

Simplified Chemical Feed

For municipal water treatment applications



CHEM-FEED®

Multi-Diaphragm Metering Pumps

MD1

How does the CHEM-FEED® 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 reducing the risk of vapor lock.

Brushless DC motor

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

Reliable Double Ball Check Cartridges

Ensures proper seating of suction and discharge ball checks for reliable pumping.

Built-in leak detection

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

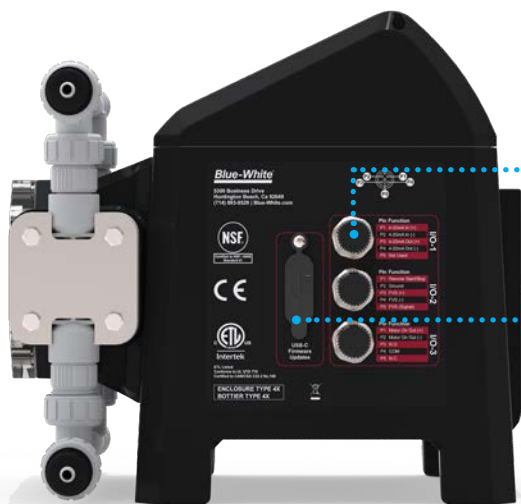
Exclusive DiaFlex® Diaphragms

The MD1's exclusive DiaFlex® Diaphragms designed to last the life of the pump.

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.

CHEM-FEED® 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. Safety features include built-in leak detection and a lockout feature that prevents tampering - patent pending.



Technical Overview

GPH	.0008 - 8.0	Enclosure Rating	NEMA 4X (IP66)
LPH	.0032 - 30.3	Standards	cETLus, CE, NSF61
PSI	Up to 150	Power Supply	100 to 240VAC-50/60Hz
Bar	Up to 10.3	Warranty	5 years

Features

Benefits of Multi-Diaphragm Technology:

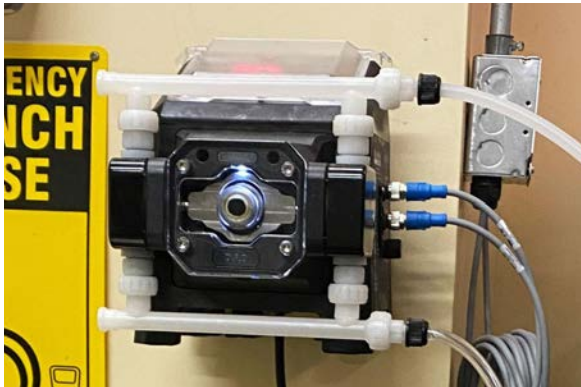
- Allows for smooth, nearly pulse-less chemical feed
- Self-priming – ideal for intermittent pumping operations
- Full stroke length clears gases from pump head
- Capable of achieving 20 feet of suction lift

Multiple Inlet and Outlet Fitting Options/Configurations:

- Straight and Elbow fittings available
- 1/2" MNPT, 1/2" Hose Barb, and 1/4"x3/8" compr. options
- Reversible inlet/outlet manifolds allow suction/discharge from right or left side
- Maximum installation flexibility

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 (FVS) system
- Scalable 4-20 mA SCADA input
- Non-scalable 4-20 mA SCADA 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. DiaFlex® incorporates an innovative single-layer design resulting in zero breakdown or delamination, significantly reducing field maintenance and downtime.

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



Elbow or Straight Adapter Fitting Kits

Straight adapters for horizontal connection. Elbow adapters allow for connection to vertically oriented suction and discharge tubing/piping.

- KIT-CA1TZZ Elbow Kit, 3/8" OD tubing, Aflas
- KIT-CE1TZZ Elbow Kit, 3/8" OD tubing, EP
- KIT-CA1SZZ Straight Kit, 3/8" OD tubing, Aflas
- KIT-CE1SZZ Straight Kit, 3/8" OD tubing, EP
- KIT-CA1XZZ Elbow Kit, 1/2" MNPT, Aflas
- KIT-CE1XZZ Elbow Kit, 1/2" MNPT, EP
- KIT-CA1MZZ Straight Kit, 1/2" MNPT, Aflas
- KIT-CE1MZZ Straight Kit, 1/2" MNPT, EP
- KIT-CA1CZZ Elbow Kit, 1/2" Hose Barb, Aflas
- KIT-CE1CZZ Elbow Kit, 1/2" Hose Barb, EP
- KIT-CA1BZZ Straight Kit, 1/2" Hose Barb, Aflas
- KIT-CE1BZZ Straight Kit, 1/2" Hose Barb, EP



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 MD1 AFLAS
- KIT-CQE Quick Disconnect MD1 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 M12 Cable Assembly, 15 ft, Qty 3
- KIT-M12-3-30 M12 Cable Assembly, 30 ft, Qty 3