

## For Foodservice Applications

Job Name \_\_\_\_\_

Contractor \_\_\_\_\_

Job Location \_\_\_\_\_

Approval \_\_\_\_\_

Engineer \_\_\_\_\_

Contractor's P.O. No. \_\_\_\_\_

Approval \_\_\_\_\_

Representative \_\_\_\_\_

# LEAD FREE\*

# Hydro-Safe®

## Series Steam Max Steam and Combi Oven Filtration Systems

**Flow Rate: 1 to 6 GPM (3.8 to 22.7 LPM)**

The Hydro-Safe line of Steam Max systems have been specifically engineered to address and correct multiple common water related problems both efficiently and economically. It is designed for food-service applications for the treatment of steamers, combi ovens and specific ice machines. Different configurations have been developed to address unique water treatment needs. Utilizing multiple treatment technologies, from poly spun sediment and coconut shell carbon for de-chlorination to phosphate or OneFlow® media for scale control, this Steam Max line has the solution for your steam cooking water treatment needs.

### Applications

- Steamers
- Combi Ovens
- Ice Machines

### Features

- Reduces scale build-up
- Reduces sediment, chlorine taste and odor
- Reduces maintenance and system downtime
- Increases ice machine life, performance and quality
- In/Out valves allow for easy filter service
- Pressure Gauges and flush kit included
- Easy to install
- Simple filter replacement



**Steam Max-S3**

### System Specifications

Maximum Pressure: 125psi/8.6 bar

Steam Max Models S1, S1L, S3 Lime Scale, S3L Lime Scale, S3L+ Lime Scale, and S3

90psi/6.2 bar

Steam Max Models S1BBL, S1BBLHF, and S3L+

Maximum Temperature: 100°F/38°C

pH 6.5 to 8.5

Hardness (maximum for systems containing OneFlow) 75 grains (1282 ppm CaCO<sub>3</sub>)

Chlorine < 2ppm

Iron (maximum) 0.3 mg/l

Manganese (maximum) 0.05 mg/l

Copper (for systems containing OneFlow) < 0.1 mg/l

Oil & H<sub>2</sub>S- None allowed

Polyphosphate (for systems containing OneFlow)- None allowed

Silica (maximum for systems containing OneFlow) 10 ppm

For all other feed water quality requirements abide by the current USEPA Safe Drinking Water Act standards.



Steam Max Systems are Tested and Certified by WQA to NSF/ANSI Standard 42 for the reduction of claims specified on the Performance Data Sheet & NSF/ANSI 372 for "lead free" compliance.

\*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.

# WATTS®

| System Models             | Ordering Code | Max Flow Rate   | Connection Size |
|---------------------------|---------------|-----------------|-----------------|
| Steam Max-S1              | STMMA-S1S     | 1 GPM (3.8 LPM) | 3/8 NPT         |
| Steam Max-S1L             | STMMA-S1L     | 2 GPM (7.6 LPM) | 3/8 NPT         |
| Steam Max-S1BBL           | STMMA-S1B     | 4 GPM (15 LPM)  | 3/4 NPT         |
| Steam Max-S1BBLHF         | STMMA-S1BP    | 6 GPM (22 LPM)  | 3/4 NPT         |
| Steam Max-S3 Lime Scale   | STMMA-S3S-LS  | 1 GPM (3.8 LPM) | 3/8 NPT         |
| Steam Max-S3L Lime Scale  | STMMA-S3L-LS  | 2 GPM (7.6 LPM) | 3/8 NPT         |
| Steam Max-S3L+ Lime Scale | STMMA-S3LP-LS | 2 GPM (7.6 LPM) | 3/8 NPT         |
| Steam Max-S3              | STMMA-S3S     | 1 GPM (3.8 LPM) | 3/8 NPT         |
| Steam Max-S3L+            | STMMA-S3LP    | 2 GPM (7.6 LPM) | 3/8 NPT         |

## OneFlow® Application Practices

**Note:** Systems using OneFlow technology prevent hardness related scale formation inside the plumbing system at influent hardness levels of 75 grains per gallon of calcium carbonate and less. Due to variances in water chemistry certain aesthetic conditions external of the plumbing system may not be attained. New copper lines need to be passivated before placing unit into service. Copper usually originates from new copper plumbing upstream of the OneFlow system. All new copper plumbing before the system should be allowed to passivate by operating under normal conditions for a period of 4 weeks prior to starting the system up. This will allow the copper surfaces to be fully flushed and develop a natural protective surface. To further minimize any problem with excess copper, avoid applying excess flux on the inner surfaces of the pipe and use a low-corrosivity water soluble flux listed under the ASTM B813 standard. OneFlow is not for use on closed loop systems.

## Filter Cartridge Life Span

Filter cartridges should be changed at end of filter life, due to lack of filtering performance, or whenever a 15psi pressure drop or greater is experienced during normal operation, whichever comes first.

## Replacement Filters

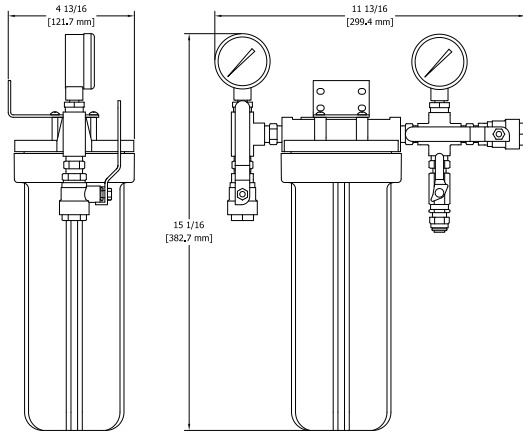
| System Replacement Filters   |                      |           |                                    |
|------------------------------|----------------------|-----------|------------------------------------|
| System Model                 | Filter Ordering Code | Frequency | Description                        |
| Steam Max-S1                 | DOR-OF110RM          | 12 Months | 10" OneFlow Anti-Scale Cartridge   |
| Steam Max-S1L                | DOR-OF120RM          | 12 Months | 20" OneFlow Anti-Scale Cartridge   |
| Steam Max-S1BBL              | DOR-OF140RM          | 12 Months | 20" OneFlow Anti-Scale Cartridge   |
| Steam Max-S1BBLHF            | OFTWHRM              | 12 Months | 20" OneFlow Anti-Scale Cartridge   |
| Steam Max-S3<br>Lime Scale   | STMMA-S3S-PM         |           | All Filters for System Maintenance |
|                              | HSR-S-SED-5M         | 6 Months  | 10" Sediment Pre Filter            |
|                              | STMAXR-S-CB          | 6 Months  | 10" Carbon Block                   |
|                              | STMAXR-S-ACSC        | 6 Months  | 10" Phosphate Scale Control        |
| Steam Max-S3L<br>Lime Scale  | STMMA-S3L-PM         |           | All Filters for System Maintenance |
|                              | HSR-S-SED-5M         | 6 Months  | 10" Sediment Pre Filter            |
|                              | STMAXR-L-CB          | 6 Months  | 20" Carbon Block                   |
|                              | STMAXR-S-ACSC        | 6 Months  | 10" Phosphate Scale Control        |
| Steam Max-S3L+<br>Lime Scale | STMMA-S3LPS-PM       |           | All Filters for System Maintenance |
|                              | HSR-S-SED-5M         | 6 Months  | 10" Sediment Pre Filter            |
|                              | STMAXR-L-CB          | 6 Months  | 20" Carbon Block (2)               |
|                              | STMAXR-S-ACSC        | 6 Months  | 10" Phosphate Scale Control        |
| Steam Max-S3                 | STMMA-S3S-PM         |           | All Filters for System Maintenance |
|                              | HSR-S-SED-5M         | 6 Months  | 10" Sediment Pre Filter            |
|                              | STMAXR-S-CB          | 6 Months  | 10" Carbon Block                   |
|                              | DOR-OF110RM          | 12 Months | 10" OneFlow Anti-Scale Cartridge   |
| Steam Max-S3L+               | STMMA-S3LP-PM        |           | All Filters for System Maintenance |
|                              | HSR-S-SED-5M         | 6 Months  | 10" Sediment Pre Filter            |
|                              | STMAXR-L-CB          | 6 Months  | 20" Carbon Block (2)               |
|                              | DOR-OF140RM          | 12 Months | 20" OneFlow Anti-Scale Cartridge   |

**Note:** One-stage Steam Max systems do not dechlorinate water. If chlorine is present, then a multi-stage system that contains activated carbon should be selected to minimize corrosion due to chlorine within systems that generate steam.

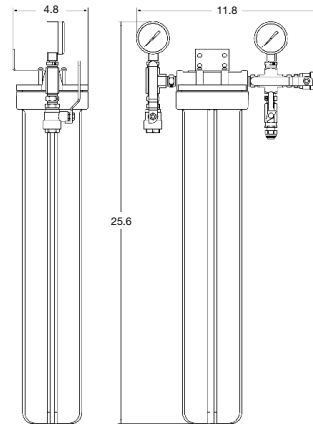
**Please note:** Cartridge capacities are estimates and may be less depending on incoming water quality.

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

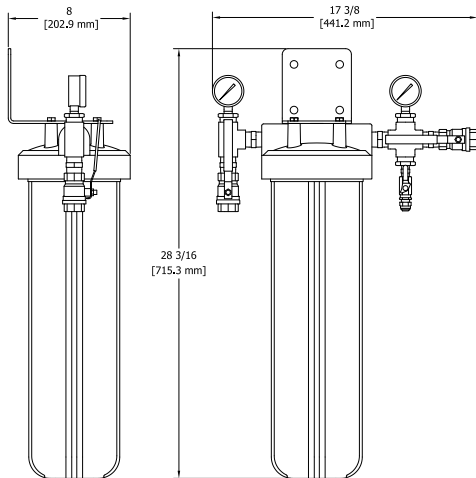
**Steam Max-S1**



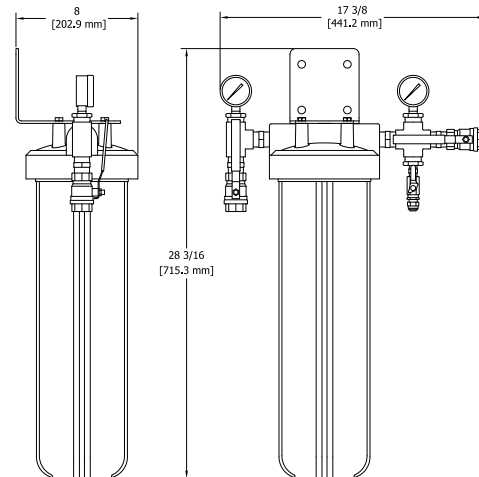
**Steam Max-S1L**



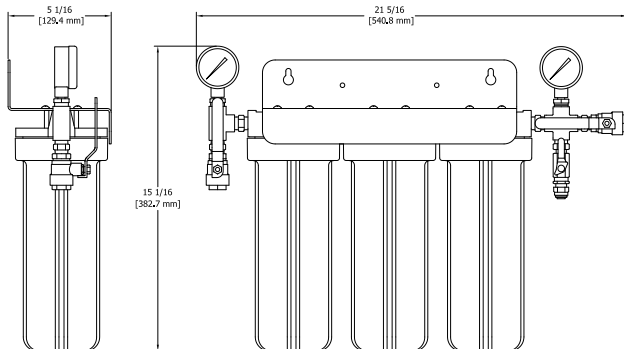
**Steam Max-S1BBL**



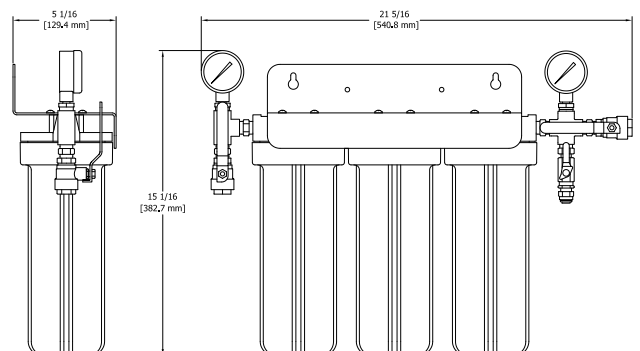
**Steam Max-S1BBLHF**



**Steam Max-S3**

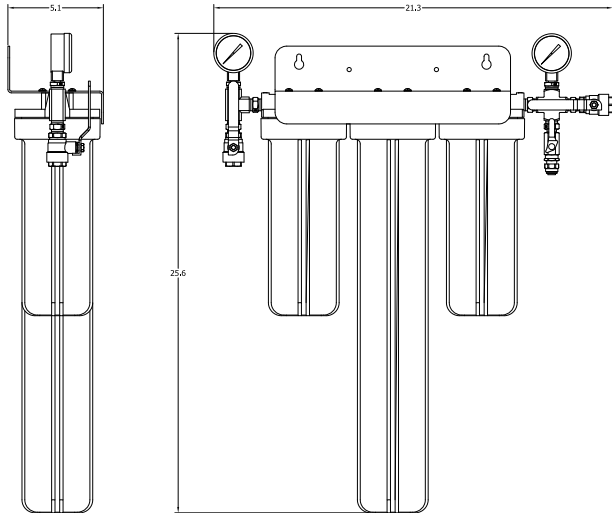


**Steam Max-S3 Lime Scale**

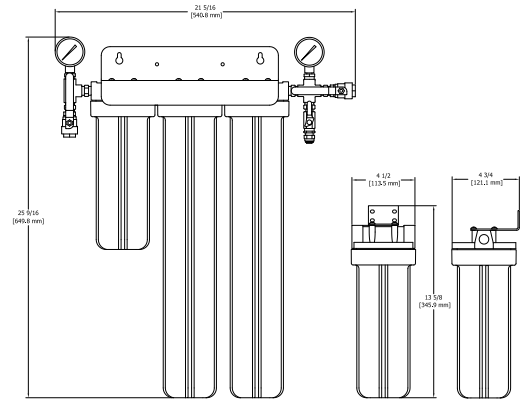


**Note:** Allow 3" of clearance at bottom of system for removal of filter bowls for filter cartridge replacement

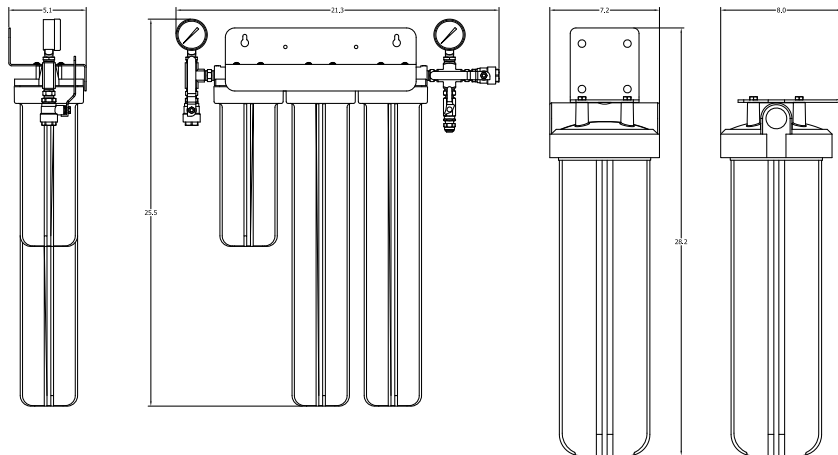
**Steam Max-S3L Lime Scale**



**Steam Max-S3L + Lime Scale**



**Steam Max-S3L +**



**Note:** Allow 3" of clearance at bottom of system for removal of filter bowls for filter cartridge replacement