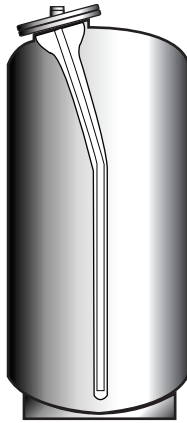


# Bladder Tank Series

## How do Blader Tanks Work

### 1. System Pressure at 12 psi (83kPa) Cold Water, Pmin

Fill the System to minimum operating pressure Pmin. Here the factory pre-charge condition equals 12 psi. Always check the air pressure, using a tire gauge. Add air if low. If the minimum system operating pressure is 12 psi (as used in this example) the bladder is empty.

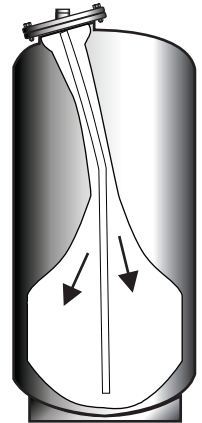


### 2. Pressure System at 20 psi (138 kPa) with Heated Water

Heat system water to approximately half of the system's maximum temperature.

The expanded water enters the bladder and compresses the air.

The air pressure in the tank now equals the system pressure, or 20 psi.

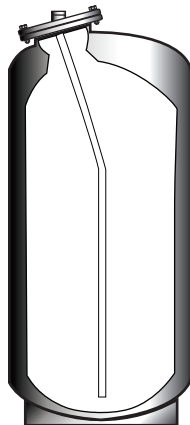


### 3. System Pressure at 25 psi (172kPa) at Maximum Temperature

The system water is heated to system's maximum temperature.

The expanded water fills the bladder and further compressing the air.

The tank's air pressure now equals the system's maximum pressure of 25 psi (Pmax).

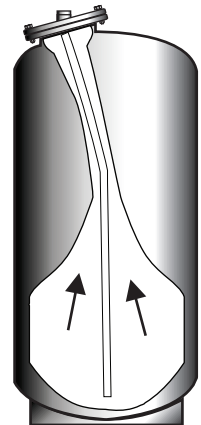


### 4. System Pressure at 20 psi (138 kPa) Heated Water

The System water cools down to about half of the maximum temperature.

The expanded water in the bladder now is drawn back into the system.

The air pressure in the tank now drops back to the system pressure of 20 psi.



JOB NAME \_\_\_\_\_  
 LOCATION \_\_\_\_\_  
 \_\_\_\_\_  
 CONTRACTOR \_\_\_\_\_  
 CONTRACTOR P.O. NO. \_\_\_\_\_

ITEMS	QUANTITY
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