

Acid Feed Setting Charts

If you are using the new **Pulsar®** Infinity feeder or a traditional **Pulsar®** calcium hypochlorite feeder, then the new **Pulsar®** pH Control system can help maintain proper pH levels in your pool, spa or water feature. The system is easily adjusted to balance the pH increases from hypochlorite sanitizers – with or without the use of an automated chemistry controller. For manual control with a **Pulsar®** Infinity feeder, use the charts below for the proper potentiometer (dial) settings of the **Pulsar®** pH Control system acid pump based on your Cal-Hypo chlorine output (**Pulsar®** Infinity manual, section 4.2.2) and feeder system configuration. For ORP/chemical control, plug the power cord into the ORP wired receptacle and use pump tube H (sold separately) and set potentiometer dial to 100%.

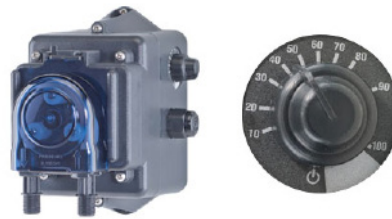
Operation

- The pump's flow rate output is adjusted using a potentiometer located on the right side of the pump and is also dependent on the pump tube
- Turning the potentiometer fully counterclockwise turns the pump off

- Turning the potentiometer clockwise gradually increases the speed to 100%
- Set the acid pump dial to the number that corresponds to the cartridge setting and inlet flow rate for your feeder. (Refer to your feeder manual, section 4.2.2, for help with the proper feed rate setting.)

NOTE: The numbers below are for start-up only. Monitor the pH closely for the first few days to determine the impact of bathers, fill water and other chemicals added to the pool and modify the pump output accordingly. Continue to test pH as often as the health code requires.

NOTE: Refer to the Stenner pump manual for pump tube flow rates.



Dial: Off – 100% Clockwise

1 Feeder	Inlet Flow Rate (gpm)								
CARTRIDGE Setting	0.5	1	1.5	2	2.5	3	3.5	4	4.5
	Pump Dial Setting (M Tube - default)								
A	6	9	12	14	16	19	21	26	36
B	7	11	14	16	18	20	22	27	38
C	8	12	16	18	19	21	24	28	39
D	•	•	•	19	20	22	26	31	40
E	•	•	•	•	21	23	28	33	47
F	•	•	•	•	•	25	31	35	59
G	•	•	•	•	•	•	33	38	71
H	•	•	•	•	•	•	•	40	82

2 Feeders	Inlet Flow Rate (gpm)								
CARTRIDGE Setting	0.5	1	1.5	2	2.5	3	3.5	4	4.5
	Pump Dial Setting (F Tube - sold separately)								
A	4	6	8	10	11	13	14	17	25
B	5	7	10	11	12	13	15	18	25
C	6	8	11	12	13	14	16	19	26
D	•	•	•	13	13	15	17	21	27
E	•	•	•	•	14	16	19	22	32
F	•	•	•	•	•	17	21	24	40
G	•	•	•	•	•	•	22	25	48
H	•	•	•	•	•	•	•	27	55

3 Feeders	Inlet Flow Rate (gpm)								
CARTRIDGE Setting	0.5	1	1.5	2	2.5	3	3.5	4	4.5
	Pump Dial Setting (F Tube - sold separately)								
A	6	10	12	14	17	19	21	26	37
B	7	11	14	17	18	20	23	27	38
C	8	12	17	18	19	21	24	29	39
D	•	•	•	19	20	23	26	31	40
E	•	•	•	•	21	24	29	33	48
F	•	•	•	•	•	25	31	36	59
G	•	•	•	•	•	•	33	38	71
H	•	•	•	•	•	•	•	40	83

WARNING: If not using the pH Control system with an ORP controller, be sure to connect the acid pump into a powered receptacle interlocked with the pool/spa pump to automatically shut down the acid pump during a no flow condition. Connecting the pump to an independent always powered receptacle may cause excessive acid injection into the pool/spa return and drop the pH down to dangerous levels.

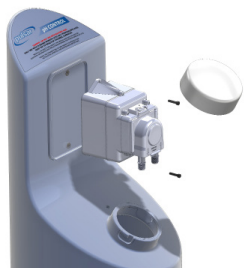
WARNING: If the acid pump of the pH Control system is connected to an independent always powered receptacle, be sure to manually shut off the pump whenever the pool pump is shut off to avoid excessive acid injection into the pool.

WARNING: Always use personal protective equipment including but not limited to chemical gloves, safety goggles and a full-face mask when handling acid to protect from liquid and vapor. Refer to the applicable Safety Data Sheets for the acid for additional information and precautions regarding the proper handling of acid.

WARNING: Refer to Stenner Pump manual for safety considerations regarding pump installation and operation.

Installation

- Mount pump onto acid tank using connecting screws
- The pump must be installed in a vertical position as shown in the installation diagram below
- Cut about 23" of the 1/4" OD tubing to use as the pump suction (length will allow tubing to suspend slightly above tank bottom to reduce chance of sediment pick up)
- Connect one end of the tubing to the suction side of the pump using the connecting nut and ferrule
- Insert the other end of the tubing into the 1/4" hole located right above the tank cap
- Use a hanger or tool to grab the end of the tubing within the tank to connect the weighted suction strainer



IMPORTANT: Follow the detailed instructions from pages 10 through 17 of the Stenner Econ LD Pump manual provided with the system to complete the installation of the pump to the tank and the injection point.

Specifications

Tank Capacity

Volume 10 GAL [37.8 L]
Graduations 0.25 GAL [1.1 L]

Tank Material

Translucent Blue LLDPE

System Dimensions

Width 13" [0.3 m]
Height 41.5" [1 m]
Depth 16" [0.4 m]
Weight 12.5 lbs (empty)

Pump Operating Parameters

Output Range 1-51 oz per hour [0.03 - 1.5 LPH]
Max Pressure 80 psi [5.5 bar]
Max Temperature 104° F [40° C]
Motor Voltage [Amp Draw] 120 V 60 Hz, 230 V 50 Hz (0.17)

USE WITH THE FOLLOWING ACID

20° Baume Muriatic

Serial Number

Part List

Part	Description	Qty	Part #
Pulsar® pH Control System	Complete acid feed system (pump with 2 pk M tubing and other accessories, acid tank with cap, suction and discharge tubing)	1	74448
Pulsar® Acid Tank	Acid tank, LLDPE [no tubing comes with the tank]	1	74440
Cap	Acid tank cap with compression washer	1	74466
Acid Pump	Stenner Econ LD Pump, model E10LHMA1S36 with 2 pk M tubing and other accessories	1	74445
Suction / Discharge tubing	1/4" OD polyethylene tubing, 20 ft roll	1	74454
Connecting Nuts	1/4" connecting nuts suction/discharge tubing and injection check valve, PVC	10 pk	74451
Connecting Ferrule	1/4" connecting ferrule suction/discharge tubing and injection check valve	10 pk	74452
Pump tube – M	Pump tube for 1 feeder system (works with included white roller assembly)	2 pk	74449
Pump tube – F	Pump tube for 2 and 3 feeder systems (works with included white roller assembly)	2 pk	74462
Pump tube - H	Pump tube for bigger feeders (works with black roller assembly)	2 pk	74461
Econ Roller Assembly (White)	Roller assembly for use with F & M pump tubes	1	74463
Econ Roller Assembly (Black)	Roller assembly for use with H pump tube	1	74464
Suction Strainer	Weighted suction strainer, PVC or polypropylene, 1/4"	1	74450
Injection Check Valve	Injection fitting with 1/4" FKM duckbill check valve	1	74453
Duckbill & O-ring	FKM duckbill & o-ring for injection check valve	2 pk	74468
Screws	#8-32 x 3/4" round head SS machine, pump to tank screws	2 pk	74465
Pool Calculator	Pool LSI slide calculator	1	74467