

**Description**

The GE550Y024 and GE550Y111 units integrate a thermostatic mixer within sanitary water metering units.

For both product codes, units with plastic dummy meter connection points should be supplied for each meter.

The GE550Y024 also includes the two meters and the supports for fixing the unit in the user modules. The meters are equipped with a display which shows cumulated consumption and can be read remotely (via M-Bus).

The handles on the shut-off valves are blue or red, to indicate respectively the entry of cold or hot water.

**Main characteristics**

- Can be mounted either horizontally or vertically
- 3/4" connections
- Dummy meter connection point for installation on sites
- Thermostatic mixer for sanitary water, R156 series, in compliance with regulation A.S.S.E. 1017

**For GE550Y024 only:**

- Hot and cold sanitary water meter with pulse output (for centralisation via M-Bus)
- Display with 5-figure totalizator, hand to indicate current consumption and wheel to indicate the presence of flow
- Supports for fixing in box

**Versions and product codes**

Product code	Connections	Connection points	Water meter	Collars
GE550Y024	3/4"	YES	YES	YES
GE550Y111	3/4"	YES	NO	NO

Table 1 - Comparison of versions

**Technical data**

- Max. working temperature: 90 °C (sanitary hot water side); 30 °C (sanitary cold water side)
- Max. working pressure 10 bar.
- Kv = 1,8 and 3,8 with mounted connection points (product code GE550Y111) respectively for SHW (sanitary hot water) and SCW (sanitary cold water), see Figure 2.
- Kv = 1,6 and 2,5 with mounted sanitary meters (product code GE550Y024) respectively for SHW (sanitary hot water) and SCW (sanitary cold water), see Figure 2.

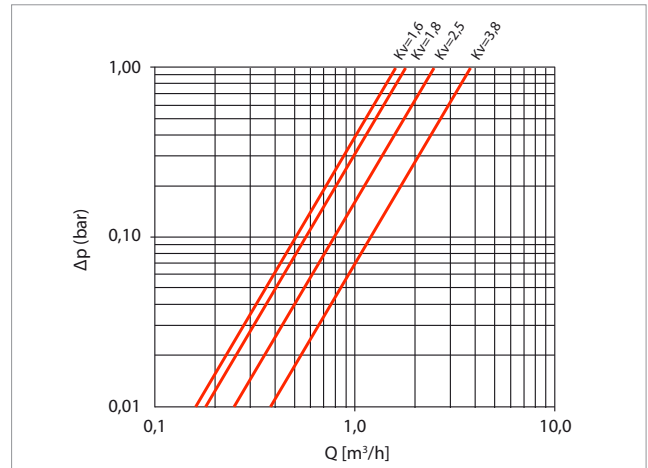


Figure 2 – Losses of pressure diagram

Installation	Nominal flow rate Q3 [m³/h]	Minimum flow rate Q1 [m³/h]	Transition flow rate Q2 [m³/h]	Maximum capacity Q4 [m³/h]
Horizontal	1,5	0,032	0,051	3,0
Vertical	1,5	0,064	0,102	3,0

- Q2 / Q1 = 1,6
- Q3 / Q1 = 50 (horizontal installation)
- Q3 / Q1 = 25 (vertical installation)

Table 2 - Sanitary meter characteristics (hot and cold water)

**Operating diagram**

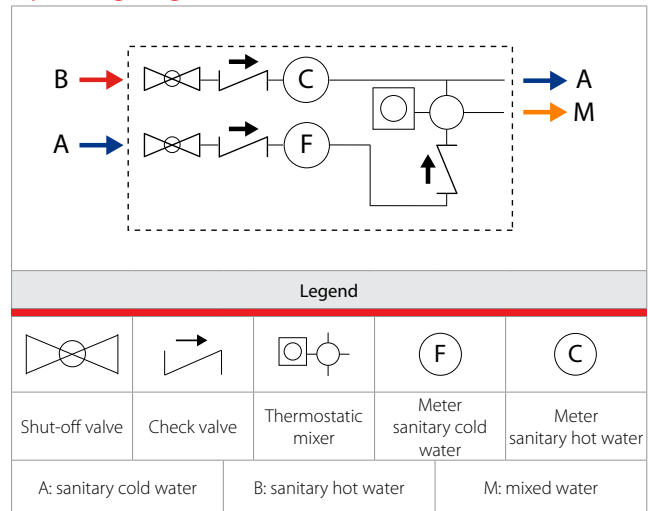


Figure 3 – Operating diagram



**Installation**



**Warning.**  
Comply with the rules regarding the use (installation, mounting, etc.), operation, recalibration and replacement of the meter.  
In addition, refer to the instructions supplied with each meter.

**1) Connecting the unit to the system box and pipes.**

For installation on a construction site, use the connection points instead of meters; connection points are supplied as standard with both the GE550Y111 and the GE550Y024, and allow you to wash out the system pipes without damaging the meters.

Three supports are available with the GE550Y024 (Figure 3a) for fixing into the box: the GE551 boxes are equipped with dedicated guides; the plate is inserted on the inside of the guide (no. 3); the clip (no. 2) should be placed on top of the guide and fixed by tightening the screw (n. 1). It is advisable to pre-assemble the support unit before inserting the plate into the guide and to only tighten the screw once this is completed. Figure 3b shows the collar installation position. For connection to the system pipes, the valve nuts and three-piece connectors included with the GE550Y111 and GE550Y024 units can be used.

**2) Washing the system.**

It is important to wash the system out thoroughly before installing the meters.

**3) Replacing the connection points.**

Once the system has been washed, the connection points can be replaced with the meters.



**Warning.**  
Check the direction of flow displayed on the body of the meter, referring to the operational diagram in Figure 2.

**4) Testing the system.**

Perform tests for leaks after completing connections and replacing the meters.



Figure 3a - Collar unit

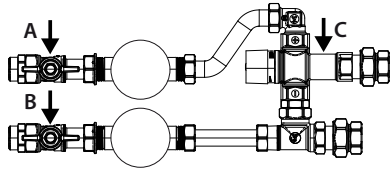


Figure 3b - Collar installation position

**Regulation**

The sanitary hot water temperature can be adjusted via the mixer handwheel R156 (Figure 4a) according to table 3. In the case of units orientated from left to right (figure 4b) the adjustment of the R156 mixer is not directly visible: for adjustment, refer to the mould line (Figure 4b), which corresponds to a position number lower than 2 with regard to the set (e.g. if the mixer set is 3, the mould line of the R156 corresponds to position 1, as in figure 4b).

Figure 4a - Unit positioned from R to L

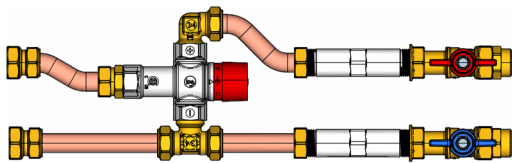


Figure 4a - Unit positioned from L to R

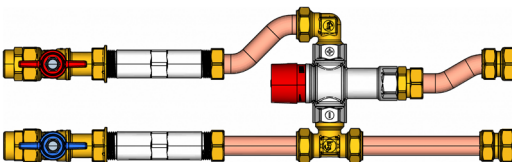
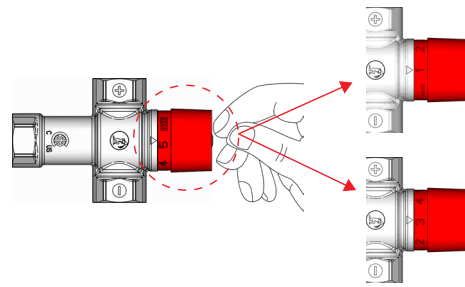


Table 3 - Adjusting the temperature



**Dimensions**

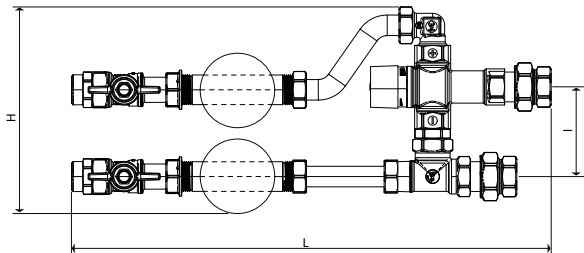
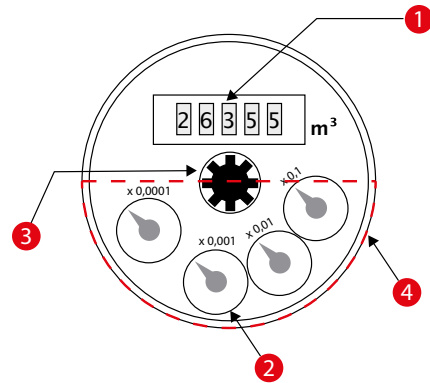


Figure 6 - Dimensions

Product code	H [mm]	L [mm]	I [mm]
GE550Y024	218	420	75
GE550Y111	218	420	75

Table 4 - Dimensions (mm)

**Sanitary water meter**



**Legend**

- 1) 5-figure mechanical totalizer for reading cumulative consumption (maximum value 99.999 m<sup>3</sup>)
- 2) Totalizer for displaying current consumption in litres (1 turn = 1 litre)
- 3) Rotary indicator indicating the presence of flow
- 4) Protective plastic cover for pulse module

The meter is composed of a section of the flow measurement in nickel-plated brass which houses the single-jet impeller and a totalizer protected by a transparent cover made of plastic material. The entrance to the meter has a filter for trapping larger impurities and preventing these from entering the measuring chamber. The 5-figure totalizer displays the cumulative consumption of sanitary water; it is mechanical and as such does not need to be attached to a power supply. A rotary indicator at the centre of the device indicates the presence of flow, while a totalizer indicates the current consumption in litres. The device is equipped with a pulse output; 1 pulse corresponds with a volume of 10 litres. A 1,4 m connection cable is used to connect the meter to an interface that translates the pulses into a consumption value which can then be encoded and transmitted via the M-Bus system for remote reading and centralisation of consumption data.



**Remote reading enabling through energy meters**

Up to two sanitary meters can be enabled for remote operation on M-Bus through the energy meters, GE552 series, which are equipped with a 6-conductor cable for this purpose. Use the connections set out in the table.

Conductor colour	Connection	Meaning
Yellow	NC	Not in use
Pink	M-Bus 1	1 M-Bus conductor
Grey	M-Bus 2	2 M-Bus conductor
Green	E/S 1	Sanitary meter 1
White	GND	Common for sanitary meters 1 and 2
Brown	F/S 2	Sanitary meter 2

Table 5 - Encoding connections to the energy meter.

**Normative references**

- EC mark
- MID directive (2004/22/EC)

**Compliance with MID Directive**

If used for commercial applications, the meters are classified as measuring instruments subject to the rules of legal metrology. The GE552-2 sanitary meters comply with the requirements of Directive 2004/22/EC on measuring instruments (MID Directive - Measurement Instrument Directive), implemented in Italy by Legislative Decree of February 2, 2007, n. 22 (Official Gazette no. 64 of 17 March 2007). The DE-07-MI001-PTB010 certificate of conformity was issued by the PTB Institute of Metrology (Physikalisch-Technische Bundesanstalt).



**Note.**  
The MID marking is displayed next to the CE mark and consists of an "M" flanked by the last two digits of the year of marking, surrounded by a rectangle.

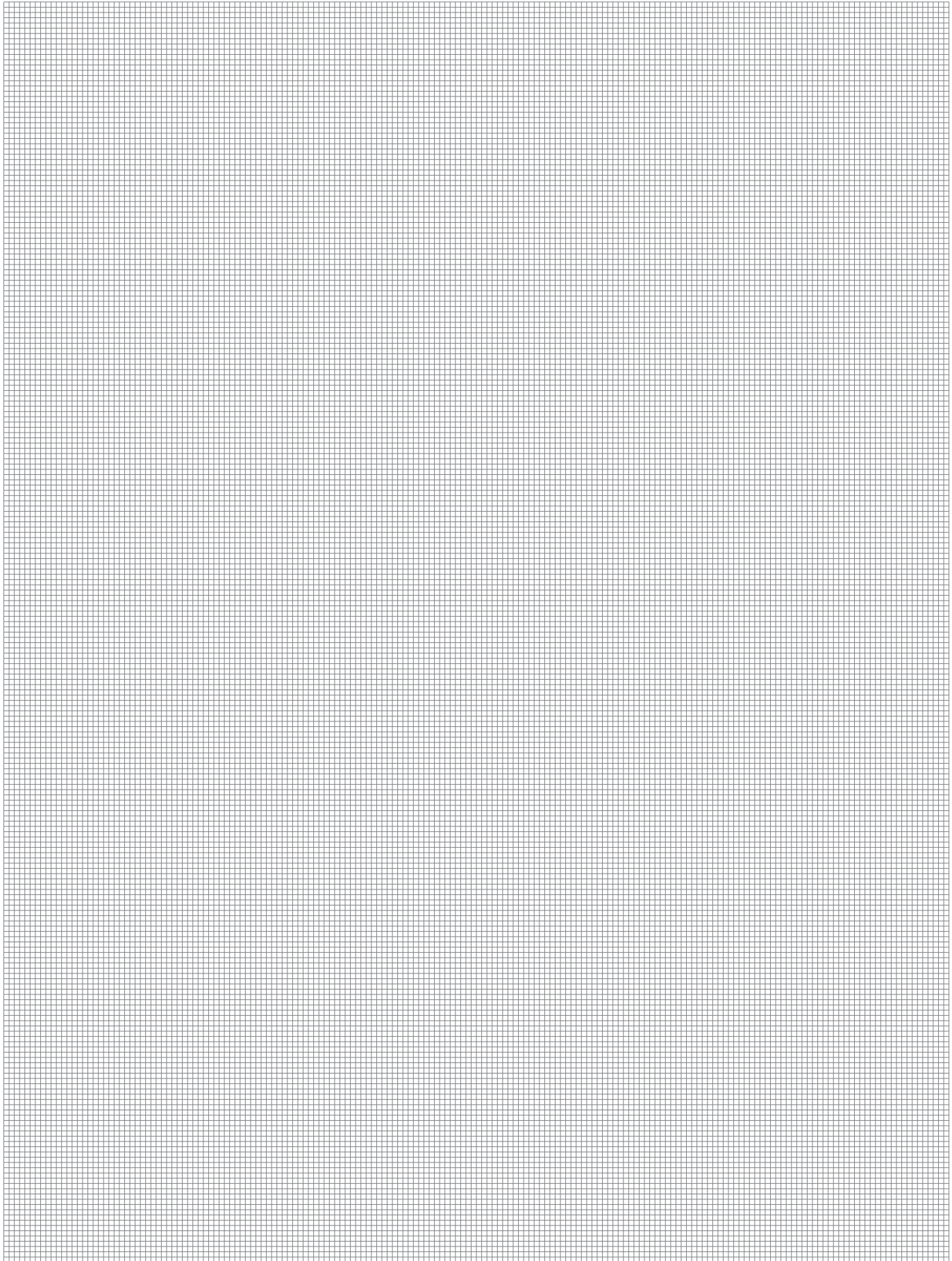
**Product specifications**

**GE550Y024**

Sanitary hot and cold water metering unit. 3/4" connections. Integrated thermostatic mixer, with temperature range 38÷60 °C. Two shut-off valves with blue and red colour handles, with chrome ball and PTFE seals. Check valve with body and internal parts in acetal resin (POM) and stainless steel spring. GE552-2 meter series, single-jet for sanitary hot and cold water, with pulse output (REED contact), nominal flow rate 1,5 m<sup>3</sup> / h, centre to centre distance 110 mm. Plastic connection point for system washing. Supports for fixing in box. Unit length 420 mm. Maximum working temperature 90 °C (30 °C for sanitary cold water). Max. working pressure 10 bar.

**GE550Y111**

Sanitary hot and cold water metering unit. 3/4" connections. Integrated thermostatic mixer, with temperature range 38÷60 °C. Two shut-off valves with blue and red colour handles, with chrome ball and PTFE seals. Check valve with body and internal parts in acetal resin (POM) and stainless steel spring. Enabled for sanitary water meter assembly with plastic connection point. Unit length 420 mm. The unit can be completed by ordering the following separately: supports for fixing in box, GE551-3 series. GE552-2 meter series, single-jet for sanitary hot or cold water, with pulse output (REED contact), nominal flow rate 1,5 m<sup>3</sup> / h, centre to centre distance 110 mm. Maximum working temperature 90 °C (30 °C for sanitary cold water). Max. working pressure 10 bar.



**Additional information**

For further information, visit the website [www.giacomini.com](http://www.giacomini.com) or contact the technical service: ☎ +39 0322 923372 📠 +39 0322 923255 ✉ [consulenza.prodotti@giacomini.com](mailto:consulenza.prodotti@giacomini.com)  
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