

# EXPANSION TANKS

HEATING

HIGH TEMPERATURE

THERMAL

**WATER IS IN THE BLADDER**

**NO CONTACT BETWEEN  
STEEL SHELL AND WATER**

**NO RUST OR CORROSION  
OF THE STEEL SHELL**

## FEATURES AND BENEFITS

### Strong welded construction

Welded steel construction is designed to withstand high pressure loads and adds safety to your installation. Tanks are sturdy and built to last while at the same time they are lightweight, easy to handle and simple to install.

### Resistant electrostatic paint finish

Provides an attractive look in addition to being durable as the finish is obtained through an electrostatic paint process.

### Full acceptance bladder

Withstands high temperatures. Of heavy duty construction, manufactured in house through an injection molding process. Compatible with water/glycol mixtures (up to 50%), solar and cooling systems.

### Factory precharge on all models

Suits most common installations. The precharge must be manually adjusted on site.

**HEATING TANKS  
HGT/HGTV**

NON-ASME TANKS RESIST  
TO TEMPERATURES AS  
HIGH AS 240°F

**HIGH  
TEMPERATURE  
TANKS  
HTS**

CAN WITHSTAND  
CONSTANT HIGH  
TEMPERATURES  
UP TO 315°F

**PATENT  
PENDING**

**NEW!  
HGTE1**

**THERMAL TANKS  
HGTE/HGTEV/FTTE**

STAINLESS STEEL  
CONNECTION RATED FOR  
150 PSI FOR POTABLE  
WATER SYSTEM



C US  
Drinking Water  
NSF/ANSI 61 & 372

**CERTIFIED FOR USE IN  
POTABLE WATER SYSTEMS**



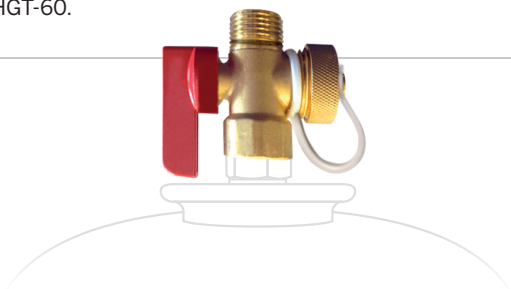
## HEATING TANKS

The HGT-HGTV Series bladder expansion tanks are available in sizes from 2 to 80 gallons in either in-line or stand models. The two shell welded construction allows the tank to withstand high pressure and therefore adds safety to your installation. The EPDM bladder separates air from water and prevents waterlogging while saving space and energy. These devices are indicated for use in hot water, solar and cooling systems, in addition to being compatible with glycol.

ITEM #	VOLUME		CONNECT.	PRE-CHARGE PSI	MAX TEMP.	MAX WORKING PRESSURE PSI	DIMENSION DIAMETER × HEIGHT		WEIGHT	
	gal	L					in	mm	lbs	kg
FIXED BLADDER / CONNECTION: GALVANIZED STEEL (MNPT)										
HGT-15	2.1	8	½"	12	240°F	115	7.9×13.7	200×348	5	2
HGT-30	4.8	18	½"	12	240°F	115	10.6×16.3	270×415	9	4
HGT-60M	6	23	½"	12	240°F	115	10.6×18.9	270×480	9.25	4.2
HGT-60	8	30	½"	12	240°F	115	13.8×17.9	350×455	14	6
HGT-90	13	50	1"	12	240°F	115	14.9×23	380×585	23	10
WITH BASE RING / REPLACEABLE BLADDER / CONNECTION: GALVANIZED STEEL ELBOW (FNPT)										
HGTV-30	13	50	1"	12	240°F	115	14.9×25.3	380×645	25	12
HGTV-40	21	80	1"	12	240°F	115	17.7×26.7	450×680	29	13
HGTV-60	26	100	1"	12	240°F	115	17.7×30.1	450×765	35	16
HGTV-90	40	150	1 ¼"	12	240°F	115	19.7×41.1	500×1045	49	22
HGTV-110	57	215	1 ¼"	12	240°F	115	19.7×52.1	500×1325	77	35
HGTV-150	74	280	1 ¼"	12	240°F	115	19.7×63.1	500×1605	102	46

### SERVICE VALVE #HGSV12

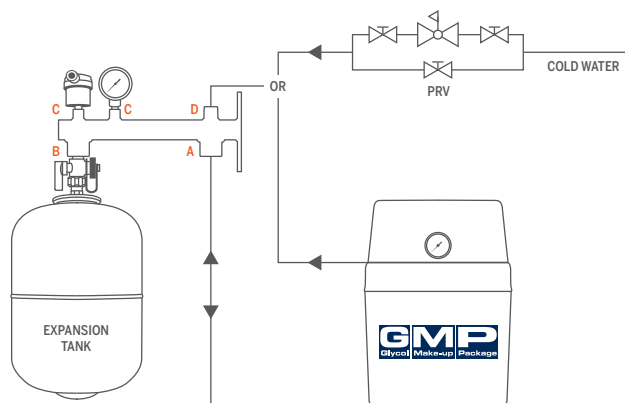
This service valve links the expansion tank to the system or to the Service Center (#HGSC-MULTI) and allows you to isolate the expansion tank from the system pressure. While the tank is shut off from the system pressure, you can inspect it (verify pressure) or remove it for replacement without having to drain the system. Once this operation is over, re-open the valve and the system will get back to normal operation. It's available in ½" MNPT × ½" FNPT and suits HGT-15, HGT-30, HGT-60M and HGT-60.



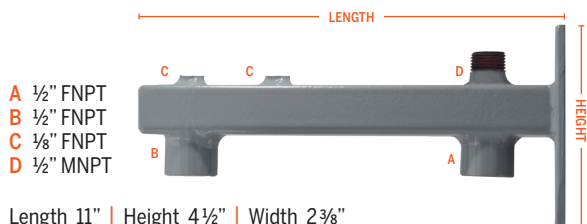
### SERVICE CENTER #HGSC-MULTI

**THE SERVICE CENTER FOR RESIDENTIAL HEATING SYSTEM OFFERS YOU A CLEAN AND FUSS-FREE INSTALLATION.**

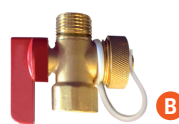
Link your heating system to the ½" FNPT connection **A**. Connect directly a heating expansion tank (HGT-15, HGT-30, HGT-60M and HGT-60), with the Service valve (HGSV12) on the ½" FNPT connection **B**. Then, on connections **C** (½" FNPT), connect an automatic air vent (R8818) or a pressure gage (#GAGE0-100BOTTOM or #GAGE0-30BOTTOM). On connection **D** (½" MNPT) you can either connect your GMP or simply the cold water supply.



**ONCE THE SERVICE CENTER IS INSTALLED, YOU HAVE A COMPLETE OVERVIEW OF THE SYSTEM. THIS MAKES MAINTENANCE A LOT MORE EASIER!**



### OPTIONS FOR CONNECTIONS



**SERVICE VALVE**  
#HGSV12  
½" FNPT



**AUTOMATIC AIR VENT**  
#R8818  
½" MNPT



**SERVICE CENTER PRESSURE GAGE**  
#GAGE0-30BOTTOM  
OR #GAGE0-100BOTTOM  
½" MNPT

### EXPANSION TANKS BRACKET

Model BRACKET200MM for HGT-15  
Model BRACKET270MM for HGT-30 and HGT-60M



# THERMAL TANKS

## FOR USE IN POTABLE WATER SYSTEMS

The HGTE-HGTEV and FTTE Series bladder expansion tanks are designed for use in domestic installations for potable hot water applications. The tanks are installed in systems equipped with a backflow preventor or as an add-on to direct or indirect water heaters. The tank's function is to absorb the increased volume of water which results from the heating process, thereby keeping the system's pressure below the relief valve setting.



ITEM #	VOLUME		CONNECT.	PRE-CHARGE PSI	MAX TEMP.	MAX WORKING PRESSURE PSI	DIMENSION DIAMETER x HEIGHT		WEIGHT	
	gal	L					in	mm	lbs	kg
FOR TANKLESS WATER HEATERS LESS THAN 2 GALLONS										
HGTE-1	0.04	0.16	½"	50	200°F	150	3.25 x 4.5	80x112	0.5	0.2
FIXED BLADDER / CONNECTION: STAINLESS STEEL (MNPT)										
HGTE-5	2.1	8	¾"	50	200°F	150	7.9x13.7	200x348	5	2
HGTE-8	3.2	12	¾"	50	200°F	150	10.6x12.8	270x325	9	4
HGTE-12	4.7	18	¾"	50	200°F	150	10.6x16.7	270x425	11	5
HGTE-25	8	30	¾"	50	200°F	150	13.8x16.4	350x418	14	6
WITH BASE RING / REPLACEABLE BLADDER / CONNECTION: STAINLESS STEEL ELBOW (FNPT)										
HGTEV-30	14	53	¾"	50	200°F	150	14.9x26.4	380x670	26	12
HGTEV-42	20	75.8	¾"	50	200°F	150	17.7x27.8	450x750	31	14
HGTEV-60	30	114	1 ¼"	50	200°F	150	17.7x31.8	450x808	37	17
HGTEV-80	44	167	1 ¼"	50	200°F	150	19.7x42	500x1065	52	23
HGTEV-180	57	215	1 ¼"	50	200°F	150	19.7x52.4	500x1330	75	34
HGTEV-200	74	280	1 ¼"	50	200°F	150	19.7x63.4	500x1610	103	47

### SERVICE VALVE #HGSV34

Suitable for tanks HGTE-5, HGTE-8, HGTE-12, HGTE-25, FTTE-5, FTTE-8, FTTE-12 and FTTE-25.

3/4" FNPT, 1/8" gage port

- For use in potable water systems



### SERVICE CENTER #HGSC-SS

Suitable for tanks HGTE-5, HGTE-8, HGTE-12 and HGTE-25.

- Stainless steel

A 3/4" FNPT B 3/4" FNPT  
Length 9 1/4" | Height 4 3/4" | Width 2 3/8"



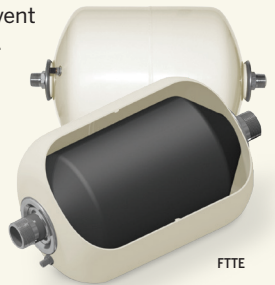
## FLOW-THROUGH – FTTE

NEW!

Calefactio's new flow-through potable water thermal expansion tank. It avoids stagnant water in the tank and is an easy way to prevent microbial growth associated with legionella.

- Prevents microbial growth
- Avoid stagnant water
- Integral forced circulation

### FULL ACCEPTANCE BLADDER

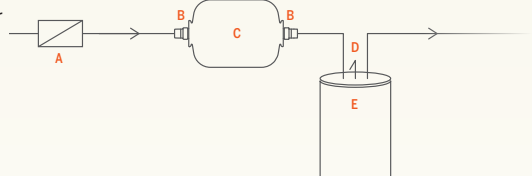


Drinking Water  
NSF/ANSI 61 & 372

ITEM #	VOLUME		CONNECT.	PRE-CHARGE PSI	MAX TEMP.	MAX WORKING PRESSURE PSI	DIMENSION DIAMETER x HEIGHT		WEIGHT	
	gal	L					in	mm	lbs	kg
FIXED BLADDER / CONNECTION: STAINLESS STEEL ELBOW (MNPT)										
FTTE-5	2.1	8	¾"	50	200°F	150	7.9 × 14.3	200×365	6.3	2.9
FTTE-8	3.2	12	¾"	50	200°F	150	10.6 × 14.3	270×365	7.6	3.5
FTTE-12	4.7	18	¾"	50	200°F	150	10.6 × 17.5	270×445	9.3	4.2
FTTE-25	8	30	¾"	50	200°F	150	13.8 × 17.5	350×445	11.5	5.2

### INSTALLATION EXAMPLE

- A Backflow preventer
- B Union (optional)
- C FTTE tank
- D Safety valve
- E Water heater



### EXPANSION TANKS BRACKET

Model BRACKET200MM for HGTE-5  
Model BRACKET270MM for HGTE-8 and HGTE-12



# HIGH TEMPERATURE TANKS

PATENT PENDING

Calefactio's expansion tank series for high temperature such as systems can withstand constant temperatures of up to 315°F/157°C. These tanks have a unique design and are only available at Calefactio. Each tank has an EPDM bladder and a buffer zone. The tanks are compatible with glycol solutions (up to 50%) and will absorb expanded liquid heated by the system, thus ensuring its safety.

ITEM #	VOLUME		CONNECT.	PRE-CHARGE PSI	MAX TEMP.	MAX WORKING PRESSURE PSI	DIMENSION DIAMETER x HEIGHT		WEIGHT	
	gal	L					in	mm	lbs	kg
REPLACEABLE BLADDER / CONNECTION: GALVANIZED STEEL (MNPT)										
HTS-30	6.6	25	½"	25	315°F	150	10.6x21	270x533	12	5.4



HTS



ALSO AVAILABLE! A WIDE VARIETY OF ASME EXPANSION TANKS. VISIT CALEFACTIO.COM FOR DETAILS.

## QUICK SIZING CHART FOR EXPANSION TANKS

### HGT/HGTV – HEATING TANKS

#### AVERAGE INSTALLATION TEMPERATURE

UNIT (L/gal)	100 °F	110 °F	120 °F	130 °F	140 °F	150 °F	160 °F	170 °F	180 °F	190 °F	200 °F	210 °F	220 °F	230 °F	240 °F
379/100	HGT15	HGT15	HGT30	HGT30	HGT30	HGT30	HGT60	HGT60	HGT60	HGT60	HGT90	HGT90	HGT90	HGT90	HGT90
757/200	HGT30	HGT30	HGT60	HGT60	HGT60	HGT90	HGT90	HGT90	HGTV40	HGTV40	HGTV40	HGTV40	HGTV60	HGTV60	HGTV60
1136/300	HGT30	HGT60	HGT60	HGT90	HGT90	HGTV40	HGTV40	HGTV40	HGTV40	HGTV60	HGTV90	HGTV90	HGTV90	HGTV90	HGTV90
1514/400	HGT60	HGT60	HGT90	HGT90	HGTV40	HGTV40	HGTV40	HGTV60	HGTV90	HGTV90	HGTV90	HGTV90	HGTV110	HGTV110	HGTV110
1893/500	HGT60	HGT90	HGT90	HGTV40	HGTV40	HGTV60	HGTV60	HGTV90	HGTV90	HGTV90	HGTV110	HGTV110	HGTV110	HGTV150	HGTV150
2271/600	HGT90	HGT90	HGTV40	HGTV40	HGTV60	HGTV60	HGTV90	HGTV90	HGTV110	HGTV110	HGTV110	HGTV150	HGTV150		
2650/700	HGT90	HGTV40	HGTV40	HGTV60	HGTV90	HGTV90	HGTV90	HGTV110	HGTV110	HGTV110	HGTV150				
3028/800	HGT90	HGTV40	HGTV40	HGTV60	HGTV90	HGTV90	HGTV110	HGTV110	HGTV110	HGTV150					
3407/900	HGT90	HGTV40	HGTV60	HGTV90	HGTV90	HGTV90	HGTV110	HGTV110	HGTV150						
3785/1000	HGTV40	HGTV40	HGTV60	HGTV90	HGTV90	HGTV110	HGTV110	HGTV150							

**Note:** This sizing tool is based on a minimal pressure of 12 PSI, maximal pressure of 30 PSI and initial water temperature of 40°F.

### HGT/HGTV – HEATING DEVICE TYPE

Boiler net output (MBH)	Fine tube baseboard or radiant panel	Convectors or unit heaters	Cast iron radiators	Cast iron baseboard
25	HGT15	HGT15	HGT15	HGT15
50	HGT15	HGT15	HGT30	HGT30
75	HGT30	HGT30	HGT30	HGT60
100	HGT30	HGT30	HGT60	HGT60
125	HGT30	HGT60	HGT60	HGT90
150	HGT30	HGT60	HGT90	HGT90
175	HGT60	HGT60	HGT90	HGT90
200	HGT60	HGT60	HGT90	HGT90
250	HGT60	HGT90	HGT90	HGTV40
300	HGT90	HGT90	HGT90	HGTV40
350	HGT90	HGT90	HGTV40	HGTV60
400	HGT90	HGTV40	HGTV40	HGTV60
500	HGTV40	HGTV60	HGTV90	HGTV60
600	HGTV40	HGTV90	HGTV90	HGTV60
700	HGTV60	HGTV90	HGTV90	HGTV60
800	HGTV60	HGTV110	HGTV110	HGTV90
900	HGTV60	HGTV110	HGTV110	HGTV90
1000	HGTV90	HGTV110	HGTV110	HGTV90

### CALEFACTIO THERMAL SIZING CHARTS

Water heater size (U.S. Gallons)	MAXIMUM TEMPERATURE SETTING 140°F		
	Static Supply Pressure		
	40 PSI	60 PSI	80 PSI
40	HGTE/FTTE-5	HGTE/FTTE-5	HGTE/FTTE-5
50	HGTE/FTTE-5	HGTE/FTTE-5	HGTE/FTTE-5
60	HGTE/FTTE-8	HGTE/FTTE-8	HGTE/FTTE-8
80	HGTE/FTTE-8	HGTE/FTTE-8	HGTE/FTTE-12
120	HGTE/FTTE-12	HGTE/FTTE-12	HGTE/FTTE-25

Water heater size (U.S. Gallons)	MAXIMUM TEMPERATURE SETTING 160°F		
	Static Supply Pressure		
	40 PSI	60 PSI	80 PSI
40	HGTE/FTTE-5	HGTE/FTTE-5	HGTE/FTTE-8
50	HGTE/FTTE-5	HGTE/FTTE-8	HGTE/FTTE-8
60	HGTE/FTTE-8	HGTE/FTTE-8	HGTE/FTTE-12
80	HGTE/FTTE-8	HGTE/FTTE-12	HGTE/FTTE-25
120	HGTE/FTTE-12	HGTE/FTTE-25	HGTE/FTTE-25

Water heater size (U.S. Gallons)	MAXIMUM TEMPERATURE SETTING 180°F		
	Static Supply Pressure		
	40 PSI	60 PSI	80 PSI
40	HGTE/FTTE-8	HGTE/FTTE-8	HGTE/FTTE-8
50	HGTE/FTTE-8	HGTE/FTTE-8	HGTE/FTTE-12
60	HGTE/FTTE-8	HGTE/FTTE-12	HGTE/FTTE-25
80	HGTE/FTTE-25	HGTE/FTTE-25	HGTE/FTTE-25
120	HGTE/FTTE-25	HGTE/FTTE-25	HGTE/FTTE-25

\*Sizing based on: 40°F incoming water temperature; 150 psi T&P safety release valve; pre-charge equal to static supply valve.

**If you intend to use these tanks for a special application, call our agents to check compatibility and suitability.**

**These devices should be installed by qualified and accredited professionals in accordance with the plumbing code and current local regulations.** By design, these tanks are meant for heating systems, or hot water distribution systems and can be used at a maximum working pressure of 90 to 150 PSIG (depending on the model). Please note that the maximum pressure allowed in Canada is 30 PSIG and that the maximum service temperature is set at 200°F for thermal tanks, 240°F for heating tanks and 315°F for high temperature. Any use different than foreseen or any important or sudden pressure change over indicated limits above is **DANGEROUS** and can result in material damages, serious injuries and can even cause death.

Information in this document is founded on the most recent data available at the moment of its publication and is meant for a general presentation of our products. The accuracy of this information cannot be guaranteed. Our products are steadily enhanced and their technical specifications can be modified without prior notice.

**Calefactio Solutions Inc.**  
Quebec (Canada)

T 450 951.0818  
F 450 951.2165

**calefactio.com**  
info@calefactio.com

