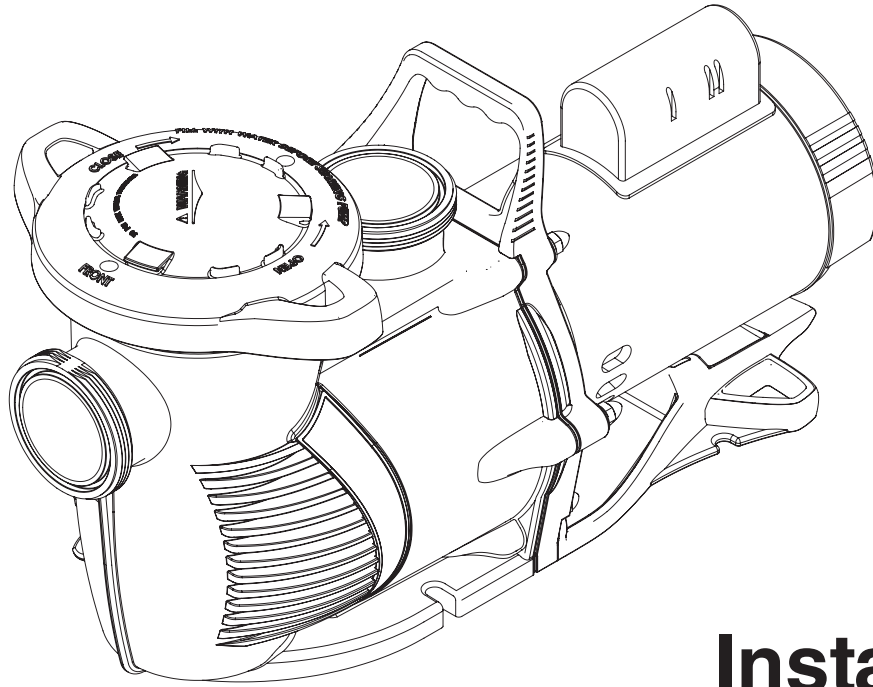


WhisperFloXF™ and Max-E-ProXF™ High Performance Pump



Installation and User's Guide

IMPORTANT SAFETY INSTRUCTIONS
READ AND FOLLOW ALL INSTRUCTIONS
SAVE THESE INSTRUCTIONS

Technical Support

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Pentair Water Pool and Spa®

PUMP WARNINGS AND SAFETY INSTRUCTIONS

For Pool and Spa Pumps (Non SVRS Pumps)

(Pentair Water Pool and Spa®, Sta-Rite®, and Pentair Pool Products®)

Warnings and safety instructions for Pentair Water Pool and Spa® pumps and other related products are available at: <http://www.pentairpool.com/pool-owner/safety-warnings/>

READ AND FOLLOW ALL WARNING AND SAFETY INSTRUCTIONS!



This is the safety alert symbol. When you see this symbol on your system or in this manual, look for one of the following signal words and be alert to the potential for personal injury.



Warns about hazards that can cause death, serious personal injury, or major property damage if ignored



Warns about hazards that may cause death, serious personal injury, or major property damage if ignored.



Warns about hazards that may or can cause minor personal injury or property damage if ignored.

NOTE indicates special instructions not related to hazards.

Carefully read and follow all safety instructions in this manual and on equipment. Keep safety labels in good condition; replace if missing or damaged.

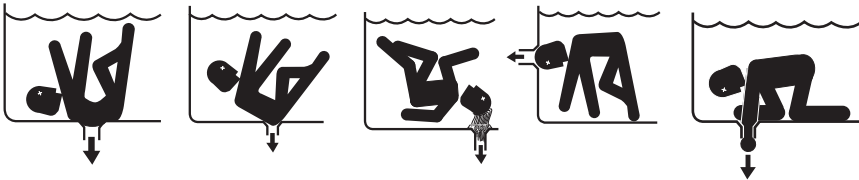


FAILURE TO FOLLOW ALL INSTRUCTIONS AND WARNINGS CAN RESULT IN SERIOUS BODILY INJURY OR DEATH. THIS PUMP SHOULD BE INSTALLED AND SERVICED ONLY BY A QUALIFIED POOL SERVICE PROFESSIONAL. INSTALLERS, POOL OPERATORS AND OWNERS MUST READ THESE WARNINGS AND ALL INSTRUCTIONS IN THE OWNER'S MANUAL BEFORE USING THIS PUMP. THESE WARNINGS AND THE OWNER'S MANUAL MUST BE LEFT WITH THE POOL OWNER.

Warnings and safety instructions for Pentair Water Pool and Spa® pumps and other related products are available at: <http://www.pentairpool.com/pool-owner/safety-warnings/> Call (800) 831-7133 for additional free copies of these instructions. Please refer to www.pentairpool.com and www.starite.com for more information related to Pentair Water Pool and Spa® pumps.



SUCTION ENTRAPMENT HAZARD: STAY OFF THE MAIN DRAIN AND AWAY FROM ALL SUCTION OUTLETS!



THIS PUMP PRODUCES HIGH LEVELS OF SUCTION AND CREATES A STRONG VACUUM AT THE MAIN DRAIN AT THE BOTTOM OF YOUR POOL AND SPA. THIS SUCTION IS SO STRONG THAT IT CAN TRAP ADULTS OR CHILDREN UNDER WATER IF THEY COME IN CLOSE PROXIMITY TO A POOL OR SPA DRAIN OR A LOOSE OR BROKEN DRAIN COVER OR GRATE.

READ AND KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE

Pentair Water Pool and Spa®

PUMP WARNINGS AND SAFETY INSTRUCTIONS

For Pool and Spa Pumps (Non SVRS Pumps)

(Pentair Water Pool and Spa®, Sta-Rite®, and Pentair Pool Products®)

THE USE OF UNAPPROVED COVERS OR ALLOWING USE OF THE POOL OR SPA WHEN COVERS ARE MISSING, CRACKED OR BROKEN CAN RESULT IN BODY OR LIMB ENTRAPMENT, HAIR ENTANGLEMENT, BODY ENTRAPMENT, EVISCERATION AND/OR DEATH.

The suction at a pool or spa drain or outlet can cause:

Limb Entrapment: When a limb is sucked or inserted into an opening resulting in a mechanical bind or swelling. This hazard is present when a drain cover is missing, broken, loose, cracked or not properly secured.

Hair Entanglement: When the hair tangles or knots in the drain cover, trapping the swimmer underwater. This hazard is present when the flow rating of the cover is too small for the pump or pumps.

Body Entrapment: When a portion of the body is held against the drain cover trapping the swimmer underwater. This hazard is present when the drain cover is missing, broken or the cover flow rating is not high enough for the pump or pumps.

Evisceration/Disembowelment: When a person sits on an open pool (particularly a child wading pool) or spa outlet and suction is applied directly to the intestines, causing severe intestinal damage. This hazard is present when the drain cover is missing, loose, cracked, or not properly secured.

Mechanical Entrapment: When jewelry, swimsuit, hair decorations, finger, toe or knuckle is caught in an opening of an outlet or drain cover. This hazard is present when the drain cover is missing, broken, loose, cracked, or not properly secured.

NOTE: ALL SUCTION PLUMBING MUST BE INSTALLED IN ACCORDANCE WITH THE LATEST NATIONAL AND LOCAL CODES FOR SWIMMING POOLS, SPAS AND HOT TUBS, INCLUDING NSPI STANDARDS AND CPSC GUIDELINES.

⚠ WARNING TO MINIMIZE THE RISK OF INJURY DUE TO SUCTION ENTRAPMENT HAZARD:

- Pools and spas should utilize a minimum of two drains per pump.
- A properly installed and secured ANSI/ASME A112.19.8 approved anti-entrapment suction cover must be used for each drain.
- Each suction cover must be installed at least three (3') feet apart, as measured from the nearest point to nearest point.
- Regularly inspect all covers for cracks, damage and advanced weathering.
- If a cover becomes loose, cracked, damaged, broken or is missing, close the pool or spa immediately, shut off the pump, post a notice and keep the pool or spa closed until an appropriate certified cover is properly installed.
- Replace drain covers as necessary. Drain covers deteriorate over time due to exposure to sunlight, pool chemicals and weather.
- Avoid getting hair, limbs or body in close proximity to any suction cover, pool drain or outlet.
- Use a safety vacuum release system ("SVRS"), suction limiting system or automatic pump shut-off system.
- Disable suction outlets or reconfigure into return inlets.

⚠ WARNING A clearly labeled emergency shut-off switch for the pool pump and spa jet pump must be in an easily accessible, obvious place near the pool or spa. Make sure bathers know where it is and how to use it in case of emergency.

Pentair Water Pool and Spa®

PUMP WARNINGS AND SAFETY INSTRUCTIONS

For Pool and Spa Pumps (Non SVRS Pumps)

(Pentair Water Pool and Spa®, Sta-Rite®, and Pentair Pool Products®)

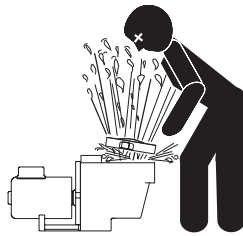
The Virginia Graeme Baker (VGB) Pool and Spa Safety Act creates new requirements for owners and operators of commercial swimming pools and spas.

Commercial pools or spas constructed on or after December 19, 2008, shall utilize:

- (A) A multiple main drain system without isolation capability with suction outlet covers that meet ASME/ANSI A112.19.8a Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs and either:
 - (i) A safety vacuum release system (SVRS) meeting ASME/ANSI A112.19.17 Manufactured Safety Vacuum Release systems (SVRS) for Residential and Commercial Swimming Pool, Spa, Hot Tub, and Wading Pool Suction Systems and/or ASTM F2387 Standard Specification for Manufactured Safety Vacuum Release Systems (SVRS) for Swimming pools, Spas and Hot Tubs or
 - (ii) A properly designed and tested suction-limiting vent system or
 - (iii) An automatic pump shut-off system.

Commercial pools and spas constructed prior to December 19, 2008, with a single submerged suction outlet shall use a suction outlet cover that meets ASME/ANSI A112.19.8a and either:

- (A) A SVRS meeting ASME/ANSI A112.19.17 and/or ASTM F2387, or
- (B) A properly designed and tested suction-limiting vent system, or
- (C) An automatic pump shut-off system, or
- (D) Disabled submerged outlets, or
- (E) Suction outlets shall be reconfigured into return inlets.



HAZARDOUS PRESSURE: STAND CLEAR OF PUMP AND FILTER DURING START-UP

Pool and spa circulation systems operate under high pressure. When any part of the circulating system (i.e. lock ring, pump, filter, valves, etc.) is serviced, air can enter the system and become pressurized. Pressurized air can cause the pump housing cover, filter lid and valves to violently separate which can result in severe personal injury or death. Filter tank lid and strainer cover must be properly secured to prevent violent separation. Stand clear of all circulation system equipment when turning on or starting up pump.

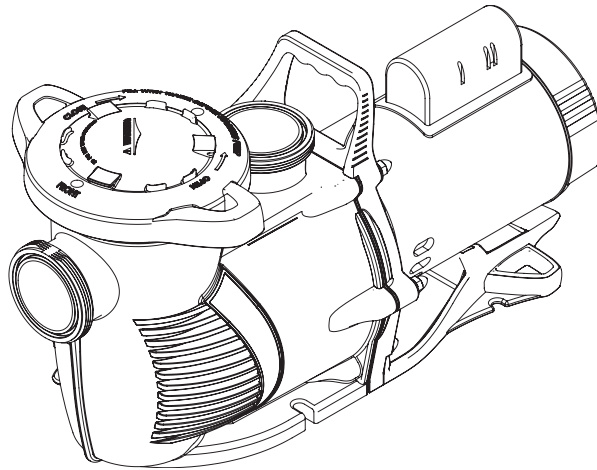
CAUTION!: Electrical controls such as on/off switches, timers, and control systems, etc. should be properly installed to allow the operation (start-up, shut-down, or servicing) of any pump or filter without requiring the user to place any portion of his/her body over or near the pump strainer lid or filter lid. Such installation should allow the user to stand clear of the filter and pump during system start-up, shut down or servicing of the system.

Before servicing pool and spa equipment, make note of the filter pressure. Be sure that all controls are set to ensure the system cannot inadvertently start during service. Turn off all power to the pump. **IMPORTANT: Place filter manual air relief valve in the open position and wait for all pressure in the system to be relieved.** Before starting the system, fully open the manual air relief valve and place all system valves in the "open" position to allow water to flow freely from the pool and spa back to the pool or spa. Stand clear of all pool and spa equipment and start the pump. **IMPORTANT: Do not close filter manual air relief valve until all pressure has been discharged from the valve and a steady stream of water appears.** Observe filter pressure gauge and be sure it is not higher than the pre-service condition.

Introduction

Pump Overview

The WhisperFloXF™ and Max-E-ProXF™ pumps are the perfect choice for all types of pools and is specifically designed to be the best choice for a variety of inground pools. A heavy duty 56 square flange motor, and highly engineered hydraulics make this rugged and tested design perfect for any pool, spa, water feature, or fountain. All pumps from Pentair Water Pool and Spa® incorporate innovative hydraulic engineering to move water more efficiently for lower operational costs. WhisperFloXF and Max-E-ProXF pumps are designed to deliver years of reliable service.



WhisperFloXF™ Pump

Features

- Extremely quiet operation
- Unionized fittings (2.5" and 3") for simple replacement
- Cam and Ramp™ lid for easy cleaning and maintenance
- Heavy-duty, high service factor 56 square flange motor for long life
- “Diamond Seal” o-rings for superior seal performance
- Integral volute and pot reduce hydraulic noise
- See-through lid permits easy inspection of strainer basket
- Self-priming for quick, easy start-up
- Every WhisperFloXF and Max-E-ProXF pump is performance and pressure tested prior to shipment to ensure superior quality
- Drop-in replacement for all WhisperFlo models. Simple replacement for Challenger® pumps (Riser base required for Challenger replacements P/N 400012 available separately)
- UL/CUL/NSF

Electrical Requirements

This section describes how to wire the WhisperFloXF and Max-E-ProXF pump.

Note: Before installing this product, read and follow all warning and safety instructions starting on page ii.

Electrical Requirements and Wiring

When pump is mounted permanently within 5 ft. of the inside walls of a swimming pool, you **MUST** use a No. 8 AWG or larger conductor to connect to bonding conductor lug.

Wiring Installation

Risk of electrical shock or electrocution.

⚠ WARNING



This pool pump must be installed by a licensed or certified electrician or a qualified pool serviceman in accordance with the National Electrical Code and all applicable local codes and ordinances. Improper installation will create an electrical hazard which could result in death or serious injury to pool users, installers, or others due to electrical shock, and may also cause damage to property.

Always disconnect power to the pool pump at the circuit breaker before servicing the pump. Failure to do so could result in death or serious injury to serviceman, pool users or others due to electric shock.

1. Make sure all electrical breakers and switches are turned off before wiring motor.
2. Make sure that the wiring voltage matches the motor voltage (230 VAC or 115 VAC). If they do not match permanent damage to the motor will occur.
3. Choose a wire size from the Chart 1. When in doubt use a heavier gauge (larger diameter) wire. Heavier gauge will allow the motor to run cooler and more efficiently.
4. Make sure all electrical connections are clean and tight.
5. Cut wires to the appropriate length so they don't overlap or touch when connected to the terminal board.

Chart 1.

SUPPLY WIRE SIZES (AWG)						
(Size and Length by Horsepower)						
Hp	115 volts			230 volts		
	50 ft.	100 ft.	150 ft.	50 ft.	100 ft.	150 ft.
1/3	14	14	12	14	14	14
1/2	14	12	10	14	14	14
3/4	12	12	10	14	14	14
1	12	10	8	14	14	14
1½	10	10	8	14	14	12
2	10	8	8	14	12	12
2½	-	-	-	12	12	10
3	-	-	-	12	12	10

Wiring Installation, continued.

6. Permanently ground the motor using the green ground terminal located on the inside of the motor canopy or access plate, see **Figure 1**. Use the correct wire size and type specified by National Electrical Code. Make sure the ground wire is connected to an electrical service ground.
7. Bond the motor to the pool structure in accordance with the National Electrical Code. Use a solid No. 8 AWG or larger copper conductor. Run a wire from the external bonding screw on the motor to the pool bonding structure.
8. Connect the pump permanently to a circuit. Make sure no other lights or appliances are on the same circuit.

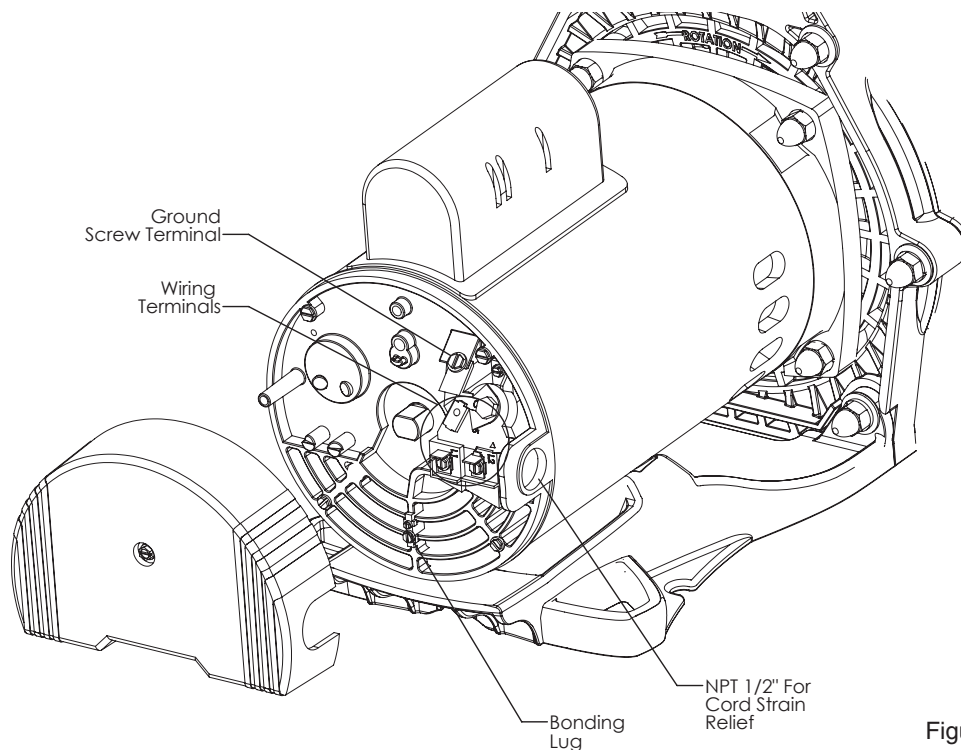


Figure 1.

Pump Strainer Basket

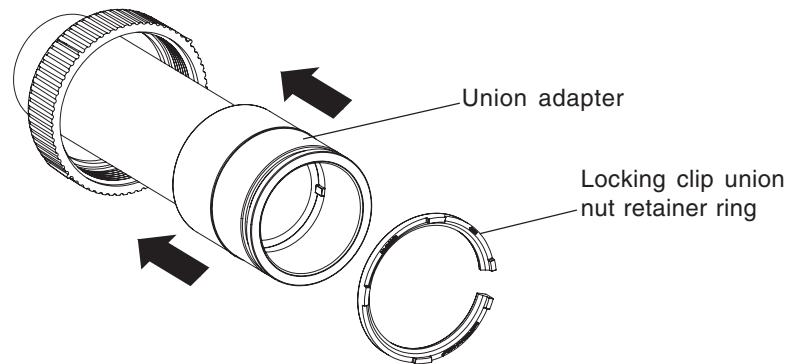
The strainer basket, sometimes referred to as the ‘Hair and Lint Pot’, is located in front of the pump housing. Inside the chamber is the basket which must be kept clean of leaves and debris at all times. View basket through the ‘See Through Lid’, to inspect for leaves and debris (see page 5).

Regardless of the length of time between filter cleaning, it is important to visually inspect the hair and lint pot basket at least once a week. A dirty basket will reduce the efficiency of the filter and heater and also put an abnormal stress on the pump motor.

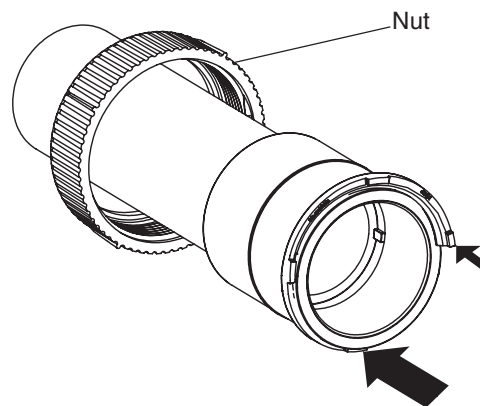
Union Adapter Installation

The following describes how to install the locking union adapter onto the pump.

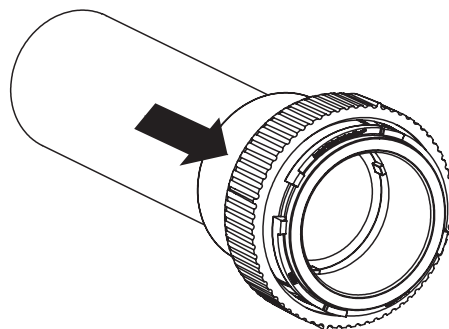
1. Glue PVC union adapter fitting to PVC pipe. Adapter accepts 2.5" PVC pipe internally or a 3" PVC coupling externally. Be sure that the groove for the retainer ring is on the end opposite your glue joint.



2. Slip nut on fitting. Place the flat side of the retainer ring against the adapter on the grooved end. Gently flex the locking clip union nut retainer ring into place on the adapter. Start snapping it into the groove on one end of the ring and work your way around.



3. Slide the nut over the ring and attach it to the pump. **HAND TIGHTEN THE NUT** to secure in place.



Maintenance

This section describes how to maintain the WhisperFloXF and Max-E-ProXF pump.

Cleaning the Pump Strainer Basket

⚠ WARNING

DO NOT open the strainer pot if pump fails to prime or if pump has been operating without water in the strainer pot. Pumps operated in these circumstances may experience a build up of vapor pressure and may contain scalding hot water. Opening the pump may cause serious personal injury. In order to avoid the possibility of personal injury, make sure the suction and discharge valves are open and strainer pot temperature is cool to touch, then open with extreme caution.

⚠ CAUTION

To prevent damage to the pump and filter and for proper operation of the system, clean pump strainer and skimmer baskets regularly.

1. Turn off motor.
2. Relieve pressure in the system.
3. Turn the lid and locking ring in a counter-clockwise direction and remove them from the pump.
4. Remove the debris from the basket and rinse out the basket. Replace the basket if it is cracked.
5. Replace the basket. Be sure to align the notch in the bottom of the basket with the rib in the bottom of the volute, see Figure 2.
6. Fill the pump pot and volute up to the inlet port with water.
7. Clean the lid and locking ring, O-ring, and sealing surface of the pump pot.

NOTE

It is important that the O-ring be kept clean and well lubricated.

8. Reinstall the lid by placing the lid and locking ring on the pot; see Figure 2 on next page.
 - a. Make sure the lid O-ring is properly placed. Seat the lid and locking ring on the pump then turn clockwise until the locking ring handles are horizontal; see Figure 3 on next page.
9. Turn the power “ON” at the house circuit breaker. Reset the pool time clock to the correct time.

⚠ WARNING



THIS SYSTEM OPERATES UNDER HIGH PRESSURE.

When any part of the circulating system (e.g., Lock Ring, Pump, Filter, Valves, etc.) is serviced, air can enter the system and become pressurized. Pressurized air can cause the lid to blow off which can result in serious injury, death, or property damage. To avoid this potential hazard, follow these instructions.

10. Open the manual air relief valve on top of the filter.
11. Stand clear of the filter. Start the pump.
12. Bleed air from the filter until a steady stream of water comes out. Close the manual air relief valve.

Cleaning the Pump Strainer Basket (Continued)

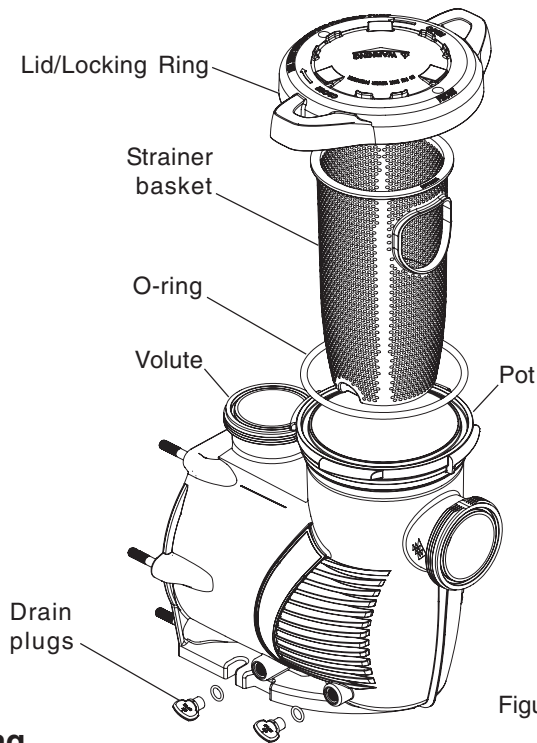


Figure 2.

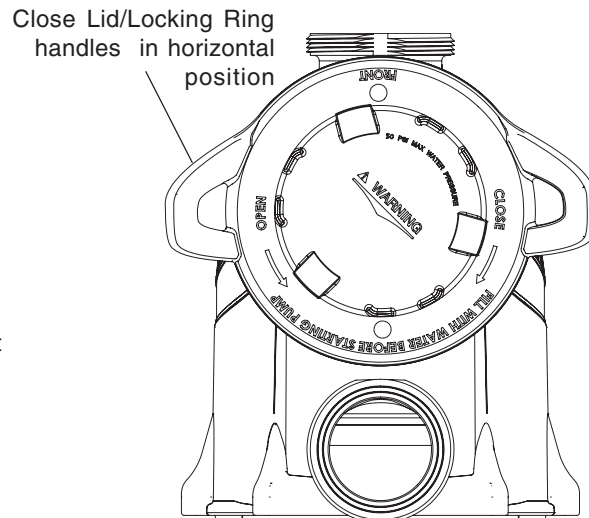


Figure 3.

Winterizing

1. If the air temperature drops below 35° F (1.67° C), the water in the pump can freeze and cause damage. Freeze damage is not covered under warranty.
2. To prevent freeze damage follow the procedures listed below:
 - a. Shut off electrical power for the pump at the house circuit breaker.
 - b. Drain the water out of the pump housing by removing the two thumb-twist drain plugs from the housing. Store the plugs in the pump basket.
 - c. Cover the motor to protect it from severe rain, snow and ice.
 - d. Do not wrap the motor in plastic. It will cause condensation and rust on the inside of the motor.

Care of Electric Motor

1. Protect from heat.
 - a. Shade the motor from the sun.
 - b. Any enclosure must be well ventilated to prevent overheating.
 - c. Provide ample cross ventilation.
2. Protect against dirt.
 - a. Protect from any foreign matter or splashing water.
 - b. Do not store (or spill) pool chemicals on or near the motor.
 - c. Avoid sweeping or stirring up dust near the motor while it is operating.
 - d. If a motor has been damaged by dirt it voids the motor warranty.
3. Protect against moisture.
 - a. Protect from splashing pool water and lawn sprinklers.
 - b. Protect from the weather.
 - c. If a motor has become wet - let it dry before operating. Do not allow the pump to operate if it has been flooded.
 - d. If a motor has been damaged by water it voids the motor warranty.

NOTE

- **DO NOT** wrap motor with plastic or other air tight materials. The motor may be covered during a storm, for winter storage, etc., but never when operating, or expecting operation.
- When replacing the motor, be certain that the motor support is correctly positioned to support the size of motor being installed.

Servicing

This section describes how to service the WhisperFloXF and Max-E-ProXF pump.

Risk of electrical shock or electrocution

WARNING



This pool pump must be installed by a licensed or certified electrician or a qualified pool serviceman in accordance with the National Electrical Code and all applicable local codes and ordinances. Improper installation will create an electrical hazard which could result in death or serious injury to pool users, installers, or others due to electrical shock, and may also cause damage to property.

Always disconnect power to the pool pump at the circuit breaker before servicing the pump. Failure to do so could result in death or serious injury to serviceman, pool users or others due to electric shock.

Read all servicing instructions before working on the pump.

WARNING



DO NOT open the strainer pot if pump fails to prime or if pump has been operating without water in the strainer pot. Pumps operated in these circumstances may experience a build up of vapor pressure and may contain scalding hot water. Opening the pump may cause serious personal injury. In order to avoid the possibility of personal injury, make sure the suction and discharge valves are open and strainer pot temperature is cool to touch, then open with extreme caution.

Pump Disassembly

1. All moving parts are located in the rear subassembly of this pump.
Tools required:
 - a. Adjustable wrench.
 - b. Flat-blade screw driver.
 - c. 3/4 inch socket wrench.
 - d. 9/16 inch open end wrench.
 - e. 9/64 inch HEX key wrench.
2. To remove and repair the motor subassembly perform the following procedures:
 - a. Turn off the pump circuit breaker at the main panel.
 - b. Drain the pump by removing the drain plugs.
 - c. Using a 9/16" open end wrench, remove the six (6) nuts that secure the main pump body (strainer pot/volute) to the rear subassembly.
 - d. GENTLY pull the two pump halves apart, removing the rear subassembly.
 - e. Remove the three hex head screws holding the diffuser in position.
 - f. Using a 3/4" socket wrench, hold the impeller securely in place and remove the impeller lock screw.
NOTE: The screw is a left-handed thread and loosens in a clockwise direction.
 - g. Remove the screw on the motor canopy and remove the canopy.
 - h. Using an adjustable wrench to hold the motor shaft, twist the impeller counter-clockwise to remove it from the shaft.

CAUTION

Be sure not to scratch or mar the polished shaft seal faces; seal will leak if faces are damaged.

Pump Disassembly, continued.

- i. Remove the four (4) nuts from the seal plate to the motor using a 9/16 inch wrench.
- j. Place the seal plate face down on a flat surface and press out the ceramic part of the mechanical seal.
- k. Clean the seal plate, seal housing, and the motor shaft.

Pump Reassembly/Seal Replacement; see Figure 4 and Section 7 (Technical Data)

1. Install the SPRING END onto the impeller shaft. Be sure BLACK/CARBON face is facing outward.
2. Remount the seal plate to the motor using the four (4) lock washers and four (4) nuts..
3. With the white ceramic face facing outward, press the seal into the seal plate with your thumbs and wipe off the ceramic with a clean cloth.
4. Hand tighten impeller onto the motor shaft.
5. Screw in the impeller reverse lock screw (counter-clockwise to tighten).
6. Install the canopy on the back of the motor.
7. Remount the diffuser onto the seal plate. Make sure the plastic pins and holding screw inserts are aligned (see "TOP" indicator).
8. Assemble the motor subassembly to the housing. **DO NOT** tighten the nuts and washers until all four (4) motor bolts are in place. Using a torque wrench, install and tighten the four nuts to a torque value of 100 in-lbs (maximum). **CAUTION! DO NOT** overtighten the nuts.
9. Fill the pump with water.
10. Reinstall the pump lid and locking ring; see **SECTION 3, Maintenance**.
11. Reprime the system.

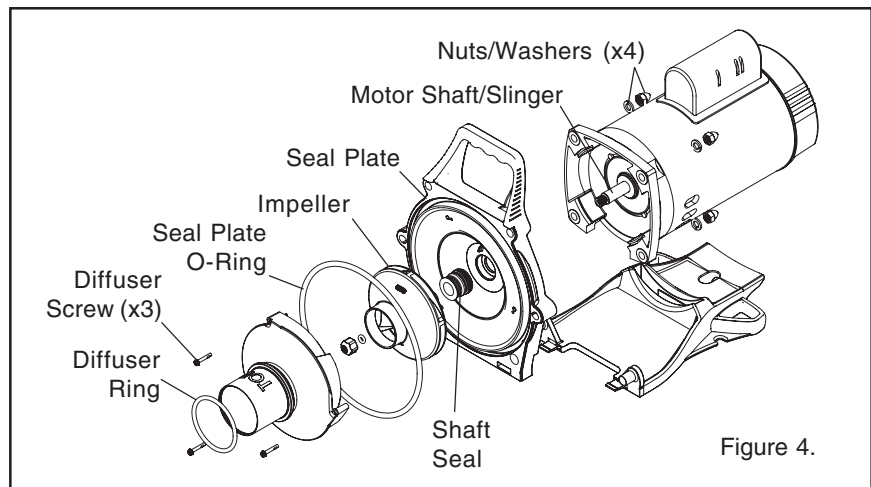


Figure 4.

The Shaft Seal

1. The Shaft Seal consists primarily of two parts, a rotating member and a ceramic seal.
2. The pump requires little or no service other than reasonable care, however, a Shaft Seal may occasionally become damaged and must be replaced.

CAUTION The polished and lapped faces of the seal could be damaged if not handled with care.

CAUTION In mild climate area, when temporary freezing conditions may occur, run your filtering equipment all night to prevent freezing.

Restart Instructions

If the WhisperFloXF or Max-E-ProXF pump is installed below the water level of the pool, close return and suction lines prior to opening hair and lint pot on pump. Make sure to reopen valves prior to operating.

 **CAUTION**

DO NOT run the pump dry. If the pump is run dry, the mechanical seal will be damaged and the pump will start leaking. If this occurs, the damaged seal must be replaced. ALWAYS maintain proper water level in your pool (half way up skimmer opening). If the water level falls below the skimmer opening, the pump will draw air through the skimmer, losing the prime and causing the pump to run dry, resulting in a damaged seal.

NOTE

Continued operation in this manner could cause a loss of pressure, resulting in damage to the pump case, impeller and seal.

Priming the Pump

1. The pump strainer pot must be filled with water before the pump is initially started. Follow these steps to prime the pump.
 - a. Remove the pump lid and locking ring.
 - b. Fill the pump strainer pot with water.
 - c. Reassemble the pump lid and locking ring onto the strainer pot. The pump is now ready to prime.
 - d. Open the air release valve on the filter, and stand clear of the filter.
 - e. Turn on the switch or time clock.
 - f. When water comes out of the air release valve, close the valve. The system should now be free of air and recirculating water to and from the pool.
 - g. This pump will prime within 13 minutes. Do not allow your pump to run longer than this time without developing full flow. If the pump does not prime, see the “Troubleshooting” section on page 10.
 - h. Two speed pumps should run on high speed for priming.

Troubleshooting

Use the following troubleshooting information to resolve possible WhisperFloXF and Max-E-ProXF pump problems.

⚠ WARNING



RISK OF ELECTRICAL SHOCK OR ELECTROCUTION.

Improperly installation will create an electrical hazard which could result in death or serious injury to pool users, installers, or others due to electrical shock, and may also cause damage to property.

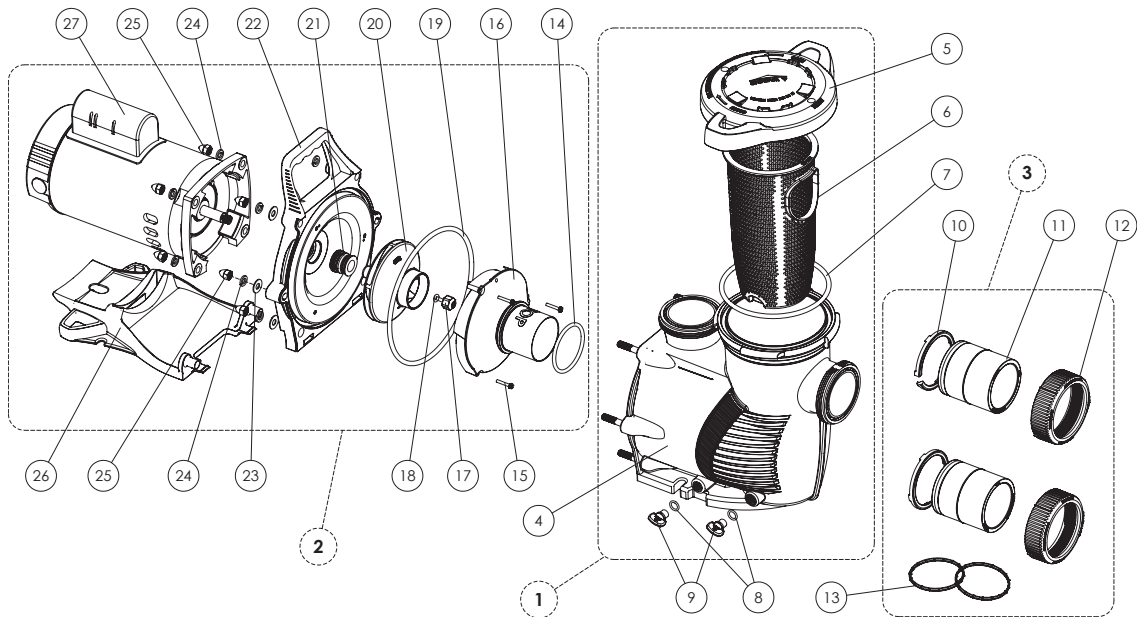
1. If you are not familiar with your pool filtering system and/or heater:
 - a. **DO NOT** attempt to adjust or service without consulting your dealer, or a qualified pool professional.
 - b. Read the entire Installation & User's Guide before attempting to use, service or adjust the pool filtering system or heater.
2. **SWITCH OFF power to the pump before attempting service or repair.**

Problems and Corrective Actions

<i>Problem</i>	<i>Corrective Action</i>
Pump Will Not Prime — too much air	<p>Check suction piping and valve on any suction gate valves.</p> <p>Secure lid on pump strainer pot and make sure lid gasket is in place.</p> <p>Check water level to make sure skimmer is not drawing air.</p>
Pump Will Not Prime — not enough water	<p>Make sure suction lines, pump strainer, and pump volute are full of water.</p> <p>Make sure valve on suction line is working and open, (some systems do not have valves).</p> <p>Check water level to make sure water is available through skimmer.</p>
Pump strainer clogged	Clean pump strainer pot.
Pump strainer gasket defective REDUCED CAPACITY and/or HEAD Air pockets or leaks in suction line Pump Will Not Prime — too much air	<p>Replace gasket.</p> <p>Check suction piping and valve on any suction gate valves.</p> <p>Secure lid on pump strainer pot and make sure lid gasket is in place.</p> <p>Check water level to make sure skimmer is not drawing air.</p>
Clogged impeller	<p>Switch OFF electrical power at the house circuit breakers to the pump.</p> <p>Remove the nuts that secure the volute to the seal plate.</p> <p>Slide the motor and seal plate away from the volute.</p> <p>Clean debris from impeller.</p> <p>If debris cannot be removed, complete the following steps.</p> <ol style="list-style-type: none"> (1) Remove impeller reverse screw and O-ring. (2) Remove, clean and reinstall impeller. (3) Reinstall anti-spin bolt. <p>Reinstall diffuser and O-Ring.</p> <p>Reinstall motor and seal plate into volute.</p> <p>Reinstall hardware around seal plate and volute and tighten securely.</p> <p>Clean suction trap.</p>

Technical Data

WhisperFloXF and Max-E-ProXF Illustrated Parts



Item No.	Description/Part Number/Model	WhisperFloXF	Max-E-ProXF
1	Wet End Assembly	400001	401001
2	Power End Assembly	See Motor Table	-
3	Union Kit Without Tap	410020	-
4	Tank Body	400001	401001
5	Lid/Locking Ring Assembly	400006	401006
6	Trap Basket	400007	-
7	Lid/Locking Ring O-Ring	35505-1440	-
8	Drain Plug O-Ring	192115	-
9	Drain Plug	071131	357161
10	2.5" C-Clip Locking Ring	410001	-
11	2.5" Union Adapter without Tap	410002	-
12	2.5" Union Nut	411000	-
13	2.5" Diamond Seal	410006	-
14	Diffuser O-Ring	350336	-
15	Diffuser Screw	353323	-
16	Diffuser	See Hydraulic Parts Table	-
17	Impeller Reverse Screw	37337-6080	-
18	Impeller Reverse Screw O-Ring	33455-1047	-
19	Seal Plate O-Ring	351446	-
20	Impeller Assembly	See Hydraulic Parts Table	-
21	Mechanical Seal	37400-0028	-
22	Seal Plate	400002	401002
23	Flat Washer	072184	-
24	Split Lock Washer	U43-12SS	-
25	Acorn Nut	071413	-
26	Motor Support	400004	401004
27	Motor	See Motor Table	-

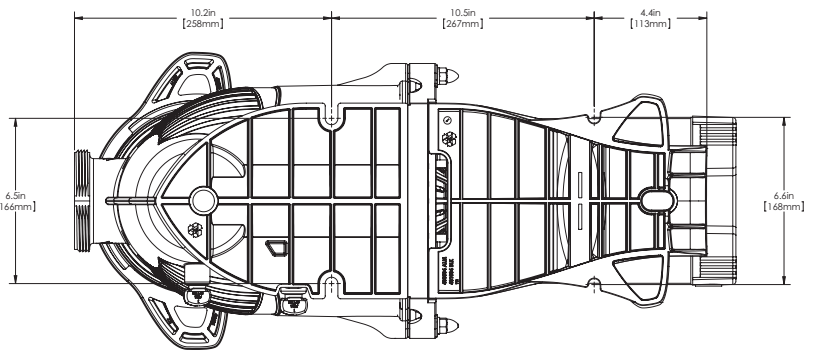
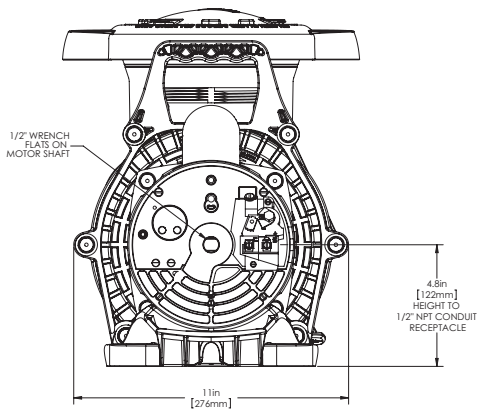
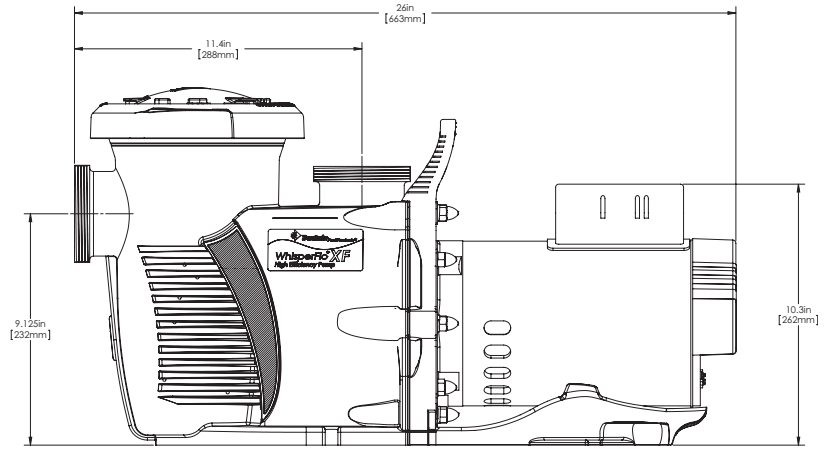
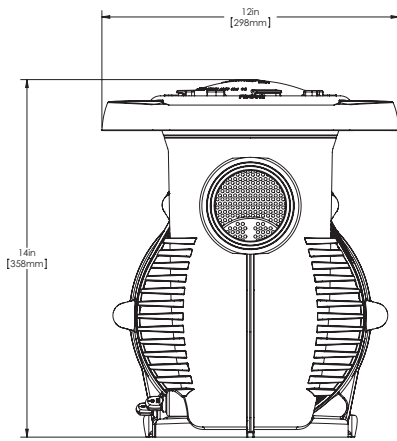
Motor Table

Model Name			Motor Part Number		Power End Part Number	
WhisperFloXF	Max-E-ProXF	Description	WhisperFloXF	Max-E-ProXF	WhisperFloXF	Max-E-ProXF
XF-8	XP-8	2hp Standard E 230v	355026	355027	400612	401612
XF-12	XP-12	3hp Standard E 230v	355033	355034	400613	401613
XFE-8	XPE-8	2hp High Eff 208-230v	355014	355015	400609	401609
XFE-12	XPE-12	3hp High Eff 208-230v	355016	355017	400610	401610
XFE-20	XPE-20	5hp High Eff 208-230v	353317	353319	400611	401611
XFDS-8	XPDS-8	2hp 2 Speed 230V	359526	359527	400607	401607
XFDS-12	XPDS-12	3hp 2 Speed 230V	353316	353318	400608	401608
XFDS-28	XPDS-28	2.5hp Uprated 2 Speed 230V	359526	359527	400626	401626
XF-28	XP-28	2.5hp Uprated Standard E 230V	355026	355027	400627	401627
XFE-28	XPE-28	2.5hp Uprated High E 208-230v	355014	355015	400628	401628
XFK-8	XPK-8	2hp 3 Phase High E 208-230-460v	352037	-	400617	401617
XFK-12	XPK-12	3hp 3 Phase High E 208-230-460v	352038	-	400618	401618
XFK-20	XPK-20	5hp 3 Phase High E 208-230-460v	352039	-	400619	401619

Hydraulic Parts Table

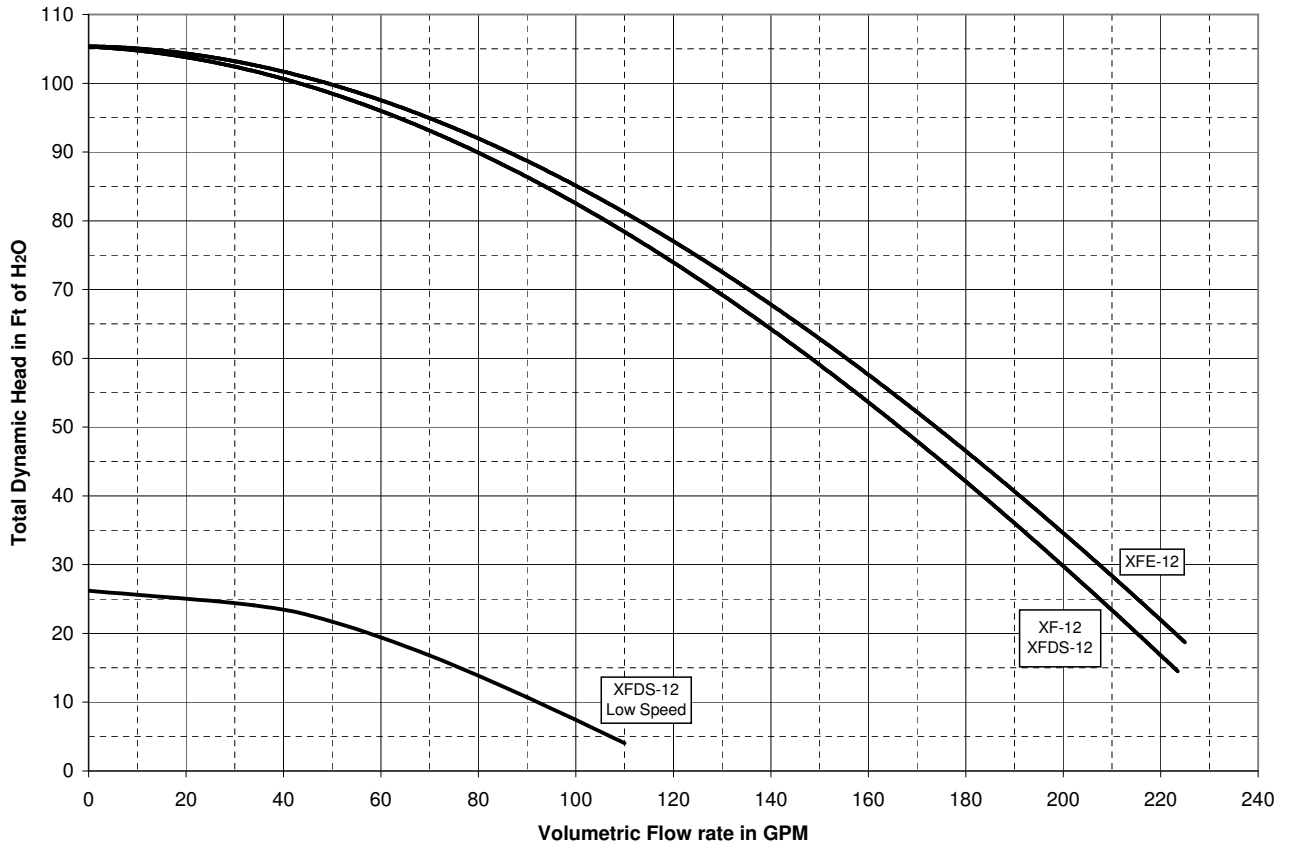
Model Name			Hydraulic Parts	
WhisperFloXF	Max-E-Pro XF	Description	Diffuser	Impeller
XF-8	XP-8	2hp Standard E 230v	400010	400020
XF-12	XP-12	3hp Standard E 230v	400010	400015
XFE-8	XPE-8	2hp High Eff 208-230v	400010	400020
XFE-12	XPE-12	3hp High Eff 208-230v	400010	400015
XFE-20	XPE-20	5hp High Eff 208-230v	400011	400023
XFDS-8	XPDS-8	2hp 2 Speed 230V	400010	400020
XFDS-12	XPDS-12	3hp 2 Speed 230V	400010	400015
XFDS-28	XPDS-28	2.5hp Uprated 2 Speed 230V	400010	400020
XF-28	XP-28	2.5hp Uprated Standard E 230V	400010	400020
XFE-28	XPE-28	2.5hp Uprated High E 208-230v	400010	400020
XFK-8	XPK-8	2hp 3 Phase High E 208-230-460v	400010	400020
XFK-12	XPK-12	3hp 3 Phase High E 208-230-460v	400010	400015
XFK-20	XPK-20	5hp 3 Phase High E 208-230-460v	400011	400023

Pump Dimensions



ANCHOR BOLT MOUNTING LOCATIONS

XF Performance Curves





P/N 352036 Rev. A