


**GE552Y190
GE552Y191**

Description

Single-jet dry dial meter with modular timer and pulse output for possible remote data reading. This device has a very low initial flow rate value and can be installed either horizontally or vertically. The compact design of the meter allows installation in confined or difficult to reach spaces. The dial with five numbered drums ensures correct reading results.

Versions and product codes

| Product code | Sanitary water | Connections | Centre distance distance [mm] |
|--------------|----------------|-------------|----------------------------------|
| GE552Y190 | cold | 3/4" | 110 |
| GE552Y191 | hot | 3/4" | 110 |

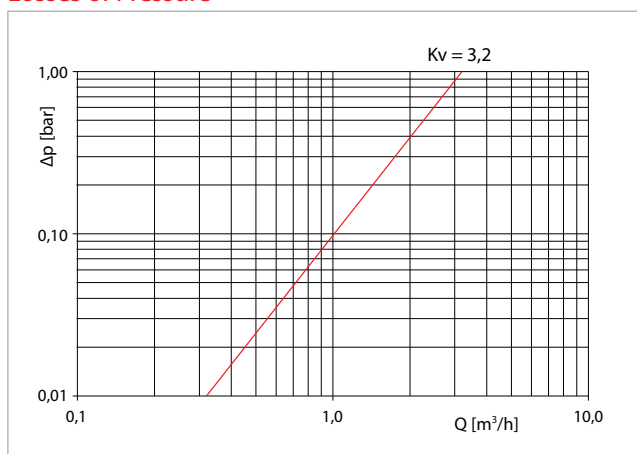
Technical data

- Max. working temperature:
30 °C for sanitary cold water meter
90 °C for sanitary hot water meter
- Max. working pressure: 10 bar

Main characteristics

- Can be mounted either horizontally or vertically
- 5-figure mechanical totalizer with hands for partial consumption and flow detection
- M-Bus enabled pulse output (1 pulse = 10 litres)
- CE marking (compliance with MID directive)

Losses of Pressure



Qualitative error diagram

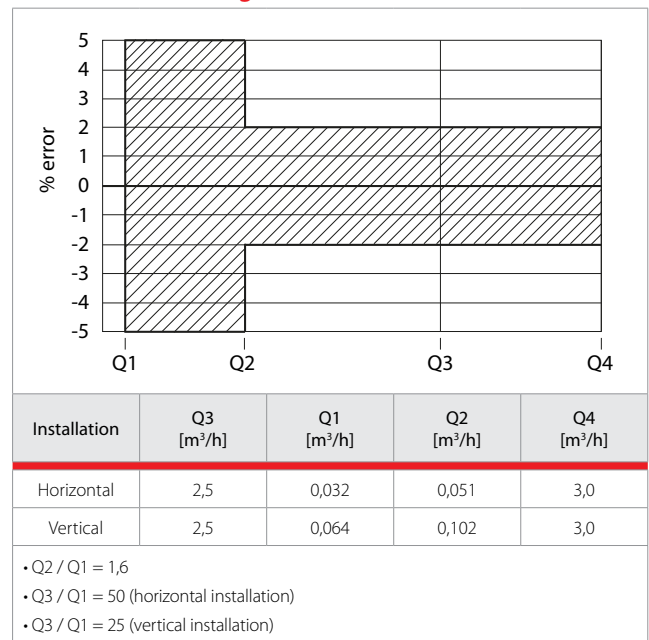
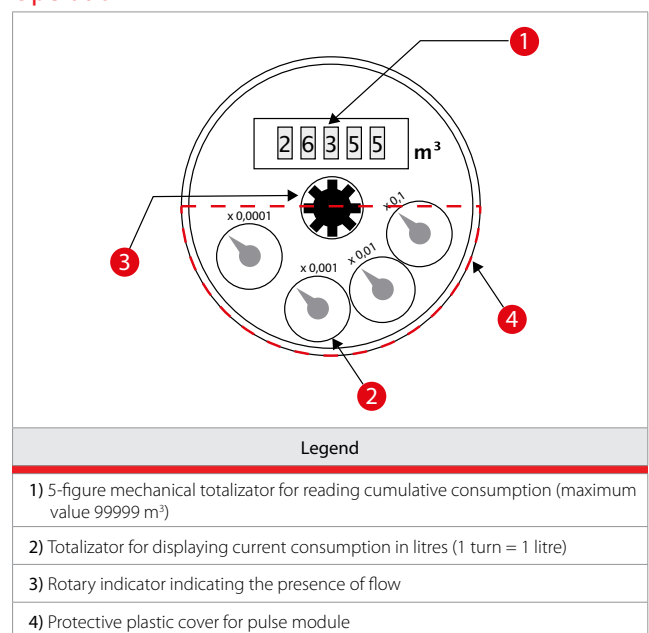


Figure 1 - Qualitative error diagram

Operation



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

The sanitary meters can be enabled for remote operation on M-Bus through the energy meters, GE552 series.



Dimensions

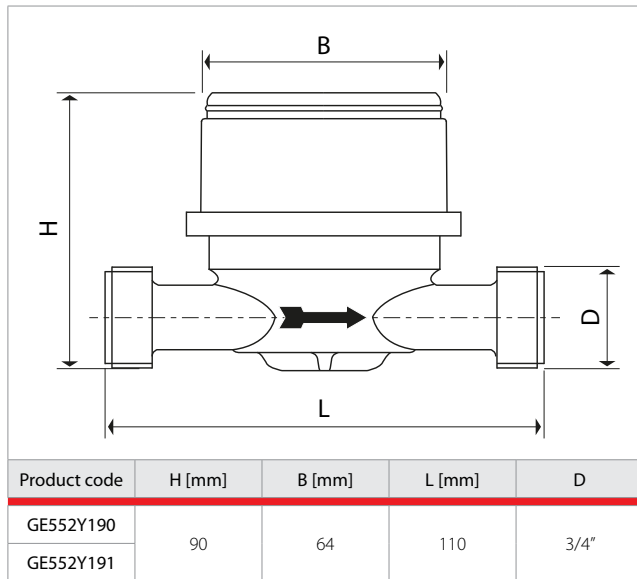


Figure 2 – Dimensions

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

GE552Y190

Single-jet sanitary cold water meter. 3/4" connections. With pulse output for possible remote data reading, pulse output K=10 l/pulse. Permanent flow rate 2,5 m³/h. Dimensions 110x90 mm (LxH). Centre to centre assembly distance 110 mm. Max. working temperature 30 °C. Max. working pressure 10 bar. CE marking (compliance with MID directive).

GE552Y191

Single-jet sanitary hot water meter. 3/4" connections. With pulse output for possible remote data reading, pulse output K=10 l/pulse. Permanent flow rate 2,5 m³/h. Dimensions 110x90 mm (LxH). Centre to centre assembly distance 110 mm. Max. working temperature 90 °C. Max. working pressure 10 bar. CE marking (compliance with MID directive).

Additional information

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GE552Y124
GE552Y125
GE552Y126
GE552Y127

Description

The GE552-2 sanitary hot water meters are single-jet water meters, with dry dial and direct reading on eight numbered drums. Made in cold water (30 °C) and hot water (90 °C) versions, in 3/4" and 1" sizes. Dial adjustable through 360°. Enabled for wireless M-Bus radio module (GE552Y016) or M-Bus via cable (GE552Y014), to be mounted on the dial of the meter.

In the wireless M-Bus configuration, the USB antenna (GE552Y043) with relative software (GE552Y034), should be connected to a PC, from which GE552Y016 radio module data can be received for the centralisation of consumption data.

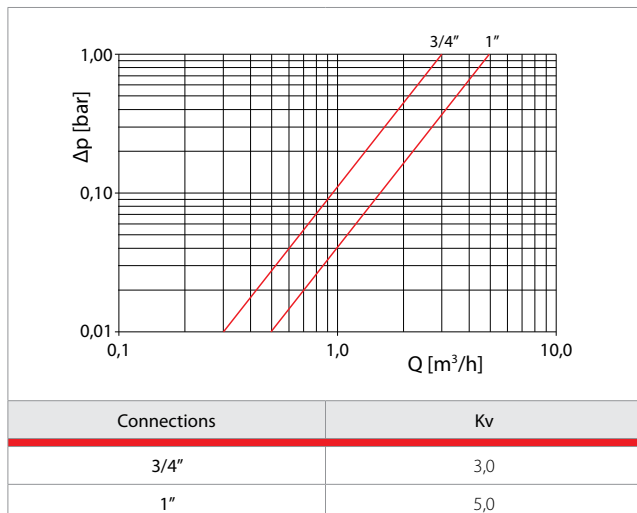
Versions and product codes

| Product code | Connection | Sanitary water | Distance between centres [mm] |
|--------------|------------|----------------|-------------------------------|
| GE552Y124 | 3/4" | cold | 110 |
| GE552Y125 | 1" | cold | 130 |
| GE552Y126 | 3/4" | hot | 110 |
| GE552Y127 | 1" | hot | 130 |

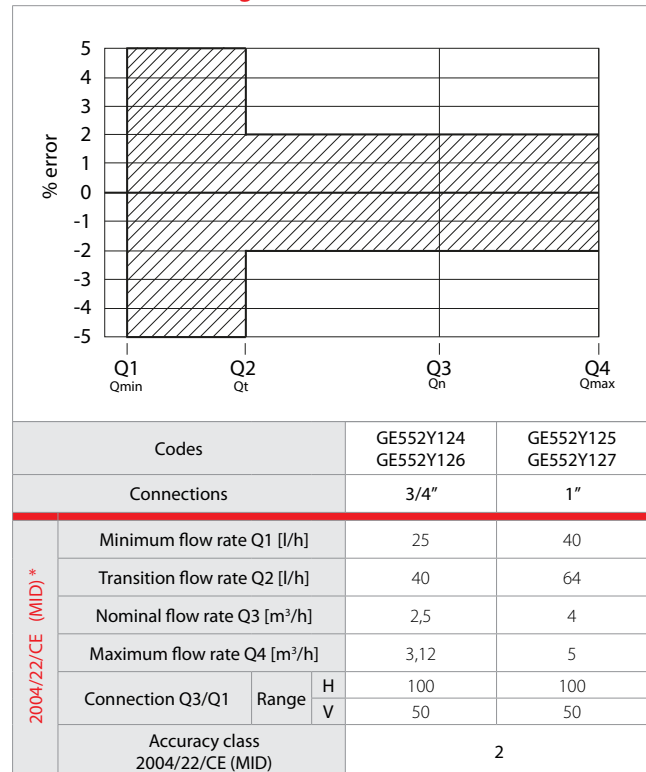
Technical data

- Max. working temperature:
30 °C for sanitary cold water meter
90 °C for sanitary hot water meter
- Max. working pressure: 16 bar

Losses of Pressure



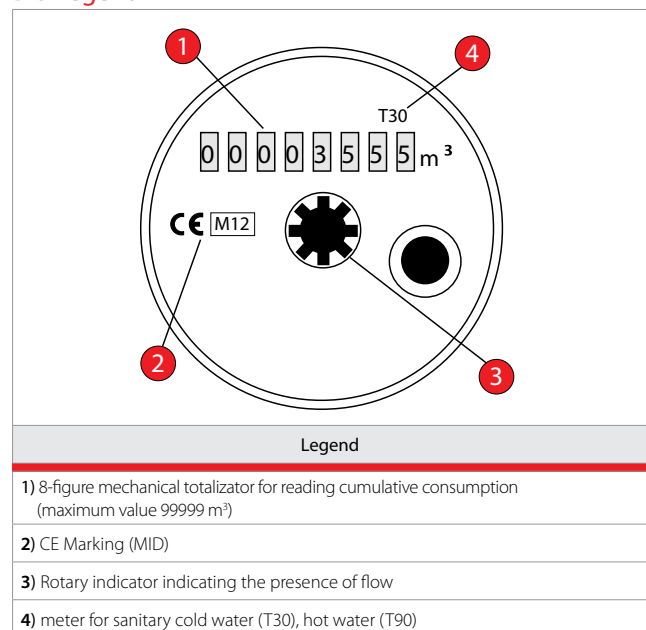
Qualitative error diagram



* Nota.

2004/22/CE (MID) - 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.

Dial legend





Accessories for centralisation through wireless M-Bus, GE552-W series

The centralisation of the wireless M-Bus (868 MHz) complies with EN 868 13757 MHz. The consumption data can be transmitted using the following methods:

- **WALK-BY mode:** data sent to a PC, received by antenna (GE552Y043) connected to USB port.
- **REMOTE MODE:** data sent to a concentrator (GE552Y044), which allows:
 - remote transmission of read data to programmable email addresses;
 - remote transmission of data to a PC, through the GSM/GPRS network;
 - local download of data to a PC, connected through a USB port.

| Product code | Description and technical data |
|--|--|
|  GE552Y016 Use in REMOTE and WALK BY modes. | <p>Wireless module for sanitary water meter. To be installed on the sanitary water meter dial, product codes GE552Y124, GE552Y125, GE552Y126, GE552Y127.</p> <p>Technical data Radio interface: Wireless M-Bus - complies with EN 13757-4 868 MHz. Power supply: lithium battery Maximum battery lifespan: 10 years. Fraud protection: magnetic/optical Transmission power: ≤ 10 mW. Minimum reading: 1 litre. Data transmission frequency: programmable. Operating temperature range: -10 ÷ 55 °C. Protection degree: IP65.</p> |
|  GE552Y043 Use in WALK-BY and REMOTE modes, for configuration of wireless modules for meters, in combination with a PC | <p>Antenna for receiving wireless data and for configuration of wireless modules for meters.</p> <p>Technical data Radio interface: Wireless M-Bus - complies with EN 13757-4 868 MHz. Can be connected to PC via USB port. Rubber antenna, 1/4". Protection degree: IP50. Flow rate: up to 400 m (in optimal environmental conditions). Dimensions: 65x22x15 mm.</p> |
| GE552Y034 Use in combination with antenna GE552Y043 | <p>Software for configuration of wireless modules for meters and for centralisation of wireless data. The software can be used to configure and easily manage the wireless metering system.</p> |
|  GE552Y044 Use in REMOTE mode | <p>Wireless data concentrator and transmitter. This module can transmit read data from meters across the GPRS network. Equipped with an integrated wireless M-Bus 868 MHz module, which collects readings from the devices and then sends the data collected via the GPRS connection. With the help of easy-to-use configuration software, the device can be configured either locally with RS232 serial connection or remotely through the GPRS network or by sending a configuration SMS.</p> <p>Technical data Manages up to 300 devices Radio interface: Wireless M-Bus - complies with EN 13757-4 868 MHz. GSM/GPRS interface: QuadBand 850/900/1800/1900 MHz. Integrated GSM and 868 MHz antenna. Power supply: 3,6 V lithium battery - replaceable. Battery lifespan: 5 years (2 readings/months, 1 data send/month). Configuration: integrated user-friendly software. Configuration mode: local (RS232); remote (GPRS/GSM). Method of attachment: wall anchored. Operating temperature range: -20 ÷ 60 °C. Protection degree: IP68. Dimensions: 126x123x63 mm.</p> |
|  GE552Y045 Use (optional) in REMOTE and WALK BY modes. | <p>Wireless signal repeater. This wireless M-Bus radio signal repeater can be used to amplify the signal of the meters. Equipped with an integrated wireless M-Bus 868 MHz module, which stores readings from the paired devices, then sends these to the receiving device (antenna or data concentrator). With the help of easy-to-use configuration software, the device can be configured through the radio signal. The device can repeat the signal of a maximum of 100 devices, and is simple to use for the individual receiving the data.</p> <p>Technical data Radio interface: Wireless M-Bus - complies with EN 13757-4 868 MHz. Integrated 868 MHz antenna. Power supply: 3,6 V lithium battery - replaceable. Battery lifespan: 3 years (depending on device transmission frequency). Configuration: with user-friendly software. Configuration mode: local (via radio). Method of attachment: wall anchored. Operating temperature range: -20 ÷ 60 °C. Protection degree: IP64. Dimensions: 155x83x55 mm. Recommended use: install in the case of difficulty transmitting data (to be evaluated for each case)</p> |



Data transmitted through wireless module for GE552Y016 meters

| | |
|--|--|
| Serial number of the meter | yes |
| meter status | alarms, battery status |
| Actual value of the meter | yes, in litres |
| Battery voltage value | optional configurable in the meter configuration phase |
| Inverse flow value | optional configurable in the meter configuration phase |
| meter date and time | optional excluding transmission of historical data, can be configured in the configuration phase |
| 12 month historical data | optional excluding transmission of meter date and time, can be configured in the configuration phase |
| Recording of the number of temperature measurements taken | of the front or rear sensor |

Accessories for the centralisation of data through M-Bus, module GE552Y014

The M-Bus module is installed on the sanitary hot water meter dial.



GE552Y014

M-Bus module for sanitary water meter.

To be installed on the sanitary water meter dial, product codes GE552Y124, GE552Y125, GE552Y126, GE552Y127.

Technical data

Interface: M-Bus.

Power supply: from M-Bus network + safety battery.

Battery lifespan: 1 year not connected to bus.

Cable type: two wires, length 3 m.

Primary and secondary address: programmable.

Protection degree: IP65.

GE552-2 meter dimensions

| GE552-2 | | | | |
|-------------|-----|----|----|----|
| | | | | |
| Connections | L | H | H1 | H2 |
| 3/4" | 110 | 76 | 63 | 7 |
| 1" | 130 | 80 | 63 | 7 |

| GE552-2 + GE552Y016 (Wireless M-Bus module) GE552Y014 (M-Bus module via cable) | | | | |
|---|-------------|-----|----|----|
| | | | | |
| Centralisation module | Connections | L | H | H1 |
| with GE552Y016 | 3/4" | 110 | 94 | 29 |
| | 1" | 130 | 98 | 29 |
| con GE552Y014 | 3/4" | 110 | 85 | 21 |
| | 1" | 130 | 89 | 21 |



Product specifications

GE552-2 SANITARY WATER METER

GE552Y124

Single-jet sanitary cold water meter. 3/4" connections. Dry dial, adjustable through 360° with direct reading on eight numbered drums. Nominal flow rate 2,5 m³/h. Meter dimensions 110x63 mm (LxH). Centre to centre assembly distance 110 mm. Max. working temperature 30 °C. Max. working pressure 16 bar. Enabled for mounting the wireless M-Bus radio module (GE552Y016) or M-Bus via cable (GE552Y014), to be mounted on the dial of the meter. CE marking (compliance with MID directive). Meter can be completed by ordering the insulation shell (product code GE551Y173) separately.

GE552Y125

Single-jet sanitary cold water meter. 1" connections. Dry dial, adjustable through 360° with direct reading on eight numbered drums. Nominal flow rate 4,0 m³/h. Meter dimensions 130x63 mm (LxH). Centre to centre assembly distance 130 mm. Max. working temperature 30 °C. Max. working pressure 16 bar. Enabled for mounting the wireless M-Bus radio module (GE552Y016) or M-Bus via cable (GE552Y014), to be mounted on the dial of the meter. CE marking (compliance with MID directive).

GE552Y126

Single-jet sanitary hot water meter. 3/4" connections. Dry dial, adjustable through 360° with direct reading on eight numbered drums. Nominal flow rate 2,5 m³/h. Meter dimensions 110x63 mm (LxH). Centre to centre assembly distance 110 mm. Max. working temperature 90 °C. Max. working pressure 16 bar. Enabled for mounting the wireless M-Bus radio module (GE552Y016) or M-Bus via cable (GE552Y014), to be mounted on the dial of the meter. CE marking (compliance with MID directive). Meter can be completed by ordering the insulation shell (product code GE551Y173) separately.

GE552Y127

Single-jet sanitary hot water meter. 1" connections. Dry dial, adjustable through 360° with direct reading on eight numbered drums. Nominal flow rate 4,0 m³/h. Meter dimensions 130x63 mm (LxH). Centre to centre assembly distance 130 mm. Max. working temperature 90 °C. Max. working pressure 16 bar. Enabled for mounting the wireless M-Bus radio module (GE552Y016) or M-Bus via cable (GE552Y014), to be mounted on the dial of the meter. CE marking (compliance with MID directive).

GE552-W ACCESSORIES FOR WIRELESS CENTRALISATION

GE552Y016

Wireless module for sanitary water meter. To be installed on the sanitary water meter dial, product codes GE552Y124, GE552Y125, GE552Y126, GE552Y127. Wireless M-Bus radio interface - complies with EN 13757-4 868 MHz. Powered by lithium battery. Maximum battery lifespan 10 years. Magnetic/optical fraud protection. Transmission power ≤ 10 mW. Minimum reading: 1 litre. Data transmission frequency: programmable. Operating temperature range -10÷55 °C. Protection degree IP65. Use in combination with GE552-2 meters, in REMOTE and WALK BY modes.

GE552Y043

Antenna for receiving wireless data from devices installed on the system and for configuration of wireless modules for sanitary water meters. Wireless M-Bus radio interface - complies with EN 13757-4 868 MHz. Can be connected to PC via USB port. Rubber antenna, 1/4". Protection degree IP50. Range up to 400 m (in optimal environmental conditions). Dimensions 65x22x15 mm. Use in WALK-BY and REMOTE modes in combination with a PC.

GE552Y034

Software for configuration and centralisation of data from wireless modules for series GE552-2 sanitary water meters. Initial configuration of devices: encryption enabling; alarm enabling; setting data transmission intervals (default every 30 seconds); setting days for sending data; linking of meter serial number with user data; historical consumption settings; display list (e.g.: users on the same street or in the same building where programmed readings will be taken); possibility to detect a single module, all modules or only those on the display list; data export in CSV or XML format. Use in combination with antenna GE552Y043.

GE552Y044

Wireless data concentrator and transmitter. can transmit read data from installed wireless devices across the GPRS network. Equipped with an integrated wireless M-Bus 868 MHz module, which collects readings from the meters and then sends the data collected via the GPRS connection. With the help of easy-to-use configuration software, the device can be configured either locally with RS232 serial connection or remotely through the GPRS network or by sending a configuration SMS. Manages up to 300 devices. Wireless M-Bus radio interface - complies with EN 13757-4 868 MHz. Interface GSM/GPRS QuadBand 850/900/1800/1900 MHz. Integrated GSM and 868 MHz antenna. Powered by 3,6 V lithium battery - replaceable. Battery lifespan 5 years (2 readings/months, 1 data send/month). Integrated user-friendly software configuration. Local (RS232) or remote (GPRS/GSM) configuration modes. Method of attachment - wall anchored. Operating temperature range -20÷60 °C. Protection degree IP68. Dimensions 126x123x63 mm. Use in REMOTE mode.

GE552Y045

Wireless signal repeater. Can be used to amplify the signal of the wireless devices installed. Equipped with an integrated wireless M-Bus 868 MHz module, which stores readings from the paired meters, then sends these to the receiving device (antenna or data concentrator). With the help of easy-to-use configuration software, the device can be configured through the radio signal. The repeater can repeat the signal of a maximum of 100 devices. Wireless M-Bus radio interface - complies with EN 13757-4 868 MHz. Integrated 868 MHz antenna. Powered by 3,6 V lithium battery - replaceable. Battery lifespan 3 years (depending on heat cost allocator transmission frequency). User-friendly software configuration. Local configuration mode (via radio). Method of attachment - wall anchored. Operating temperature range -20÷60 °C. Protection degree IP68. Dimensions 155x83x55 mm. Use in REMOTE and WALK BY modes.



Note.

For further information on the Wireless M-Bus system, see technical document 0563EN.

Additional information

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