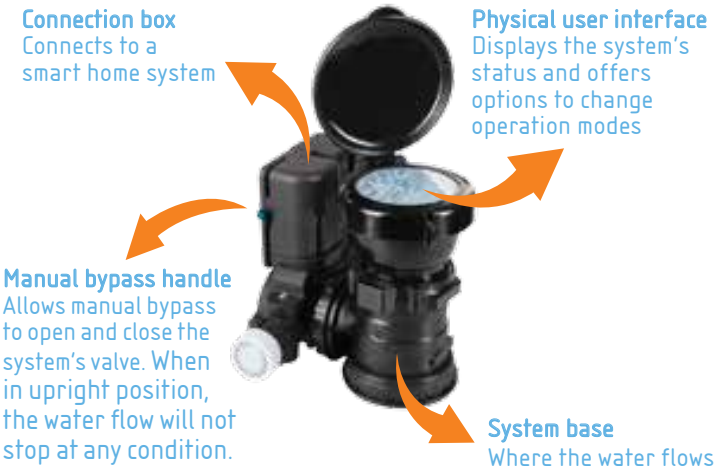
INTRODUCTION

Flowless is a system for managing water consumption and preventing water damage.

The system offers the most advanced solution for preventing water damage, by noticing water leak, and managing the water consumption. The system includes a computer and algorithm that allows on-going learning of the water consumption, giving an alarm at excess consumption, and even shutting down the valve during a leak that may cause damage to the property. Flowless can communicate via a personal website and mobile device.

Applications:

Command and control over water consumption in private homes, business and institutions.Identification of water leaks and prevention of water damage.



HOW DOES THE SYSTEM WORK

The system includes a standardized wet base and a body where a diaphragm valve is installed in its base. An electronic system and an algorithm are installed on the wet base to analyze changes in the flow rate over time and generate information of usage patterns. The raw information is presented on the user's web page and it is broken down hourly, daily (last 7 days), weekly and monthly.

Website

Mobile App

In case of a suspected event, the system produces an alert by SMS and presents an event in the irregularities page on the website. During an event, the valve is shut down automatically. It is possible for the shutdown not to accur automatically but at a certain point decided by the customer.

INSTALLING THE SYSTEM

The system is installed on water pipes, according to the site's characteristics. It is possible to install the system on larger diameter pipes by narrowing them, based on the site's characteristics. The installation is carried out on the main water pipe at the entrance to the property or at the closest split next to where the pipe is laid, and according to the site's characteristics. Before installing the system, it is mandatory to wash the feeding pipe that enters the water meter. The feeding pipe has to have a full flow cut. It is possible to install it within any angle in the space. The mechanism's face will always lie horizontally and will face upward.

Where to install it

- A private home or an apartment – adjacent as possible to the water meter
- Office – on each floor, based on the consumption patterns
- Industry – based on requirements / consumption patterns
- Municipal – on water pipes of the specified diameters or according to the consumption patterns

THE SYSTEM'S CHARACTERISTICS

Components

- Water meter manifold with input and output thread 1"BSP or NPT and a ¾" adaptor
- Built-in diaphragm valve in the manifold
- Water meter that is based on FAM by "Master Meter"
- Computer that includes a sensor to read water flow, cellular modem, and energy package
- Options: (unmeasured flow reducer) built-in UFR in the manifold
- Also used as non return valve

Technical specifications

- Maximum working pressure – 10 BAR
- Liquid temperature – 122°f
- Raw material of the manifold and the water meter – reinforced Nylon
- Connectors – BSP/NPT
- Communication – GSM generation 3G
- Life span of 5 years of reasonable usage without changing batteries

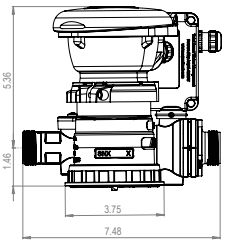
Standardizations

The system is developed according to the following standards:

- NSF 61, American standard for drinking water
- CE European safety standard
- MIL STD 810 – durability in environmental conditions
- UL - ETL
- FCC

Sizes

Vertical installation



Horizontal installation