

For Commercial and Industrial Applications

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

LEAD FREE*

Models OF1465-50TM and OF1665-75TM OneFlow® Anti-Scale System

Connection Sizes: 2" (50mm)

Flow Rates: From 50 gpm to 75 gpm (189 lpm to 284 lpm)

The OneFlow® Anti-Scale System provides protection from scale formation on internal plumbing surfaces. The OneFlow® system may be installed at the point-of-entry to a building to treat both hot** and cold water, or it can be located directly before a water heater, boiler, or other hot water-using device that requires protection from the ill effects of hard water.

OneFlow® prevents scale by transforming dissolved hardness minerals into harmless, inactive microscopic crystal particles, as water travels up through the media. These precipitated micro-crystals stay suspended in the water and are passed to drain, thereby having a greatly reduced ability to react negatively like dissolved hardness does. The system requires very little maintenance, no backwashing, no salt, and no electricity. Typical hardness problems, especially build-up of scale in pipes, water heaters, boilers and on fixtures are no longer a concern.

OneFlow® is not a water softener or a chemical additive (like anti-scalants or sequestrants). It is a scale prevention device with proven third party laboratory test data and years of successful residential and commercial installation. OneFlow® is the one water treatment device that effectively provides scale protection and is a great salt-free alternative to water softening (ion exchange) or scale sequestering chemicals.



OF1665-75TM

Features

- Chemical-free scale prevention and protection – converts hardness minerals to harmless, inactive microscopic crystals making OneFlow® an effective alternative technology to a water softener for the prevention of scale due to water hardness
- Virtually maintenance free - no control valve
- Uses environmentally friendly technology by using no salt or other chemicals to constantly add, no electricity and no wastewater
- Improves efficiency of all water using appliances – both hot** and cold
- Simple sizing & installation – all you need to know is pipe size and the peak flow rate

** For hot water applications where water temperature is 100°F – 140°F (38° – 60°C), please consult ES-OneFlow-HotWater



WQA Certified against NSF/ANSI Standard 61 and 372 for Lead Free.

- Perfect system for towns or communities where water softeners are banned or restricted
- For high-flow applications, install multiple tanks in parallel
- OneFlow® does not remove minerals or add sodium to the water supply
- OneFlow® can be installed as pre-treatment to reverse osmosis (OneFlow® should be the last stage in treatment unless a point-of-use system is being used down stream.)

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

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.

Models

Model	Ordering Codes	Maximum Flow Rate
OF1465-50TM	EDP #7100661	50 gpm (189 lpm)
OF1665-75TM	EDP #7100662	75 gpm (284 lpm)

Connections

Inlet Connection 2" (50mm) PVC FNPT

Outlet Connection 2" (50mm) PVC FNPT

2 inch Flex connectors are furnished and must be used in installation.

Replacement Media

OF1465RM Media should be replaced every 3 years

OF1665RM Media should be replaced every 3 years

Specifications

A OneFlow® scale prevention system shall be installed on the main water service pipe just after it enters the building, but after other whole building water safety devices (backflow preventers or pressure reducing valves), to effectively address water hardness concerns. A system may also be installed further downstream to protect specific equipment or areas within a plumbing system. The system shall be plumbed with a bypass valve to allow isolation of tank(s) and to allow the bypass of untreated water in the event that service or media replacement be necessary. The installation area should be suitable in size for the tank(s) to be serviced without encumbrance and sit upright on a flat level surface.

The system must operate in an upflow manner and does not require additional water to backwash, flush, or regenerate once put into service. The system does not require any chemical additives and does not require electricity for operation.

Multi-tank systems shall be installed in parallel with PVC/CPVC manifold to meet peak flow rate requirements.

NOTICE

Not for use on closed loop systems.

It is very important to use flexible connections on the inlet and outlet plumbing. The tanks expand and contract with water pressure fluctuations. Flexible connectors will prevent plumbing and tank leaks. The EDP code for the suggested Watts 2" Flexible Connector is C515285 (Two are required for installation).

Anytime OneFlow® systems are installed above the ground floor of a building it is recommended that a vacuum breaker also be installed to protect against tank collapse in the event the plumbing system is drained. If a vacuum breaker is not used then the system should be placed in bypass anytime the plumbing system is drained. The EDP code for the suggested vacuum breaker is 0556031. The vacuum breaker should be installed on the outlet of the system.

Feed Water Chemistry Requirements

pH	6.5 to 8.5
Hardness (maximum)	75 grains (1282 ppm CaCO ₃)
Water Pressure	15psi to 100psi (103 kPa to 6.9 bar)
Temperature	40°F to 100°F (5°C to 38°C)
Chlorine	< 2 ppm
Iron (maximum)	0.3 mg/l*
Manganese (maximum)	0.05 mg/l*
Copper	1.3 ppm**
Oil & H ₂ S	Must be removed prior to OneFlow®
Silica (maximum)	20 ppm***

NOTICE

*Iron and Manganese

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

**Copper

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. For applications with copper concentration greater than 1.3 ppm, please contact Watts Pure Water Technical Service at 1-800-224-1299. To further minimize any problem with excess copper, avoid applying excessive flux on the inner surfaces of the pipe and use a low-corrosivity water soluble flux listed under the ASTM B813 standard.

NOTICE

***Silica

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.

NOTICE

Water known to have heavy loads of dirt and debris may require pre-filtration prior to OneFlow®.

Standards

Independent scientific testing has confirmed Template Assisted Crystallization (TAC) technology provides scale reduction of over 95+%. Testing was conducted under protocol based on DVGW W512 test to access control of scale formation.

Weights

	OF1465-50TM		OF1665-75TM	
Dry Weight	66 lbs.	30 kgs.	75 lbs.	34 kgs.
Service Weight	400 lbs.	181 kgs.	480 lbs.	218 kgs.

Maximum Service Flow (gpm) vs. Water Temperature

Continuous Duty Systems:

System	40°F	45°F	50°F	55°F	60°F	65°F	70°F
OF1465-50TM	40	44	48	50	50	50	50
OF1665-75TM	45	51	56	59	63	69	75

Intermittent Duty Systems:

OF1465-50TM	50 GPM at all temperatures
OF1665-75TM	75 GPM at all temperatures

Intermittent duty is defined as less than 2 hours of Maximum Flow per 24 hour period. Higher Flow rates can be achieved by combining systems in an array.

Maximum Flow Rate***		
Models	gpm	lpm
OF1465-50TM	50	189
OF1665-75TM	75	284

*** Exceeding maximum flow can reduce effectiveness and void warranty.

Pressure drop at peak flow rate is less than 10 psi.

Pressure drop reading taken with inlet and outlet gauges installed at a common elevation and 80 degree feed water.

NOTICE

The information above shows flow rate data for our large single tanks (50gpm & 75gpm). High-flow applications can utilize OneFlow® multiple tanks, plumbed in parallel, to meet flow rates from 100 gpm up to 1000 gpm or more. An example of a multi-tank OneFlow® system is shown below:

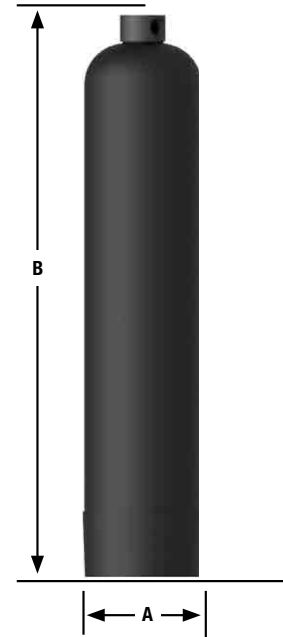
NOTICE

*2 inch Flex Connectors must be installed horizontally not vertically in the water pipe line.

Dimensions

Model	Dimensions	
	A in.	B in.
OF1465-50TM	14	73.1
OF1665-75TM	16	73.1

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



USA: T: (978) 689-6066 • F: (978) 975-8350 • Watts.com
 Canada: T: (905) 332-4090 • F: (905) 332-7068 • Watts.ca
 Latin America: T: (52) 81-1001-8600 • Watts.com