

OneFlow™ + OFPSYS

Integrated Water Filtration and Scale Control System
For Residential Applications

Technical Data Sheet



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.

Inquire with governing authorities for local installation requirements.

The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

⚠ WARNING

Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Description

The **OneFlow™+** system is an economical and environmentally friendly physical water treatment technology that helps protect pipes, extend the life of appliances, and provide better tasting water through filtration. **OneFlow™+** system is a dual cartridge-based system with a radial flow 20 micron carbon block cartridge which reduces sediment, chlorine taste and odor, and an integrated **OneFlow™+** scale prevention cartridge.

The **OneFlow™+** system uses template assisted crystallization (TAC) 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 and on fixtures, are reduced**.

The **OneFlow™+** system is not a water softener. It does not add chemicals. It is a 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 salt-free alternative to water softening (ion exchange) or scale sequestering devices.



OFPSYS

- Reduces sediment, chlorine taste and odor
- Chemical-free scale prevention and protection - converts hardness minerals to harmless, inactive microscopic crystals making **OneFlow™+** an effective salt-free alternative to ion exchange water softeners
- Virtually maintenance free - no salt bags or other chemicals to constantly add or maintain
- No control valve, no electricity and no wastewater
- Improves efficiency of all water heating devices and downstream plumbing components
- Simple installation – standard 1” connections
- Excellent system for homes where equipment protection is desired for longer equipment life and reduced energy consumption
- **OneFlow™+** cartridge-based systems are easily maintained.
- Easily installed mounting bracket and multi-function tool included to allow cartridge change-outs when necessary

Type	Part No.	DN	Nominal Flow Rate Up To (l/min)
OneFlow®	OFPSYS	1” NPT/1”BSPP	38

Feed Water Chemistry Requirements

pH	6.5-8.5
Hardness (maximum)	28.8°dH, 51.3°F (513 mg/L CaCO3)*
Water Pressure	10-90 psi (0.69-6.2 bar)
Temperature	40-100°F (5-38°C)
Free Chlorine	< 2 ppm
Iron (maximum)	0.3 ppm**
Manganese (maximum)	0.05 ppm**
Copper	1.3 ppm***
Oil & H2S	Must be Removed Prior to OneFlow™+
Total Phosphates	< 3.0 ppm
Silica (maximum)	20 ppm†
TDS	1500 mg/l††

NOTICE

* Systems using **OneFlow™+** technology are effective at controlling lime-scale formation inside the plumbing system at influent hardness levels up to 30 grains per gallon (513 ppm CaCO₃) of calcium carbonate. Due to variances in water chemistry, 30 grains per gallon is a recommended hardness maximum due to potential aesthetic issues related to soft scale residue formation outside of the plumbing system. Testing should be performed to determine proper application where hardness levels exceed 30 grains per gallon.

** 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.

⚠ WARNING

***** Pursuant to the EPA drinking water standards, the copper concentration permitted is up to 1.3 ppm. Typically originating from new copper plumbing, high levels of copper can foul OneFlow media. New Copper lines need to be passivated for a minimum of 4 weeks before placing unit into service. For applications with copper concentration greater than 1.3 ppm, please consult Watts Water Quality Technical Service. To further minimize any problem with excess copper, avoid applying excessive flux on the inner surfaces of the pipe and use a low-corrosivity.**

NOTICE

† **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 ppm limitation is for aesthetic purposes.

†† All other contaminants must meet the requirements of the USEPA Safe Drinking Water Act. Specific Mineral and Metal MCL's, identified in Watts published Feed Water Chemistry Requirements, supersedes the USEPA SDWA. Water known to have heavy loads of dirt and debris may require pre-filtration prior to **OneFlow™+**.

System specifications

Inlet/Outlet Connections: 1" NPT/1" BSPP

Nominal Flow Rate up to 10 gpm (38 lpm)

OFPRFC Radial Flow Carbon Block Cartridge should be replaced at least once every year

OFPSF Scale Prevention Cartridge should be replaced at least once every 3 years

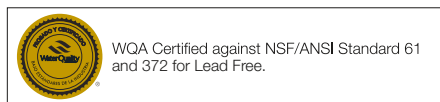
OFFCOM Combo Pack includes one carbon block cartridge and one scale prevention cartridge

System Specifications

Inlet/Outlet Connections	1" NPT/1"BSPP
Service Flow Rate (Nominal)	up to 10 gpm (38 lpm)
Capacity	OneFlow™+ system helps prevent scale in addition to removing sediment, chlorine taste and odor. A replacement schedule of once per year for the carbon cartridge and once per every 3 years on the OneFlow™+ anti-scale cartridge is typical for residential systems. Frequency of cartridge replacement will depend on volume of system usage.

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, © 2014, Water Reuse Research Foundation).



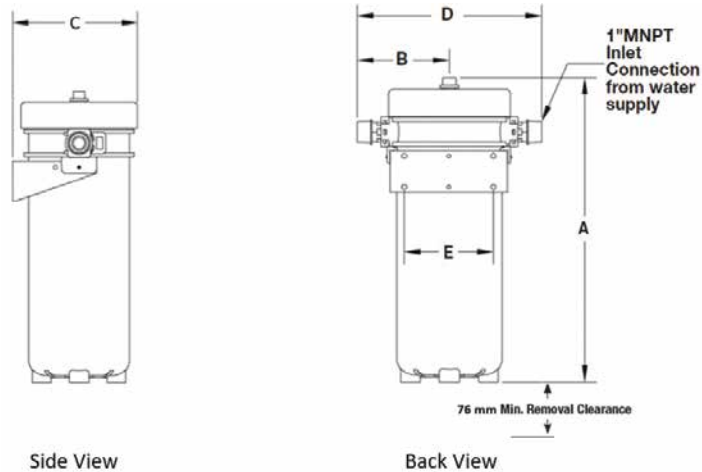
Applications

A **OneFlow™+** scale prevention system shall be installed on the cold water service line to condition the tap water just prior to the service line feeding the residential home. The **OneFlow™+** system uses a 20 micron radial flow carbon block cartridge with a dirt holding capacity up to 2.2 lbs (1 kg). This carbon block reduces chlorine taste and odors for up to 50,000 gallons (189,000 liters) of use, with a flow rate of 3 gpm (11.34 lpm). The **OneFlow™+** system also uses a scale prevention cartridge which is good for up to 250,000 gallons (945,000 liters) or replacement every 3 years, whichever comes first. The installation area should be suitable in size for the housing to be serviced without encumbrance and the system should be installed per the Installation, Operation & Maintenance manual as provided with each system.

The **OneFlow™+** system must not require additional wastewater to backwash, flush, or regenerate once put into service. The system shall not require any chemical additives and shall not require electricity for operation.

Overall dimensions (mm)

The overall height and the height of the inlet fitting varies due to material variations and assembly tolerances. Please allow additional clearance above the filter for making connections.



Mod.	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Weight (kg)
OFPSYS	476	144	205	289	140	7,5

Product text

OneFlow™+ Series OFPSYS

OneFlow™+ Anti-Scale System, **Series OFPSYS** - Watts brand, cartridges included. It improves efficiency of all water heating devices and downstream plumbing components, protecting from scale formation on internal plumbing surfaces. Maximum flow rate 38 lt/min, Max. pressure 6,2 bar; max temperature 38°C. Size 1".

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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