



OWNERS MANUAL - INSTALLATION INSTRUCTIONS

FLEXCON FLOW-THRU TANKS

Flexcon Industries patented Flow-Thru tank has been designed for today's modern VFD pumping systems. Because these systems operate on such low differential pressures, systems water may remain in the pressure tank's water chamber for an extended period of time. The Flow-Thru tank's unique design provides total exchange of the water from the tank, thus greatly reducing the potential for stagnant water.



WARNING
THIS IS A SAFETY ALERT SYMBOL. IT IS USED TO ALERT YOU TO POTENTIAL PERSONAL INJURY AND PROPERTY DAMAGE. REVIEW ALL GENERAL SAFETY AND PRODUCT INFORMATION INCLUDING THAT PROVIDED WITH THE TANK PRIOR TO INSTALLATION.



DANGER!



WARNING!

CAUTION!

- WARNING** This product must be installed and serviced by a qualified professional.
- WARNING** This tank must be installed according to all local and national plumbing, well and electrical codes. Failure to do so will void the warranty and may be unsafe.
- WARNING** All tanks fail over time. This tank and the associated piping may over time corrode, deteriorate and leak. The installation must provide adequate means of drainage and be in a location where leaking or flooding will not cause property damage. **The manufacturer of this product does not accept liability for property damage that results from improper use, installation or operation of the tank or from failure to provide adequate drainage.**
- WARNING** This tank has been designed for water storage at the maximum pressure and temperature listed on the tank data label. Any installations that do or have the ability to exceed the listed ratings are **UNSAFE** and can cause serious bodily injury or death, flooding and property damage. **The manufacturer of this product does not accept liability for personal injury or death that results from improper use, installation, or operation of this tank.**
- WARNING** This tank must have an adequate means of pressure relief. A relief valve must be installed to prevent the pressure from exceeding the maximum working pressure listed on the tank data label. Please refer to local or national code requirements.
- WARNING** This product should be inspected annually by a qualified professional. If it shows any signs of leakage, corrosion or fatigue it should be replaced immediately.
- WARNING** Do not install this product in a location where it is subject to freezing temperatures. Any tank subjected to freezing temperatures must be replaced.
- WARNING** Protect this tank from exposure to a vacuum. If the possibility of a vacuum exists in the system, an adequately sized vacuum relief valve must be installed. Failure to do so will void the warranty.
- DANGER** Disconnect electrical power to the system before attempting to install, inspect or service this product. Failure to do so may result in serious bodily injury or death.
- DANGER** All of the manufacturer's products operate under pressure. Overpressurization can result in serious personal injury or death as well as serious damage to the tank and its surroundings. Take necessary precautions to protect the tank, the environment it is in and those living and working around it.
- CAUTION** Stagnant water promotes the growth of bacteria. Potable water tanks must be drained if they are going to be left unused for extended periods of time.



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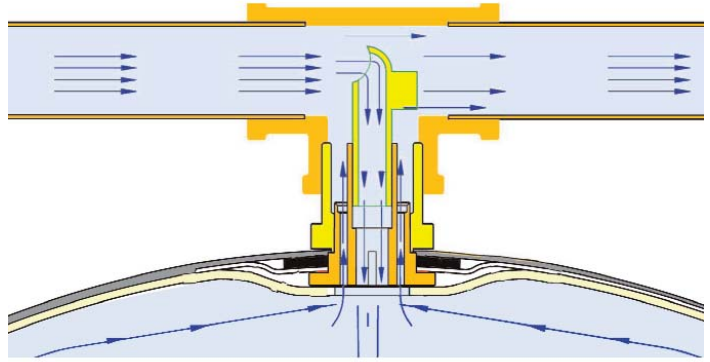
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How It Works

The patented watervane tank concept is based on the principle that when a scoop diverter is introduced into the flowstream, it will force a higher pressure stream of supply flow into the water chamber of the expansion vessel. This stream is carried through the center of the water connection fitting. A lower pressure flow path is created around the circumference of the fitting. These pressure differentials create an exchange from the contents of the water chamber to fresh supply water.

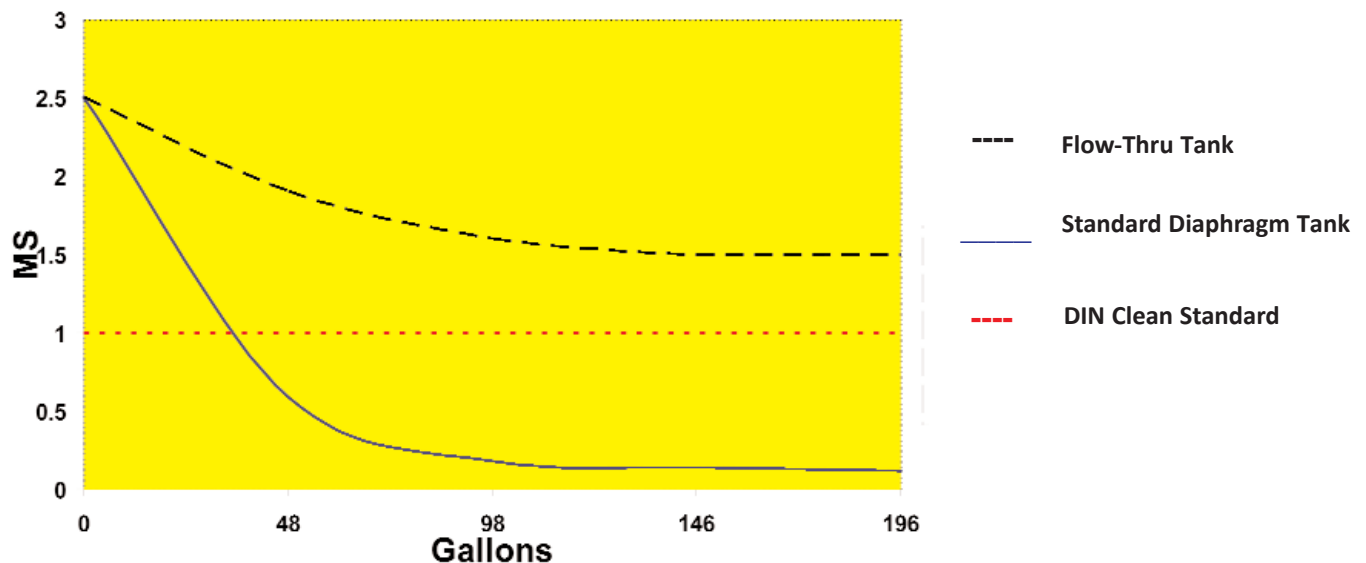
The device is self-aligning due to the patented watervane opposite the diverter scoop opening. This aligning feature alleviates the need for directional alignment during installation.



Testing

The Flow-Thru tank with watervane insert has been thoroughly tested by an independent laboratory to the stringent requirements of the German DIN standard. Testing was conducted utilizing a VFD submersible pumping system cycled to a typical household demand, and exceeded the DIN standard within 48 gallons of system flow while the standard tank remained above the standard well beyond the daily demand of the typical household.

Flow-Thru Tank vs. Standard Diaphragm Tank



Installation

Important: Flow-Thru tanks, when shipped are not fully assembled. The windvane assembly must be inserted into the tank connection before installation on FT8/18/18S/35/35S models. Please refer to instructions below for proper assembly.

Tank Location

The Flow-Thru tank may be installed in a horizontal or vertical position with the connection up or down. Like any pressure tank installation, this tank, system piping and your connections may in time leak. Select a location where a water leak will not cause property damage. Flexcon Industries is not responsible for any water damage that may occur in connection with this tank installation.

Tank Precharge

Flow-Thru tanks are shipped with a pre-charge of 40 PSIG. Please consult the VFD manufacturer's specifications for proper air pre-charge for your system. This will ensure proper use and function of the tank.

Important: To check tank pressure via the air charging valve, the piping system must be at 0 PSIG or the tank must be removed from the system.

Tank Assembly

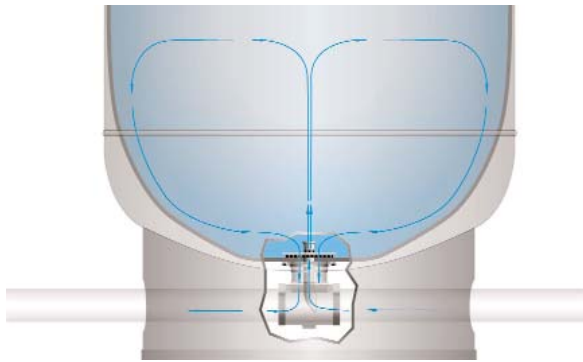
The watervane insert may be set at one of three different positions in the tank's system connection. It should be positioned so the opening is in the center of the pipe train. Gently insert the windvane assembly, tube end first, into the tank nipple. Each position is determined by a "click". The insert may be removed and re-inserted. Once installed, the windvane will swivel freely.

System Connection

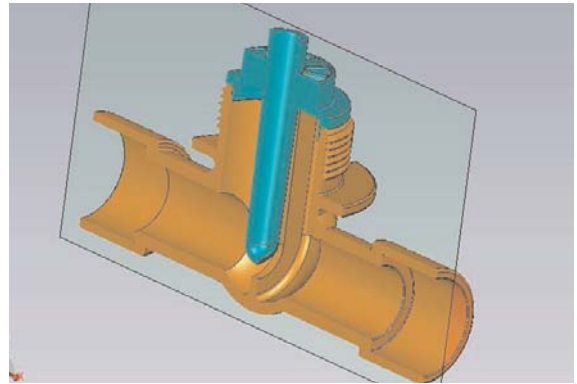
Prepare the Flow-Thru tank's threads for mounting to the water system using pipe dope. Screw the tank into the fitting hand tight. Secure the tank to the system via the wrench flats on the tank connection.

The Flow-Thru tank is now ready for operation.

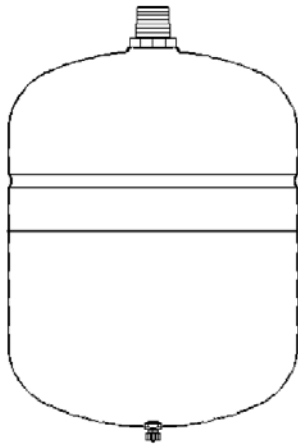




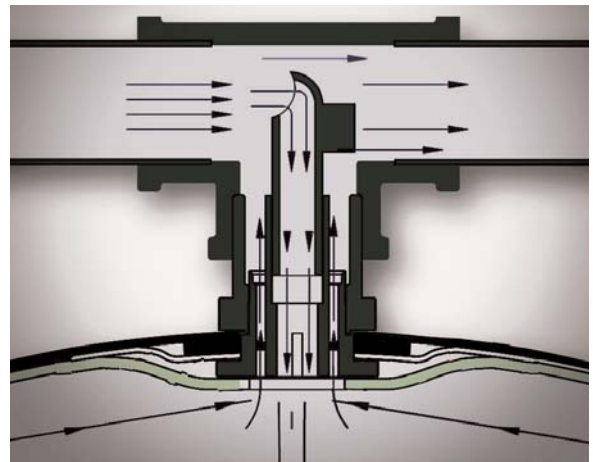
FT66, FT144, FT266



FTC15, FTC22, FTC38SQ, FTC50



FT8, FT18, FT35



Watervane on all 1" Flow-Thru models
FT8, FT18(s), FT35(S)

Model	Volume (Gallons/Liters)	Diameter (Inches/CM)	Height/Length (Inches/CM)	Connection (Inches)	Weight (lbs./Kgs.)
FT8	2.1/8	8.0/20.0	12.0/30.0	1" NPT	5.0/2.3
FT18	4.5/18	11.0/28.0	14.5/37.0	1" NPT	10.0/4.6
FT18S	4.5/18	11.0/28.0	14.5/37.0	1" NPT	12.0/6.9
FT35	9.0/32	12.5/31.8	18.9/48.1	1" NPT	15.4/7.0
FT35S	9.0/32	12.5/31.8	18.9/48.1	1" NPT	15.4/7.0
FT66	20.0/80	16.0/40.64	29.0/73.66	1 1/4" FNPT	36.0/16.4
FT144	44.0/170	21.0/53.34	36.25/92.07	1 1/4" FNPT	68.0/30.9
FT266	85/325	26.0/66.04	44.5/113.03	2" FNPT	122.0/55.5
FTC15	15/56.8	16.5/41.9	25.6/64.0	1 1/4" SCH 80	19.0/8.6
FTC22	22/83.0	16.5/41.9	33.1/84.1	1 1/4" SCH 80	24.0/10.9
FTC38SQ	38/143.8	24.2/61.5	29.75/74.7	1 1/4" SCH 80	35.0/15.9
FTC50	50.0/189.3	21.4/54.4	42.9/109.0	1 1/4" SCH 80	41.0/18.6

Pre-charge: 40 PSIG

Maximum Working Pressure: 125 PSIG



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