



**Diaphragm & Peristaltic Metering Pump**

# Pulsafeeder Expertise

Since 1936, Pulsafeeder, Incorporated has been the recognized leader in fluids handling, electronic pump controllers and systems technology. We have always understood that leadership is comprised of many facets, all in balance: long-lasting, high performance products, comprehensive application solutions, innovative engineering designs, knowledgeable and attentive service, continuous improvements in R & D and manufacturing processes. Pulsafeeder works hard to maintain this balance - always with the goal to provide the best products and support for our customers.



XP Series Only



C USA  
 Tested and Certified by WQA against NSF/ANSI 61-Section 8 and CSA B483.1

## CHEM-TECH Series Pumps

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, people and services that are dependable trustworthy and available when needed.

**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.

### Product Specifications

- Flows to 120 gpd (19 lph) on specific series
- Pressures to 150 psi (10 Bar) on specific models

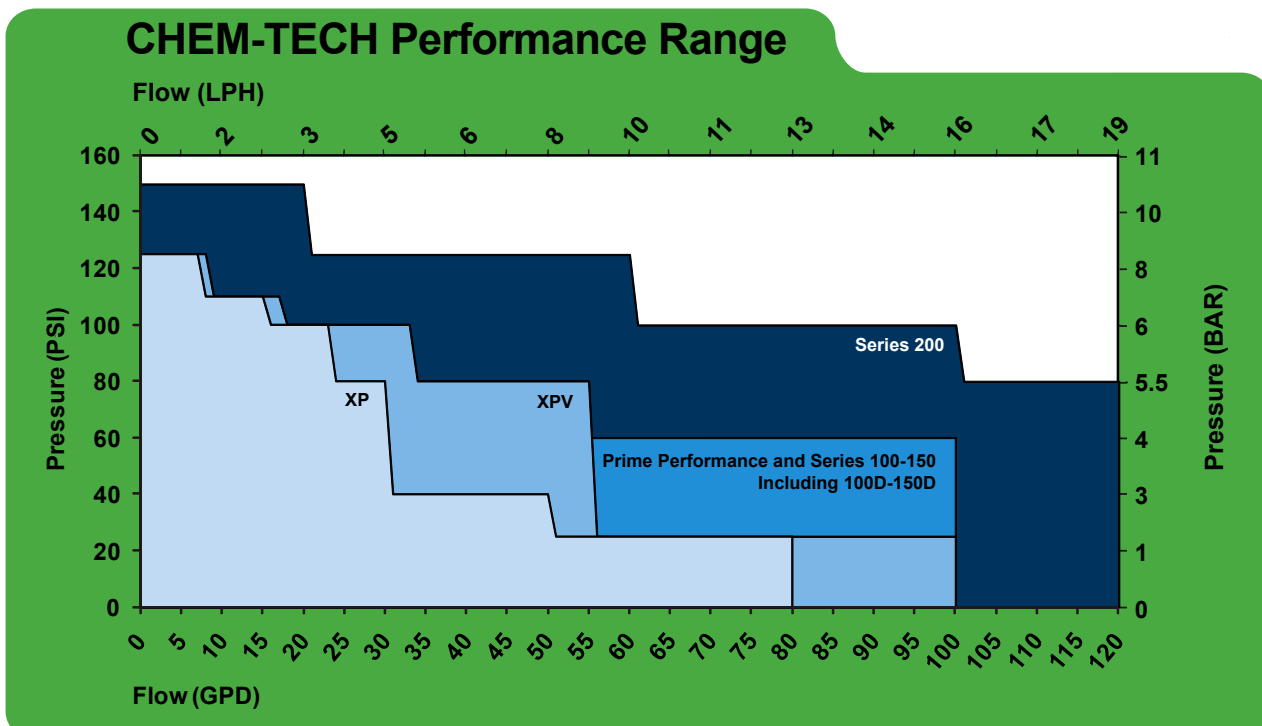
### Materials of Construction

- Housing - PBT / XP Series - ABS
- Head materials - GFPP, PVC, PPS, 303SS, 304SS
- Seats materials - CSPE, TFE, Viton, 304SS
- Ball materials - Ceramic, TFE, 316SS
- Diaphragm - PTFE faced CSPE
- XP Series Tubing - Norprene or Fluran

### Typical Applications

- Car Wash
- Water Conditioning
- Water Treatment
- Ware Wash

CSPE is a generic formulation of Hypalon, a registered trademark of E.I. DuPont Company. Viton is a registered trademark of E.I. DuPont Company.

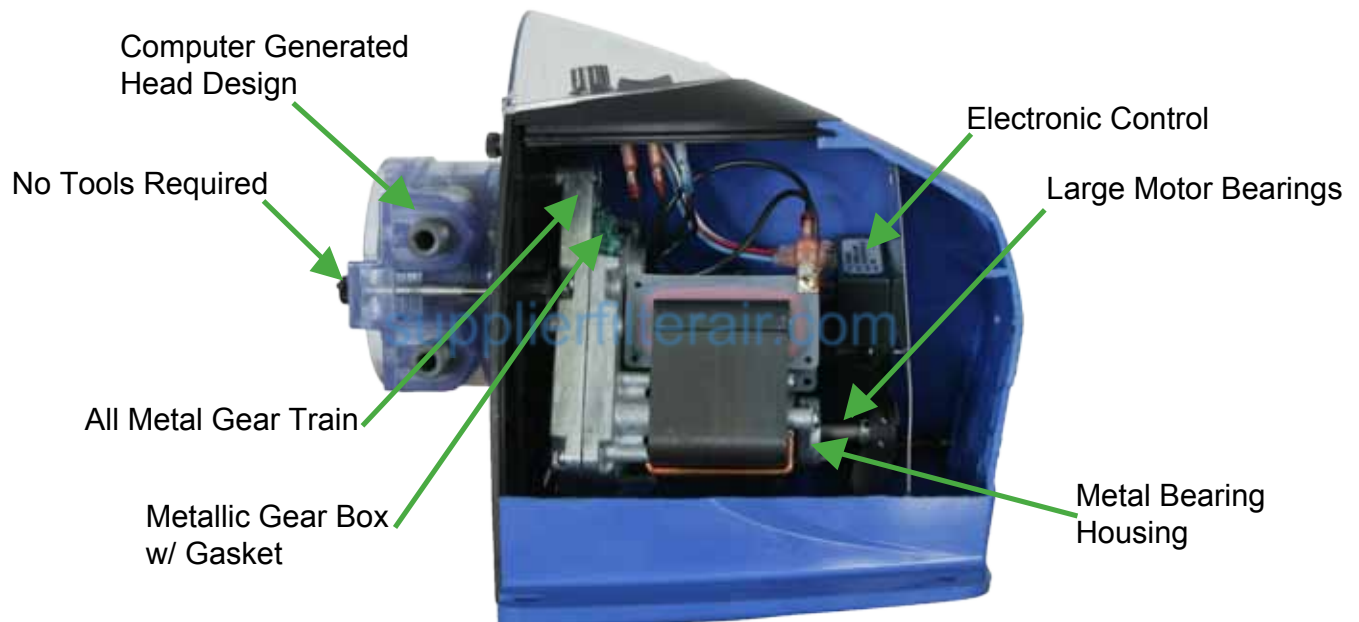


## **Diaphragm and Peristaltic Technology**

The CHEM-TECH family is comprised of either mechanical diaphragm metering pumps and peristaltic metering pumps.

**Diaphragm Pumps-** 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.

**Peristaltic Pumps-** 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. No tools are required to remove the tubing; Stainless Steel wing bolts allow for quick and easy tube replacement when needed.



## **CHEM-TECH Metering Pump Configurations**



The CHEM-TECH is available in several different series. Shown here are the Series XP, Series XPV, Series 100, Prime Performance, and Series 200.

## Features & Benefits



### **XP Series**

- Feed rates from 4 to 80 gpd (0.60 to 12.6 lph), pressures up to 125 psi (8.6 bar)
- Inherently degassing
- Self priming
- Fixed, Adjustable, Pulse Input, Dry Contact, Flow Switch Activated and 7 Day/8 Event Electronic Timer models
- Sealed gear train
- Chemical resistant materials



### **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
- Fully scalable 4-20mA input
- Hall effect input
- Contacting head water meter input
- Cycle timer / Daily timer



### **Prime Performance Series**

- Feed rates from 15 to 100 gpd (2.34 to 15.76 lph), pressures up to 100 psi (7 bar)
- Quad check valve system
- Chemically resistant materials
- Degassing pump head
- Stroke length control
- Self priming
- Sealed gear train



### **100 / 150 Series**

- Feed rates from 3 to 100 gpd (0.47 to 15.76 lph), pressures up to 100 psi (7 bar)
- Duplex head models available
- Quad check valve system
- Chemically resistant materials
- Stroke length control
- Self priming
- Sealed gear train



### **200 Series**

- Feed rates from 10 to 120 gpd (1.5 to 18.9 lph), pressures up to 150 psi (10.3 bar)
- Stroke length control
- Strong fibercore casing and corrosion-resistant rubber and plastic solution handling components
- Oil immersed gear train and heavy duty, fan cooled motor with thermal overload protection

# Features & Benefits

## Diaphragm Pumps

### Premium Standard Wettend Component Materials



- Few moving parts
- Chemical resistant materials

### Bleed Valve Assembly



- Standard on Series 100-200
- Safe & easy priming
  - Durable and leak free

### Visible Check Balls



- Easy viewing to ensure proper operation

### Motor Driven Diaphragm



- Cool running
- Long lasting

## Peristaltic Pumps

### Automatic Degassing Technology



#### Prime Performance Series

- Degas valve system

#### XP and XPV Series

- Mixed fluid capable
- Inherently degassing
- Self priming

### External Control Capable



#### XPV Series

- Fully scalable 4-20mA input
- Hall effect input

#### XP and XPV Series

- Contacting head water meter input

## Controls, Options and Systems

### Automatic Control

On CHEM-TECH XPV Series

- Variable speed
- Fully scalable 4-20mA input
- Hall effect input
- Flow totalization
- Contacting head water meter input
- Cycle timer or daily timer



### Integrated Tank System

Available on CHEM-TECH models except Series 200

- 15 gallon tank
- Bulk head assembly
- Flow indicator
- Float assembly
- Pump mounting plate

### Pre-Engineered Feed System

- Ease of selecting the right water meter and pump combination
- Mounted on panel
- Easy set up and installation
- Complete package ready to go



## Valve Options



### Five Function De-Gas Valve

- • De-Gas - Bypass gasses and fluid
- • Back Pressure
- • Anti-Siphon
- • Air Bleed
- • Discharge Drain



### Five Function Valve

- • Pressure Relief
- • Back Pressure
- • Anti-Siphon
- • Air Bleed
- • Discharge Drain

## Typical Applications

- Sodium Hypochlorite (Disinfection)
- Acid & Caustic (pH Adjustment)
- Corrosion Inhibitor
- Fertilizers
- Soap & Detergent



# Parts & Accessories



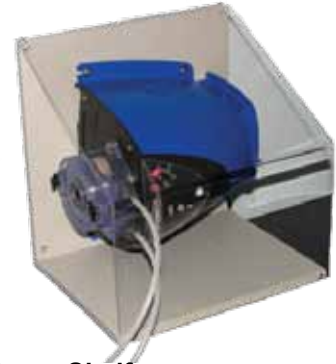
### KOPkits

When you need a part, you've got it. A KOPkit can help you cut downtime and put you back in business fast.



### Calibration Kit

Calibration columns are used on the supply side of the pump to permit flow calibration.



### Pump Shelf

Designed to safely and securely mount your metering pumps on a wall or level surface and contain any potential spills.



**Pulsation Dampeners** improve pump system efficiency by removing pulsating flows from positive displacement pumps.



### Corporation Stop

Pulsafeeder's high quality brass corporation stop and nozzle assembly disperses chemical into the center of a line for even mixing.



**Pressure Relief Valves** prevent an over pressurization situation from ever damaging your pumps or pipes. Over pressurization can occur when a valve is closed or a blockage occurs. They are always recommended equipment for any pump or skid system.



### Solution Tanks

Available in sizes from 15 to 500 gallon.



**Solenoid Valves** are used to permit and shut off fluid flow.

Contact your local Pulsafeeder  
Distributor or Pulsafeeder Technical  
Services at 800-333-6677