

# OneFlow<sup>®</sup>

## OFTWH-R, OFTWH

Innovative Scale Control

For Residential, Commercial and  
Food Service Applications

### Technical Data Sheet



OFTWH

OFTWH-R

**NOTICE**

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

## Description

**OneFlow**® Innovative Scale Control Systems - **OFTWH-R** and **OFTWH Series** - provides protection from hard scale formation on internal plumbing surfaces. The **OneFlow**® system is a single cartridge-based system that must be installed on a cold water line prior to a single water heating device (water heater or tankless water heater) that requires protection from the ill effects of hard water.

**OneFlow**® uses template assisted crystallization (T.A.C.) to attract hardness minerals and convert them into harmless, inactive microscopic crystal particles. These crystals stay suspended in the water and are passed to drain. The system requires very little maintenance, no backwashing, no salt and no electricity. Typical hardness problems, especially build-up of scale in heating elements, pipes, water heaters, boilers are no longer a concern. **OneFlow**® is not a water softener. It does not need additional chemicals. It is a hard scale prevention device with proven third party laboratory test data and years of successful commercial, residential and foodservice applications. **OneFlow**® is the intelligent scale solution and is a great alternative to water softening or scale sequestering devices.

### OFTWH-R - OFTWH



- **OneFlow**® converts hardness minerals to harmless, inactive microscopic crystals making **OneFlow**® an effective alternative to water softeners
- Virtually maintenance free - No salt bags or other chemicals required
- No energy consumption (different compared to other scale control technologies)
- Contributes to reduce water and electric consumption, no control valve needed
- Innovative technology with an enhanced respect of the environment, salt free, without additional chemicals
- Improves efficiency of all water heating devices and downstream plumbing components
- Simple sizing & installation – standard 3/4” connections
- Perfect solution for homes where equipment protection is desired for longer equipment life and reduced energy consumption
- **OneFlow**® cartridge-based systems are easily maintained; change the TAC cartridge once every two years
- Mounting bracket and wrench for cartridge change-outs included

| Type    | Part No.   | DN    | Peak Flow Rate | Weight (Kg) |
|---------|------------|-------|----------------|-------------|
| OFTWH-R | S0002188EU | 3/4”F | 23L/min*       | 5,7         |
| OFTWH   | S0002182EU | 3/4”F | 38L/min*       | 6,2         |

\* Exceeding maximum flow can reduce effectiveness and void warranty. Pressure drop at peak flow rate is less than 1.03 bar at 27°C feed water.

## Specifications

A **OneFlow**® Innovative Scale Control system shall be installed on the cold water service line to condition the tap water just prior to the service line feeding the equipment it is designed to protect. The system will be sized for maximum or peak flow rate based on the specification of said equipment. A **OneFlow**® system may also be installed to protect multiple pieces of equipment from the ill-effects of hard water scale provided the aggregate peak flow rate for each piece of equipment it is protecting has been considered. The system shall be plumbed with a bypass valve to allow isolation of filter housing to allow the bypass of untreated water in the event that service or cartridge replacement be necessary. Bypass is recommended but not required. The installation area should be suitable in size for the housing to be serviced without encumbrance. The **OneFlow**® system does not require additional water to backwash, flush, or regenerate once put into service. The system shall not require any chemical additives and shall not require electricity for operation.

| Feed Water Chemistry Requirements |  |
|-----------------------------------|--|
| pH                                | 6.5 - 8.5                                      |
| Hardness (maximum)                | 28.8°dH, 51.3°F (513 mg/L CaCO <sub>3</sub> )* |
| Water Pressure                    | 1.03 - 6.2 bar                                 |
| Temperature                       | 5 - 38°C                                       |
| Free Chlorine                     | < 2 mg/l                                       |
| Iron (maximum)                    | 0.3 mg/l**                                     |
| Manganese (maximum)               | 0.05 mg/l**                                    |
| Copper                            | 1.3 mg/l                                       |
| Oil & H <sub>2</sub> S            | Must be Removed                                |
| Total Phosphates                  | < 3.0 mg/l                                     |
| Silica (maximum)                  | 20 mg/l†                                       |
| TDS                               | 1500 mg/l††                                    |

All these water chemistry requirements are corresponding to the average parameters of the water delivered usually, please contact your water supplier or local authorities in order to confirm the compliance.

#### NOTICE

\* Systems using **OneFlow**® technology are effective at controlling limescale formation inside the plumbing system at influent hardness levels up to 513 mg per liter (28.8°D, 51.3°F) of calcium carbonate. Due to variances in water chemistry, 513 mg per liter is a recommended hardness maximum due to potential aesthetic issues related to soft scale residue formation outside the plumbing system. Testing should be performed to determine proper application where hardness levels exceed 513 mg per liter.

\*\* Just as with conventional water softening media, **OneFlow**® media needs to be protected from excess levels of certain metals that can easily coat the active surface, reducing its effectiveness over time. Public water supplies rarely, if ever, present a problem, but if the water supply is from a private well, confirm that the levels of iron (Fe) and manganese (Mn) are less than 0.3 mg/l and 0.05 mg/l, respectively.

† **OneFlow**® media does not reduce silica scaling. While silica tends to have a less significant effect on scale formation than other minerals, it can act as a binder that makes water spots and scale residue outside the plumbing system difficult to remove. This 20 mg/l limitation is for aesthetic purposes.

†† All other water contaminants must meet the requirements of the local water control agency of each specific country where **OneFlow**® is sold and installed. Specific Mineral and Metal Maximum Contaminants Level's, identified in the above Feed Water Chemistry Requirements list, supersedes those requirements. Water known to have heavy loads of dirt and debris may require a pre-filtration prior to **OneFlow**®.

## System specifications

**Inlet/outlet connections:** 3/4" BSP threaded fittings

**Peak flow rate OFTWH-R** up to 23l/min

**Peak flow rate OFTWH** up to 38l/min

**Flow capacity (continuous flow rate):**

**OFTWH-R** up to 15,2Lit/min, 24/7/365 for 2 years for the OFTWH-R-RM cartridge

**OFTWH** up to 22,7Lit/min, 24/7/365 for 2 years for the OFTWH-RM cartridge

**Capacity:** OFTWH-R-RM and OFTWH-RM cartridges do not have a grain removal capacity, however, other elements present in the water will gradually degrade the effectiveness of the cartridge. Change the OFTWH-R-RM and OFTWH-RM cartridges at least once every two years.

#### INSTALLATION WITH COPPER (Cu)

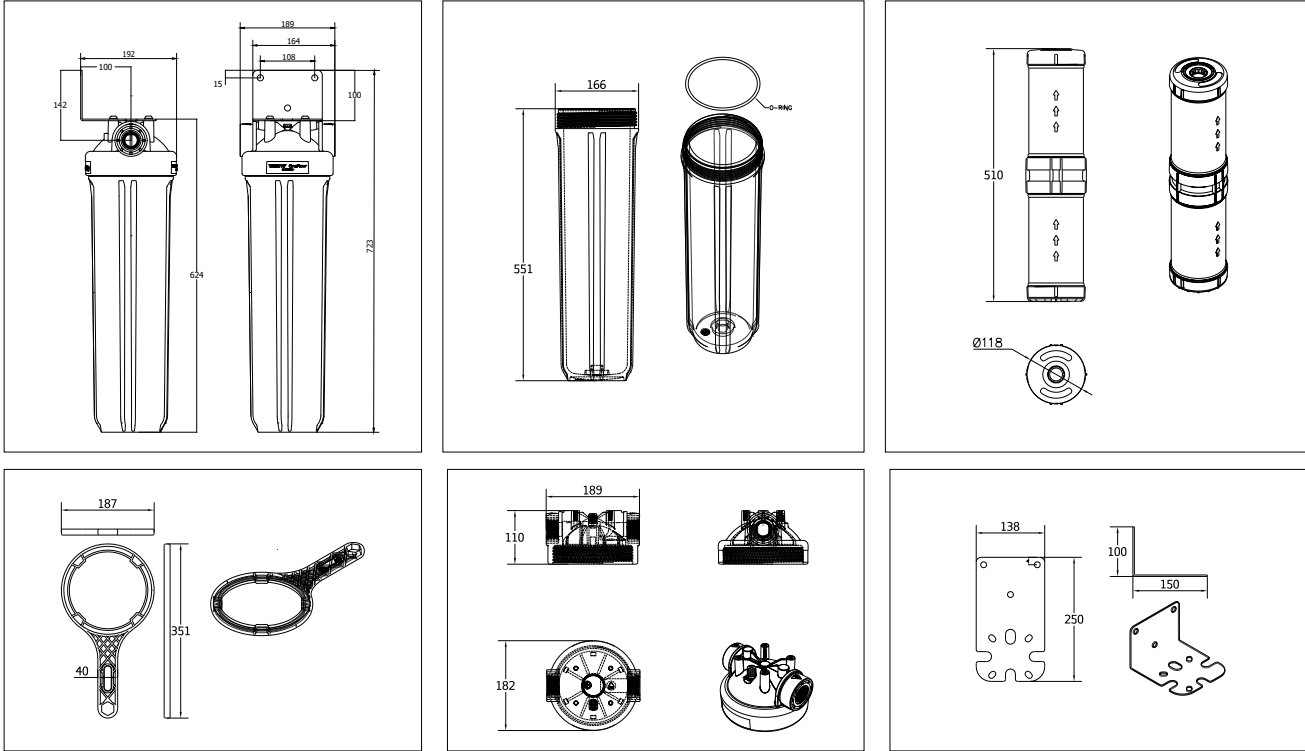
We do not recommend to install **OneFlow**® with new copper pipes. Excessive copper levels can foul the **OneFlow**® media. If NEW copper lines had been installed, they need to be passivated for a minimum of 4 weeks before placing unit into service.

## Independent Research

Independent scientific testing has confirmed Template Assisted Crystallization (TAC) technology provides scale reduction of over 95+%. Testing was conducted based on DVGW W512 protocols/tests to assess control of scale formation. (see Water ReUse Foundation/Arizona State University Study, Evaluation of Alternatives to Domestic Ion Exchange Water Softeners, © 2013, Water Reuse Research Foundation).

## Overall dimensions (mm)

Please allow additional clearance above the device for making connections and replace the cartridge.



## Product text

### OneFlow® Series OFTWH-R

Innovative Scale Control System, **OneFlow® Series OFTWH-R** - Watts Brand, cartridge included. It improves efficiency of all water heating devices and downstream plumbing components, protecting from scale formation on internal plumbing surfaces. Peak flow rate 23 l/min, Maximum pressure 6,2 bar; maximum temperature 38°C. Size 3/4" F.

### OneFlow® Series OFTWH

Innovative Scale Control System, **OneFlow® Series OFTWH** - Watts Brand, cartridge included. It improves efficiency of all water heating devices and downstream plumbing components, protecting from scale formation on internal plumbing surfaces. Peak flow rate 38 l/min, Maximum pressure 6,2 bar; maximum temperature 38°C. Size 3/4" F.

The descriptions and photographs contained in this product specification sheet are supplied by way of information only and are not binding.

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