# The Comfort and Savings of Instant Hot Water with Recirculation



## **AquaMotion**<sup>®</sup>

The Innovation Leader in Hot Water Recirculation Technology



US DESIGN 🗢 US BUILT 🗢 PATENTED



Hot Water Recirculation Systems For Retrofit & New Construction

#### **The Problem**

How long do you wait for hot water when you turn on the faucet? 30 seconds, 1 minute, 2 or 3 minutes, longer? While you wait, a home with 5 taps can waste up to 15,000 gallons of tempered water down the drain. You pay for this potable water, wasted energy and sewage fees.

#### **The Solution**

Install a proven, awarded AquaMotion recirculation system. One system is available for every type of installation, hot water tanks or tankless.

#### **The Benefits**

- Hot Water Comfort at Every Faucet
- Save Time, No More Waiting For Hot Water
- Save Hot Water, 12,000 15,000 Gallons a Year
- Save Energy with Timer, Save on Utility and Sewer Bills
- Save More with ON DEMAND Systems
- Go Green, Help Conserve this Precious Water Resource
- Meet local Plumbing Codes

#### **The Cost**

To run the circulator with timer at \$0.12 per kw is approx. \$3.00, \$8.00 for the large pump annually. Our hot water recirculation kits have an approx. one to three year payback depending on the size of the installation.

#### **How Does It Work?**

A pump at the tank or tankless heater, or installed under the sink, forces the lukewarm water from the hot supply line into the cold supply line. If a dedicated return line is used it returns the lukewarm water to the heater.

A sensor/switch (Aquastat) built into the pump or an Aqua-Flash® or ODR Superflow<sup>TM</sup> By-pass valve transfers the lukewarm water into the cold pipe. The valves maintain average 93° F (34° C) at the sink. The under sink pump starts when temperature drops to 85° F (30° C) and stops when it reaches 104° F (40° C). The pump runs about 3 times an hour for 2 minutes. A built-in 24-hour mechanical timer allows the user to set the time when he wants instant hot water. An ON DEMAND button/motion sensor or app can also activate the system

US Patents, RTM, 9,864,647, D834, 145, 8,083,500, 8,303, 184, 9,328,736, 10,612, 793, 5,501,838, 4,507,949. Canadian Patents 2,883,495 & 2,935,949



**HOT WATER TANK SYSTEMS** Standard plumbing, single pipe system Up to 250 ft. total pipe length

#### **AMH3K-7**

#### Complete kit installs under sink. No cutting of pipe.

- Requires electrical outlet under sink. •
- Kit includes: stainless union pump with legs, 10 ft. line cord, built-in timer with 48 tabs of 15 min. runtime, Aquastat/switch, fittings, check valves, hoses, tees
- Meets Title 24 California
- Patented
- Installs in 15 minutes

#### AMH1K-3UV

#### Select this if No electrical outlet under sink.

- Patented •
- By-pass valve kit installs under sink in 10 minutes •
- Does NOT require electrical outlet at sink
- Pump with built-in timer installs on top of water heater
- Kit includes: stainless union pump, built-in timer, 10 ft. line cord, fittings, brass/stainless Agua-Flash Valve, hose, tee

#### **AMK-UK**

- Under sink bypass valve kits for additional locations, up to 5 per pump. No Power required under Sink, Valve installs on cold angle stop.
- Replaces Grundfos plastic Comfort Valve 59526, Watts 367010, Taco Hotlink HLV-1 plastic valve and others on Hot water tank installations only. Valve installs on the cold angle stop. Patented and Pending.

#### FOR HOMES WITH DEDICATED RETURN LINE

#### **AMH2K-7**

#### For systems with standard hot water heater.

- Installs into Return line at the hot water heater.
- Fully automatic stainless union pump with Aquastat/switch and built-in timer, long tail . pieces for mounting
- Meets Title 24 California
- Patented



















TANKLESS WATER HEATER SYSTEMS Standard plumbing single pipe system up to 250 ft. total pipe length

#### AMH1K-60DRZT1

#### Pump with bypass flow control keeps heater ready to fire when temperature setting is reached. Patented system.

- Stainless union circulator with built-in timer, check, flow control, bypass, line cord, union fittings, Tee.
- Bypass Valve Kit: ODR stainless valve, hose, tee installs under sink in 10 minutes
- Does NOT require electrical outlet at sink.
- **AMK-ODR** bypass valve kit for additional locations
- Under sink bypass valve kit, up to 5 per pump. ٠
- No Power Required Under Sink
- Kit includes Stainless Bypass Valve with Tee, Hot Angle Tee, Stainless Hose

#### AMH1K-RODRN

#### Agua-ON DEMAND<sup>™</sup> up to 600 ft. of total pipe length. Includes AMK-WB ON-DEMAND<sup>™</sup> Kit

- Stainless High Speed Circulator flanged with check, 10 ft. line cord, and  $\frac{34''}{4}$ Stainless FNPT Flanges
- Stainless Bypass AMK-ODR Valve Kit with hose and Tee installs under sink in 10 minutes on cold angle stop.
- Does Not require electrical outlet at sink.
- ON DEMAND AMK-WB Push Button\* with Receiver included
- Meets Title 24 California
- Patented

#### AMH3K-R

#### Under sink for Tankless and large tank systems up to 600 ft. of total pipe length

- Requires electrical outlet at sink.
- Stainless High speed circulator, built-in timer, line cord, check valves, Aguastat/switch, MNPT • Companion flanges, 2 hoses, 2 Tees
- Fully automatic controlled by Aguastat and Timer, stainless pump.
- Meets Title 24 California
- Patented

#### FOR HOMES WITH DEDICATED RETURN LINE

#### AMH2K-R

#### Pump installs into return line at heater

- For Systems with Tankless Heater or large tanks. •
- Stainless High Speed Circulator, Aguastat, Timer, <sup>3</sup>/<sub>4</sub> FNPT Flanges, 10 Ft. line cord.
- Installs into return line near heater.
- Meets Title 24 California
- Patented















### **AQUA-SHIELD<sup>TM</sup>** The Only Outdoor Recirculation Circulator

#### For Outdoor Tankless Installation UL & NSF/ ANSI 372 Listed and Approved, Patented

Aqua-Shield<sup>™</sup> was designed for the Southern Tier of the US market where Tankless heaters are installed outside to save on expensive air intake and exhaust systems. Use with Tankless Heaters without built-in pump and other plumbing jobs.

#### **Features**

- Outdoor enclosure with clear cover for timer visibility
- Anti-tampering locking device
- Rain, sprinkler and insect resistant
- On/Off operating range 115-125°F, 46.1-51.7°C (Models AMH2K-7X and AMH2K-RX)
- Timer has 3 positions; On, Off, Timer; with 48 tabs.
- UL Approved for outdoor installation
- Freeze protected with power on, except ON DEMAND
- Saves 12,000 15,000 Gallons of potable water annually
- 10 ft. line cord

#### For Dedicated Return Line AMH2K-7X Stainless Outdoor

#### union circulator.

- Performance 11 ft. head x 14 GPM
- For up to 250 ft. of total pipe length
- Includes Union Kit UK75T <sup>3</sup>/<sub>4</sub>" threaded male brass fittings
- Tankless must require less than .4 GPM flow

## For Dedicated Return Line AMH2K-RX

### Stainless Outdoor 4 bolt flanged circulator.

- Performance 21 ft. head x 16 GPM
- For up to 600 ft. of total pipe length.
- FK75S stainless <sup>3</sup>/<sub>4</sub>" flange set included.





Outdoor installed AMH1K-70DRXZT1



AMK-ODR By-Pass Kit Installs under sink in 10 minutes

#### 3 Kits for use with Outdoor Installed Tankless Heaters in Single Pipe Homes (95° at sink)

#### AMH1K-RODRXT1 ON DEMAND

Stainless flanged circulator for SINGLE PIPE, Meets CA Title 24

- For up to 600 ft. of total pipe length.
- Includes AMK-ODR under-sink valve kit
- Includes AMK-WB ON DEMAND wireless push button and receiver.
- Includes FK75S Stainless 3/4" Flanges.
- No Freeze protection with ON DEMAND

#### AMH1K-70DRXT1 ON DEMAND,

Stainless union circulator for SINGLE PIPE, Tankless requires .4 GPM or less flow. Meets CA Title 24

- For up to 250 ft. of total pipe length.
- Includes AMK-ODR under-sink valve kit
- Includes AMK-WB ON Demand wireless push button and receiver.
- Includes Union Kit UK75T <sup>3</sup>/<sub>4</sub>" threaded male bronze fittings.
- No Freeze protection with ON DEMAND

**AMH1K-70DRXZT1**, Stainless union circulator for SINGLE PIPE, Tankless requires .4 GPM or less flow.

- For up to 250 ft. of total pipe length
- Built-in timer and bypass at the pump,
- ¾" Cold line Tee & check
- Includes AMK-ODR under-sink valve kit
- Includes Union Kit UK75T ¾" threaded male bronze fittings.

## AQUA ON-DEMAND (ON CALL<sup>™</sup>)

AquaMotion recirculation systems are fully automatic with sensors, switches and timers with programmed ON times. ON Demand systems don't have timers. ON Demand gives the homeowner the ability to control system activation through a wireless receiver. When activated, the circulator runs 5 minutes or when the water temperature reaches 105°F (40.55°C). All systems except AMH1K-3UV and AMH1K-60DRZT1 are available with ON Demand version by adding "N" to the suffix of all part numbers and selecting the desired activation type. (example: AMH3K-7 becomes AMH3K-7N).

#### The following pump kits can be made ON-DEMAND with options below.

AMH3K-7 Under-sink AMH3K-R Under-sink AMH2K-7 AMH2K-R AMH3K-7N Under-sink AMH3K-RN Under-sink AMH2K-7N AMH2K-RN



**AMK-WB** Wireless Button and Receiver



**AMK-MS** Motion Sensor and Receiver



AMK-WS Wall Switch and Receiver



**AMK-CB** Counter Button and Relay



AMK-SM Smart Plug WIFI Plug and App

Receiver range 100 Ft. Range 500 Ft. unobstructed.

AquaMotion	AquaMotion	C AqueMotion
AMK-WBR	AMK-MSR	AMK-WSR

Additional Switches and Plugs Add Up to 5 buttons, motion sensors, wall switches per receiver.