



CHEM-TECH

DIAPHRAGM AND PERISTALTIC METERING PUMPS

SIMPLE, RELIABLE, REAL PERFORMANCE



REAL PERFORMANCE **CHEM-TECH**

Pulsafeeder simplifies metering pump technology.

Technology is the key to delivering responsible products to the markets that we serve. Leading the way in the development of metering technologies, Pulsafeeder continues to set the standard for accuracy, reliability and safety.

Helping customers find a new approach to an old problem is what we do best.

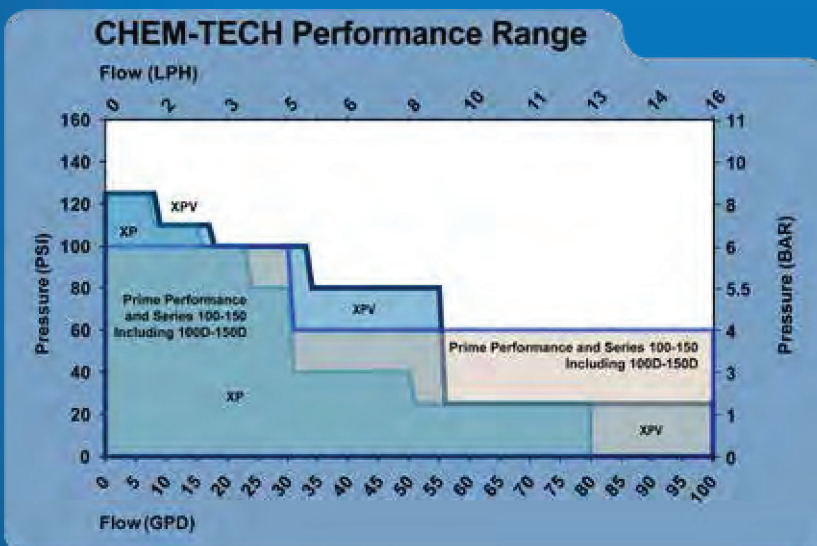
In the water conditioning market the CHEM-TECH product line has addressed the needs of professionals for over 50 years through products that are:

Reliable: Products you can rely on to precisely dose water treatment chemical(s) to meet your needs.

Easy-to-Use: Simple, intuitive products to operate and maintain, with as few parts as possible.

Affordable: True value, including initial purchase, operating costs and maintenance leading up to total cost of ownership benefit.

Long-lasting: Robust, durable components, products and systems designed and manufactured to withstand the conditions of service.



All Chem-Techs are tested and rated under hot conditions guaranteeing that the flow and pressure ratings meet the specifications.



MAKING YOUR LIFE EASY.

Pulsafeeder strives to offer everything necessary for your fluid handling needs. Offering a complete solution to your need of ancillary products that enhance and compliment Pulsafeeder pumps makes life simpler for water treaters.



DIAPHRAGM PUMPS FOR DEPENDABILITY AND EASE OF MAINTENANCE.

Diaphragm metering pumps are respected by professionals around the world for dependability, easy maintenance and versatility in a wide range of water conditioning applications. Fluid Handlers rely on Chem-Tech pumps for an economical, consistent performance.

The key element which differentiates these pumps from other types is the elastomer diaphragm. This diaphragm is sealed against the reagent head forming a seal-less, leak free pumping chamber. The motor is connected to the diaphragm to create the pumping motion. As the diaphragm moves away from the face of the reagent head, it creates a vacuum which closes the discharge check valve and opens the suction check valve, drawing the pumped fluid into the pumping chamber. As the motor forces the diaphragm toward the face of the reagent head, the suction check valve closes and the discharge check valve opens allowing the liquid to flow out the discharge valve.



100 / 150 SERIES

- Feed rates from 3 to 100 gpd (0.47 to 15.76 lph) / Pressures up to 100 psi (7 bar)
- Bleed Valve Assembly: Aids in the priming and relieves pressure from the discharge line
- pH Adjustment Applications: Soda Ash, Caustic



DEGASSING SERIES

- Feed rates from 15 to 100 gpd (2.34 to 15.76 lph) / Pressures up to 100 psi (7 bar)
- Self priming
- Degass Head Assembly: Top mounted vent valve evacuates gas bubbles for return to the tank to eliminate vapor lock
- Disinfection Applications: Chlorine, Hydrogen Peroxide, Chemicals that tend to out gas

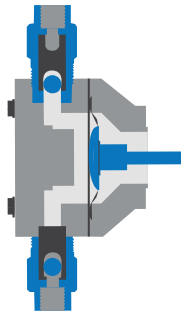
Simple Installation: Injection back pressure valve assembly enables injection at an angle and inhibits siphoning.

ADVANCED FEATURES AND FUNCTIONS TO BETTER SERVE YOUR CUSTOMERS.



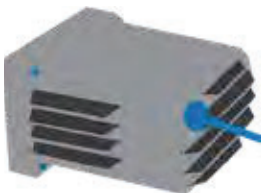
PREMIUM CONSTRUCTION.

- Few moving parts
- Chemical resistant materials: Motor and gear shaft are treated with a special lubricant to extend the life of the pump in normal operating environments
- Sealed gear train: Lowers maintenance and extends the life of the pump
- Feed rate control: The output is fully adjustable over the entire operating range



VISIBLE CHECK BALLS.

- Easy viewing to ensure proper operation on 100 / 150 Series
- Quad ball check system: Ensures accurate and reliable metering performance



MOTOR DRIVEN DIAPHRAGM.

- Cool running
- Long lasting

Features and functions that create a simple to use, reliable, robust diaphragm metering pumps that matter to Fluid Handlers, assisting them in distributing chemical into their system effectively and safely.

PERISTALTIC PUMPS INHERENTLY SELF PRIMING & OFF-GAS TOLERANT.

Peristaltic metering pumps are inherently self priming and off-gas tolerant making the Chem-Tech peristaltic pumps the ideal choice for chlorine and similarly volatile chemical applications. Fluid Handlers can select from multiple control configurations — with features and benefits that customers ask for. Fixed Rate models are simple and straight forward pumps for water conditioning applications where economy and ease-of-use are required. Adjustable Rate models with 20:1 turndown for enhanced flexibility. While the XPV Variable Rate models with LCD display makes simple, intuitive program selections and clearly displays operating parameters. Variable Rate models also allows a variety of choices of input signal types, and onboard timer programs to customize this pump to any application.

The head on a peristaltic pump consists of a piece of tubing and a roller assembly that moves chemical around the circular head. The engineered composite, three piece roller assembly reduces friction, while allowing a greater load capacity and longer tube life.



XP SERIES

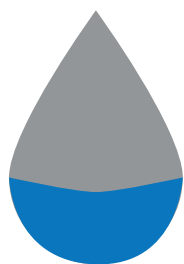
- Feed rates from 4 to 80 gpd (0.60 to 12.6 lph) / Pressures up to 125 psi (8.6 bar)
- Models: Fixed or Adjustable
- Inputs: Pulse, Dry Contact, Flow Switch Activated
- Timers: 7 Day/8 Event Electronic Timer models



XPV SERIES

- Feed rates from 8 to 100 gpd (1.3 to 15.8 lph) / Pressures up to 125 psi (8.6 bar)
- Variable Speed
- Flow Totalization: Accurately reports the volume pumped at the touch of a button
- Inputs: Fully scalable 4-20 mA, Hall Effect, Contacting Head Water Meter
- Timers: Cycle or Daily

ADVANCED FEATURES AND FUNCTIONS TO BETTER SERVE YOUR CUSTOMERS.



DESIGNED WITH THE WATER CONDITIONER IN MIND.

- Sealed gear train: Rugged, sealed, all metal gears, housed in a sealed metallic housing lowers maintenance and extends the life of the pump
- Metallic gear box with gasket
- Chemical resistant materials: The tubing assembly Norprene is the only wetted component within the pump for maximum compatibility



AUTOMATIC DEGASSING TECHNOLOGY.

- Mixed fluid capable: Peristaltic tube design with triple roller assembly pump both liquid and gas without risk of vapor lock
- Inherently degassing
- Self priming



SIMPLE INSTALLATION.

- Triple roller assembly prevents siphoning and eliminates the need for a foot valve/anti-siphon
- External control capable: Inputs = Fully scalable 4-20mA, Hall effect or Contacting head water meter

Easy tool less tube replacement; Stainless Steel wing bolts allow for quick and easy tube replacement.



AN ISO 9001 CERTIFIED COMPANY



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PULSAFEEDER®

The Chem-Tech Series 100 is the standard by which all other dosing pumps are judged, Chem-Tech Series 100/150 pumps with motorized-diaphragm technology deliver dependable performance and extended longevity. The Series 100/150 provides quiet, consistent metering over long periods of time in a compact form.

A tried-and-true electric motor transfers power via a sealed gearbox and eccentric cam for smooth, reliable dosing. Simple, adjustable system with knob and locking lever provide easy flow rate control and turndown. The compact, injection-molded housing and clear pump head offer both affordability and chemical resistance. The industrial grade, low-stress diaphragm provides long life, even in harsh conditions and continuous duty cycles.

Series 100 Models - The preferred metering pump for water conditioning professionals around the world. Perfect for applications where economical, consistent performance is required. Capable of a wide range of flows, from less than 3 USGPD (0.47 lph) up to 30 USGPD (4.72 lph) and pressures up to 100 PSIG (7 BAR).

Series 150 Models - Built upon the same solid platform as the 100 Models, these units are capable of higher flow rates. With a range offering up to 100 USGPD (15.76 lph), the Series 150 can meet the demands of larger applications. Maximum pressure is 60 PSIG (4.2 BAR).

FEATURES

- Guided Quad Check Valve System
- Bleed Valve Assembly Standard.
- Feed Rate Control.

CONTROLS



Feed Rate Control

- Adjustable Feed Rate.

OPERATING BENEFITS

- Reliable metering performance.
- Sealed gear train.
- Self priming.
- Chemical resistant materials.
- Simple installation.



DUFF WATER CONDITIONING
Products for Quality Water

 **CHEM-TECH**
Series 100, 150
Mechanical Metering Pumps

Standard Agency Listings

Model	ETL	ETL san
All 60Hz	X	X
100-150 50 Hz		
Contact factory for alternate listings		

SPECIFICATION AND MODEL SELECTION

MODEL Series 100	Control Parameters		MODEL Series 150	Control Parameters
X003.	3 gpd (0.47 lph) max pres.: 100 PSI (7 BAR)		X068	68 gpd (10.72 lph) max pres.: 60 PSI (4 BAR)
X007	7 gpd (1.00 lph) max pres.: 100 PSI (7 BAR)		X100	100 gpd (15.76 lph) max pres.: 60 PSI (4 BAR)
X015	15 gpd (2.34 lph) max pres.: 100 PSI (7 BAR)			
X024	24 gpd (3.78 lph) max pres.: 100 PSI (7 BAR)			
X030	30 gpd (4.72 lph) max pres.: 100 PSI (7 BAR)			

ENGINEERING DATA

Pump Head Materials Available	Clear PVC, PVC, PP, 316SS
Diaphragm	CSPE, Viton, PTFE-faced CSPE backed
Check Valves Materials Available	
Seats/O-Rings	PTFE, CSPE, Viton
Balls	Ceramic, PTFE, 316SS
Fittings Materials Available	GFPP, PVC, PVDF
Bleed Valve	Same as fitting and check valve selected, except 316SS
Injection Valve & Foot Valve Assy	Same as fitting and check valve selected
Tubing	Clear PVC, White PE, Black PE

Important: Material Code - GFPP=Glass-filled Polypropylene, PVC=Polyvinyl Chloride, PE=Polyethylene, CSPE=Generic formulation of Hypalon, a registered trademark of E.I. DuPont Company. Viton is a registered trademark of E.I. DuPont Company. PVC wetted end recommended for sodium hypochlorite.

Viscosity Max CPS	300 CPS
Power Input	115 VAC/60 HZ, 230 VAC/50 HZ, 230 VAC/60 HZ
Temperatur Limitaions	125°F / 51°C max
Shipping Weight	8 lbs. / 3.63 kg.
Approvals	Conforms to ANSI/NSF STD. 50 Equipment for swimming pools, spas, hot tubs, and other recreational water facilities.

AFTERMARKET

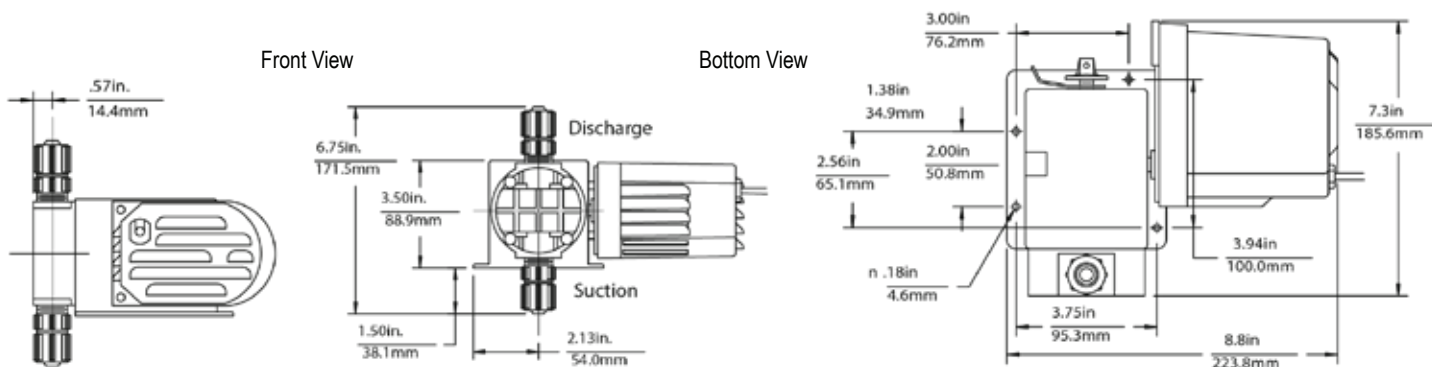
- KOPkits
- Gauges
- Dampeners
- Pressure Relief Valves
- Tanks
- Process Controllers (MicroVision)

INTEGRATED TANK SYSTEMS



Pulsafeeder's ITS System is a completely integrated tank system constructed of high density UV resistant polyethylene (PE) with a 15 gallon capacity. This tank system is translucent with 5 gallon increments and the tank's low level indicator allows visual monitoring of chemicals without opening the tank. The tight fitting child proof lid keeps the chemical free of contaminants and protects the surrounding area from chemical fumes. The ITS System also allows for easy access to the liquid end and control panel of the mounted pump. A system consists of a chemical tank with lid and bulkhead fittings, a liquid level indicator float assembly and feeder mounting hardware.

DIMENSIONS



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