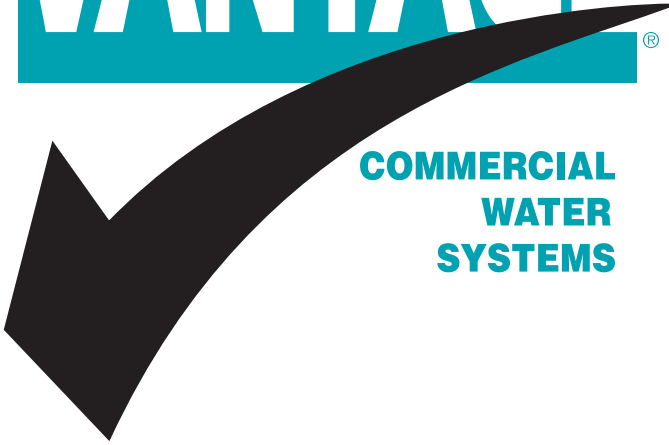


VANTAGE[®]



**COMMERCIAL
WATER
SYSTEMS**

Installation and Operation Manual

VPF-20

Poly-A Tablet Feeder

**Clarifier Dispensing Device
for Commercial Swimming Pools**

Operating Specifications

Flow Rate:	0.1 - 0.2 gpm	Feeder Height	17.5"
Maximum Pressure:	50 psi	Feeder Diameter	9"
		Feeder Depth	20"
		Feeder weight (full)	25 lbs.
Capacity: 20 lbs. of Vantage Poly-A Tablets		Feeder weight (empty)	5 lbs.
		Tubing	3/8" O.D.
For Swimming Pool Use Only			

FACTORY SUPPLIED INSTALLATION PARTS

- 1 - Flow Meter (0 to 0.5 gpm)
- 2 - Flow meter mounting clamps
- 2 - 3/8" npt x 3/8" tubing connectors
- 5 - 1/2" Threaded nipple
- 3 - 1/2" Ball valves
- 4 - 1/2" npt x 3/8" tubing connectors
- 1 - 3/4" npt x 1/2" npt bushing
- 1 - 3/4" npt Drain Valve with garden hose connection

INSTALLER SUPPLIED PARTS

Due to the wide variety of installations possible, AllChem Performance Products can not supply all parts and pieces required for installation. Some commonly available plumbing parts and supplies may be supplied by the installer.

REPLACEMENT PARTS

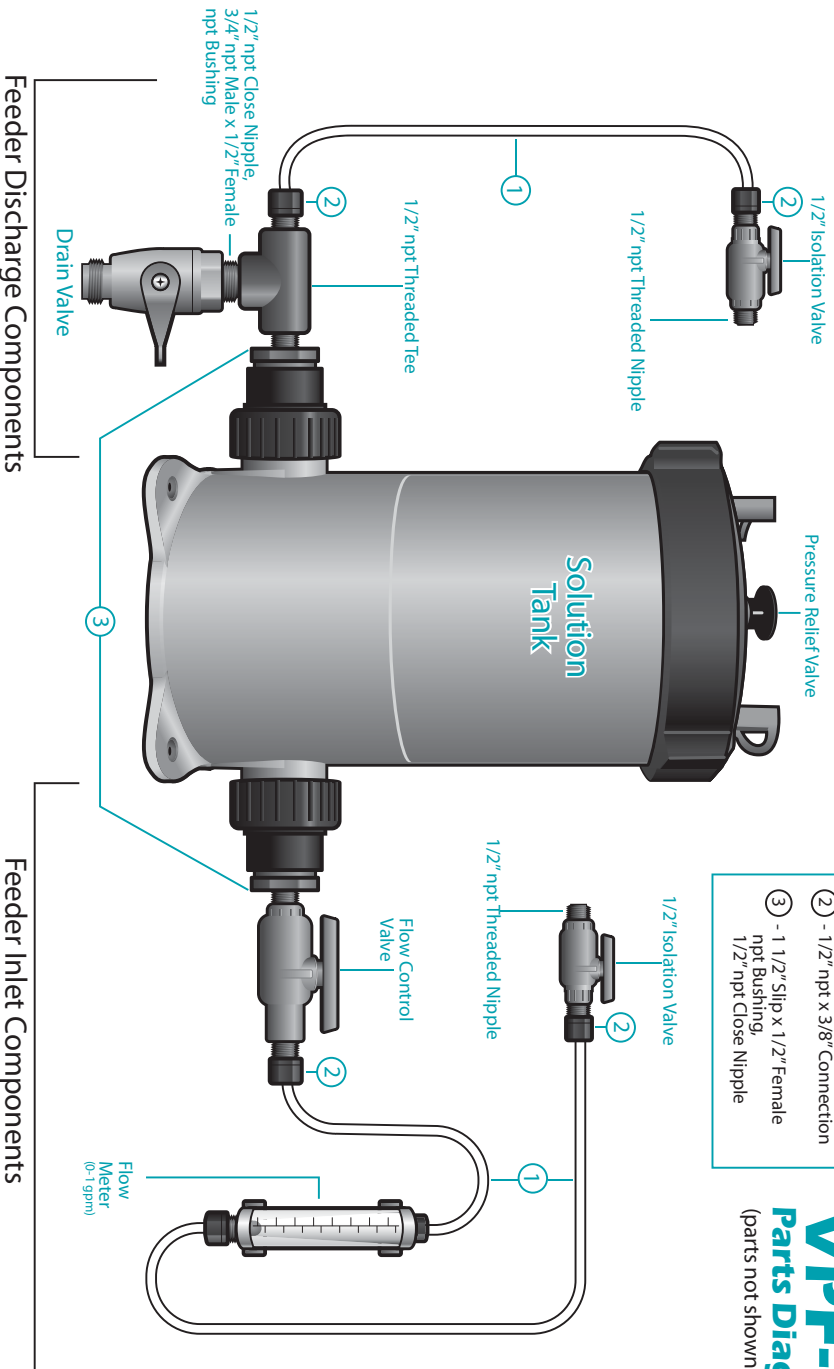
Feeder Assembly
Complete VPF-20 Feeder

Part Number
E033020VTG

Part Description
Flow Meter (0 to 0.5 gpm)

Part Number
P330001

Figure 1:
VPF-20
Parts Diagram
(parts not shown to scale)



INSTALLATION PROCEDURE

The Poly-A System was developed to work with a properly operating filtration system to provide unsurpassed water clarity. The Poly-A System consists of a feeder, fittings and tubing along with a flow meter to regulate the flow of Poly-A Tablets into the pool. Poly-A is a proprietary blend of water clarifiers compressed into a convenient four ounce tablet.

Never use any other type of chemical in the VPF-20. The use of other chemicals may lead to explosion, fire or the creation of hazardous gases, possibly leading to personal or bodily injury. The applicability of any limited warranty either expressed or implied is limited to the use of Vantage Poly-A Tablets in the VPF-20 feeder.

The VPF-20 is designed for use in any size pool and using a sand, diatomaceous earth or cartridge filter media.

This feeder should be installed in a secured maintenance room or other suitable location to prevent general public access to the feeder and associated chemicals.

Select a feeder location that has easy access for maintenance and refilling. This feeder must be installed in an area protected from direct sunlight and rain. Tubing lengths should be kept as short as possible. Choose an installation location that minimizes the tubing length of the feeder output.

This feeder should be installed on a flat, level surface capable of supporting its weight when full.

Exercise caution when opening or servicing the Poly-A feeder. Always shut off the pump and isolation valves before opening feeder. Do not open feeder when the pump is running and the isolation valves are open. Open air relief valve on top of tank prior to removing the lid.

CONNECTING THE VPF-20

RECOMMENDED INSTALLATION METHODS

Filter System information

Sand Filters

High Rate sand filters are the most common filter type used in the recreational water treatment industry. The two important aspects of high rate filtration that must be taken into consideration when using Poly-A Tablets are sand size and flow rate. The effective particle size of the filter sand should range from 0.40 to 0.55 mm and the uniformity coefficient should not exceed 1.75. The flow rate should not exceed 15 gpm per square foot. If necessary the flow rate should be reduced to 15 gpm per square foot. If reducing the flow rate is necessary, be certain to maintain a rate regulated by local or state regulations.

Diatomaceous Earth

There are two types of D.E filters, pressure and vacuum. Each type relies on the hydraulic placement of diatomaceous earth media onto porous support septums. D.E media is composed of small fossilized remains that act as filtering microscreens to remove insoluble particles from pool water. Flow rates should not exceed 1.5 gpm per square foot.

Cartridge Filters

Cartridge filters are arranged in a pressure vacuum housing assembly. The cartridge is usually constructed of a synthetic fabric. Since cartridge filters cannot be backwashed, internal cartridges must be physically removed and cleaned. After repeated cleaning, the cartridge may exhibit shorter run cycles. Flow rates should not exceed 0.375 gpm per square foot.

PRESSURE-SUCTION

The pressure-suction installation is the most common used with the Vantage Poly-A feeder. The feeder supply line (3/8" o.d. tubing) uses filtered water to supply the feeder water. The feeder outlet line (3/8" o.d. tubing) connects the feeder effluent to the main pool suction line prior to the main circulation pump.

Figure 2: Pressure-Suction Installation

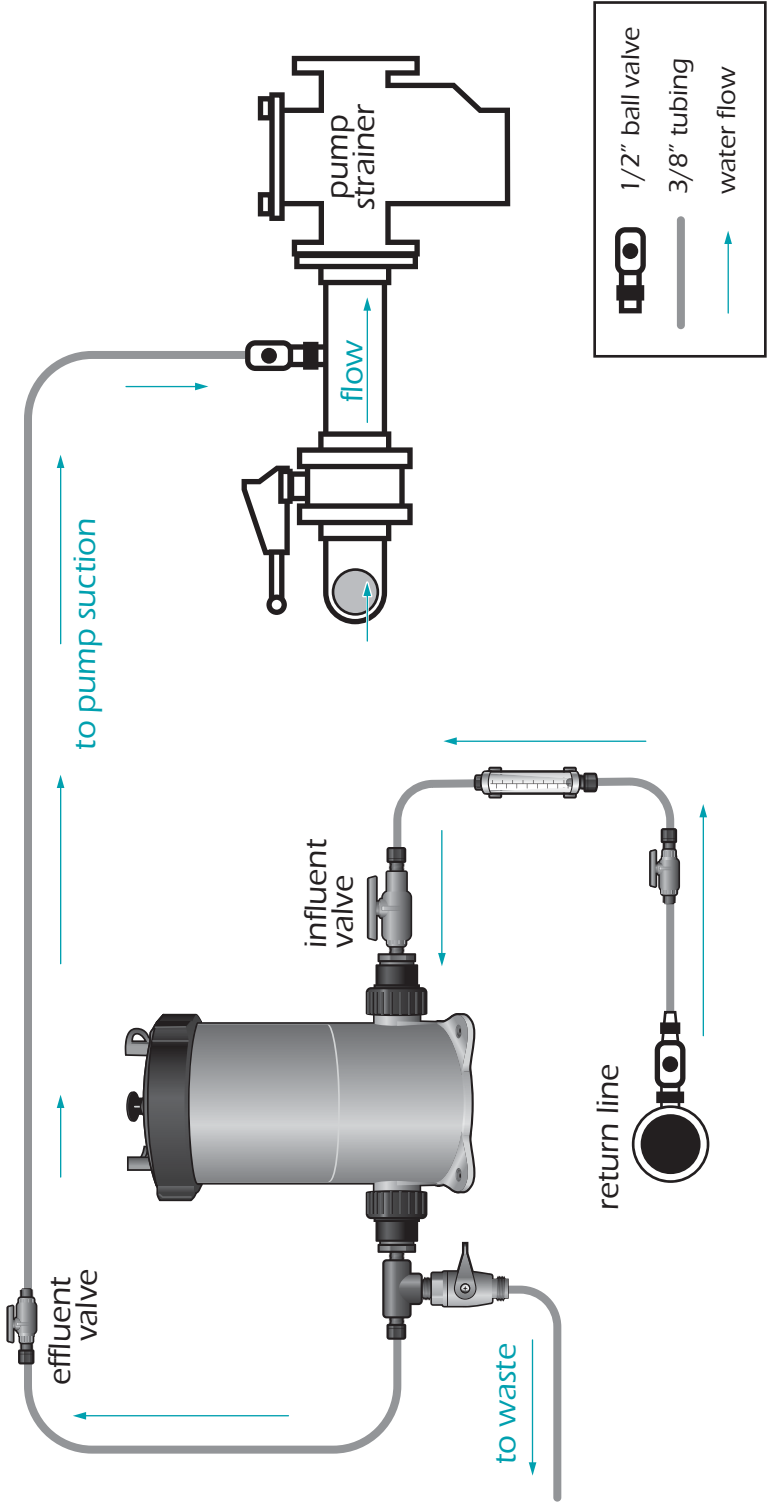
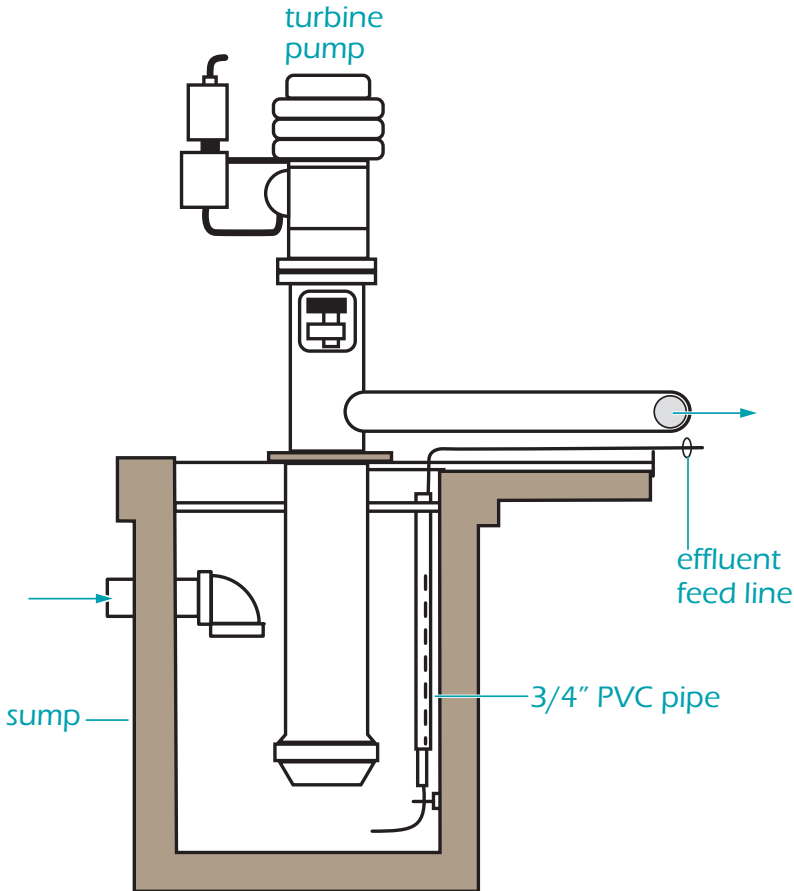


Figure 3:

Pressure-Gravity Installation



PRESSURE-GRAVITY

A pressure gravity installation can also be used with the Vantage Poly-A Feeder. The feeder inlet line (3/8" o.d. tubing) is connected to the filter discharge line prior to any other chemical feed line. The feeder effluent line (3/8" o.d. tubing) is placed through a 3/4" PVC schedule 40 pipe attached to the wall of the pump "wet well" with the end of the tube near the pump intake.

The pressure-gravity method can also be used with vacuum sand and diatomaceous earth filter. The feeder outlet line (3/8" o.d. tubing) is placed over the side of the vacuum filtration system. The outlet line can be placed either above or below the water line of the vacuum filter. The outlet line must be secured so as not to become dislodged during filter operation.

STARTUP AND ADJUSTMENT OF VPF-20

Poly-A Dosage Rates

Initial use of Poly-A Tablets may cause filter pressures to rise within a few hours of application. Pressure differentials and flow rates will indicate the need for backwashing. It is not uncommon that a backwash is required within hours of an initial application of Poly-A, particularly if the pool water is cloudy. Poly-A increases the filters efficiency and more dirt and smaller particles are trapped on the filter for removal. Shorter than normal filter cycles are typical when Poly-A is first used. As these particles are removed through backwash or filter cleaning the filter cycles will return to normal.

Sand Filters

For sand filters, a dosage rate of 1 ounce of Poly-A per square foot of filter area (1 Poly-A Tablet per 4 square feet of filter area) should be used. After each backwash, follow the instructions for refilling the feeder. Once the pool water is clear, and depending upon bather load, the application of Poly-A following every other backwash application may be sufficient to maintain water clarity. During active use, sand filters should be backwashed at least once a week, even if influent and effluent gauges do not indicate a need for backwashing.

D.E. Filters

For both vacuum and pressure D.E. filters, a dosage rate of 0.08 ounces of Poly-A per square foot of filter area (1 Poly-a Tablet per 50 square feet of filter area) should be used. After each backwash follow the instructions for refilling the feeder. Once the pool water is clear, and depending upon bather load, the application of Poly-A following every other backwash application may be sufficient to maintain water clarity.

Cartridge Filters

For cartridge filters a dosage rate of 0.05 ounces of Poly-A per square foot of filter area (1 Poly-A Tablet per 80 square feet of filter area) should be used. After each backwash follow the instructions for refilling the feeder. Once the pool water is clear, and depending upon bather load, the application of Poly-A following every other backwash application may be sufficient to maintain water clarity.

FILLING THE FEEDER

1. Close the 1/2" isolation valves on both the inlet and outlet sides of the feeder.
2. Open the air relief vent valve on top of the feeder and the drain on the bottom of the feeder. Allow the feeder to empty.
3. Close the drain valve.
4. Remove the feeder lid.
5. Fill the feeder with the appropriate number of Poly-A Tablets for your filter type and size from the table below. If the the filtration system calls for more product then the feeder can hold, the product should be dispensed, and the feeder refilled until the proper quantity of product is delivered.
6. Close the air relief valve and replace the feeder lid.
7. Test the pool water to determine the pH. The pool water must be above 7.4 pH. The ideal pH range for product performance is 7.5 to 8.0. Adjust the pH of the pool water as necessary.
8. Open the 1/2" influent isolation valve followed by the effluent valve. Using the 1/2" effluent valve and the flow meter, adjust the flow rate through the feeder to between 0.05 and 0.1 gpm.
9. The Poly-A feeder needs no further adjustments until it needs needs to be refilled for the next application of tablets.

CLEANING AND MAINTENANCE

TABLET HOPPER

1. Close the inlet and outlet ball valves.
2. Open the air relief valve and drain to allow the feeder to empty before removing the lid.
3. Rinse, brush, and clean out the basin with water to remove any residue.
4. Place Poly-A Tablets in the feeder.
5. Follow the instructions for filling the feeder.

WINTERIZATION OF FEEDER

If the pool circulation system is shut down during the winter the following procedures are recommended:

1. Operate the feeder until all the Vantage Poly-A Tablets are dissolved.
2. Flush the feeder with fresh water. Follow cleaning procedures to remove any residue in the feeder.
3. Drain the feeder completely of water.
4. Disconnect the feeder from the water supply.
5. Store the feeder out of the sun in a clean, dry location.

LIMITED WARRANTY

AllChem Performance Products hereby warrants, subject to the conditions set below, that should the Vantage® VPF-20 Feeder or any component part included with the VPF-20 prove defective by reason of improper workmanship or material from the original date of retail purchase and up to one year thereafter; AllChem Performance Products will replace the defective part(s) upon receipt of those same part(s) from the purchaser. AllChem Performance Products will not pay for any labor or shipping costs incurred in the removal or replacement of those parts.

CONDITIONS

1. Registration: the registration card included must be filled out completely and forwarded to AllChem Performance Products, 6010 NW First Place, Gainesville, FL 32607 within 30 days of installation.
2. Notification: the purchaser must notify AllChem Performance Products within 30 days after discovery of part failure, stating which part(s) were defective or broken.
3. Use of unauthorized chemicals: Only **VANTAGE® Poly-A Tablets** should be placed in a VPF-20 Poly-A Tablet Feeder. Use of any other chemical may lead to hazardous conditions and will void this warranty.
4. Installation and operation of the warranted equipment must be in accordance with the instructions contained in the Installation and Operation Manual. Should the warranted equipment prove defective in workmanship or material, the consumer's sole remedy shall be replacement of defective parts as is herein above expressly provided: and under no circumstances shall AllChem Performance Products be liable for any loss or damage direct or consequential arising from the use of the warranted equipment.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of accidental or consequential damages, so the above limitation or exclusion may not apply. This warranty gives the purchaser specific legal rights and (s)he may also have other rights, which vary, from state to state.

For technical support, please call 352-333-7317

Fill out the warranty information on the card below **in black ink** and mail within 14 days of Product Purchase/Installation to:

AllChem Performance Products
6010 NW First Place
Gainesville, FL 32607
Attn: Warranty Dept.

VPF-20 WARRANTY REGISTRATION CARD

Facility Name _____

Physical Address _____

City _____ State _____ Zip _____

Facility Contact _____ E-Mail Address _____

Purchased From _____

Installed By _____ Date of Installation _____

Product Model _____ Product Serial Number _____

New Installation

Replacement Installation

Pool Volume _____ Indoor Outdoor

