

ACT-4 AC Electronically Commutated Spherical Motor Centrifugal Pump Kit



Application:
Specifically designed for hot water recirculation in a residential or light commercial building.

Specifications:

Pump:

- Max Capacity: 2.5 GPM
- Max Head: 5.5 ft.
- Pipe Connections: 3/4" M / F NPT
- Maximum Working Pressure: 145 PSI
- Maximum Temperature: 203°F

Motor:

- Canned Spherical Motor
- Voltage 115 Volt 50/60 HZ
- Power 20 Watts
- Automatic Overload Protection
- Low In-Rush Current

Valve:

- Pipe Connections: 1/2" MNPT x 3/8" compression
- Maximum Working Pressure: 145 PSI
- Maximum Temperature: 203°F
- Two AA Alkaline Batteries
- Maximum Transmitter Range: 150 ft.

Features

Compact Design:

Close coupled, space saving design provides easy installation.

Mounting:

Pump can be mounted horizontally or vertically with motor end down.

Construction:

Wetted parts are brass, 316SS, thermoplastic, carbon and ceramic for superior corrosion resistance.

Ceramic Bearing Ball and Carbon Bearing Cap:

High density ceramic bearing ball and graphite impeller bearing cap designed for high efficiency and long life.

Impeller:

Highly efficient and dynamically balanced with carbon bearing for smooth ultra quiet operation.

Casing:

Casing is lead free brass construction.

Mechanical Seal:

Unique patented design has no mechanical seal thus eliminating a potential leak path.

Motor:

Highly efficient and ultra quiet spherical motor design. Pump is designed for continuous operation. All ratings are within working limits of the motor.

Electronics:

Embedded microprocessor control is self-regulating and available with variable speed dial control (potentiometer) on the pump or as an optional PWM input for OEM.

Noise level:

Whisper quiet, less than 40 db.

Weight:

Lightweight construction weighs less than 2 lbs.

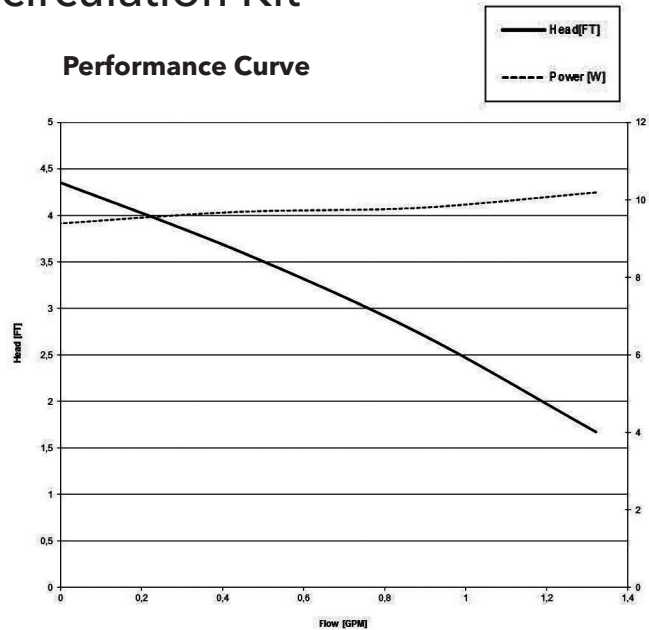
Laing Thermotech - ACT-4 Recirculation Kit

Materials of Construction (Wetted Parts)

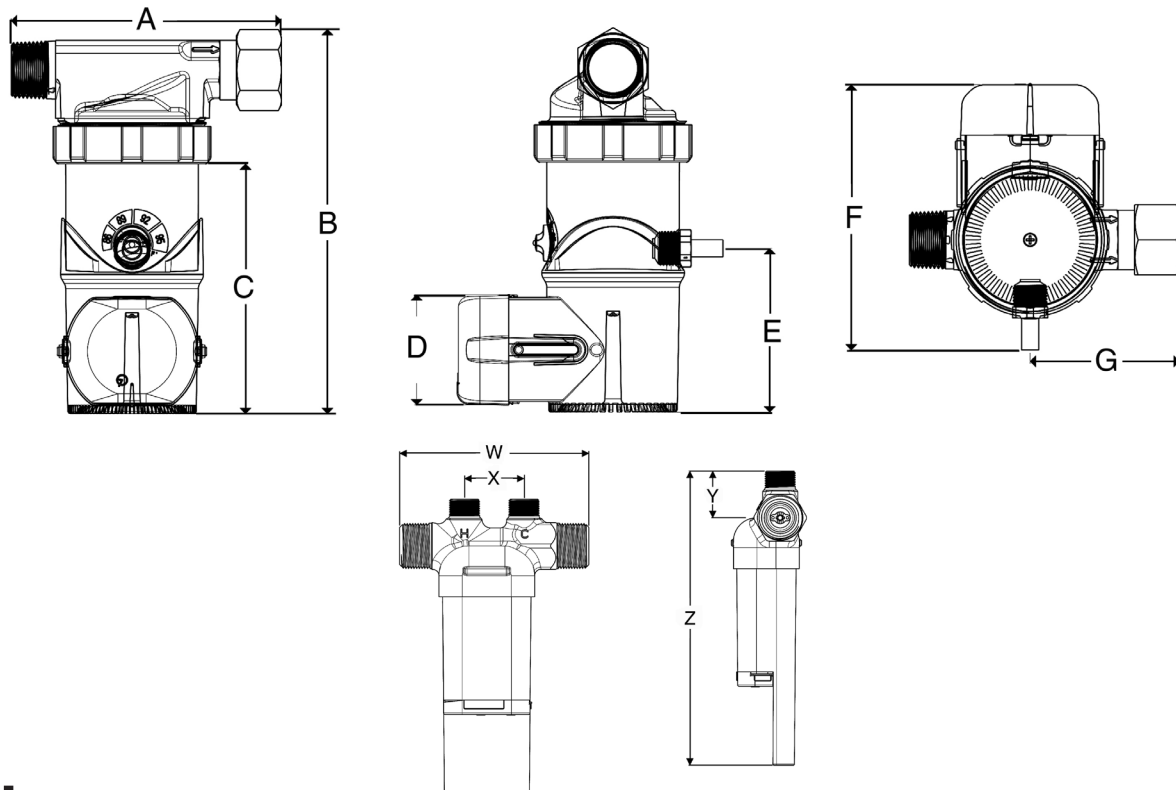
Part	Materials
Housing	Brass
"O" Ring	EPDM or Viton
Impeller	Polyphenylene Oxide (PPO)
Bearing	Carbon/Aluminum Ceramic
All Other Wetted Parts	316 Stainless Steel

Model Number	Part Number	Connection
ACT-4 kit	6050E4050	Pump: 3/4" M/F NPT Valve: 1/2" MNPT x 3/8" compression
push button/ signal repeater	6099E1550	Standard 115V Power Outlet

Performance Curve



Dimension Inches (mm)											Shipping WT. LBS. (kg)
A	B	C	D	E	F	G	W	X	Y	Z	
4.84 (123)	6.87 (174.6)	4.47 (113.5)	1.97 (50.1)	2.93 (74.4)	4.74 (120.5)	2.68 (68)	3.5 (89)	1.1 (28)	0.87 (22)	5.45 (138.5)	3.9 (1.8)



xylem
Let's Solve Water

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Provide Instant Hot Water to the ENTIRE HOUSE when and where you need it! Thanks to the high efficiency ECM technology; the ACT-4 hot water recirculation kit only uses 20 watts of power and delivers INSTANT COMFORT.

- Saves on time and money
 - No recirculation line required
 - No electric outlet needed under the sink
 - No more wasted water, saves 12,000 gallons of water per year
- Pump installed at the hot water source
- Electronically paired mixing valve installed under the sink farthest away from the hot water source
- Temperature and timer controlled
- Wireless communication between pump and valve

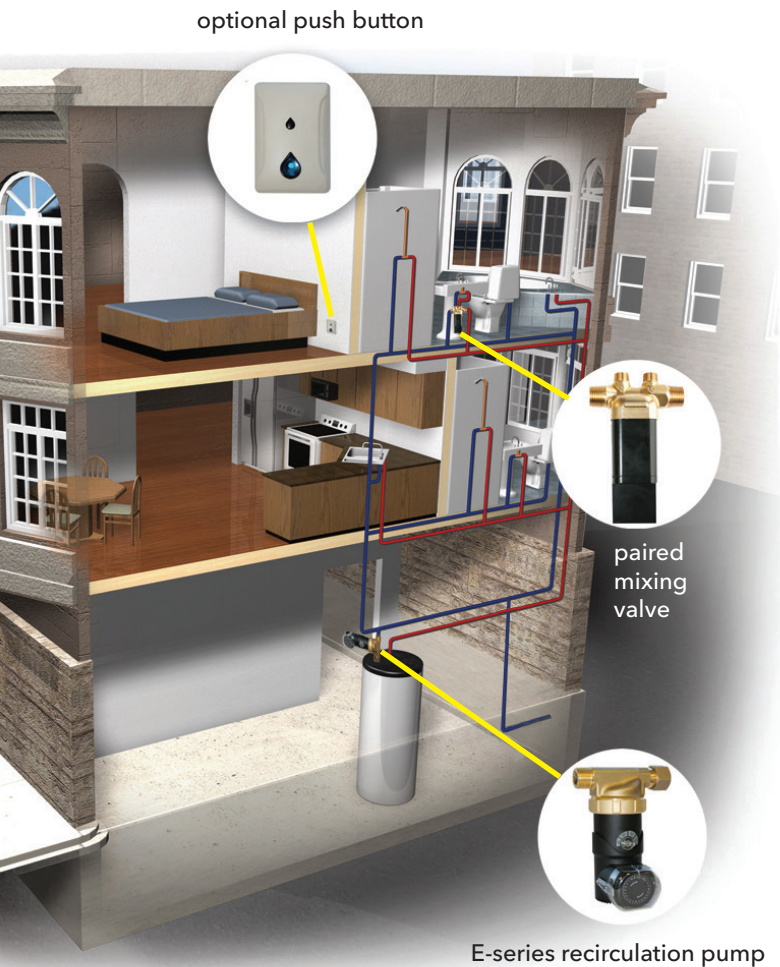


ACT-4

Potable Hot Water Recirculation Kit (RECIRCULATION PUMP & PAIRED MIXING VALVE)

ACT-4

Potable Hot Water Recirculation Kit



Features

- E-series pump with energy efficient ECM based permanent magnet motor
- Operates on as little as 20 watts
- Operated via wireless communication
- Temperature and Timer controlled
- Optional Push Button Start
- Valve operates using two AA batteries
- No electrical outlet required under the sink
- No recirculation line needed

The ACT-4 is a hot water recirculation kit (recirculation pump and paired mixing valve) for instant supply of hot water throughout the entire house.

Now you can have hot water in your home where and when you want it. No more waiting with the ACT-4 system. The pump and mixing valve wirelessly communicate temperature data. The ACT-4 pump is installed on the supply side of the hot water source and the mixing valve under the sink farthest from the hot water source.

How it works

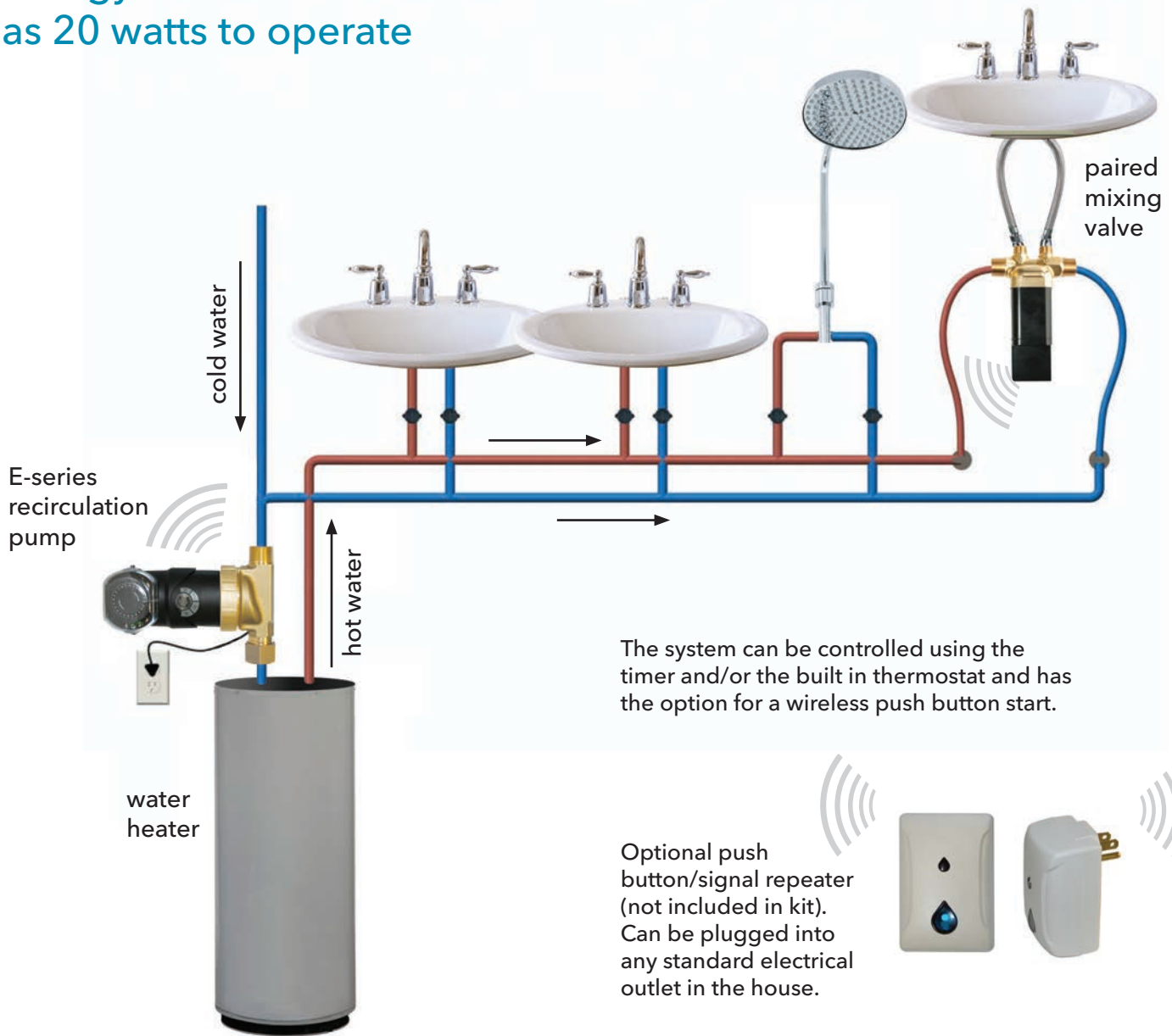
The desired water temperature at the mixing valve is set remotely with the thermostat dial on the pump. A signal is sent to the ACT-4 pump to begin circulating hot water throughout the system. The mixing valve tempers the cold water at the faucet / tap, providing instant hot water. When the set temperature is reached, a signal is sent to turn off the pump. This prevents continuous pump operation, thus saving energy. For additional energy savings, the pump can be set on timer based operation, to allow it to run only during time periods when hot water demand is high.

Saves time and money

The ACT-4 pump requires as little as 20 watts to operate. The instant hot water delivery with the ACT-4 saves water and time. An optional push-button/signal repeater device is available to provide instant hot water with a touch of a button.

Push button operation overrides the timer operation and continues until the desired temperature is met at the valve. Acting in its secondary function, the signal repeater extends the range of data transmission between the pump and valve.

Energy efficient - Uses as little as 20 watts to operate



The system can be controlled using the timer and/or the built in thermostat and has the option for a wireless push button start.

Optional push button/signal repeater (not included in kit). Can be plugged into any standard electrical outlet in the house.



Operating Data

Maximum Operating Temperature: 203°F (95°C)
Maximum Operating Pressure: 145 psi (10 Bar)
Power Supply: 115 V/1 Ph/ 60 Hz
Power Input: 20 Watts
Operating Current: 0.3 Amps
Motor RPM: 4800
Operating Noise Level: 30dB
Batteries: 2 AA Alkaline
Estimated Battery Life: 2 years
Maximum Transmitter Range: 150 ft (45 meters)

Materials of Construction

Pump

Body: Lead Free* Brass
Seals: EPDM
Impeller: Nylon/PPO
Internals: 316 Stainless Steel
Check Valve: Acetal Plastic

Paired Mixing Valve

Body: Lead Free* Brass
Springs: Stainless Steel
Valve Insert: Acetal Plastic
Seals: EPDM
Transmitter Housing: ABS Plastic



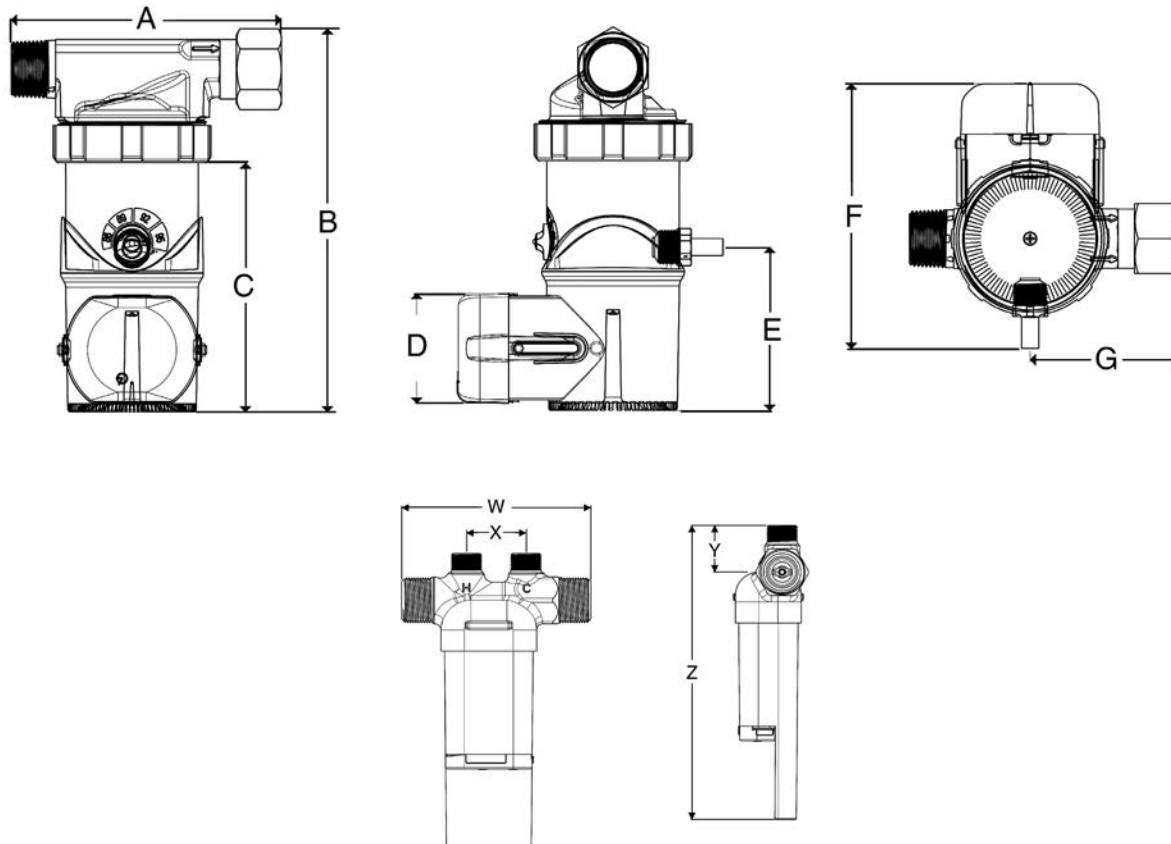
* CSA certified to NSF/ANSI 372 that product contains less than 0.25% lead content by weight on wetted surfaces.

ACT-4 Hot Water Recirculation Kit

Dimensions and Weight

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