



Heating Catalog

Hydronic Products and Specialties



Cal Pro

Hydronic Expansion Tanks

Features

- Each tank is factory leak tested to ensure tank integrity
- Certified synthetic SBR rubber diaphragm
- All diaphragms designed to maximize drawdown
- MIG welding eliminates interior rough spots and sharp edges
- Welded side outlet allows easy and quick installation
- Low profile tank design with full membrane depth eliminates stretching of diaphragm, providing increased life cycle
- External baked on epoxy-polyester coating provides a durable, appliance like finish
- Protected pre charge valve eliminates potential leak path



Side connection allows for quicker, less expensive installation

Specifications

Shell: Carbon steel
Connections: Carbon steel
Membrane: SBR synthetic rubber
Color: Grey
Warranty: 5 Years

Operating Conditions

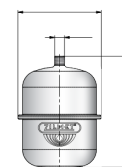
Max working pressure 2-13.2 gal: 60 psi
Max working pressure 21-184 gal: 90 psi
Max operating temperature: 210° F
Factory Precharge: 12 psi

Technical and Dimensional Data

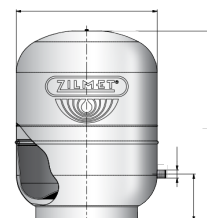
	Model	Capacity gallons	Diameter inches	Height inches	Connection Height inches	Connection	Acceptance Volume
Inline	ZHT8-15	2.1	8.7	11.6	-	1/2" NPT	1.4
	ZHT12	3.2	11.6	11.1	-	1/2" NPT	2.0
	ZHT18-30	4.8	11.4	14.8	-	1/2" NPT	3.0
	ZHT24-60	6.3	12.8	16.3	-	1/2" NPT	3.9
	ZHT35	9.2	15.9	16.1	-	3/4" NPT	5.7
With Base	ZHT50-90	13.2	16.0	20.9	-	3/4" NPT	8.1
	ZHT35F	9.2	15.9	15.2	4.7	3/4" NPT	5.7
	ZHT50F	13.2	16.0	20.0	6.2	3/4" NPT	8.1
	ZHT80	21.1	17.7	23.9	5.9	3/4" NPT	15.3
	ZHT105	27.7	19.7	26.2	6.5	3/4" NPT	20.1
	ZHT150	39.6	19.7	35.3	8.5	3/4" NPT	28.8
	ZHT200	52.8	23.6	32.0	8.9	3/4" NPT	38.4
	ZHT250	66.0	24.8	37.0	9.6	3/4" NPT	48.0
	ZHT300	79.3	24.8	43.5	9.6	3/4" NPT	57.7
	ZHT400	105.7	24.8	57.1	9.6	3/4" NPT	76.8
	ZHT500	132.1	29.5	52.8	11.4	3/4" NPT	96.0
	ZHT600	158.5	29.5	61.2	11.4	1" NPT	115.2
	ZHT700	184.9	29.5	69.1	11.4	1" NPT	134.2

Technical Drawings

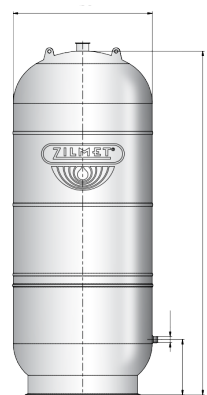
2.1 - 13.2 gallons



21.1 - 132.1 gallons



105.7 - 184.9 gallons



Flat Hydronic Expansion Tanks

Low-Profile Design for Wall-Mounted Boilers and High-Efficiency Systems

Zilmet ZFT flat hydronic expansion tanks offer high capacity in a compact size, making them an ideal match for today's heating systems. From traditional installations to wall-mounted boiler boards, every unit includes convenient, installer-focused features to streamline every job and make service easy. See why ZFT-series are the modern solution for dependable hydronic protection.

Features

- Low-profile design with optimized expansion capacity to protect new or existing installations
- Industry-best diaphragm acceptance withstands greater expansion volume without overextending
- Includes welded bracket for flexible mounting options in any position
- Exclusive union connection simplifies installation; dual-check design allows dry-disconnect for easy service

Specifications

Max System Pressure: 45 psi
Max Temperature: 190° F
Factory Precharge: 12 psi
Warranty: 5 Years

Dimensions

Model	Industry Size	Capacity (gal)	L (in)	W (in)	H (in)	Weight (lb)	Acceptance (gal)
ZFT8R-15	#15	2.1	17.2	9.8	3.7	10.0	1.1
ZFT18R-30	#30	4.8	17.5	13.8	6.2	20.0	2.7
ZFT24R-60	#60	6.3	17.5	13.8	7.0	22.0	3.9



Union with double service check included with each tank

Cal Pro In-Line Hydronic Radiant Tanks

Features

- Designed for low temperature radiant floor systems
- All radiant tanks have a polypropylene liner to prevent corrosion due to oxygen in the system
- All tanks come with a stainless steel connector
- Suitable for use with glycol

Specifications

Max System Pressure: 150 psi
Max Temperature: 210° F
Factory Precharge: 12 psi
Warranty: 5 Years

Dimensions

Model	Capacity (gal)	Diameter (in)	Height (in)	Connection Size (in)	Max Acceptance Volume (gal)
ZHT-R15	2.1	7.9	11.0	1/2"	1.4
ZHT-R30	4.8	10.6	13.7	1/2"	3.3



Boiler Trim Kit

Essential Components For a Heating System in 1 Compact Unit

Features

- NPT or SWT connections
- All-in-one package solution
- Multi-Isolation Valve
- Drain off outlet for ease of system servicing
- Microbubble Dearator
- 4.8 or 6.3 gallon heating vessel



Technical and Dimensional Data

Model	Weight (Lbs)	Connection Size	Dimensions (LxWxH)
ZBTK02N-30	18.0	1" NPT	12.5" x 12.5" x 22"
ZBTK03N-30	18.0	1 1/4" NPT	12.5" x 12.5" x 22"
ZBTK03N-60	21.0	1 1/4" NPT	12.5" x 12.5" x 22"
ZBTK02S-30	18.0	1" SWT	12.5" x 12.5" x 22"
ZBTK03S-30	18.0	1 1/4" SWT	12.5" x 12.5" x 22"
ZBTK03S-60	21.0	1 1/4" SWT	12.5" x 12.5" x 22"
ZBTK02P-30	18.2	1" Press	12.5" x 12.5" x 22"
ZBTK03P-30	18.2	1 1/4" Press	12.5" x 12.5" x 22"
ZBTK03P-60	21.2	1 1/4" Press	12.5" x 12.5" x 22"

-30 indicates 4.8 gal tank (ZHT18) -60 indicates 6.3 gal tank (ZHT24)

Accessories & Specifications

Boiler Fill Valves: (ZU0007)

Max Operating Pressure: 230 psi
Max Operating Temperature: 176°F
Adjustment Range: 11 to 101 psi



Backflow Preventor: (ZU0008/ZU0009)

Max Operating Pressure: 175 psi
Working Temperature: 32-210°F



Microbubble Eliminator: (ZU0001/2/3/4/5/6)

Max Operating Pressure: 150 psi
Max Operating Temperature: 110°F
Max Discharge Pressure: 150 psi



PSI Multi Isolation Valve: (ZU0020)

Max Operating Pressure: 125 psi



Brass Connector Nipple: (ZU0010)

Connection: 1/2" NPT



Heating Vessel: (ZHT18 / ZHT24)

Capacity: 4.8 / 6.3 gal
Max Operating Pressure: 60 psi
Max Operating Temperature: 210°F
Precharge: 12 psi



ZTPK-034 Tankless Water Heater Protection Kit

Complete Expansion and Scale Protection Kit for Tankless Water Heaters

Accessories & Specifications

ACTIVFLO LITE SCALE INHIBITOR: (ZAFL2234)

Connections: 3/4" FNPT
Service Flow Rate: 12 GPM
Working Pressure: 232 psi
Max Operating Temperature: 210 °F
Warranty: 12 years



THERMAL EXPANSION & SURGE PROTECTOR: (ZEP1)

Max Operating Pressure: 150 psi
Working Temperature: 140° F
Factory Precharge: 50 psi
Warranty: 5 years



Hydronic 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 psi
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 (in)	Height* (in)	System Connections	Vent & Drain Tappings	Sensor Port
ZBT-7	7	11.4	36.4	1" NPTF	¾" NPTF	½" NPTF
ZBT-14	14	14.2	39.7	1-¼" NPTF	¾" NPTF	½" NPTF
ZBT-21	21	18.5	35.1	1-¼" NPTF	1-¼" NPTF	½" NPTF
ZBT-28	28	18.5	42.2	1-¼" NPTF	1-¼" NPTF	½" 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.

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

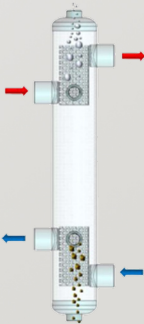
Specifications

System Connections: (x4) NPTF Thread
Front Accessory Ports: (x2) ½ in. NPTF Thread
Vent and Drain Ports: (x2) ½ in. NPTF Thread
Max Pressure: 150 psi
Max Temperature: 200° F
Fluid Compatibility: Water or Glycol mix to 50%
Tank Material: Welded steel
Warranty: 5 Years



Dimensions

Model	Size (NPTF)	Max Flow (gpm/circuit)	Body Diameter (in, w/insulation)	Height (in)
ZHS-100	1"	11	4.0	20.6
ZHS-125	1 - ¼"	18	4.7	25.7
ZHS-150	1 - ½"	26	5.7	30.5
ZHS-200	2"	40	6.7	35.2



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 psi
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

Mag Pro™

Features

- Stainless steel filter basket incorporates a self closing valve to prevent impurities from falling into the filter
- Fitted with a dosage point to add treatment fluids easily
- Option of in-line or by-pass installation on a heating system
- Magnets protected from contact with water making it easier to maintain
- The large water content extends maintenance intervals

Specifications

Max System Pressure: 145 psi
Max Temperature: 230° F
Warranty: 5 Years



Dimensions

Model	Connection (NPT)	Height (in)	Width (in)	Depth (in)	Weight (lb)
ZM02	1/2"	12.0	13.0	19.0	39.0
ZM03	3/4"	12.0	13.0	19.0	39.0
ZM10	1"	12.0	13.0	19.0	39.0
ZM11	1" 1/4"	12.0	13.0	19.0	39.0
ZM12	1 1/2"	12.0	13.0	19.0	39.0
ZM20	2"	12.0	13.0	19.0	39.0

Mag Pro Plus™

Features

- Large capacity chamber to achieve maximum performance with high flow rates while extending maintenance intervals
- Inlet/outlet pressure gauges to easily identify servicing intervals based on pressure drop
- Self-closing filter basket for effortless debris removal
- Adjustable support legs to aid simple installation

Specifications

Max System Pressure: 145 psi
Max Temperature: 203° F
Warranty: 5 Years

Dimensions

Model	Connection (NPT)	Height (in)	Width (in)	Depth (in)	Weight (lb)
ZMPP20	2"	44.0	23.0	18.0	115.0
ZMPP22	1 1/2"	44.0	23.0	18.0	115.0
ZMPP30	3"	44.0	23.0	18.0	115.0
ZMPP40	4"	44.0	23.0	18.0	115.0
ZMPP50	5"	44.0	23.0	18.0	115.0
ZMPP60	6"	44.0	23.0	18.0	115.0



Brazed Plate Heat Exchangers

Features

- Made of 316 stainless steel and pure copper
- Ideal for Hydronic and refrigeration use
- Custom sizes and configurations available upon request
- 5 year warranty



Applications

- Boiler components
- Hot water production
- Traditional boiler heating
- Pool heating
- Thermal circuits decoupling
- District heating
- Solar system
- Snow melt



Dimensions

Model	Weight (Lbs)	Connection Size (NPT)
ZB190 – 20 plates	2.4	3/4"
ZB207 – 14 plates	1.8	3/4"
ZB207 – 20 plates	2.4	3/4"
ZB207 – 30 plates	3.5	3/4"
ZB207 – 36 plates	4.1	3/4"
ZB207 – 40 plates	4.6	3/4"
ZB315 – 10 plates	2.3	3/4"
ZB315 – 16 plates	3.2	3/4"
ZB315 – 20 plates	3.9	3/4"
ZB315 – 24 plates	4.6	3/4"
ZB315 – 30 plates	5.5	3/4"
ZB315 – 40 plates	7.2	3/4"

Model	Weight (Lbs)	Connection Size (NPT)
ZB250 – 20 plates	8.4	1"
ZB250 – 30 plates	11.0	1"
ZB250 – 40 plates	13.7	1"
ZB250 – 50 plates	16.3	1"
ZB250 – 60 plates	19	1"
ZB250 – 70 plates	21.6	1"
ZB250 – 90 plates	26.9	1"
ZB500 – 20 plates	14.6	1"
ZB500 – 30 plates	19.6	1"
ZB500 – 40 plates	24.5	1"
ZB500 – 60 plates	34.4	1"
ZB450 – 40 plates	48.6	2"
ZB450 – 50 plates	58.4	2"
ZB450 – 70 plates	78.2	2"
ZB450 – 100 plates	121.9	2"

Specifications

Max System Pressure	
Primary:	72.5 psi
Max System Pressure	
Secondary:	145 psi
Min/Max Temperature:	14° F / 248° F

Specifications

Max System Pressure	
Primary:	435 psi
Max System Pressure	
Secondary:	435 psi
Min/Max Temperature:	-58° F / 392° F

*Plate and Frame Heat Exchangers available by request

ASME Products

Zilmet offers a full range of Commercial and Industrial Products.

Air & Dirt Separators (ZADS, ZADSN)

ZADS / ZADSN Flowrate
69 - 2100 GPM

High Velocity
ZADS-HV / ZADSN Flowrate
105 - 3500 GPM

SN = Non-Removable



Hydraulic Separators (ZPSA, ZPSAV)

ZPSA Flow Rate
69 - 3300 GPM

ZPSAV with internal Air & Dirt
Separator Flow Rate
69-3300 GPM



Hydronic Expansion Tanks (ZETA, ZELA)

ZETA with Fixed Diaphragm Volume
7.8 - 211 gal

ZELA with Replaceable Bladder Volume
10 - 211 gal



Tangential Air Separators (ZPA)

ZPA Flowrate
56 - 17000 GPM

ZPA-S with Strainer Flowrate
56 - 17000 GPM



Buffer Tanks (ZCBT, ZHBT)

ZCBT Chilled Water Buffer Tank Volume
120 - 1040 gal

ZHBT Hot Water Buffer Tank Volume
120 - 300 gal



Hydro-Pneumatic Tanks (ZHXT, ZHXA)

ZHXT with Fixed Diaphragm Volume
8 - 210 gal

ZHXA with Replaceable Bladder Volume
10 - 211 gal



Shock & Surge Tanks (ZSSA)

ZSSA Volume
10 - 660 gal



Thermal Expansion Tanks (ZTTA, ZTXA, ZTXA-FF)

ZTTA with Fixed Diaphragm Volume
3.5 - 90 gal

ZTXA with Replaceable Bladder Volume
10 - 528 gal

ZTXA-FF Full Flow Volume
23 - 211 gal

