

BY



# Installation Instructions Thermal Expansion Tanks

Effective Feb. 1, 2004

### **Description**

WH & WHV thermal expansion tanks eliminate the problem of nuisance cycling of the safety relief valve when a backflow preventer or check valve is present in a domestic hot water system. Utilizing Flexcon's patented double diaphragm system, they provide a reservoir for expanded water volume and help to prevent dangerous over pressurization. The diaphragm is permanently separated from the tank's air charge. The tanks also feature a brass or stainless steel system connection for maximum corrosion resistance.



Do not install this tank on the hot water outlet. Follow all local plumbing codes during installation.

#### Installation

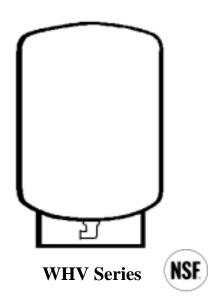
- 1. This tank must be installed according to your local plumbing code. It should be at least 18" from the cold water inlet to the water heater. A 150 PSI relief valve must be installed in the water heater. A pressure reducing valve may also be required if the incoming water pressure exceeds 80 PSI.
- 2. Flexcon WH & WHV tanks are shipped with an air precharge of 40 PSI. To obtain maximum effectiveness and prolong the life of the tank, adjust tank pre-charge to match the incoming water pressure (see note below).
- 3. This tank is designed to be supported by the system piping (WH) in the vertical position (up or down), or free standing (WHV). Please see the diagram for recommended installation.
- 4. The expansion tank, piping, and your connections may in time leak. Select a location where a water leak will not damage the surrounding area. The manufacturer is not responsible for any water damage in connection with this expansion tank.
- 5. Shut off power supply and cold water supply to the water heater. Drain water from the water heater by opening a faucet or other fixture. This must be left open to prevent vacuum build-up in the water heater.
- 6. Install the WH or WHV tank as shown by teeing into the the cold water line. Make sure that all joints are leak free.

#### **Tank Precharge Pressure**

The precharge pressure of this tank should equal the incoming water pressure. This tank is factory pre-charged to 40 PSI. If some other pressure is required, use a bicycle pump or air compressor to add air to the tank via the charging valve. Pressure may be checked with a standard tire gauge.

**NOTE:** To check tank pressure via the air charging valve, piping system must be at 0 PSI, or tank must be off the system.





Note: WH & WHV Series tanks are certified to NSF Standard 61 Cold, but are suitable for temperatures up to 200°F



TESTING SYSTEM PIPING WITH COMPRESSED AIR IS DANGEROUS AND CAN CAUSE BOOLLY INJURY. WHEN CHECKING SYSTEM PIPING WITH COMPRESSED AIR MAKE SURE THE AIR PRESSURE DOES NOT EXCEED THE MAXIMUM WORKING PRESSURE OF ANY INDIVIDUAL SYSTEM COMPONENT.

Tank Specifications						
Model	Capacity Gallons	Maximum Acceptance Volume	System Conn.	Dimension Diameter	s (inches) Height	Weight (lbs)
WH 8	2.1	1.0	3/4" MNPT	8.5	11.5	7.0
WH 18	4.5	2.5	3/4" MNPT	10	15.0	10.0
WH 32	6.0	2.5	3/4" MNPT	12.5	19.2	11.5
WHV 50	15	6.0	1" FNPT	16	21.7	32
WHV 75	20	8.0	1" FNPT	16	28.8	39
WHV120	33	13.3	1" FNPT	16	42.8	57
WHV165	44	17.7	1 1/4" FNPT	21	36.2	72
WHV320	81	32.6	1 1/4" FNPT	21	62.0	123

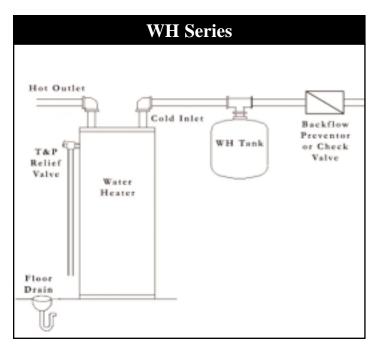
Maximum Working Pressure 150 PSI

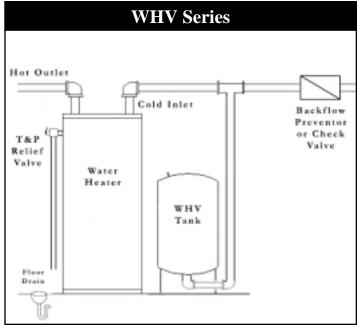
All tanks are precharged to 40 PSIG

All tanks are certified to NSF Standard 61

WH Series tanks are IAPMO certified

## **Typical Installations**







300 Pond St Randolph, MA 02368 781-986-2424 781-986-2029 Fax