

MODEL RA-34 RECIRCULATING, CONSTANT-TEMP, POTABLE WATER CHILLER

PERFECTION



Perfection Equipment, Inc.
Perfecta Stainless Division



UNIQUE HORSEPOWER FEATURE

The sealed refrigeration system utilizes a unique hot gas control principle which removes heat only as required. The unit actually varies its BTU extraction capacity to the load. Even though a 3/4 horsepower compressor is part of the system it is controlled so that it can be applied to a 1/4 horsepower load. The Model RA-34, in effect, varies its horsepower to match the requirements of the system. The RA-34 Potable Water Chiller can solve all your cold water problems. Due to its unique UltraChill™ technology, it can improve ice machine output, eliminate labor-intensive pre-mix juice systems and enhance soda quality and production. In fact it can do several of these things simultaneously. Its recirculating feature allows the flexibility to serve multiple units with one RA-34 on a maximum circuit of 500 feet. The result is greater flexibility at a significant savings!

CONSTANT TEMPERATURE

- No Differential
- Stable Water Conditions . . . no rise and fall in Water Temperature
- Regulation of Temperature (±) 1/8°F

LONG LINE RUNS

- Up to 500 feet
- Ice Machines - RA-34 increases ice machine efficiency and production of ice by 70% by pre-chilling water used by the ice machine, RA-34 can support up to 3,000 pounds of daily ice production with a 90°F incoming water supply.
- Juice Systems - RA-34 can be used to refrigerate and recirculate water through remote lines to dispense post-mix juice products.
- Soda Systems - RA-34 can refrigerate both the cold plate and the soda system.

CONSTANT RUNNING COMPRESSOR

- Longer Compressor Life
- Self-Starting after Power Failure

REFRIGERATION SYSTEM

Includes a 3/4 horsepower continuous running compressor. An externally equalized thermostatic expansion valve (TXV) controls the flow of liquid refrigerant into the evaporator. A hot gas bypass valve (HGB) controls the refrigerant affect and adjusts the unit's horsepower to the load.

SHORT FORM SPECIFICATION:

Shall be Perfection Model RA-34, patented, variable horsepower, sealed remote potable water systems, air-cooled or water cooled, 115 volt, 60 Hz, single phase, 35.0 amp Breaker, or 208/230 volt, 60 Hz, single phase, 15.0 amp Breaker, or 220/240 volt, 50 Hz, single phase, 15.0 amp Breaker, 3/4 H.P.

SERVICE AVAILABLE FROM NATIONAL NETWORK

- Service Agencies Established and Trained
- Service Agencies Available where You need them and when You want them



PERFECTION Equipment, Inc.

4259 Lee Avenue, Gurnee, Illinois 60031 Phone: 847-244-7200 Fax: 847-244-7205
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MODEL RA-34 RECIRCULATING, CONSTANT-TEMP, POTABLE WATER CHILLER

PLUMBING

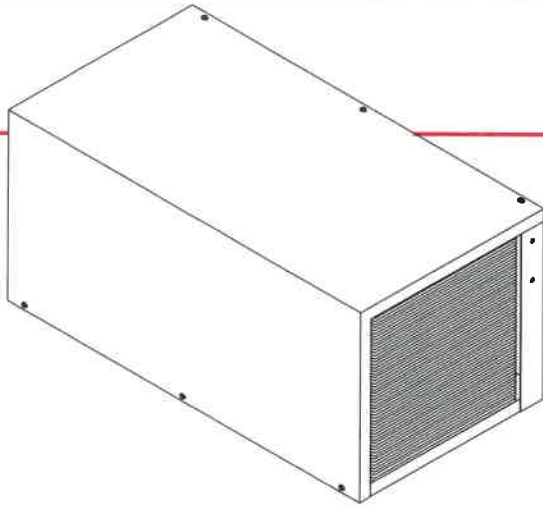
Water-Cooled Units provide a separate 1/2" I.P.S. valved cold water with a 1/2" F.P.T. connector and a 1-1/2" waste line, or cooling tower supply and return lines. (Optional 3/4" cold water supply)

WATER-COOLED UNITS

Water Usage in G.P.M. for Condenser
 Model RA-34
 Idle load .35 Gallons @ 50°F. Suction

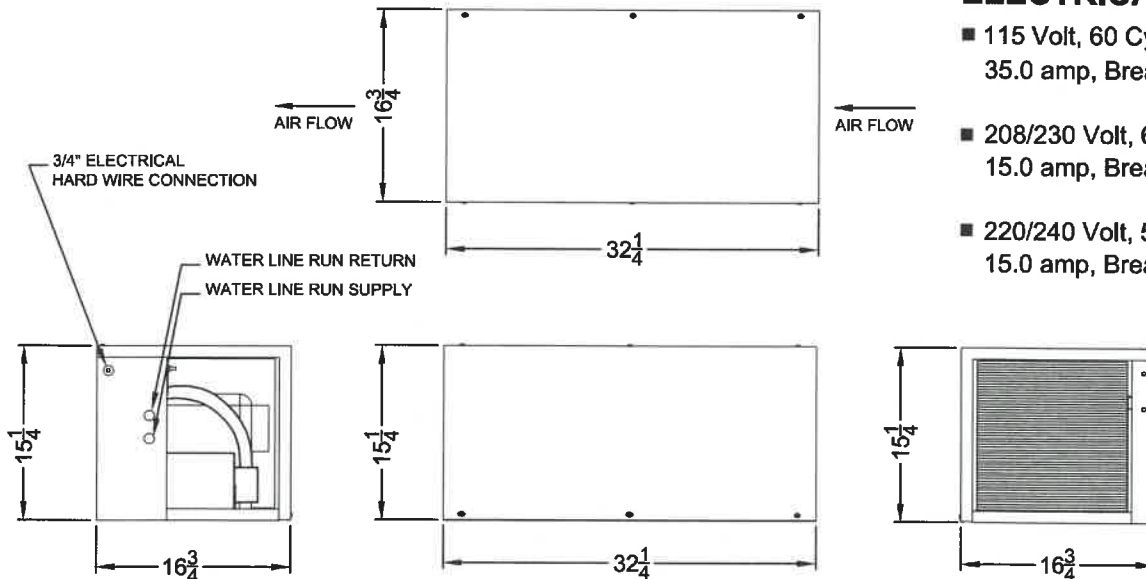
ELECTRICAL

- 115 Volt, 60 Cycle, Single Phase
35.0 amp, Breaker, Dedicated Circuit
- 208/230 Volt, 60 Cycle, Single Phase
15.0 amp, Breaker, Dedicated Circuit
- 220/240 Volt, 50 Cycle, Single Phase
15.0 amp, Breaker, Dedicated Circuit



CONNECTION KIT INCLUDED

- Three (3) 3/8" Tube X 3/8" Barb
- Three (3) 3/8" Tube X 1/2" Barb
- Three (3) 145 Tab Clamps
- Three (3) 185 Tab Clamps
- One (1) 3 Stem Two way Splitter



POWER PACK

RATED

AMP Load

Air-Cooled	115 Volt, 35.0 amp	21.10 amps
Water-Cooled	115 Volt, 35.0 amp	19.70 amps
Air-Cooled	208/230 Volt, 15.0 amp	11.65 amps
Water-Cooled	208/230 Volt, 15.0 amp	10.95 amps
Air-Cooled	220/240 Volt, 15.0 amp	12.32 amps
Water-Cooled	220/240 Volt, 15.0 amp	11.58 amps

VENTILATION AIR-COOLED UNITS

Heat of Rejection 8,000 BTU/Hour.
 Install in well ventilated area with ambient not to exceed 85°F.

SHIPPING INFO

Shipping Weight 180 lbs. / 3.6 cu. ft.



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**MODEL RA-34 RECIRCULATING,
CONSTANT-TEMP, POTABLE
WATER CHILLER**

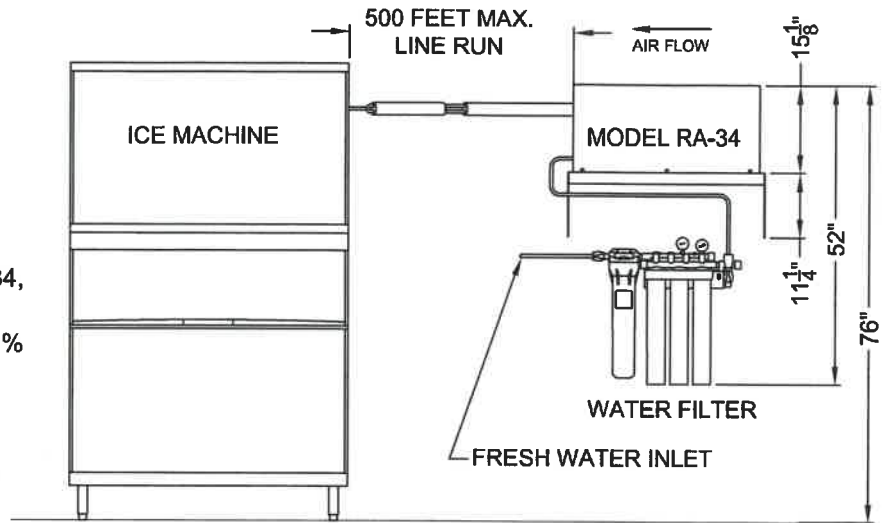
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ICE MACHINE PRODUCTION

Ice machine production is adversely affected by a warm incoming water supply. The addition of an RA-34 will substantially increase ice machine efficiency by pre-chilling the water used by an ice machine, enabling it to meet or exceed the manufacturer's rated ice production for that machine. For instance, at 70°F inlet water temperature, a typical 1,000 lb. ice machine will produce 870 lb. / day, but with the use of an RA-34, the same machine produces 1,050 lb. / day. In controlled tests, an RA-34 has achieved over a 70% increase in daily ice machine production. Furthermore, using an RA-34 shortens the ice harvest cycle, resulting in more ice per hour. One RA-34 can support up to 3,000 pounds of daily ice production with a 90°F incoming water supply.

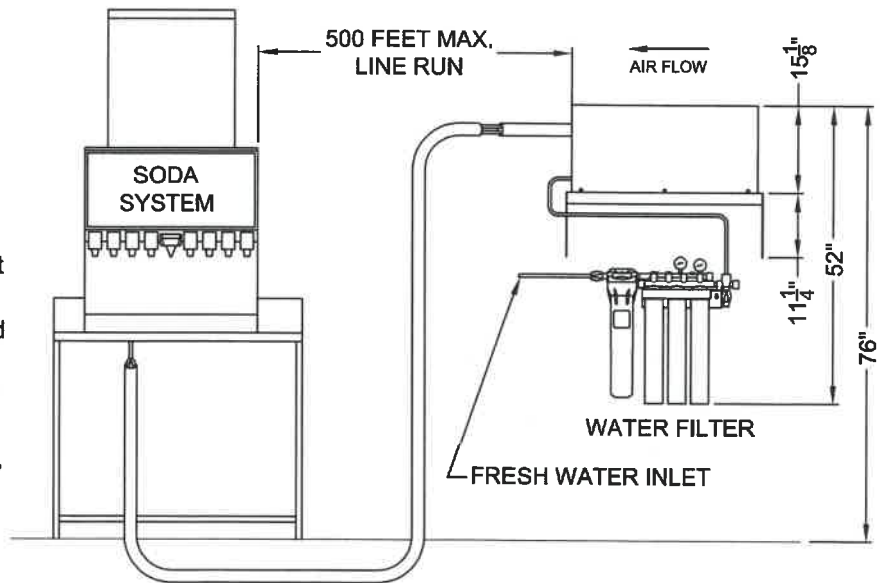


ICE MACHINE PRODUCTION

SODA SYSTEMS

Both ambient (cold plate) and refrigerated soda systems can be improved with an RA-34. The quality of carbonation is directly related to the temperature of the water. The colder the water before carbonating it, the more effervescent the final product. Traditional cold plate soda systems chill the soda water after it has been carbonated, which causes a relatively "flat" drink. Using an RA-34 to pre-chill the water prior to carbonation not only greatly improves the quality of the drink, but also results in the use of far less ice to chill the cold plate.

Pre-chilling the water with an RA-34 will double the output of cold drinks from a refrigerated soda system to meet demand in high volume operations. For example, with a 75°F water supply, a GR-4F soda system produces seven (7) 6 oz. drinks per minute under 40°F, however, a GR-4F / RA-34 combination produces fourteen (14) 6 oz. drinks per minute under 40°F.



SODA SYSTEMS



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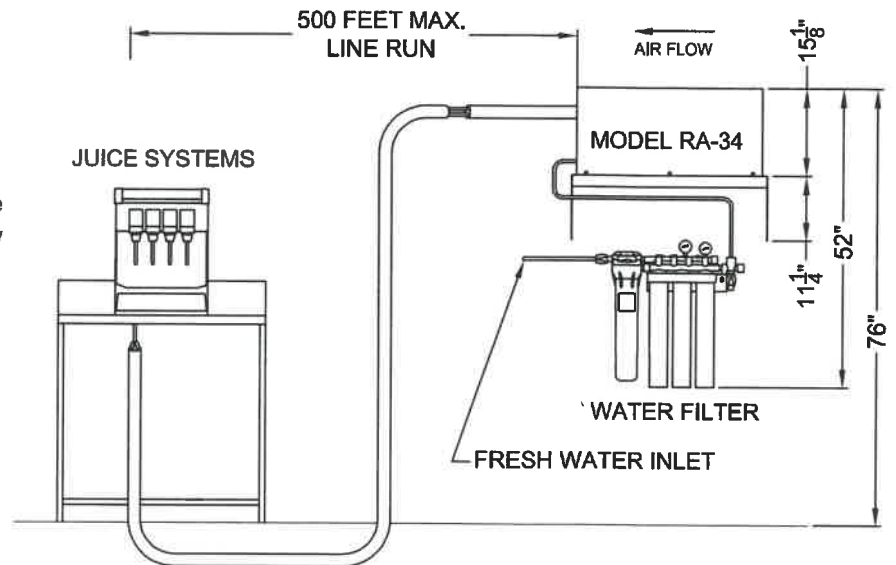
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JUICE SYSTEMS

The RA-34 can be used to refrigerate and recirculate water through remote lines to dispense post-mix juice products. These systems utilize low cost, juice concentrates mixed with chilled water from the RA-34 to produce chilled, quality juice drinks without the use of cold plates or other refrigeration. A complete system includes the RA-34, a bag-in-box rack, chilled water and concentrate line runs, and juice dispensers, and offers these advantages:



JUICE SYSTEMS

1. **REDUCES PRODUCT COSTS** - Utilizes cost efficient bag-in-box, post-mix concentrate.
2. **SANITARY** - Sealed system does not require sanitation.
3. **SAVES LABOR** - No pre-mixing or clean-up labor as required with pre-mix systems. Product is automatically mixed at the post-mix dispensing valve as needed.
4. **LESS WASTE** - Cardboard bag-in-box cartons are recyclable resulting in less refuse than for pre-mix product or for individual portions.
5. **MULTI STATION CAPABILITY** - One system can dispense several different juice products to multiple dispensing stations.
6. **CONSTANT TEMPERATURE** - Chilled water is continuously recirculated, rechilled and maintained within $\pm 1/8^\circ\text{F}$ of desired temperature, usually 38°F to 40°F .



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MODEL RA-150 RECIRCULATING, HIGH CAPACITY WATER CHILLER

PERFECTION



Perfection Equipment, Inc.
Perfecta Stainless Division



UNIQUE HORSEPOWER FEATURE

The sealed refrigeration system utilizes a unique hot gas control principle which removes heat only as required. The unit actually varies its BTU extraction capacity to the load. Even though a 1.5 horsepower compressor is part of the system it is controlled so that it can be applied to a 1/4 horsepower load. The Model RA-150, in effect, varies its horsepower to match the requirements of the system. The RA-150 Potable Water Chiller can solve all your cold water problems. Due to its unique UltraChill™ technology, eliminate labor-intensive pre-mix juice systems. In fact it can do several of these things simultaneously. Its recirculating feature allows the flexibility to serve multiple units with one RA-150 on a maximum circuit of 500 feet. The result is greater flexibility at a significant savings!

CONSTANT TEMPERATURE

- No Differential
- Stable Water Conditions no rise and fall in Water Temperature
- Regulation of Temperature (±) 1/8°F

LONG LINE RUNS

- Up to 500 feet
- Juice Systems - RA-150 can be used to refrigerate and recirculate water through remote lines to dispense post-mix juice products.
- RA-150 can provide chilled water for Bakery applications.

OPTIONS

- High Flow Water Filter System.
- Water Booster Pumps.
- Insulated Reserve Tanks (150 Gallon Max.).

CONSTANT RUNNING COMPRESSOR

- Longer Compressor Life

REFRIGERATION SYSTEM

Includes a 1.5 horsepower continuous running compressor. An externally equalized thermostatic expansion valve (TXV) controls the flow of liquid refrigerant into the evaporator. A hot gas bypass valve (HGB) controls the refrigerant affect and adjusts the unit's horsepower to the load.

SHORT FORM SPECIFICATION:

Shall be Perfection Model RA-150, patented, variable horsepower, sealed remote potable water systems, air-cooled or water cooled, 208/230 volt, 60 Hz, single phase, 30.0 amp Breaker, or 220/240 volt, 50 Hz, single phase, 30.0 amp Breaker, 1.5 H.P., 250 GPH Circulating Pump.

SERVICE AVAILABLE FROM NATIONAL NETWORK

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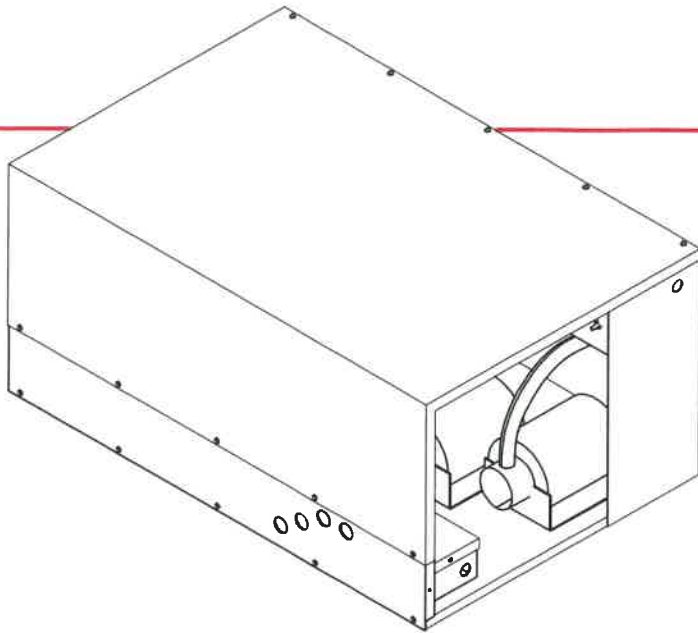


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MODEL RA-150 RECIRCULATING, HIGH CAPACITY WATER CHILLER



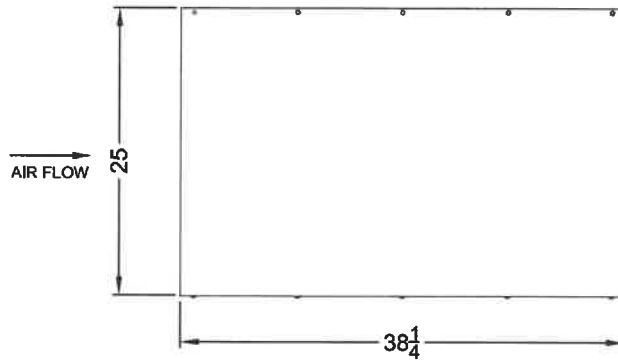
PLUMBING

Water-Cooled Units provide a separate 3/4" I.P.S. valved cold water with a 3/4" F.P.T. connector and a 1-1/2" waste line, or cooling tower supply and return lines.

WATER-COOLED UNITS

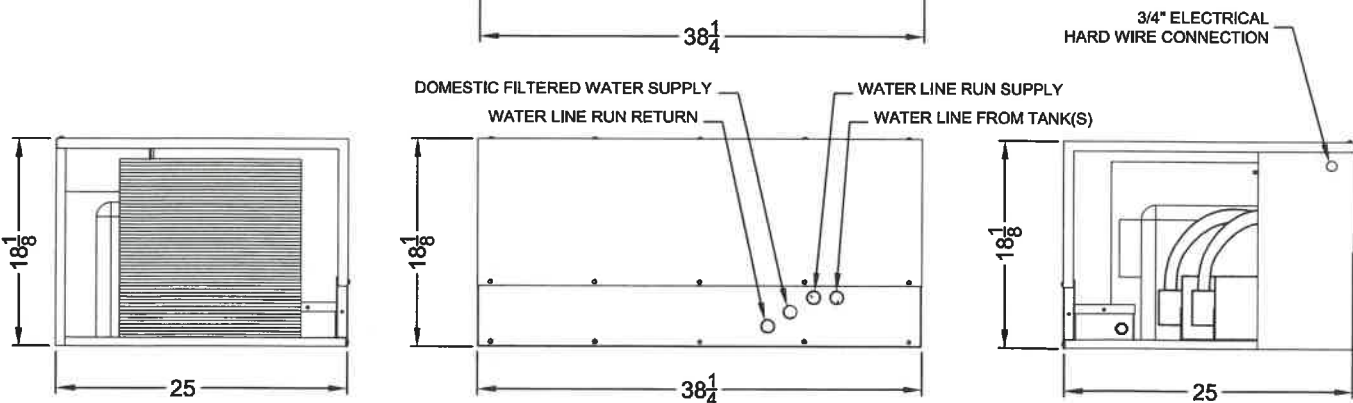
Water Usage in G.P.M. for Condenser
 Model RA-150
 Idle load 3.3 Gallon @ 45°F. Suction

CONNECTION KIT INCLUDED



ELECTRICAL

- 208/230 Volt, 60 Cycle, Single Phase
 30.0 amp, Breaker, Dedicated Circuit
- 220/240 Volt, 50 Cycle, Single Phase
 30.0 amp, Breaker, Dedicated Circuit



POWER PACK

RATED

AMP Load

Air-Cooled	208/230 Volt, 30.0 amp	16.8 amps
Water-Cooled	208/230 Volt, 30.0 amp	15.5 amps
Air-Cooled	220/240 Volt, 30.0 amp	15.9 amps
Water-Cooled	220/240 Volt, 30.0 amp	14.7 amps

VENTILATION AIR-COOLED UNITS

Heat of Rejection 22,000 BTU/Hour.
 Install in well ventilated area with ambient not to exceed 85°F.

SHIPPING INFO

Shipping Weight 350 lbs.



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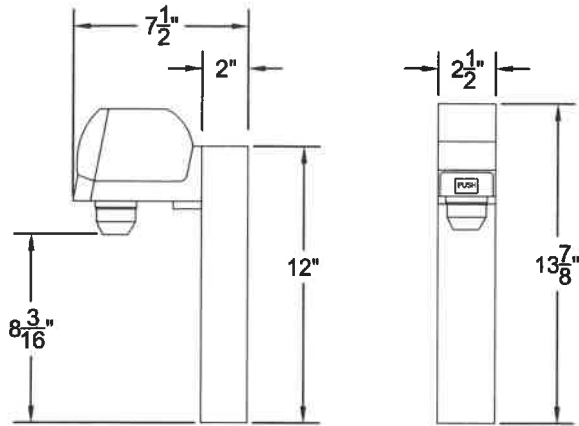


WATER DISPENSER

PERFECTION



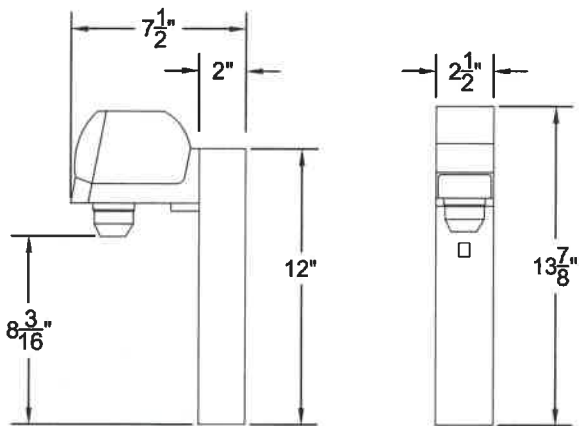
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Shown: PE-1 Water Dispenser

PE-1 Push Button Water Dispenser

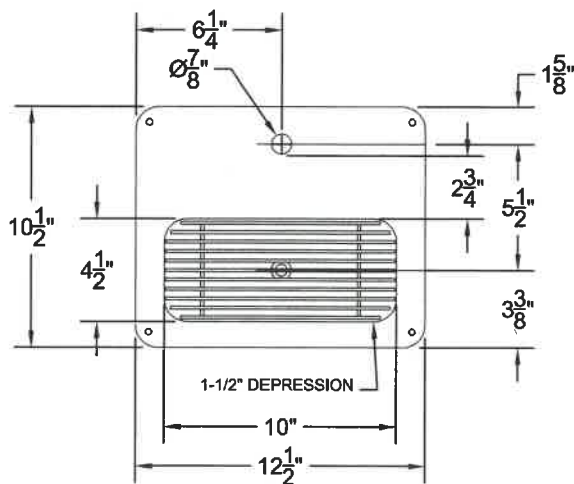
- Transformer & Power Cord 120 Volt, 10.0 amps.
- Prefabricated Water Line
- 3/8" Portable Water



Shown: PE-WT-1E Water Dispenser

PE-WT-1E Electronic Eye Water Dispenser

- Transformer & Power Cord 120 Volt, 10.0 amps.
- Prefabricated Water Line
- 3/8" Portable Water



Shown: PE-1 Water Station Drip Tray

Optional: PE-1 Water Station Drip Tray

- 1/2" Drain Line



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