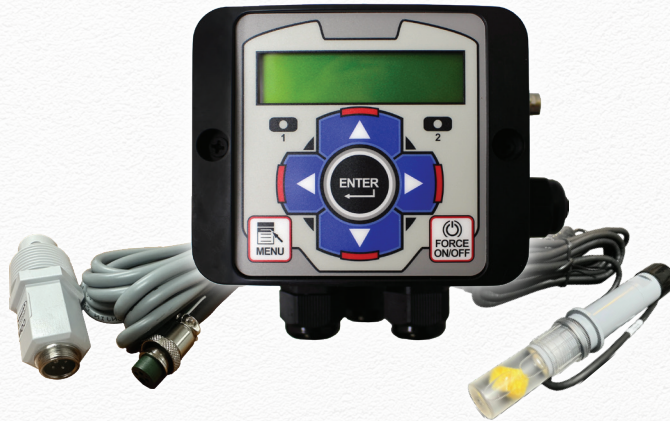


PRECISION CHEMICAL DELIVERY
PUMPS & CONTROLLERS
FOR pH ADJUSTMENT AND NUTRIENT DOSING



FlexFlow Pumps: Precision Dosing to Adjust Water pH or Nutrient Concentration

FlexFlow pumps deliver an unparalleled solution for precision dosing. When integrated with DEMA's NanoP pH controller, FlexFlow can automatically adjust acid dosing based on real-time pH readings. Pairing the FlexFlow with a NanoC conductivity controller enables automatic nutrient dosing guided by accurate probe measurements. Engineered with advanced technology and durable components, these piston diaphragm pumps are compatible with a wide range of chemicals, from highly acidic to alkaline, ensuring dependable performance in even the most challenging environments.

Key Features:

- Designed for a seamless integration with the DEMA Nano controllers to automatically control additives to water.
- Engineered to withstand exposure to acids and many other harsh chemicals without compromising efficiency or performance.
- Efficiently injects into water lines with pressures up to 100 psi, making it ideal for a variety of demanding applications.
- Compatible with most flow switches, ensuring the system only pumps when water is flowing, enhancing safety and reliability.
- Dual PTFE barrel check valve prevents flow reversal.
- Alternative pump head available for chemicals that off-gas vapor, ensuring reliable operation in challenging conditions.
- Safe and easy connection to a 120V power source, such as the relay output on the DEMA Nano controllers.
- NEMA 4X enclosure provides protection from dust and water
- Standard pump head components are made of PVDF, PTFE, and Ceramic.

FlexFlow - 0960.L LCD Screen, Wi-Fi Direct Connection, and 4-20mA Speed Control

While manual models only turn the pump on or off, this model adjusts pump speed automatically using the 4-20mA input from a DEMA Nano controller, responding to probe readings to maintain the desired pH or nutrient concentration as probe readings change. The system features a large graphic display and can be programmed easily via Wi-Fi Direct using the Air Advantage app or a cellphone browser. It also includes convenient buttons for programming directly on the pump, with the option of a 4-digit PIN to prevent unauthorized changes.

0960.L	
Main Power	120 VAC
Power Connection	Standard 3 prong grounded plug
Pump Rate (Max)	30 GPD at 100 PSI (1.25 GPH)
Maximum Injection Pressure	100 PSI
Stroke Frequency	0-200 per minute
Environmental Temperature	120°F (49°C)



Note: Standalone wall brackets available; Two brackets required to mount. Part # 0960.M.BRACKET x 2



FlexFlow - 0960.M Manual Adjustment

The 0960.M FlexFlow has a stroke speed adjustment knob that allows for speed adjustment ranging from 0 to 200 strokes per minute. LED lights on the front of the pump indicate power & stroke status.

0960.M	
Main Power	120 VAC
Power Connection	Standard 3 prong grounded plug
Pump Rate (Max)	30 GPD at 100 PSI (1.25 GPH)
Maximum Injection Pressure	100 PSI
Stroke Frequency	0-200 per minute
Environmental Temperature	120°F (49°C)

Note: Standalone wall brackets available; Two brackets required to mount. Part # 0960.M.BRACKET x 2

Nano Controllers: Automate pH Monitoring or Nutrient Dosing

The NanoP and NanoC pump controllers are designed for precision, offering real-time automated adjustments to maintain ideal water parameters. Utilizing advanced in-line probes, they continuously monitor pH or conductivity levels, ensuring your system stays within the desired range. The Nano controllers work seamlessly with pumps like the FlexFlow, dosing the exact amount of chemical needed to restore balance. For example, if the NanoP detects that the pH is too high, it turns on the FlexFlow to inject acid until the programmed level is reached. The 0960.L FlexFlow will also enable the ability to have the pump adjust speed as probe readings fluctuate.

- Real-time monitoring of pH (NanoP) or conductivity (NanoC).
- Designed for easy integration with the FlexFlow series of pumps.
- Integrated set point alarm system.
- 10' long probe cords for easy integration into existing setups (extensions available).

Reliable, efficient, and adaptable, the NanoP and NanoC deliver effortless control for your water management needs.

NanoP Controller with pH Probe - 0960.NANOP Automatic pH Monitoring Controller

The NanoP is a fully automated pH monitoring and adjustment controller that maintains your water's pH at your specified setpoint. Equipped with an in-line probe, it continuously monitors pH levels and precisely controls the FlexFlow pump to keep the pH within the desired range. While many systems use a single pump to either lower pH by injecting acid or raise it by injecting a base, the NanoP can also manage a second pump for bidirectional pH adjustments, offering even greater control.

0960.NANOP	
Control Function	Digital 4 button key pad
Main Power	120 VAC
Power Connection	Standard 3 prong plug
Max Ambient Temperature	120°F (49°C)
Probe Threads	1/2" NPT male threads with O-ring
Probe Cord	10' long with BNC Connection



NanoC Controller with Conductivity Probe - 0960.NANOC Automatically monitors and adjusts nutrient levels

The NanoC controller, equipped with a conductivity probe, provides precise monitoring of your fertilizer solution's concentration. By measuring electrical conductivity between probe points, the NanoC ensures that your water line maintains the correct nutrient levels. When conductivity drops below the preset threshold, the controller automatically activates a pump to inject more fertilizer, maintaining your desired water-to-fertilizer ratio. With seamless operation and real-time monitoring, the NanoC delivers consistent and accurate nutrient application, optimizing growing conditions and enhancing crop efficiency.



0960.NANOC	
Control Function	Digital 4 button key pad
Main Power	120 VAC
Power Connection	Standard 3 prong plug
Max Ambient Temperature	120°F (49°C)
Probe Threads	1/2" NPT male threads with O-ring
Probe Cord	10' long with BNC Connection

Flow Switches

Essential Safety for Your System

The 0960.FS.SHORT and 0960.FS.LONG flow switches provide an external auto-stop safety feature when paired with a FlexFlow pump and Nano controller. If there's insufficient flow, the switch prevents the pump from activating, avoiding over-concentration of acid or fertilizer. Requiring a minimum flow of 3 GPM, these switches feature 18-inch leads for easy connection to a Nano controller or FlexFlow pump, with an External Auto-Stop function for added security.

These flow switches ensure safe, precise chemical application, protecting your system from damage.

0960.FS.SHORT (for 3/4" or 1" diameter pipe)

Function	Sensor activates when water flow is occurring. 3 GPM flow rate required
Wire Leads	18" length, red, and black wires
Min Flow Rate to Activate	3 GPM
Min Flow Rate Once Contact is Closed	1 GPM
Case Material	PVC
Paddle Legs	1.1" long and can be used in 3/4" or 1" pipe
Fitting Size	3/4" male NPT



0960.FS.LONG (for 1.5" or 2" diameter pipe)

Function	Sensor activates when water flow is occurring. 3 GPM flow rate required
Wire Leads	18" length, red, and black wires
Min Flow Rate to Activate	3 GPM
Min Flow Rate Once Contact is Closed	1 GPM
Case Materials	PVC
Paddle Legs	1.8" long and can be used in 1.5" or 2" pipe
Fitting Size	3/4" male NPT



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