



## ***Mondale Hydronic Catalog***



***Maxifold***





## FERNOX - Express Cans (Pressurized) / For Systems Up To 34 Gallons (400 ML Sizes)

Express cans ordered in carton quantities of 10



**Protector  
F1 Express**  
Part #: F-62673

- Long term protection against corrosion and limescale
- Multi-metal safe



**Silencer  
F2 Express**  
Part #: F-62674

- Reduces boiler noise
- Systems up to 26 gal



**Cleaner  
F3 Express**  
Part #: F-62675

- Removes sludge flux and debris
- Restores heating efficiency



**Leak Sealer  
F4 Express**  
Part #: F-62676

- Stops small leaks
- Ideal for reducing pressure loss from sealed system



**Protector +  
Filter Fluid F9  
Express**  
Part #: F-62712

- Unique inhibitor package with dispersant lifts and delivers debris in the system to The filter while protecting against future corrosion and scale.

## FERNOX - Liquid Products / For Systems up to 34 Gallons (1-Pint Sizes)

Pints ordered in carton quantities of 10



**F1 Filter Fluid +  
Protector**  
Part #: F-62234

- Protects and cleans when used with TF-1 Filter
- Systems up to 26 gal



**Protector  
F1**  
Part #: F-57880

- Long term protection against corrosion and limescale
- Multi-metal safe



**Boiler Noise  
Silencer  
F2**  
Part #: F-56602

- Reduces boiler noise
- Improves heat transfer efficiency



**Cleaner  
F3**  
Part #: F-57882

- Removes sludge, scale and debris
- Restores heating efficiency



**Leak  
Sealer F4**  
Part #: F-57883

- Stops small leaks
- Ideal for reducing pressure loss from sealed systems

## FERNOX - HVAC Commercial Products



**Protector F1**  
2.6 Gallons  
Part #: F-62561

- Central heating protector for commercial and cooling systems
- Maintains efficiency of system
- Systems up to 500 gal
- Available in 55 gal drum treats 10,000 gal Part #: F-62602



**Cleaner F3**  
2.6 Gallons  
Part #: F-62562

- Central heating cleaner for commercial and cooling systems
- Remove sludge and scale
- Systems up to 500 gal
- Available in 55 gal drum treats 10,000 gal Part #: F-59852



**Protector +  
Filter Fluid**  
5.28 Gallons  
Part #: F-62710

- Inhibitor package with active dispersant to aid in safe collection of corrosion debris and scale to a filter



**Leak Sealer F4**  
2.6 Gallons  
Part #: F-62563

- Stops small leaks and pressure loss problems without the need for a drain down in HVAC systems
- -0.5% dose rate



**Heat Pump Fluid HP-1**  
5 Gallons  
Part #: F-62753

- Pre-mixed heat transfer fluid for air and ground source heat pumps and underfloor heating systems

## FERNOX - Cleaners And Limescale Remover / For Sludged And Blocked Systems



**DS-10 Dry-Side  
Cleaner**  
Part #: F-61029

- For cleaning the combustion side of heat exchangers



**DS-40 System  
Cleaner**  
Part #: F-62478 (4.2 lbs)  
Part #: F-58511 (55 lbs)

- Powerful acid descaler and sludge remover
- Eliminates boiler noise



**System Neutralizer**  
2 Liter  
Part #: F-62482

- Neutralizes DS40 System cleaner to avoid acid discharge
- Conditions system for application of corrosion inhibitor
- While supplies last\*

## Fernox Antifreeze Protector

### Alphi-11 is a 3-in-1 Solution That Protects Against Frost, Corrosion & Scale.

Fernox Antifreeze Protector Alphi-11 is a combined glycol antifreeze and inhibitor offering long-term protection against frost, internal corrosion and limescale in heating and chilled water systems, including geothermal systems. Compatible with all metals and materials commonly used in hydronic systems, including aluminum, Antifreeze Protector Alphi-11 is proven to work efficiently and has been tried and tested on installations worldwide.

#### Physical Properties

Fernox Antifreeze Protector Alphi-11 contains monopropylene glycol.

**Color:** Blue

**Odor:** Mild

**Form:** Clear Liquid

**pH (cone):** 7.0 - 7.7

**pH (soln 25%):** 7.0 - 7.8

**Specific Gravity:** 1.04

**IMPORTANT:** Fernox recommends untreated systems are thoroughly cleansed and flushed using Fernox Cleaner F3 before treating with Fernox Antifreeze Protector Alphi-11, as existing debris can damage the installation.



#### Benefits

- NSF HT1 registered product - certified safe for 'incidental food contact' and ideal for use with single-walled heat exchangers.
- Deionized water or soft water NOT required. Fernox Antifreeze Protector Alphi-11 will buffer onsite city and well water pH to neutral levels. It is also both stable and compatible with hard water.
- Compatible with all metals and materials commonly found in a hydronic heating system.
- Environmentally friendly formulation: nitrite, nitrate, phosphate and EDTA free.

#### Antifreeze Protector Alphi-11

| Description      | Product Code  | Size       | Packaging         | Stocked Locally |
|------------------|---------------|------------|-------------------|-----------------|
| Concentrate 100% | F-155738-0005 | 5 Gallon   | Singles or Pallet | X               |
| Concentrate 100% | F-155738-0055 | 55 Gallon  | Singles or Pallet | X               |
| Concentrate 100% | F-155738-0330 | 330 Gallon | Tote              | X               |
| Premix 30%       | F-174819-0005 | 5 Gallon   | Singles or Pallet | X               |
| Premix 30%       | F-174819-0055 | 55 Gallon  | Singles or Pallet | X               |
| Premix 30%       | F-174819-0330 | 330 Gallon | Tote              | X               |
| Premix 35%       | F-244338-005  | 5 Gallon   | Pallet            | X               |
| Premix 35%       | F-244338-055  | 55 Gallon  | Pallet            | X               |
| Premix 35%       | F-244338-330  | 330 Gallon | Tote              |                 |
| Premix 40%       | F-174821-0005 | 5 Gallon   | Singles or Pallet | X               |
| Premix 40%       | F-174821-0055 | 55 Gallon  | Singles or Pallet | X               |
| Premix 40%       | F-174821-0330 | 330 Gallon | Tote              | X               |
| Premix 50%       | F-175578-0005 | 5 Gallon   | Pallet            |                 |
| Premix 50%       | F-175578-0055 | 55 Gallon  | Pallet            |                 |
| Premix 50%       | F-175578-0330 | 330 Gallon | Tote              |                 |

| Concentration     | 30%    | 35%     | 40%    | 45%     | 50%     |
|-------------------|--------|---------|--------|---------|---------|
| Protection*       | 5°F    | -0.4°F  | -7.6°F | -16.6°F | -29.2°F |
| Flow Point**      | -0.4°F | -11.2°F | -22°F  | -31°F   | -42°F   |
| Burst Point Deg F | -20    | -40     | -60    | -70     | -80     |

\* First few ice crystals.

\*\* The Flow Point range is the approximate temperatures at which mixtures will still flow and prevent frost damage. Heating appliance must not be used if the mixture is too thick to be circulated freely by the pump.



## FERNOX - Filters, Commissioning And Test Kits



### Express Boiler Commissioning Kit Part #: F-62089

- Maintain the design specification and energy efficiency
- Comprised of Cleaners, Protectors and Check Strips



### Boiler Commissioning Kit Part #: F-59480

- Maintain design specification and energy efficiency
- Comprised of Cleaner, Protector and Check Strips



### Hydronic Descaling Kit Part #: F-62734

- Kit includes bucket, pump, hoses and DS-40
- Descaling process, ensures the system remains in optimal condition with minimal effort



### TDS Meter Part #: F-57875

- For easy on-site measurement of total dissolved solids
- Ideal for use when powerflushing



### Express Inhibitor Test Part #: F-62540

- Gives rapid on-site analysis of the concentration of all Fernox protectors
- Kit includes 50 test strips



### Diagnostic Water Test Part #: F-62499

- App-based diagnostic laboratory test for central heating
- Receive a detailed report with recommendation



### Universal Test Kit

- On-site analysis of central heating system water
- 25 strips each
- Simple color charts for measuring concentrations

| Part # | Product Description            |
|--------|--------------------------------|
| 63610  | pH Test Strips                 |
| 63620  | Total Hardness Test Strips     |
| 63630  | Express Inhibitor Test Strips  |
| 63600  | Universal Test Kit pH/Hardness |



### TF1 Omega Filter Part #: F-62294 (1") Part #: F-62373 (1-1/4") Part #: F-62374 (1-1/2")

- Inline magnetic filter with powerful neodymium magnetic assembly
- Easy install with vertical or horizontal piping



### TF1 Sigma Filter Part #: F-62594

- Sealed, high performance in-line system filter made from precision engineered composite polymer to collect magnetic and non-magnetic debris.
- Size: 1" Press



### TF1 Total Filter Part #: F-60003

- Removes and contains magnetic and non-magnetic contaminants
- Fast to fit and easy to clean
- Includes ball valves

## TF1 Omega Filter Installer Pack

Fernox is pleased to announce the launch of the new Fernox TF1 Omega Filter Installer Packs, which are **available to ship now!** The Fernox TF1 Omega Filter Installer Pack is the complete solution to cleaning, protecting and guarding a central heating system. Each Installer Pack includes a choice of TF1 Omega filter sizes and offers the flexibility of selecting either the Express or Pint versions of our Protector F1 and Cleaner F3 chemicals. Additionally, the kit comes with the Fernox Express Inhibitor test (2 strips) and pH test (4 strips).



| Models |        |                                                  |
|--------|--------|--------------------------------------------------|
| Part # | Size   | Description                                      |
| 62743  | 1"     | Omega Filter Installer Pack with F1/F3 Express   |
| 62744  | 1-1/4" | Omega + Filter Installer Pack with F1/F3 Express |
| 62745  | 1-1/2" | Omega + Filter Installer Pack with F1/F3 Express |
| 62746  | 1"     | Omega Filter Installer Pack with F1/F3 Pints     |
| 62747  | 1-1/4" | Omega + Filter Installer Pack with F1/F3 Pints   |
| 62748  | 1-1/2" | Omega + Filter Installer Pack with F1/F3 Pints   |

The **TurboMax®** is an indirect water heater that stores boiler water and heats potable water as needed. In commercial applications, the recovery rates and outputs are very impressive. More output in less space! In residential applications, extra connections on the tank make this a 3-in-1 product -- instantaneous indirect water heater, buffer tank and hydraulic separator.

# turbomax

**Performance and peace of mind!**

## Main Features

- Heat transfer efficiency of 99%
- Instantaneous domestic hot water
- More than 30-year life span
- Unmatched energy transfer capabilities
- Minimizes energy consumption
- Compatible with all sources of thermal energy
- limited corrosion and required maintenance

## THE MOST HIGH-PERFORMANCE WATER HEATER IN ITS CATEGORY

TurboMax® produces 2 times more hot water per hour than its closest competitor with the same volume.

### 15 - YEAR RESIDENTIAL WARRANTY

ON THE RESERVOIR AND COPPER COILS

### 10 - YEAR COMMERCIAL WARRANTY

ON THE RESERVOIR AND COPPER COILS

### 2 - YEAR WARRANTY

ON MECHANICAL PARTS

## ADDITIONAL CONNECTIONS INCLUDED.

With its additional connections, the TurboMax® indirect water heater optimizes the boiler's performance by serving as a buffer tank and hydraulic separator in addition to producing domestic water.

## Standard Features

- 1 - Heating water supply
- 2 - Heating water return
- 3 - Domestic cold water
- 4 - Domestic hot water
- 5 - Pressure relief valve
- 6 - Temperature and pressure indicator
- 7 - Tank drain valve
- 8 - Immersion well
- 9 - Automatic air vent
- 10 - Adjustable feet support
- 11 - Additional connections
- 12 - 2" HFC-free polyurethane insulation
- 13 - Aquastat with adjustable temperature



Only for  
80-5A  
120-9A models



**Provides a 3-in-1 indirect water, buffer tank and hydraulic separator.**

# turbomax

Also available in Double Wall.



| Performances                                                      |                           |     |          |            |                           |     |          |            |                           |     |          |            |
|-------------------------------------------------------------------|---------------------------|-----|----------|------------|---------------------------|-----|----------|------------|---------------------------|-----|----------|------------|
| Domestic hot water production per hour in US gallons <sup>1</sup> |                           |     |          |            |                           |     |          |            |                           |     |          |            |
| Model                                                             | 110 °F - DHW <sup>2</sup> |     |          |            | 140 °F - DHW <sup>2</sup> |     |          |            | 160 °F - DHW <sup>2</sup> |     |          |            |
|                                                                   | Maximum Exchange Capacity |     | GPH      |            | Maximum Exchange Capacity |     | GPH      |            | Maximum Exchange Capacity |     | GPH      |            |
|                                                                   | BTU/h                     | kW  | 1st hour | Continuous | BTU/h                     | kW  | 1st hour | Continuous | BTU/h                     | kW  | 1st Hour | Continuous |
| * TurboMax 30-3                                                   | 380 000                   | 111 | 683      | 653        | 270 000                   | 79  | 338      | 326        | 180 000                   | 53  | 186      | 181        |
| TurboMax 50-3                                                     | 380 000                   | 111 | 703      | 653        | 270 000                   | 79  | 346      | 326        | 180 000                   | 53  | 190      | 181        |
| * TurboMax 50-5                                                   | 645 000                   | 189 | 1159     | 1109       | 455 000                   | 133 | 569      | 549        | 300 000                   | 88  | 313      | 302        |
| * TurboMax 80-5                                                   | 645 000                   | 189 | 1189     | 1109       | 455 000                   | 133 | 581      | 549        | 300 000                   | 88  | 316      | 302        |
| TurboMax 80-5A                                                    | 645 000                   | 189 | 1189     | 1109       | 455 000                   | 133 | 581      | 549        | 300 000                   | 88  | 316      | 302        |
| * TurboMax 120-9                                                  | 1 165 000                 | 341 | 2122     | 2002       | 820 000                   | 240 | 1038     | 990        | 545 000                   | 160 | 569      | 549        |
| TurboMax 120-9A 125                                               | 1 165 000                 | 341 | 2122     | 2002       | 820 000                   | 240 | 1038     | 990        | 545 000                   | 160 | 569      | 549        |
| TurboMax 120-9A 200                                               | 1 165 000                 | 341 | 2122     | 2002       | 820 000                   | 240 | 1038     | 990        | 545 000                   | 160 | 569      | 549        |

**1 - 40 °F domestic cold water supply and 180 °F boiler water temperature.**

**2 - DHW: domestic hot water**

**\* Stocked at Mondale Warehouse**

| Specifications      |              |             |                  |                           |                            |                           |         |          |          |
|---------------------|--------------|-------------|------------------|---------------------------|----------------------------|---------------------------|---------|----------|----------|
| Model               | Max Pressure | Tank Volume | Exchange Surface | Max DHW Flow <sup>1</sup> | Domestic Water Connections | Heating Water Connections | Height  | Diameter | Weight   |
| TurboMax 30-3       | 150 psi      | 30 US gal   | 19.6 sq. ft.     | 9 gpm                     | 1 1/4" Sweat M             | 1 1/4" NPTM               | 59 3/4" | 18"      | 170 lbs. |
| TurboMax 50-3       | 150 psi      | 50 US gal   | 19.6 sq. ft.     | 9 gpm                     | 1 1/2" Sweat M             | 1 1/4" NPTM               | 60 3/4" | 22"      | 212 lbs. |
| TurboMax 50-5       | 150 psi      | 50 US gal   | 32.7 sq. ft.     | 15 gpm                    | 1 1/2" Sweat M             | 1 1/4" NPTM               | 60 3/4" | 22"      | 230 lbs. |
| TurboMax 80-5       | 150 psi      | 80 US gal   | 32.7 sq. ft.     | 15 gpm                    | 1 1/2" Sweat M             | 1 1/2" NPTM               | 74 3/4" | 24"      | 308 lbs. |
| TurboMax 80-5A      | 150 psi      | 80 US gal   | 32.7 sq. ft.     | 15 gpm                    | 2" Sweat M                 | 1 1/2" NPTM               | 74 3/4" | 24"      | 317 lbs. |
| TurboMax 120-9      | 150 psi      | 119 US gal  | 58.9 sq. ft.     | 27 gpm                    | 2" Sweat M                 | 2" NPTM                   | 76 3/4" | 28"      | 430 lbs. |
| TurboMax 120-9A 125 | 125 psi      | 120 US gal  | 58.9 sq. ft.     | 27 gpm                    | 2 1/2" Sweat M             | 2" NPTM                   | 76 3/4" | 28"      | 450 lbs. |
| TurboMax 120-9A 200 | 200 psi      | 120 US gal  | 58.9 sq. ft.     | 27 gpm                    | 2 1/2" Sweat M             | 2" NPTM                   | 76 3/4" | 28"      | 540 lbs. |

**1 - These values must be reduced for high temperature and continuous flow applications.**

- Standby loss < 1/2 °F per hour
- Heat transfer efficiency: 99%
- Output temperature up to 200 °F

| Specifications  |             |                  |               |                            |                           |         |          |          |
|-----------------|-------------|------------------|---------------|----------------------------|---------------------------|---------|----------|----------|
| Model           | Tank Volume | Exchange Surface | Max DHW Flow* | Domestic Water Connections | Heating Water Connections | Height  | Diameter | Weight   |
| DoubleMax 50-4  | 50 US gal.  | 24.7 sq. ft.     | 12 gpm        | 1-1/2" Sweat F             | 1-1/4" NPTM               | 59-1/4" | 22"      | 260 lbs. |
| DoubleMax 80-5  | 80 US gal.  | 30.9 sq. ft.     | 15 gpm        | 1-1/2" Sweat F             | 1-1/2" NPTM               | 73-3/4" | 24"      | 355 lbs. |
| DoubleMax 120-9 | 119 US gal. | 55.6 sq. ft.     | 27 gpm        | 2" Sweat F                 | 2" NPTM                   | 76-1/4" | 28"      | 530 lbs. |

# buffmax



The tank that makes all the difference!



## Standard Features

- 1 - Automatic Air Vent
- 2 - Boiler Water Connection
- 3 - Temperature and Pressure Indicator
- 4 - 3/4" NPT Drain Valve
- 5 - Immersion Well
- 6 - 3/4" Drain

## Optional Equipment

- Extra tapings
- Custom tapping diameters
- Flange connections
- Aquastat control
- Insulation for chilled water



## Buffer Tank

The **BuffMax**® optimizes runtimes and limits on/off cycling of the energy source. When the minimum system load is lower than the energy source's minimum capacity, the system will generate short cycles. This causes premature wear of the equipment and substantially decreases the system's energy efficiency.



Only for 120A, 175A and 200A models.

## Storage Tank

Any hydronic heating system with the **BuffMax**® stores energy like a battery. When a demand is made for limited heating (for example, when there is little difference between indoor and outdoor temperatures) or when it is used with a low-capacity energy source, the energy required will first come from the tank's thermal storage.

## Hydraulic Separator

Adding a **BuffMax**® tank to a hydronic heating system helps to evacuate air, eliminate impurities and ensure the optimal functioning of the pumps—not only for the energy source but also for the distribution system.

## Standard Equipment

- 2" HFC-free polyurethane insulation
- 150 psi maximum operating pressure (125 psi for ASME units)
- 4 openings for hydraulic separation
- Immersion well with multiple positions
- Tanks available in 7 sizes
- ASME models available
- Adjustable legs
- 10-year warranty

## Models and Specifications

| Model                 | Volume US Gal. | A         | B   | C        | D         | E         | Standard Connections | Weight Lb. |
|-----------------------|----------------|-----------|-----|----------|-----------|-----------|----------------------|------------|
| BUFF30-1,5NPT-HRZ-HT* | 30             | 56"       | 18" | 21-1/2"  | 46-1/2"   | 13-1/2"   | 1-1/2" NPT           | 125        |
| BUFF50-2NPT-HRZ-HT*   | 50             | 57"       | 22" | 25-1/2"  | 47-1/16"  | 14-1/16"  | 2" NPT               | 160        |
| BUFF80-2,5NPT-HRZ-HT* | 80             | 71"       | 24" | 28-1/2"  | 60-13/16" | 13-13/16" | 2-1/2" NPT           | 245        |
| BUFF120-3NPT-HRZ-HT*  | 120            | 72-1/2"   | 28" | 32-1/2"  | 61-1/2"   | 14-9/16"  | 3" NPT               | 330        |
| BUFF120A-3NPT-HRZ-HT* | 119            | 73-5/16"  | 28" | 32-1/4"  | 60"       | 17"       | 3" NPT               | 405        |
| BUFF175A-3NPT-HRZ-HT* | 175            | 82-1/16"  | 32" | 36-3/16" | 67-1/16"  | 20-7/16"  | 3" NPT               | 550        |
| BUFF200A-3NPT-HRZ-HT* | 200            | 89-15/16" | 32" | 36-3/16" | 74-15/16" | 20-7/16"  | 3" NPT               | 590        |

\* Stocked at Mondale Warehouse

**By reducing ON/OFF cycling, it improves and maximizes the heating system's efficiency— all while reducing maintenance repair costs.**



## ComboMax Ultra - Combined Electric Boiler and Instantaneous Water Heater

Get the best of both worlds with the **ComboMax® ULTRA**. An electric boiler for hydronic heating combined with an instantaneous water heater, the **ComboMax® ULTRA** is the ideal solution for all water heating needs. Almost maintenance-free, it can help to substantially save both in terms of space and installation-related costs.

# 4.5 KW TO 29 KW

# combo**max**

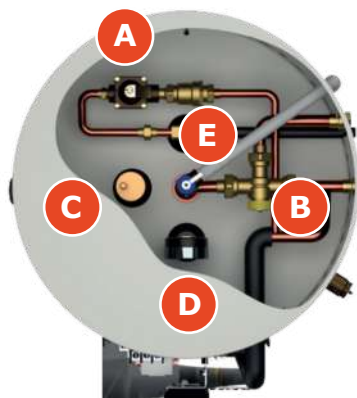
## ULTRA

### The ultimate combination!

#### Simplified Installation

Easier install with factory pre-assembled accessories

- A-** Pressure regulator with back flow preventer for boiler water
- B-** Domestic hot water mixing valve
- C-** Automatic air vent
- D-** Temperature and pressure indicator
- E-** Domestic hot water pressure relief valve



#### T2 UltraSMART® Controller

The **T2 UltraSMART®** controller is precise and easy to configure with its back light display. It enables optimal management of the hot water temperature and saves on energy costs.

This controller also manages operation of the heating system pump when there is a demand from the thermostat. It offers the possibility to be installed in a dual-energy mode and ensures a priority on domestic hot water production.



**15 - YEAR WARRANTY**  
ON THE TANK AND THE COILS

**2 - YEAR WARRANTY**  
ON ELECTRICAL AND MECHANICAL

| ComboMax Ultra                                  |                   |                   |
|-------------------------------------------------|-------------------|-------------------|
| Model                                           | ComboMax ULTRA 50 | ComboMax ULTRA 70 |
| Volume                                          | 48 US gallons     | 71 US gallons     |
| Maximum Operating Pressure                      | 30 psi            | 30 psi            |
| Maximum Operating Pressure (Domestic Hot Water) | 125 psi           | 125 psi           |
| Boiler Connections                              | 1" male NPT       | 1-1/4" male NPT   |
| Potable Water Connections                       | 3/4" female NPT   | 3/4" female NPT   |
| Diameter                                        | 22"               | 24"               |
| Height                                          | 60"               | 70-1/2"           |
| Weight                                          | 325 lb            | 430 lb            |



#### Standard Features

- 1** - T2 UltraSMART® controller
- 2** - Cold water supply
- 3** - Domestic hot water outlet
- 4** - Boiler pressure relief valve
- 5** - Copper coils
- 6** - Drain valve
- 7** - Water heating inlet
- 8** - Water heating outlet
- 9** - Electric elements



## Ventum- Hydronic Air Handler

The **Ventum** hydronic air handlers condition the air of new or existing centralized systems with unmatched precision to provide increased comfort all year round. Enjoy unparalleled comfort at the ideal humidity level that only hydronic heating can create. Ideal for single-family homes or integrated into light commercial buildings, its design provides for simple and practical pairing with a boiler or a water heater in addition to being able to be combined with a heat pump or air conditioning system for cooling in the summertime.

# ventum

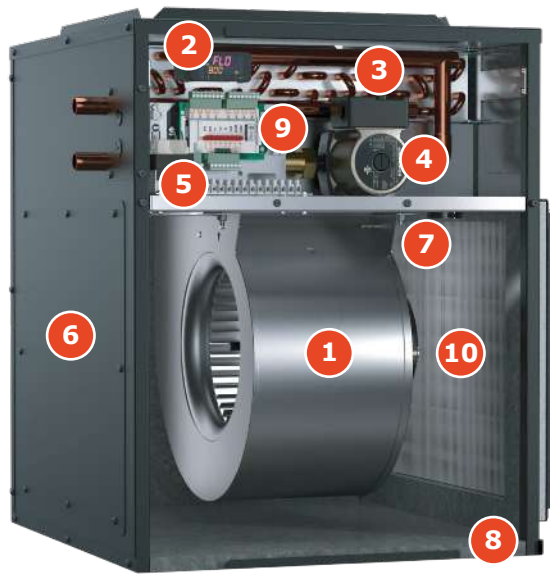


## Water And Air In Perfect Synergy!

### Standard Features

- 1** - High-efficiency ECM fan motor
- 2** - Digital controller
- 3** - 4-row coil ideal for low-temperature water
- 4** - 3-speed circulator pump
- 5** - Connection terminal
  - **120 VAC main power**
  - **Thermostat connection**
  - **24 VAC accessory power (motorized valves)**
  - **Heat source activation**
  - **Air conditioning activation**
- 6** - Pre-cut opening for easy positioning of the return duct (right, left or underneath)
- 7** - Easy-maintenance slide fan
- 8** - 1", noise-reducing insulation
- 9** - Relay card and light signals
- 10** - Air filter

**2 - YEAR WARRANTY**  
ON ELECTRICAL AND MECHANICAL PARTS



### Main Features

- Electronic controller on the front
- Efficient even with low-temperature water
- High-efficiency ECM fan motor
- Integrated circulator pump
- Ideal for new or existing centralized systems
- Durable, quiet and safe
- Compact design and two sizes
- Multi-position installation
- Compatible with an air conditioning unit

| VENTUM 40                                |                          | 3 GPM    |          |          |          |          | 5 GPM    |          |          |          |          |
|------------------------------------------|--------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|                                          | Water Supply Temperature | 700 CFM  | 800 CFM  | 900 CFM  | 1000 CFM | 1100 CFM | 700 CFM  | 800 CFM  | 900 CFM  | 1000 CFM | 1100 CFM |
| <b>HEATING EXCHANGE CAPACITY (BTU/H)</b> | 100°F                    | 13400    | 14400    | 15400    | 16500    | 17500    | 16400    | 17700    | 19100    | 20400    | 21700    |
|                                          | 120°F                    | 24400    | 26300    | 28200    | 30100    | 31900    | 27200    | 29800    | 32400    | 35000    | 37700    |
|                                          | 140°F                    | 35500    | 38200    | 41000    | 43700    | 46400    | 38500    | 42200    | 45900    | 49600    | 53200    |
|                                          | 160°F                    | 47400    | 51400    | 55300    | 59300    | 63200    | 49700    | 54300    | 59000    | 63600    | 68200    |
|                                          | 180°F                    | 50600    | 55000    | 59300    | 63700    | 68100    | 60200    | 67000    | 73800    | 80600    | 87400    |
|                                          | 200°F                    | 68800    | 74000    | 79200    | 84500    | 89700    | 72000    | 79100    | 86200    | 93300    | 100400   |
| <b>COOLING</b>                           | <b>TONS</b>              | 2        | 2        | 3        | 3        | 3        | 2        | 2        | 3        | 3        | 3        |
| VENTUM 60                                |                          | 3 GPM    |          |          |          |          | 5 GPM    |          |          |          |          |
|                                          | Water Supply Temperature | 1200 CFM | 1400 CFM | 1600 CFM | 1800 CFM | 2000 CFM | 1200 CFM | 1400 CFM | 1600 CFM | 1800 CFM | 2000 CFM |
| <b>HEATING EXCHANGE CAPACITY (BTU/H)</b> | 100°F                    | 18800    | 19700    | 21700    | 23900    | 26000    | 23000    | 24200    | 26900    | 29600    | 32300    |
|                                          | 120°F                    | 35900    | 37900    | 41300    | 44500    | 47400    | 40000    | 43000    | 47400    | 51700    | 56000    |
|                                          | 140°F                    | 54500    | 59900    | 65500    | 70800    | 76300    | 59100    | 66200    | 73300    | 80400    | 87500    |
|                                          | 160°F                    | 70600    | 78900    | 86700    | 94900    | 102900   | 74000    | 83300    | 92500    | 101800   | 111000   |
|                                          | 180°F                    | 77300    | 84500    | 91400    | 98400    | 105500   | 92000    | 102900   | 113700   | 124500   | 135400   |
|                                          | 200°F                    | 106000   | 116900   | 127800   | 138800   | 149500   | 110900   | 125000   | 139100   | 153200   | 167300   |
| <b>COOLING</b>                           | <b>TONS</b>              | 3        | 4        | 4        | 5        | 5        | 3        | 4        | 4        | 5        | 5        |

Based on a 70°F air return.

## Mini Ultra - Electric Boiler

Our **mini ULTRA** electric boilers are ideal for heating single family homes and condominiums. These compact heaters can effortlessly fit into very small spaces. What's more: the boilers come in a variety of configurations, making them easy to install.

**mini** **3 KW TO 12 KW**  
**ULTRA**



**100% compact efficient comfort!**

### mini ULTRA 3 KW TO 12 KW

- The UltraSmart™ controller enables users to view the boiler's operation status at a glance
- Preset configurations based on heating distribution system
- Outdoor sensor that modulates boiler water temperature
- Heating stops when outside temperature gets warmer
- "Boost" mode that automatically increases the temperature when needed
- Ability to purge the pump when system is not running

### Standard Features

- Safety control to limit excessively high temperatures
- 120 V pump power supply
- 24 V electrical supply for thermostat and other accessories
- 30 PSI safety relief valve
- Drain/purge valve
- 208/240 VAC electrical supply

**15 - YEAR WARRANTY**  
ON THE RESERVOIR

**2 - YEAR WARRANTY**  
ON ELECTRICAL AND MECHANICAL PARTS

21-1/2"

8-3/4"

8-7/8"



### Multi-position Installation

### Mini Ultra (240 VAC / 60 Hz / 1 Phase<sup>1</sup>)

| Model            | Power <sup>2</sup> |        |                   |                       |        | Recommended Electrical Supply <sup>4</sup> |         |         |
|------------------|--------------------|--------|-------------------|-----------------------|--------|--------------------------------------------|---------|---------|
|                  | kW                 | BTU/h  | Amps <sup>3</sup> | Electrical Elements   | Stages | Cu Wire                                    | Al Wire | Breaker |
| * Mini ULTRA 3   | 3                  | 10,236 | 12.5              | 1 x 3 kW              | 1      | 12                                         | 10      | 20      |
| * Mini ULTRA 4.5 | 4.5                | 15,354 | 18.8              | 1 x 4.5 kW            | 1      | 10                                         | 10      | 30      |
| * Mini ULTRA 6   | 6                  | 20,472 | 25                | 2 x 3 kW              | 2      | 8                                          | 6       | 40      |
| * Mini ULTRA 7.5 | 7.5                | 25,590 | 31.3              | 1 x 3 kW + 1 x 4.5 kW | 2      | 8                                          | 6       | 40      |
| * Mini ULTRA 9   | 9                  | 30,708 | 37.5              | 2 x 4.5 kW            | 2      | 8                                          | 6       | 50      |
| * Mini ULTRA 12  | 12                 | 40,944 | 50                | 2 x 6 kW              | 2      | 6                                          | 4       | 70      |

\* Stocked at Mondale Warehouse

<sup>1</sup> Electrical supply 120/240 V or 120/208 V 1 phase (L1-N-L2) with three 90 °C conductors and a ground or two conductors and a ground if the boiler does not require a 120 VAC pump or accessories.

<sup>2</sup> Multiply by .75 for 208 VAC supply.

<sup>3</sup> Multiply by .867 for 208 VAC supply.

<sup>4</sup> The wire gauges and breaker capacity must be in conformity with the standards of the National Electrical Code (NEC), Canadian Electrical Code (CEC) and local codes (if applicable).



## BTH Ultra - Electric Boiler

**bth ULTRA™** electrical boilers are compact and highly performant. Available in a wide array of performance levels and voltages, these highly versatile systems are very energy-efficient and can be used for residential, commercial and institutional applications. Lightweight and robust, the **bth ULTRA™** is easily installed and can supply all types of hot water heating systems.

# bthultra

**7 KW TO 36 KW**  
**Maximum Efficiency.  
Optimal Performance.**

### bth ULTRA™ 7 KW TO 36 KW

- Heating stops when outside temperature gets warmer
- "Boost" mode that automatically increases the temperature when needed
- Works only when triggered by the thermostat
- Ability to purge the pump when system is not running
- Adjustable between 50 °F and 190 °F
- Safety control to limit excessively high temperatures
- Electrical supply and heat pump contact (contact only with commercial boilers)
- Breakers with 33 & 36 kW residential models
- 24 V electrical supply for thermostat and other Accessories
- 30 PSI safety relief valve Drain/purge valve



**15 - YEAR WARRANTY**  
ON THE RESERVOIR

**2 - YEAR WARRANTY**  
ON ELECTRICAL AND MECHANICAL PARTS



### T2 UltraSMART® Controller

The intelligent **T2 UltraSMART®** controller modulates the power level based on the system requirements and adjusts the water temperature based on outdoor temperature.

- Accurate and easily configurable **T2 UltraSMART®** controller with back light display
- Preset configurations based on heating distribution system
- Outdoor sensor that modulates boiler water temperature
- The **T2 UltraSMART®** controller enables users to view the boiler's operation status at a glance

| Residential (240 VAC / 60 Hz / 1 Phase <sup>1</sup> ) |                    |         |                   |                       |        |                                |                              |               |
|-------------------------------------------------------|--------------------|---------|-------------------|-----------------------|--------|--------------------------------|------------------------------|---------------|
| Model                                                 | Power <sup>2</sup> |         |                   |                       |        | Recommended Electrical Supply* |                              |               |
|                                                       | kW                 | BTU/h   | Amps <sup>3</sup> | 240 V Elements        | Stages | Cu Wire                        | Al Wire                      | Breaker       |
| * BTH ULTRA 12                                        | 12                 | 40,944  | 50                | 4 x 3 kW              | 4      | 6                              | 4                            | 70            |
| * BTH ULTRA 15                                        | 15                 | 51,180  | 62.5              | 2 x 3 kW + 2 x 4.5 kW | 4      | 6                              | 4                            | 80            |
| * BTH ULTRA 18                                        | 18                 | 61,416  | 75                | 4 x 4.5 kW            | 4      | 4                              | 2                            | 100           |
| * BTH ULTRA 20                                        | 20                 | 68,240  | 83.3              | 4 x 5 kW              | 4      | 3                              | 2                            | 110           |
| * BTH ULTRA 24                                        | 24                 | 81,888  | 100               | 4 x 6 kW              | 4      | 2                              | 0                            | 125           |
| * BTH ULTRA 27                                        | 27                 | 92,124  | 112.5             | 6 x 4.5 kW            | 6      | 1 x 1 or 2 x 6 <sup>4</sup>    | 1 x 00 or 2 x 4 <sup>4</sup> | 2 x 80 or 150 |
| * BTH ULTRA 29                                        | 29                 | 98,948  | 120.8             | 4 x 5 kW + 2 x 4.5 kW | 6      | 1 x 1 or 2 x 6 <sup>4</sup>    | 1 x 00 or 2 x 4 <sup>4</sup> | 2 x 80 or 175 |
| * BTH ULTRA 33                                        | 33                 | 112,596 | 137.5             | 3 x 5 kW + 3 x 6 kW   | 6      | 2 x 4 <sup>4</sup>             | 2 x 2 <sup>4</sup>           | 2 x 100       |
| * BTH ULTRA 36                                        | 36                 | 122,832 | 150               | 6 x 6 kW              | 6      | 2 x 4 <sup>4</sup>             | 2 x 2 <sup>4</sup>           | 2 x 100       |

\* Stocked at Mondale Warehouse. Also available in 208/60/3, 400/60/3 and 600/60/3 configurations.

<sup>1</sup> Electric supply 120/240 V or 120/208 V 1 phase (L1-N-L2) with three 90 °C conductors and a ground or two conductors with a ground if the boiler does not require a 120 VAC pump or accessories.

<sup>2</sup> Multiply by .75 for 208 VAC supply. <sup>3</sup> Multiply by .867 for 208 VAC supply. <sup>4</sup> See Installation Manual.



## BTH Ultra XL - Electric Boiler

The **bth Ultra XL** is designed to combine compactness, performance and ease of installation, the **bth ULTRA XL** is a must-have when choosing your heating equipment. This electric boiler is equipped with a T2 UltraSmart® Smart Controller for precise temperature and power management, thus optimizing heating performance and comfort. The **bth ULTRA XL** can be easily paired with an auxiliary boiler for a dual-energy installation. This makes this product ideal for use with geothermal energy, heat pumps, wood-fired boilers, biomass heating or solar energy systems.

# bthultraXL

**Efficiency and simplicity for the commercial market.**

40 KW TO 72 KW



4 Input and Output Connections

### Specifications

**Model:** 40 to 72 kW  
**Weight:** 180 lbs  
**Volume:** 8 US gallons  
**Maximum Operating Pressure:** 30 psi  
**Connection:** 1-1/2" NPT male  
**Dimensions:** 23-3/8"L x 12-3/4"D x 23-1/4"H  
**Floor Stand:** Optional

### Commercial (240 V / 1 Phase<sup>1</sup>)

| Model           | Power |         | Amps  | 240 V Elements      | Stages | Stage Relays |
|-----------------|-------|---------|-------|---------------------|--------|--------------|
|                 | kW    | BTU/h   |       |                     |        |              |
| BTH ULTRA XL 40 | 40    | 136 480 | 166.7 | 8 x 5 kW            | 4      | 4 x 10 kW    |
| BTH ULTRA XL 44 | 44    | 150 128 | 183.3 | 4 x 5 kW / 4 x 6 kW | 4      | 4 x 11 kW    |
| BTH ULTRA XL 48 | 48    | 163 776 | 200   | 8 x 6 kW            | 4      | 4 x 12 kW    |

<sup>1</sup> 120/240V 1-phase (L1-N-L2) grounded power supply with three 90°C conductors or grounded 2-conductor power supply if the application does not require power from a 120 VAC pump or accessories.

### Commercial (480 V / 3 Phases<sup>1</sup>)

| Model           | Power |         | Amps | 240 V Elements       | Stages | Stage Relays          |
|-----------------|-------|---------|------|----------------------|--------|-----------------------|
|                 | kW    | BTU/h   |      |                      |        |                       |
| BTH ULTRA XL 40 | 40    | 136480  | 48.1 | 10 x 3 kW / 2 x 5 kW | 4      | 2 x 11 kW / 2 x 9 kW  |
| BTH ULTRA XL 48 | 48    | 163 776 | 57.7 | 6 x 3 kW / 6 x 5 kW  | 4      | 2 x 11 kW / 2 x 13 kW |
| BTH ULTRA XL 60 | 60    | 204 720 | 72.2 | 12 x 5 kW            | 4      | 4 x 15 kW             |
| BTH ULTRA XL 72 | 72    | 245 664 | 86.6 | 12 x 6 kW            | 4      | 4 x 18 kW             |

<sup>1</sup> 480 V 3-phase (L1-L2-L3) grounded power supply with three 90°C conductors.

### Commercial (600 V / 3 Phases<sup>1</sup>)

| Model           | Power |         | Amps | 240 V Elements       | Stages | Stage Relays          |
|-----------------|-------|---------|------|----------------------|--------|-----------------------|
|                 | kW    | BTU/h   |      |                      |        |                       |
| BTH ULTRA XL 40 | 40    | 136480  | 38.5 | 10 x 3 kW / 2 x 5 kW | 4      | 2 x 11 kW / 2 x 9 kW  |
| BTH ULTRA XL 48 | 48    | 163 776 | 46.2 | 6 x 3 kW / 6 x 5 kW  | 4      | 2 x 11 kW / 2 x 13 kW |
| BTH ULTRA XL 60 | 60    | 204 720 | 57.7 | 12 x 5 kW            | 4      | 4 x 15 kW             |
| BTH ULTRA XL 72 | 72    | 245 664 | 69.3 | 12 x 6 kW            | 4      | 4 x 18 kW             |

<sup>1</sup> 600 V 3-phase (L1-L2-L3) grounded power supply with three 90°C conductors.

\* Wire gauges and breaker capacities must be installed in compliance with the National Electrical Code (NEC), the Canadian Electrical Code (CEC), and local codes (if applicable).

## Zilmet Expansion Tanks



### Hydronic Expansion Tanks—Flat Rectangular

| Part #    | Volume (GAL) | NPT  | Stand            | Details                      |
|-----------|--------------|------|------------------|------------------------------|
| ZFT08R-15 | 2.1          | 1/2" | Mounting Bracket | w/Union & Double-Check Valve |
| ZFT18R-30 | 4.8          | 1/2" | Mounting Bracket | w/Union & Double-Check Valve |
| ZFT24R-60 | 6.3          | 1/2" | Mounting Bracket | w/Union & Double-Check Valve |

### Features

- Perfect accessory to pair with a wall hung condensing boiler
- Welded mounting bracket and unique design allows for a quicker and less expensive installation
- Great for tight installations
- All tanks come with a welded mounting bracket and union connections with a two way check valve

### Materials Of Construction

**Shell:** Carbon steel

**Connections:** 1/2" NPT

**Membrane:** SBR synthetic rubber

**Color:** Grey



## Zilmet Magnetic Filter & Dirt Strainer - "NEW"

The Magnetic Filter and Dirt Strainer Protects hydronic systems and components. Zilmet ZMF Magnetic Filters provide magnetic and mechanical separation across a broad range of applications; including boilers, heat pumps and chilled water systems. Every unit combines industry-leading performance with smart features to streamline installation and service. It's the perfect way to provide complete system protection on every job.

### Features

- Engineered for best-in-class efficiency, offering superior flow rates with less energy consumption
- Powerful magnetite capture and removable 304L stainless strainer for dedicated sludge protection
- Patented, quarter-turn bypass isolates high capacity filter housing for fast service and system dosing
- Detachable, swivel filter body rotates to accommodate any piping angle
- Rugged brass connection hub includes NPTF and PRESS connections so you're ready for every job with half the inventory



### Specifications

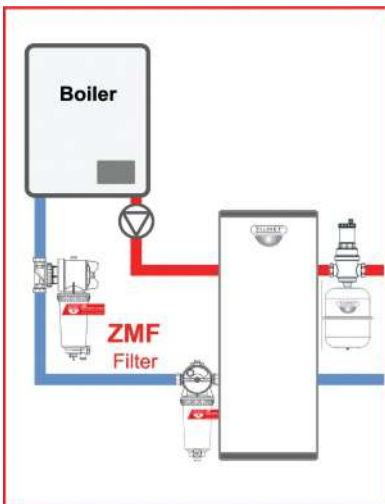
**Max System Pressure:** 90 psig

**Max Temperature:** 190° F

**Fluid Compatibility:** Water or Glycol Mix up to 50%

**Magnet Performance:** Neodymium 11,000 Gauss;  
ASTM A977

**Warranty:** 5 Years



### Dimensions

| Model # | Connection (Included)        | Height (In) | Width (In) | Depth (In) | Weight (lb) | Max Flow (gpm) | CV Rating |
|---------|------------------------------|-------------|------------|------------|-------------|----------------|-----------|
| ZMF-100 | 1" NPTF and 1" PRESS         | 12.8        | 3.9        | 7.8        | 3.8         | 21.0           | 12.0      |
| ZMF-125 | 1-1/4" NPTF and 1-1/4" PRESS | 12.8        | 3.9        | 8.1        | 3.8         | 26.0           | 13.5      |

## Buffer Tanks - For Mixed Circuits And Microloads

Zilmet ZBT Buffer Tanks are the ideal solution to integrate variable demands, small loads and mixed flows in high-efficiency heating and chilled water systems. ZBT Buffer Tanks provide thermal mass and hydraulic separation to minimize cycling, simplify installation and reduce energy use.

### Features

- Optimal capacity for high efficiency boilers in most residential and light-commercial applications
- Compact footprint, flush-mount fittings and side-facing sensor well for a streamlined installation
- Air vent, drain and temperature sensor ports
- Hardware kit includes bottom legs and wall-mount brackets for installation flexibility
- Closed-cell urethane insulation and bonded jacket eliminate condensation problems in chilled-water applications



### Specifications

**Max System Pressure:** 60 psig  
**Max Temperature:** 200° F  
**Fluid Compatibility:** Water or Glycol Mix up to 50%  
**Tank Material:** Welded Steel  
**Warranty:** 5 Years

### Dimensions

| Model         | Volume GAL | Diameter INCHES | *Height INCHES | System CONNECTIONS | Vent & Drain TAPPINGS | Sensor PORT |
|---------------|------------|-----------------|----------------|--------------------|-----------------------|-------------|
| <b>ZBT-7</b>  | 7          | 11.5            | 36.5           | 1" NPTF            | 3/4" NPTF             | 1/2" NPTF   |
| <b>ZBT-14</b> | 14         | 14              | 39.5           | 1-1/4" NPTF        | 3/4" NPTF             | 1/2" NPTF   |
| <b>ZBT-21</b> | 21         | 18.5            | 35.1           | 1-1/4" NPTF        | 1-1/4" NPTF           | 1/2" NPTF   |
| <b>ZBT-28</b> | 21         | 18.5            | 42.2           | 1-1/4" NPTF        | 1-1/4" NPTF           | 1/2" NPTF   |

**\*Tank height without accessories. Add 4" when leg kit is installed.**

## Hydraulic Separators - For Hydronic Heating and Chilled Water Systems

Insulated, multifunction unit separates primary and secondary circuits in hydronic heating and chilled water applications. All units include dual sensor ports and perforated internal baffles for air and dirt separation.

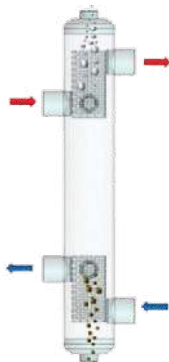


### Dimensions

| Model # | Size   | Max Flow    | Body Diameter        | Height |
|---------|--------|-------------|----------------------|--------|
|         | NPTF   | GPM/Circuit | Inches, w/Insulation | Inches |
| ZHS-100 | 1"     | 11          | 4.0                  | 20.6   |
| ZHS-125 | 1-1/4" | 18          | 4.7                  | 25.7   |
| ZHS-150 | 1-1/2" | 26          | 5.7                  | 30.5   |
| ZHS-200 | 2"     | 40          | 6.7                  | 35.2   |

### Specifications

**System Connections:** 4(x4) NPTF Thread  
**Front Accessory Ports:** (x2) 1/2 in. NPTF Thread  
**Vent and Drain Ports:** (x2) 1/2 in. NPTF Thread  
**Max Pressure:** 150 psig  
**Max Temperature:** 200°F  
**Fluid Compatibility:** Water or Glycol mix to 50%  
**Tank Material:** Welded Steel  
**Warranty:** 5 Years



### Features

- Low-loss design supports flow rates up to 40 gpm for residential and light-commercial applications
- Welded baffles; no plastic internal components
- Dual accessory ports for sensing and magnetic inserts
- Includes high-capacity automatic float vent
- Bottom port for drain or blowdown valve
- Two-piece insulation with hook & loop clamshell

## Zilmet Expansion Tanks - Hydronic Heating

Zilmet has over 50 years experience in manufacturing high quality expansion tanks. The company produces over 5 million tanks annually. All products are designed and manufactured exclusively by Zilmet. The tanks are fully vertically integrated with a seamless diaphragm that never stretches or creases. There are no bubbles or corners to trap sediment, inhibiting bacterial growth. **There is a 5-year warranty on all models.**



**Side Connection  
allows for quicker, less  
expensive installation**



### Cal-Pro Hydronic Expansion Tanks

| Part #     | Volume (GAL) | NPT  | Stand | Details              |
|------------|--------------|------|-------|----------------------|
| ZHT-R15    | 2.1          | 1/2" | None  | Radiant / Lined Tank |
| ZHT-R30    | 4.8          | 1/2" | None  | Radiant / Lined Tank |
| ZHT-008-15 | 2.1          | 1/2" | None  | Equiv to #15         |
| ZHT-018-30 | 4.8          | 1/2" | None  | Equiv to #30         |
| ZHT-024-60 | 6.3          | 1/2" | None  | Equiv to #60         |
| ZHT-035    | 9.2          | 3/4" | None  | ---                  |
| ZHT-035F   | 9.2          | 3/4" | Yes   | Side Connection      |
| ZHT-050-90 | 13.2         | 3/4" | None  | ---                  |
| ZHT-050F   | 13.2         | 3/4" | Yes   | Side Connection      |
| ZHT-080    | 21.0         | 3/4" | Yes   | Side Connection      |
| ZHT-105    | 27.7         | 3/4" | Yes   | Side Connection      |
| ZHT-150    | 39.6         | 3/4" | Yes   | Side Connection      |
| ZHT-200    | 52.8         | 3/4" | Yes   | Side Connection      |
| ZHT-250    | 66.0         | 3/4" | Yes   | Side Connection      |
| ZHT-300    | 79.3         | 3/4" | Yes   | Side Connection      |
| ZHT-400    | 105.7        | 3/4" | Yes   | Side Connection      |
| ZHT-500    | 132.1        | 1"   | Yes   | Side Connection      |
| ZHT-600    | 158.5        | 1"   | Yes   | Side Connection      |
| ZHT-700    | 184.9        | 1"   | Yes   | Side Connection      |

### Features

- Certified synthetic SBR rubber diaphragm
- MIG welding on large sizes eliminates interior rough spots and sharp edges
- Protected pre charge valve eliminates potential leak path
- Factory leak tested to ensure tank integrity
- Designed to maximize drawdown
- Low profile tank design with full membrane depth eliminates stretching of diaphragm, providing increased life cycle

### Operating Conditions

**Max. Working Pressure 2-13.2 Gal:** 60 psi  
**Max. Working Pressure 21-184 Gal:** 90 psi  
**Max. Operating Temperature:** 210 F  
**Factory Pre-charge:** 12 psi

### Materials Of Construction

**Shell:** Carbon steel  
**Connections:** Stainless steel  
**Membrane:** SBR synthetic rubber  
**Color:** Grey

# Hydro-Plus Bottom Connection Well Tank

| Hydro-Plus Models Chart |              |        |       |       |                   |
|-------------------------|--------------|--------|-------|-------|-------------------|
| Part #                  | Volume (GAL) | NPT    | NSF61 | Stand | Details           |
| ZHP202BC                | 21.1         | 1"     | Yes   | Yes   | Bottom Connection |
| ZHP202BV-BC             | 21.1         | 1"     | Yes   | Yes   | Bottom Connection |
| ZHP203BC                | 27.7         | 1-1/4" | Yes   | Yes   | Bottom Connection |
| ZHP204BC                | 39.6         | 1-1/4" | Yes   | Yes   | Bottom Connection |
| ZHP34BC                 | 34.1         | 1-1/4" | Yes   | Yes   | Bottom Connection |
| ZHP250BC                | 54.7         | 1-1/4" | Yes   | Yes   | Bottom Connection |
| ZHP251BC                | 66.0         | 1-1/4" | Yes   | Yes   | Bottom Connection |
| ZHP302BC                | 79.3         | 1-1/4" | Yes   | Yes   | Bottom Connection |
| ZHP351BC                | 119.0        | 1-1/4" | Yes   | Yes   | Bottom Connection |



(HydroPlus BC)

## Features

- 150 psi rated
- All weather epoxy-polyester powder coated paint
- SS connector
- Polypropylene base for all weather applications

## Material Description

**Shell:** Carbon Steel  
**Connection:** Stainless Steel  
**Fixed Membrane:** Butyl  
**Material of Base:** Polypropylene  
**Tank Color:** Blue  
**Base Color:** Grey

## Operating Conditions

**Max. Operating Pressure:** 150 psi  
**Operating Temperature:** 210°F  
**Factory Pre-Charge:** 38 psi

\* New- Standard color is blue. All BC tanks are also available in tan.



- System Connection height consistent with Industry
- Same ZHP Tank with "NEW" Bottom Connection

## Inox-Pro Tanks



Inox-Pro

## Operating Conditions

**Max. Operating Pressure**  
**ZS05-ZS18:** 150 psi  
**Operating Temperatures:** 14-210 F



## Inox Stainless Steel Expansion Tanks

| Part # | Volume (GAL) | NPT  | NSF 61 | Stand | Details |
|--------|--------------|------|--------|-------|---------|
| ZS05   | 0.13         | 1/2" | No     | None  | ----    |
| ZS1    | 0.26         | 1/2" | No     | None  | ----    |
| ZS2    | 0.53         | 1/2" | No     | None  | ----    |
| ZS8    | 2.1          | 3/4" | Yes    | None  | ----    |
| ZS12   | 3.2          | 3/4" | Yes    | None  | ----    |
| ZS18   | 4.8          | 3/4" | Yes    | None  | ----    |
| ZS24V  | 6.3          | 1"   | Yes    | None  | ----    |

## Materials Of Construction

**Shell:** 304 stainless Steel  
**Flange:** Stainless steel  
**Membrane:** Butyl diaphragm

## Features

- Butyl diaphragms are suitable for both hot and cold water Applications
  - ZS8, ZS12, ZS18 are NSF 61 certified
  - Available in additional sizes
- Uses:**
- High corrosive areas, rain water collection, water hammer arrestors, variable speed pump applications, marine applications, breweries, hospitals, food manufacturing plants, etc.



## Zilmet Expansion Tanks - Thermal and Well Tanks



### ZEP-1 Stainless Steel Expansion Tank

and Shock Arrester for Tankless and POU Water Heaters with 2 gallons or less of total water volume



#### Features

- Seamless NSF 61 certified low permeability butyl diaphragm never creases and channels water directly to outlets, thus eliminating bacterial growth pockets
- MIG welding eliminates interior rough spots and sharp edges
- Low profile tank design with full membrane depth eliminates stretching of diaphragm, increasing life cycle
- Powder coated finish for a longer lasting, more durable finish

#### Operating Conditions

**Max. Operating Pressure:** 150 psi  
**Operating Temperatures:** 210 F  
**Factory Pre-charge Hydro-Plus:** 38 psi  
**Factory Pre-charge Easy-Pro In-Line:** 40 psi

#### Materials Of Construction

**Shell:** Carbon steel (internally coated with epoxy powder for potable water applications)  
**Connections:** Stainless steel (internally coated with powder for potable water applications)  
**Fixed Membrane:** Butyl (for potable water applications)  
**Color:** Almond



**Stainless steel side connection allows for quicker, less expensive installation**

#### Easy-Pro In-Line Thermal Expansion Tanks For DHW

| Part # | Volume (GAL) | NPT  | NSF 61 | Stand | Details                                      |
|--------|--------------|------|--------|-------|----------------------------------------------|
| ZEP001 | 0.04         | 1/2" | Yes    | No    | For Tankless Water Heaters / Stainless Steel |
| ZEP005 | 2.1          | 3/4" | Yes    | No    | Good For Well Tank / Thermal                 |
| ZEP012 | 4.8          | 3/4" | Yes    | No    | Good For Well Tank / Thermal                 |
| ZEP018 | 6.3          | 1"   | Yes    | No    | Good For Well Tank / Thermal                 |

#### Hydro-Plus Well Tanks (Vertical Stand With Base)

| Part #   | Volume (GAL) | NPT    | NSF 61 | Stand | Details         |
|----------|--------------|--------|--------|-------|-----------------|
| ZHP005   | 2.1          | 3/4"   | Yes    | No    | — — —           |
| ZHP012   | 4.8          | 3/4"   | Yes    | No    | — — —           |
| ZHP018   | 6.3          | 1"     | Yes    | No    | — — —           |
| ZHP104IL | 9.2          | 1"     | Yes    | No    | — — —           |
| ZHP200IL | 13.2         | 1"     | Yes    | No    | — — —           |
| ZHP200F  | 13.2         | 1"     | Yes    | Yes   | Side Connection |
| ZHP202   | 21.1         | 1"     | Yes    | Yes   | Side Connection |
| ZHP203   | 27.7         | 1-1/4" | Yes    | Yes   | Side Connection |
| ZHP204   | 39.6         | 1-1/4" | Yes    | Yes   | Side Connection |
| ZHP250   | 52.8         | 1-1/4" | Yes    | Yes   | Side Connection |
| ZHP251   | 66.0         | 1-1/4" | Yes    | Yes   | Side Connection |
| ZHP302   | 79.3         | 1-1/4" | Yes    | Yes   | Side Connection |
| ZHP350   | 106.0        | 1-1/4" | Yes    | Yes   | Side Connection |
| ZHP351   | 119.0        | 1-1/4" | Yes    | Yes   | Side Connection |
| ZHP400   | 132.1        | 1-1/4" | Yes    | Yes   | Side Connection |
| ZHP451   | 158.5        | 1-1/4" | Yes    | Yes   | Side Connection |

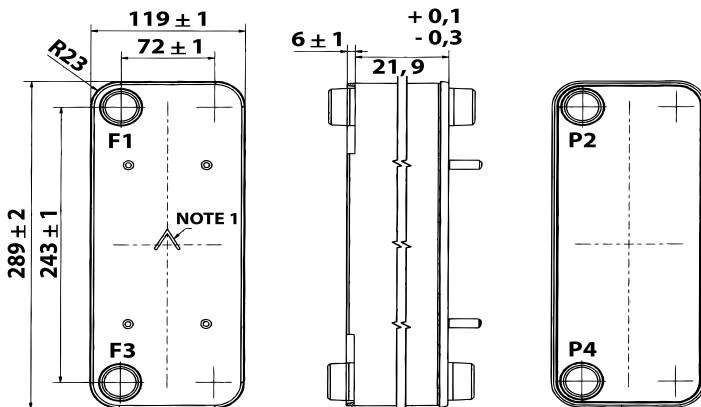
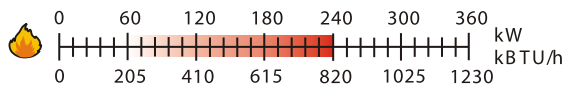
## Compact Brazed Plate Heat Exchangers

Experience more efficient heat transfer solutions in your heating application! The list of applications that operate more efficiently with Compact Brazed Plate Heat Exchangers, is a long one: boilers, steam, solar panels, floor heating, snow melting and so on...



**\*Mondale stocks several sizes of B10T (roughly 5" x 12") single-wall models with the "Front and Back" connections, B120T (10" x 20") and several sizes of B16 double-wall models. SWEP also manufactures many other types of brazed plate heat exchangers up to 3+ million BTUs. Please call us for sizing, pricing and availability. Dimensions for our B10T models are provided below.**

| Port diameter |      | Max flow rate     |         | Max heat transfer area |                 |
|---------------|------|-------------------|---------|------------------------|-----------------|
| mm            | inch | m <sup>3</sup> /h | usg/min | m <sup>2</sup>         | ft <sup>2</sup> |
| 24            | 1"   | 12                | 53      | 4.3                    | 41              |



**NOTE 1 Alternate Marking: Sticker or Stamp**

### Features

- Made from stainless steel and manufactured with the highest of quality
- Delivered with full traceability and verified functionality
- Approved by leading independent international bodies such as PED, UL, KHK, CSA
- Manufactured in the USA and Sweden

### Brazed Plate Heat Exchangers (Single Wall)

| #Part       | Description                                       | BTUh    |
|-------------|---------------------------------------------------|---------|
| B10TH-BKT   | Wall Mount Bracket for Front and Back Connections | ---     |
| B10THX-8FB  | B10TH x 8/1P-SC-S 2 x 1" NPT / 2 x 1" NPT         | 65,000  |
| B10THX-10FB | B10TH x 10/1P-SC-S 2 x 1" NPT / 2 x 1" NPT        | 90,000  |
| B10THX-12FB | B10TH x 12/1P-SC-S 2 x 1" NPT / 2 x 1" NPT        | 110,000 |
| B10THX-16FB | B10TH x 16/1P-SC-S 2 x 1" NPT / 2 x 1" NPT        | 150,000 |
| B10THX-20FB | B10TH x 20/1P-SC-S 2 x 1" NPT / 2 x 1" NPT        | 185,000 |
| B10THX-24FB | B10TH x 24/1P-SC-S 2 x 1" NPT / 2 x 1" NPT        | 220,000 |
| B10THX-30FB | B10TH x 30/1P-SC-S 2 x 1" NPT / 2 x 1" NPT        | 270,000 |
| B10THX-36FB | B10TH x 36/1P-SC-S 2 x 1" NPT / 2 x 1" NPT        | 320,000 |
| B10THX-40FB | B10TH x 40/1P-SC-S 2 x 1" NPT / 2 x 1" NPT        | 345,000 |
| B10THX-50FB | B10TH x 50/1P-SC-S 2 x 1" NPT / 2 x 1" NPT        | 405,000 |
| B10THX-60FB | B10TH x 60/1P-SC-S 2 x 1" NPT / 2 x 1" NPT        | 455,000 |
| B120TH x 30 | B120T Model (9.6" x 20.7") 1-1/2" NPT             | 385,000 |
| B120TH x 40 | B120T Model (9.6" x 20.7") 1-1/2" NPT             | 505,000 |
| B120TH x 50 | B120T Model (9.6" x 20.7") 1-1/2" NPT             | 620,000 |
| B120TH x 80 | B120T Model (9.6" x 20.7") 1-1/2" NPT             | 920,000 |

**Side A- 180°F In / 150°F Out  
Side B- 100°F In / 120°F Out**

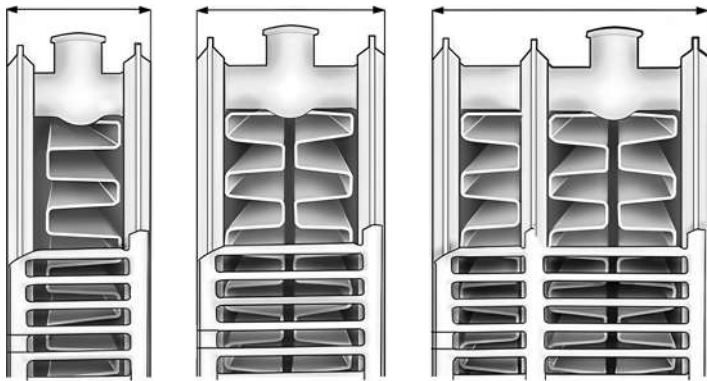
### (Double Wall)

| Part #      | Description                    | BTUh    |
|-------------|--------------------------------|---------|
| B16DW x 10  | B16DW x 10 / 1P-SC-S4* 1" NPT  | 60,000  |
| B16DW x 30  | B16DW x 30 / 1P-SC-S4* 1" NPT  | 205,000 |
| B16DW x 50  | B16DW x 50 / 1P-SC-S4* 1" NPT  | 350,000 |
| B16DW x 70  | B16DW x 70 / 1P-SC-S4* 1" NPT  | 480,000 |
| B16DW x 100 | B16DW x 100 / 1P-SC-S4* 1" NPT | 575,000 |

## Ecostyle Radiator Panels

Ecostyle Radiator Panels supply exceptional convective and radiant heat while adding style to your home. Radiant heat acts like the sun, heating objects and people not just room air. This even warmth minimizes cold spots and drafts throughout the home.

### Radiator Types



**Type 21**  
2-3/4"

**Type 22**  
4"

**Type 33**  
6"

**Type 21:** Two radiant panels and one set of convector fins.  
(Special order. May take 12 Weeks.)

**Type 22:** Two radiant panels and two sets of convector fins.

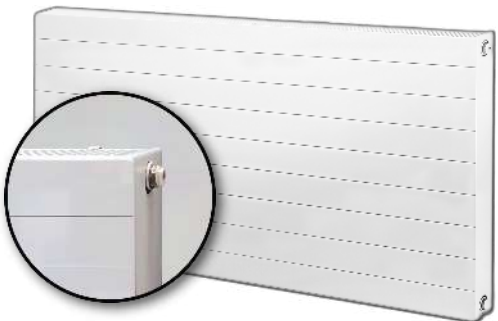
**Type 33:** Three radiant panels and three sets of convector fins.  
(Special order. May take 12 Weeks.)

### Radiator Models



#### CV Model

The Purmo CV features a classic profiled front face with subtle vertical lines, giving it a clean, understated look that blends seamlessly into any room décor.

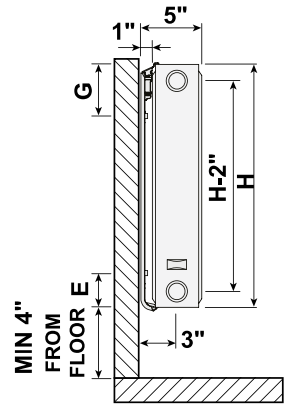


#### RCV Model

The Purmo RCV panel radiator features a smooth, clean front face with elegant horizontal lines, offering a modern, high-class look that complements any interior while delivering efficient, consistent warmth.

### How To order

Include the **MODEL (CV, RCV)** at the start of the order code.  
Example: "CV221648"



**Side View**

### General Specifications



#### CERTIFICATION

Produced in a ISO 4001:2004 certified facility. DC01 steel\_PN-EN 10130



#### WARRANTY

10-year guarantee from date of purchase to the original owner against manufacturing defects. Visit our website for warranty details.



#### CONNECTIONS

2-1/2" Bottom connections  
4-1/2" Side connections  
View page 31 for recommended piping Connections. Valves and fittings are available as a separately purchased option.



#### INCLUDED COMPONENTS

Installed on the Radiator:  
2-Plugs (bottom side Tappings) 1-Air vent (top left corner) 1-TRV insert (top right corner)

Packaged with the unit:  
Wall bracket (clamp style)  
Lug bolts for fixing bracket to the wall, sheetrock anchors.



#### OPERATING PARAMETERS

Max working pressure is 147psi. Max test pressure is 191psi. Max temperature is 230°F.



#### FINISH OPTIONS

RAL 9016 White.



#### MATERIAL

High quality, low carbon, cold rolled DC01 steel. 1.3" water channel spacing.

## Ecostyle Radiator Panels

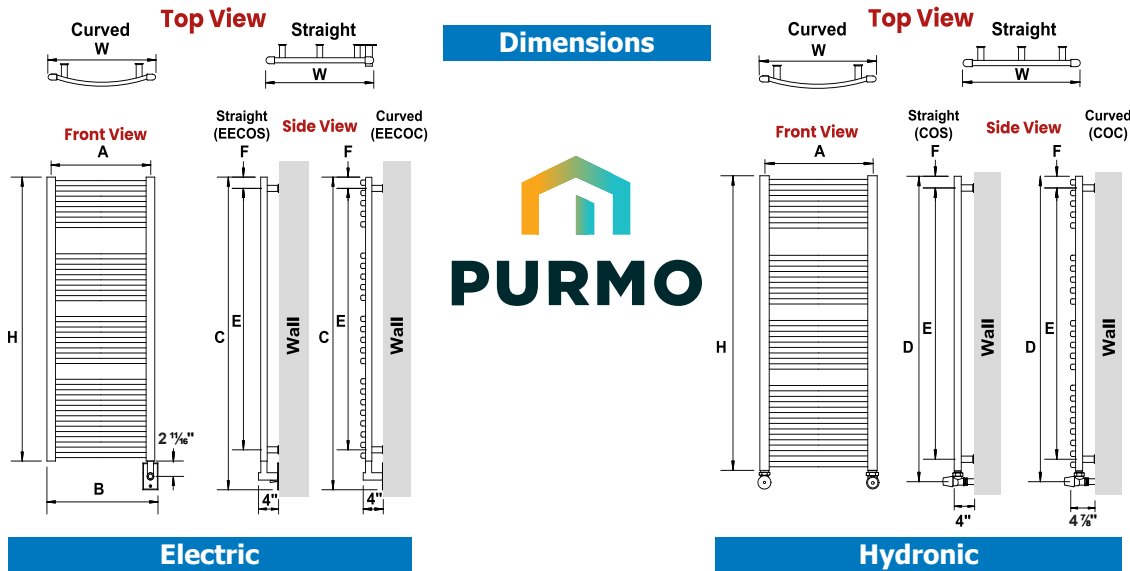
| Heat Outputs |                               |     |                |                |                       |         |
|--------------|-------------------------------|-----|----------------|----------------|-----------------------|---------|
| Order Code   | Model Code                    |     | Overall Height | Overall Length | Hydronic Heat Outputs |         |
| Type 22      | (✓) Stocked (N) Special Order |     |                |                | @ 180°F               | @ 140°F |
|              | CV                            | RCV |                |                | Inch                  | Inch    |
| 22824        | N                             | N   | 8"             | 24"            | 1777                  | 925     |
| 22836        | N                             | N   |                | 36"            | 2669                  | 1390    |
| 22848        | N                             | N   |                | 48"            | 3557                  | 1852    |
| 22863        | N                             | N   |                | 63"            | 4740                  | 2468    |
| 22871        | N                             | N   |                | 71"            | 5334                  | 2777    |
| 221216       | N                             | N   | 12"            | 16"            | 1572                  | 818     |
| 221220       | N                             | N   |                | 20"            | 1969                  | 1025    |
| 221224       | ✓                             | N   |                | 24"            | 2362                  | 1230    |
| 221232       | N                             | N   |                | 32"            | 3148                  | 1639    |
| 221236       | ✓                             | N   |                | 36"            | 3541                  | 1844    |
| 221248       | ✓                             | N   |                | 48"            | 4720                  | 2457    |
| 221263       | N                             | N   |                | 63"            | 6296                  | 3278    |
| 221271       | ✓                             | N   |                | 71"            | 7082                  | 3687    |
| 221616       | ✓                             | N   | 16"            | 16"            | 1998                  | 1040    |
| 221620       | N                             | N   |                | 20"            | 2501                  | 1302    |
| 221624       | ✓                             | N   |                | 24"            | 3001                  | 1562    |
| 221632       | N                             | N   |                | 32"            | 3999                  | 2082    |
| 221636       | ✓                             | N   |                | 36"            | 4499                  | 2342    |
| 221648       | ✓                             | N   |                | 48"            | 5997                  | 3122    |
| 221663       | ✓                             | N   |                | 63"            | 7999                  | 4164    |
| 221671       | ✓                             | N   |                | 71"            | 8998                  | 4684    |

| Heat Outputs |                               |     |                |                |                       |         |
|--------------|-------------------------------|-----|----------------|----------------|-----------------------|---------|
| Order Code   | Model Code                    |     | Overall Height | Overall Length | Hydronic Heat Outputs |         |
| Type 22      | (✓) Stocked (N) Special Order |     |                |                | @ 180°F               | @ 140°F |
|              | CV                            | RCV |                |                | Inch                  | Inch    |
| 222016       | N                             | N   | 20"            | 16"            | 2407                  | 1253    |
| 222020       | N                             | N   |                | 20"            | 3009                  | 1566    |
| 222024       | ✓                             | N   |                | 24"            | 3611                  | 1880    |
| 222028       | N                             | N   |                | 28"            | 4212                  | 2193    |
| 222036       | ✓                             | N   |                | 36"            | 5416                  | 2820    |
| 222048       | ✓                             | N   |                | 48"            | 7209                  | 3753    |
| 222063       | N                             | N   |                | 63"            | 9628                  | 5013    |
| 222071       | N                             | N   |                | 71"            | 10832                 | 5639    |
| 222416       | ✓                             | N   | 24"            | 16"            | 2800                  | 1458    |
| 222420       | N                             | N   |                | 20"            | 3500                  | 1822    |
| 222424       | ✓                             | N   |                | 24"            | 4196                  | 2185    |
| 222436       | ✓                             | N   |                | 36"            | 6296                  | 3278    |
| 222448       | ✓                             | N   |                | 48"            | 8396                  | 4371    |
| 222463       | ✓                             | N   |                | 63"            | 11192                 | 5827    |
| 222471       | N                             | N   |                | 71"            | 12592                 | 6556    |
| 223616       | N                             | N   | 36"            | 16"            | 3909                  | 2035    |
| 223620       | N                             | N   |                | 20"            | 4888                  | 2545    |
| 223624       | ✓                             | N   |                | 24"            | 5866                  | 3054    |
| 223628       | N                             | N   |                | 28"            | 6845                  | 3563    |
| 223632       | N                             | N   |                | 32"            | 7819                  | 4071    |
| 223636       | ✓                             | N   |                | 36"            | 8797                  | 4580    |
| 223640       | N                             | N   |                | 40"            | 9776                  | 5089    |
| 223648       | N                             | N   |                | 48"            | 11732                 | 6108    |
| 223663       | N                             | N   |                | 63"            | 15642                 | 8144    |
| 223671       | N                             | N   |                | 71"            | 17594                 | 9160    |

| Panel Radiator and Towel Warmer (Valves & Accessories) |                                                                                                                         |
|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Part #                                                 | Product Description                                                                                                     |
| H-1365                                                 | Thermostat (WHITE)                                                                                                      |
| H-5813                                                 | 1/2" 2-Pipe Isolation Valve (STRAIGHT)                                                                                  |
| H-5814                                                 | 1/2" 2-Pipe Isolation Valve (ANGLED)                                                                                    |
| H-5933                                                 | 1/2" 2-Pipe Diverter Valve (STRAIGHT)                                                                                   |
| H-5934                                                 | 1/2" 2-Pipe Diverter Valve (ANGLED)                                                                                     |
| H-6062                                                 | 1/2" Double Angle Valve LH (For towel warmers)                                                                          |
| H-6063                                                 | 1/2" Double Angle Valve RH (For towel warmers)                                                                          |
| H-1082                                                 | Return Angle Valve 1/2" (For towel warmers)                                                                             |
| H-M3831S                                               | 1/2" Copper Compression Fittings (Pair)                                                                                 |
| H-F6674                                                | Dual Floor Escutcheon                                                                                                   |
| H-WKL                                                  | Tubing Cover                                                                                                            |
| DN40041                                                | Floor Pedestal (Requires 2 per radiator) Radiator Rough-in Template, Includes 4-Tube/U-Tube only, For use with DN40441. |
| DN40441                                                | Radiator Rough-in Template. Includes U-Tube.                                                                            |
| DN40442                                                | U-Tube only. For use with DN40441.                                                                                      |

## Avonmore Electric and Hydronic Towel Warmers

Avonmore by PURMO is a classic multi-rail design that is available in an **electric** or **hydronic option**. It's range of sizes, finishes, and straight or curved models makes it an extremely popular specification product for new build. It is highly functional for heating, with good outputs, and it has tube spacing for practical towel placement. With three different rail configurations, this is a flexible choice for any project.



| MODEL | Height (H) (inch) | Width (W) (inch) | Electric Weight (lb) | Hydronic Weight (lb) | A (inch)  | B (inch) | C (inch) | D (inch) | E** (inch) | F** (inch) |
|-------|-------------------|------------------|----------------------|----------------------|-----------|----------|----------|----------|------------|------------|
| 85    | 33 15/16"         | 19 11/16"        | 40                   | 39                   | 17 15/16" | 20 3/16" | 38 7/8"  | 35 9/16" | 26 9/16"   | 3 11/16"   |
| 86    | 33 15/16"         | 23 5/8"          | 45                   | 45                   | 21 7/8"   | 24 1/8"  | 38 7/8"  | 35 9/16" | 26 9/16"   | 3 11/16"   |
| 125   | 48 1/8"           | 19 11/16"        | 60                   | 59                   | 17 15/16" | 20 3/16" | 53 1/16" | 49 3/4"  | 33 11/16"  | 7 1/4"     |
| 126   | 48 1/8"           | 23 5/8"          | 70                   | 68                   | 21 7/8"   | 24 1/8"  | 53 1/16" | 49 3/4"  | 33 11/16"  | 7 1/4"     |

\*\*Dimensions E and F may vary depending on the positioning of the mounting brackets.

| Heat Outputs        |             |                |                                  |       |                                  |      |                       |        |      |
|---------------------|-------------|----------------|----------------------------------|-------|----------------------------------|------|-----------------------|--------|------|
| Order Code          |             | Stock Finishes | Hydronic Heat Outputs @ ΔT 180°F |       | Hydronic Heat Outputs @ ΔT 140°F |      | Electric Heat Outputs |        |      |
| Straight            | Curved      |                | Btu/h                            |       | Btu/h                            |      | Watts                 | Amps   |      |
|                     |             |                | PL*                              | PA**  | PL*                              | PA** |                       |        |      |
| AVONMORE - Hydronic |             |                |                                  |       |                                  |      |                       |        |      |
| Order Code          | Order Code  |                |                                  |       |                                  |      | N/A                   |        |      |
| PUR-COS85           | PUR-COC85   | WH, CH, BN, MB | 1,300                            | 1,951 | 582                              | 585  |                       |        |      |
| PUR-COS86           | PUR-COC86   | WH, CH, BN, MB | 1,538                            | 2,273 | 690                              | 695  |                       |        |      |
| PUR-COS125          | PUR-COC125  | WH, CH, BN, MB | 1,857                            | 2,710 | 828                              | 827  |                       |        |      |
| PUR-COS126          | PUR-COC126  | WH, CH, BN, MB | 2,188                            | 3,159 | 984                              | 988  |                       |        |      |
| AVONMORE - Electric |             |                |                                  |       |                                  |      |                       |        |      |
| Order Code          | Order Code  |                |                                  |       |                                  |      |                       |        |      |
| PUR-ECOS85          | PUR-ECOC85  | WH, CH, BN, MB |                                  |       |                                  |      |                       | 200    | 1.75 |
| PUR-ECOS86          | PUR-ECOC86  | WH, CH, BN, MB |                                  |       |                                  |      |                       | 200    | 1.75 |
| PUR-ECOS125         | PUR-ECOC125 | WH, CH, BN, MB |                                  |       |                                  |      |                       | 300    | 2.73 |
| PUR-ECOS126         | PUR-ECOC126 | WH, CH, BN, MB |                                  |       |                                  |      |                       | 300 PL | 2.73 |
|                     |             |                |                                  |       |                                  |      |                       | 400 PA | 3.63 |

**NOTE:** Be sure to include the **FINISH** suffix at the end of the order code when placing your order.

\*\*PA = Painted Finish \*PL = Plated Finish (Hardwired Kit)

**CERTIFICATION**  
Produced in a ISO 4001:2004 certified facility. Manufactured and 3rd party tested by ETL according to UL-499 and CAN/CSA-E60335-2-43.

**WARRANTY**  
5-year guarantee from date of purchase to the original owner against manufacturing defects. Visit our website for warranty details.

**SYSTEM**  
MYSON hydronic towel warmers are for properly designed closed loop (not open loop and/or drinking water systems) hydronic heating systems in residential and commercial applications.

**CONNECTIONS**  
4 x 1/2" BSP as standard. Valves and fittings are available as a separately purchased option (refer to page 28).

**AIR VENTS & PLUG**  
Included in the packaging installed for hydronic version.

**HEATING FLUID**  
Electric towel warmers are filled with non-toxic glycol based fluid to facilitate heat transfer.

**APM® TECHNOLOGY**  
APM® represents the most advanced element technology available. It is an economical, self-regulating element. When it reaches the required temperature, it reduces power consumption accordingly. There is no need for a thermostat.

**FINISH OPTIONS**

- Chrome (CH)
- Brushed Nickel (BN)
- White (WH)
- Matte Black (MB)

**OPERATING PARAMETERS**  
Maximum sustained working pressure is 77psi. Maximum Sustained temperature is 230°F.

**MATERIAL**  
AVONMORE towel warmers are produced with cold-rolled steel tube. Profile 1" round tubes.

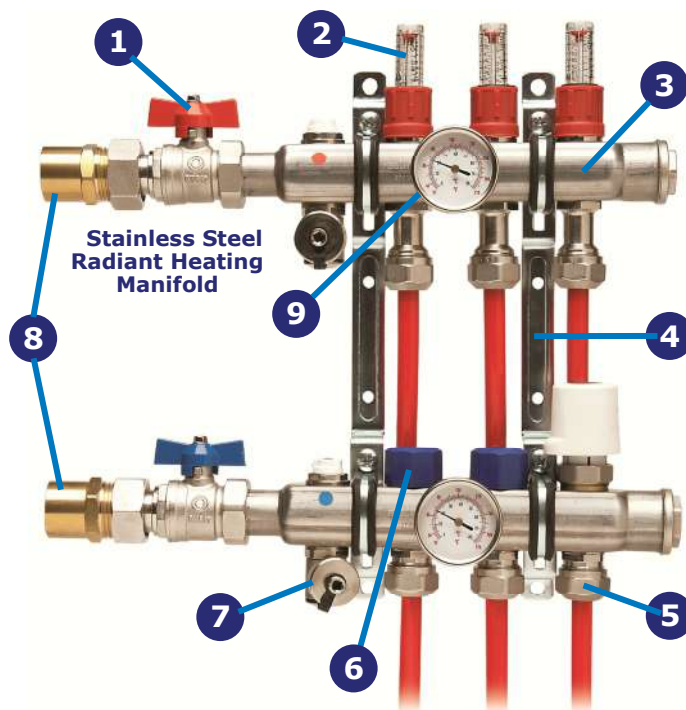


## Maxifold Radiant Heating Manifold

The stainless steel Maxifold manifold provides quality craftsmanship and maximum comfort in radiant heating for your home. It's a wise choice as part of your overall hydronic heating system.

### Features

- 1 Full-Port Ball Valves (optional)
- 2 Adjustable flowmeters allow flow to be set at up to 2 gallons per minute per loop
- 3 High-quality 1-1/2" stainless steel manifold. The slim profile fits conveniently in joist space
- 4 Mounting brackets included
- 5 Compression fittings available for 3/8", 1/2", 5/8" and 3/4" Pex tubing. These fittings can be used with most brands of Pex tubing.
- 6 Actuator Zone Valves (optional)
- 7 Fill valve swivels to allow piping from either direction. The fill valve cap also serves as the tool to open the fill and bleeder valves
- 8 1" Sweat Manifold Transitions (Included)
- 9 Well for optional thermometers



**Extension Valves**



**Extension Flow Meter**

### Electrothermal Actuators (LH)

| Product # | Description                         |
|-----------|-------------------------------------|
| H - 2496  | Normally Closed w/End Switch 4-Wire |

### Compression Fittings (EK-20 Size)

| Product #  | Description                      |
|------------|----------------------------------|
| H - 6849   | 3/8" PEX                         |
| H - 6850   | 1/2" PEX                         |
| H - 6851   | 5/8" PEX                         |
| H - 6852   | 3/4" PEX                         |
| H - M3831S | 1/2" Copper Compression Fittings |
| H - 6950   | 1/2" Pex-Al-Pex                  |

### Stainless Steel Radiant Manifold

| Product # | Description    |
|-----------|----------------|
| H - 4172  | For 2 Branches |
| H - 4173  | For 3 Branches |
| H - 4174  | For 4 Branches |
| H - 4175  | For 5 Branches |
| H - 4176  | For 6 Branches |
| H - 4177  | For 7 Branches |
| H - 4178  | For 8 Branches |

### Extension Kit

| Product #    | Description               |
|--------------|---------------------------|
| H - 4172 EXT | For 2 Additional Branches |
| H - 4173 EXT | For 3 Additional Branches |
| H - 4174 EXT | For 4 Additional Branches |
| H - 4175 EXT | For 5 Additional Branches |
| H - 4176 EXT | For 6 Additional Branches |

### Accessories

| Product #    | Description                                     |
|--------------|-------------------------------------------------|
| H - 4004     | Caps For Unused Loops (Pair)                    |
| H - 4008     | Sweat Tails (Pair)                              |
| H - 4700     | Full-Port Ball Valves (Pair), Union Connections |
| H - 4700-NPT | Ball Valve Set w/Gaskets, 1" NPT Connections    |
| H - 6815     | Gasket for 1" Manifold Tail Piece (Pair)        |
| H - 4900     | Thermometers                                    |

***Your Trusted Manufacturer's Representative Since 1974!***



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