smart vatten®

OMNI

HVAC WORK SPECIFICATION MODEL

30/04/2026

1 HVAC WORK SPECIFICATION MODEL NB-IOT

1.1 Remotely readable Smartvatten Omni water metering system

Wireless water meters are installed to each space equipped with water fixtures, according to measurement needs.

The measuring data is transmitted to the Smartvatten HUB cloud service, where the building manager can monitor the water consumption, consumption reports and download billing materials. Consumption data can be transferred to another software or system through APIs.

The user can see their water consumption from screen on the water meter, or from the web application hub.smartvatten.com.

1.2 Water meters

- Omni W1 cold/hot wireless ultrasonic water meter with LCD display
- Standard size DN15/110 mm, meters are available in size range DN15-DN100.

1.3 Installing water meters

The size of the water meter is 80mm x 75mm x 70mm.

1. Place the water meter freely in the space (protection class IP68). You can also place the meter with the display facing downwards or sideways. However, make sure that users and maintenance personnel can check the consumption data on the screen when needed.
2. No straight pipe sections before or after the meter are required.
3. Place the meters so that they are easy to service. Make sure that their installation must meet the regulations for fire safety and electrical installations.
4. If you place the devices inside a casing or suspended ceiling, install a service hatch measuring at least 500 x 500 mm in the location of the devices.
5. It is recommended to install a valve before and after the meter for maintenance and warranty replacements. This way the meter can be easily replaced by closing the valves.
6. If you suspect there are impurities, such as sediment in the pipelines, we recommend installing a sediment filter. The sediment filter is included in the delivery.

1.4 Finishing water meter installation

Air trapped inside the pipes is released in the follow-up inspection after the installation.

1. Perform the follow-up inspection upon commissioning.
2. Run enough water through the pipes to flush out the air from the pipelines.
3. The water meter starts to function automatically after the air has been flushed from the pipes. Before this there is a triangle with an exclamation mark on the screen of the meter. This means that the meter has not yet identified water pressure in the pipes.
4. When the meter is functioning properly, the screen shows the water consumption, as well as the speed of hourly consumption. The screen is updated every 10 seconds.
5. The meter starts remote transmission of data when the water consumption is over 10 liters. The data transmission includes hourly consumption and leakage alarms.

1.5 Duties of the construction contractor

The construction contractor is in charge of installing service hatches for the water meters installed on the premises. The service hatches must be at least 500x500 mm and placed so that the meters and valves are reachable through the hatch.

1.6 Duties of the HVAC contractor

The HVAC contractor is in charge of

- acquisition of the devices
- installing the meters according to the HVAC design guidelines and the list of meters after the pipelines have been flushed
- inspecting the installations and performing water passage tests
- delivering the installation and commissioning records to the customer
- documenting the work done using the Smartvatten installation application

1.7 Commissioning

After the devices have been installed the HCAV contractor notifies Smartvatten of the need for commissioning. Smartvatten then performs the commissioning remotely.

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