

# **Simplified Chemical Feed**

For municipal water treatment applications



# CHEM-FEED®

**Multi-Diaphragm Metering Pumps** 



# How does the CHEM-FEED<sup>®</sup> MD1 simplify chemical feed?



### Heavy-duty display shield

The UV and chemical-resistant display shield protects controls from harsh environments.

### Intuitive display

Simplified controls allow users to adjust output accurately, prime the pump, toggle control methods, and more.

### Hyperdrive technology

Patented Hyperdrive Technology allows alternating pumping action between two diaphragms, resulting in smooth pumping action and the elimination of vapor locking.

### Brushless DC motor

The BLDC motor reduces energy costs and is more durable than AC motors.

### Built-in leak detection

Patented Diaphragm Failure Detection (DFD) senses diaphragm rupture by detecting chemical in the pump head. There's no false trigge ng.

#### Exclusive DiaFlex<sup>®</sup> Diaphragms

The MD1's exclusive DiaFlex<sup>®</sup> Diaphragms will last the life of the pump, guaranteed.

### Innovative manifold design

Allows for multiple configuration possibilities. Suction and discharge ports can be positioned on the left and right side of the pump.

# **Simplified I/O connections**



#### IP67 rated M12 connection ports

Quick and reliable connection even in confined spaces. Protects against dust, moisture, and changes in temperature.

### USBC connection port

Download the latest firmware in the field, saving time while ensuring optimum performance.



# Nearly pulse-less chemical feed against high system pressures



# **CHEM-FEED<sup>®</sup> MD1**

The MD1 delivers smooth, continuous chemical feed even when injecting chemicals that off-gas. Remote control signal options include Remote Start/Stop, Flow Verification, and 4-20mA. Safe-ty features include built-in leak detection and a lockout feature that prevents tampering - patent pending.

# **Technical Overview**

GPH	.0007 - 7.7	Enclosure Rating	NEMA 4X (IP66)
LPH	.0029 - 29.2	Standards	cETLus, CE, NSF61
PSI	<b>Up to</b> 150	Power Supply	100 to 240VAC-50/60Hz
Bar	<b>Up to</b> 10.3	Warranty	5 years



# **Features**

### **Benefits of Multi-Diaphragm Technology:**

- Allows for smooth, nearly pulse-less chemical feed
- Self-priming even against maximum system pressure
- Will not vapor lock or lose prime
- Capable of achieving 20 feet of suction lift

### **Communication & Interface:**

- Remote Start/Stop: Non-powered dry contact closure
- Relay outputs include single 250V / 3A and single solid-state
- Compatible with Flow Verification Sensor system
- Scalable 4-20mA SCADA input
- 4-20 mA output



# **Exclusive DiaFlex® PVDF Diaphragms**

## Innovative design for a longer lasting diaphragm

Blue-White's exclusive DiaFlex® High-Performance Diaphragm is constructed of PVDF for exceptional chemical compatibility and is manufactured 100% in-house. DiaFlex® incorporates an innovative single-layer design resulting in zero breakdown or delamination, virtually eliminating field maintenance and downtime.

## Guaranteed to last the life of the pump

DiaFlex<sup>®</sup> comes standard on every CHEM-FEED<sup>®</sup> MD1 and is guaranteed to last the life of the pump. Blue-White will replace a damaged diaphragm at no cost to the customer, provided the pump was, at all times, operated within the guidelines included in the pump's operation manual.



# Premium accessories to complete your system

# **STAR III® Chemical Tanks**

STAR III® Chemical Tanks are made from natural polyethylene and UV inhibitors and will securely mount your chemical metering pump for easy access. All necessary accessories are included.

- KIT STAR-3 7 Gallon Tank
- KIT STAR-3 15 Gallon Tank
- KIT STAR-3 30 Gallon Tank

# **Quick Disconnect Fittings**

Safely and quickly disconnect your pump with Blue-White's Quick Disconnect Fittings. The red discharge fitting has an automatic check valve, preventing chemical backflow. The white suction fitting functions as a check valve when tubing is detached, preventing loss of prime and spills during routine maintenance.

- KIT-CQA Quick Disconnect CD1 AFLAS
- KIT-CQE Quick Disconnect CD1 EP

# Wall Mount Kit

Mount your pump at a convenient height to improve ergonomics. The wall mount kit comes with a tough, chemical resistant high-density polyethylene bracket and four concrete wall anchors.

**KIT-PSM** 

# M12 Connection Cables

Compatible with Blue-White's CHEM-FEED® MD1, our M12 connection cables offer fast and easy connections even in challenging conditions. Their IP67 rating means they're protected against dust, moisture, and changes in temperature.

- KIT-M12 M12 Cable Assembly, 10 ft, Qty 2
- KIT-M12-2-15 M12 Cable Assembly, 15 ft, Qty 2
- KIT-M12-2-30 M12 Cable Assembly, 30 ft, Qty 2
- KIT-M12-3 M12 Cable Assembly, 10 ft, Qty 3 •
- KIT-M12-3-15 M12Cable Assembly, 15 ft, Qty 3
- KIT-M12-3-30 M12 Cable Assembly, 30 ft, Qty 3 •

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Fluid metering solutions made simple<sup>™</sup>











**Blue-White**