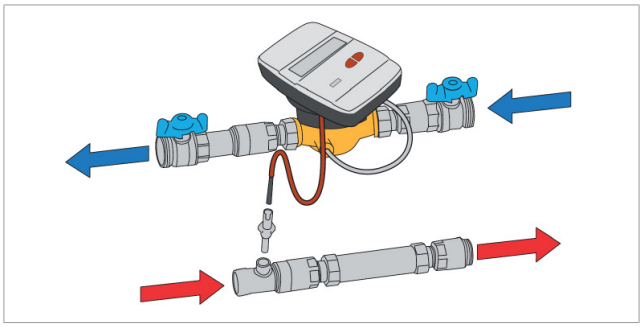
Main characteristics

• Combined heating/cooling
• N.2 inlets / N.1 outlet with integrated pulses
• M-Bus cable EN13757-2/3 integrated outlet **(supplied)**
• Wireless M-Bus EN13757-4 outlet through GE552Y027 card **(optional)**
• 360°-adjustable calculation unit
• High-precision platinum temperature probes

Installation

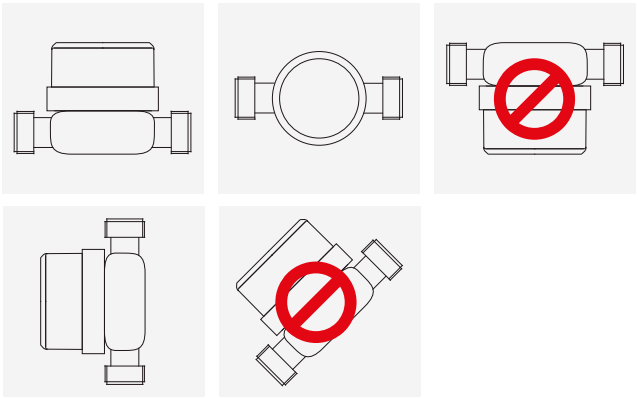
Energy meter installation

• The unit can be installed by replacing the plastic or metal spacer of the meters.
• No adapters or other connection components required.
• Before installing the unit, make sure the two piping elements are aligned and clean them thoroughly. Also make sure there is an adequate filter on the flow inlet, with clean and intact gaskets on both ends.
• Install proper flow interception and regulation devices on top and bottom of the unit to carry out inspections and maintenance operations, to control the heating circuit and seal the system.
• Check the flow direction. Install the meter so that water flows in the direction shown by the arrow marked on the brass body and complying with the recommended position (see indications on meter lid).
• For proper metering, make sure there is no air inside the pipes and that the fluid is clean and free of debris (potentially harmful for the meter turbine).
• The unit must be installed on the heating return circuit. Always refer to indications on unit lid.



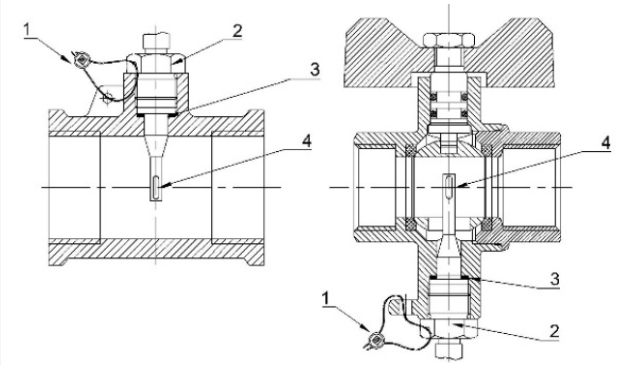
Installation positions allowed

The GE552Y215-216-217 energy meters can be installed both horizontally and vertically.
Do not install the meters with the electronic unit facing down.



Installation of temperature probes

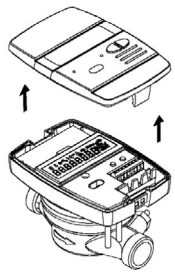
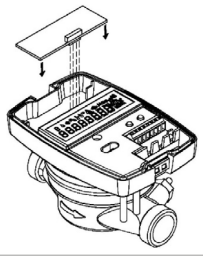
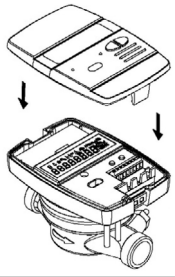
The energy meter is provided with two PT1000 probes complying with the MID 2014/32/CE directive and the EN1434 standard.
For proper installation, always comply with the directives of the rules in force.
The return probe is already integrated in the brass case.
The delivery probe must be installed in a ball valve (i.e. **R251T** series) or in a housing with M10x1 mm connection, assembled on the delivery pipe and complying with the requirements of the EN1434.
Before installing the free probe (the one not installed in the meter case), intercept the flow (by closing the ball valve or the proper dampers)
Then loosen the valve closing screw and fit adequate gaskets [3] (included in the box) to guarantee a safe installation. Fit the probe by screwing on the threaded guide and make sure it is properly tightened (see arrow [2]).



Warning.
For proper temperature metering, the tip of the probe [4] must be placed in the center of the pipe. In addition, the probe axis must be perpendicular to the piping axis (see picture).

The probe must be sealed once the installation is completed [1].

Installation of the GE552Y027 wireless card

	**1)** Remove the meter lid.
	**2)** Install the wireless card by fitting it to the finger joint as shown and making sure it is firmly in place.
	**3)** Close the unit lid. We also recommend applying the provided installer seal.

Note.
The wireless card can be configured only when installed inside the energy meter.

Data centralization

Centralization throught GE552-4 M-Bus cable

Product code	Description
GE552Y050/59 	Local concentrator for the collection, processing and recording of data originated from the M-Bus network. To be used with GE552Y056 data acquisition software. GE552Y050: able to manage up to 60 devices. GE552Y059: including power supply, capable of managing up to 250 devices.
GE552Y058 	M-Bus/M-Bus Wireless datalogger for acquisition, processing and recording of data from wired or wireless M-Bus devices. Directly manages up to 6 concentrators, max. 500 devices wired to 20 devices connected directly. Supports max. 2500 Wireless devices (via repeater).
GE552Y060 	Modem router 3G/EDGE/GPRS - wireless for remote connection of the GE552Y058 datalogger.
GE552Y056	Software for data acquisition from the M-Bus central unit. To be combined with the GE552Y050/59 data concentrator

Centralization throught GE552-W Wireless M-Bus

Product code	Description
GE552Y058 	M-Bus/M-Bus Wireless datalogger for acquisition, processing and recording of data from wired or wireless M-Bus devices. Directly manages up to 6 concentrators, max. 500 devices wired to 20 devices connected directly. Supports max. 2500 Wireless devices (via repeater).
GE552Y053 	Wireless repeater and concentrator to extend the device radio range and send data to the GE552Y058 datalogger.
GE552Y060 	Modem router 3G/EDGE/GPRS - wireless for remote connection of the GE552Y058 datalogger.

Note.
For more details about the M-Bus cable system see datasheet 0780EN.
For more details about the Wireless M-Bus system see datasheet 0794EN.

Data transmitted via GE552Y027 wireless board

The GE552Y027 wireless board provides for the sending of the following information:

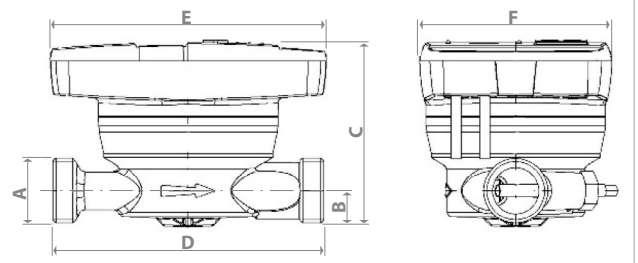
- Energy measured (calories - use for heating)
- Volume useful for accounting
- Alarms

it is also expected to send additional selectable information:

- Delivery probe temperature
- Return probe temperature
- Energy measured (for cooling)
- Additional pulse input information (C1 IN and C2 IN)
- Historical data (up to a maximum of 12 months)

It is recommended to set a radio transmission configuration of the module suitable for the use of the energy meter in order to optimize the life of the device. Sending additional information increases the length of the transmission by requiring more battery power.

Dimensions



Product code	Connec-tions A	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]
GE552Y215	3/4"	13	74	110	112	78
GE552Y216	3/4"	13	74	110	112	78
GE552Y217	1"	17	78	130	112	78

Product specifications

GE552Y215

Dual-mode volumetric thermal energy meter to read heating and cooling consumptions. 3/4" connections. Nominal diameter DN15. Nominal flow 0,6 m^3/h. Max. flow 1,2 m^3/h. Min. flow 24 l/h. LCD display with 8 characters+icons. 10 years-life lithium battery. Includes N.2 PT1000 temperature probes with 1,5 m connection wire. Protection class IP54. Meter dimensions 110x74x78 mm (LxHxW). Installation center distance 110 mm. Operating temperature range 5÷90 °C. Max. operating pressure 16 bar. Accuracy class 2. MID certificate. Preset for installation of GE552Y027 Wireless M-Bus card, for data centralization complying with EN 13757 Wireless M-Bus standard.

GE552Y216

Dual-mode volumetric thermal energy meter to read heating and cooling consumptions. 3/4" connections. Nominal diameter DN15. Nominal flow 1,5 m^3/h. Max. flow 3,0 m^3/h. Min. flow 30 l/h. LCD display with 8 characters+icons. 10 years-life lithium battery. Includes N.2 PT1000 temperature probes with 1,5 m connection wire. Protection class IP54. Meter dimensions 110x74x78 mm (LxHxW). Installation center distance 110 mm. Operating temperature range 5÷90 °C. Max. operating pressure 16 bar. Accuracy class 2. MID certificate. Preset for installation of GE552Y027 Wireless M-Bus card, for data centralization complying with EN 13757 Wireless M-Bus standard.

GE552Y217

Dual-mode volumetric thermal energy meter to read heating and cooling consumptions. 1" connections. Nominal diameter DN20. Nominal flow 2,5 m^3/h. Max. flow 5,0 m^3/h. Min. flow 50 l/h. LCD display with 8 characters+icons. 10 years-life lithium battery. Includes N.2 PT1000 temperature probes with 1,5 m connection wire. Protection class IP54. Meter dimensions 130x78x78 mm (LxHxW). Installation center distance 130 mm. Operating temperature range 5÷90 °C. Max. operating pressure 16 bar. Accuracy class 2. MID certificate. Preset for installation of GE552Y027 Wireless M-Bus card, for data centralization complying with EN 13757 Wireless M-Bus standard.