# What makes Chem-Pro a Superior Diaphragm Metering Pump? Leading Edge Features and Materials.



chemical compatibility.

 Manufactured 100% in-house exclusively for use on Chem-Pro® Diaphragm Metering Pumps.



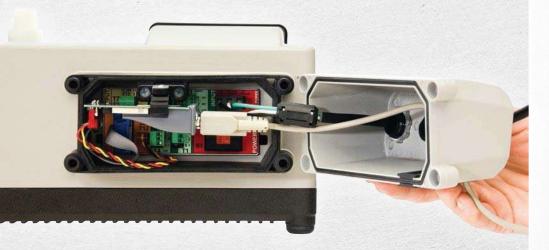
CHEM-PRO® C2 AND C3 DIAPHRAGM METERING PUMPS provide superior chemical resistance and precision chemical metering capabilities. The C2 and C3 are designed to provide excellent service in a wide range of applications.

The Chem-Pro's thoughtfully engineered design begins with a substantial control pad that's easy to use and highly intuitive. A protective snap-on polycarbonate cover protects the LCD control pad from UV and the elements. The Chem-Pro® PVDF pump head is designed to provide unparalleled service and precision feed with large double ball ceramic valves.

The large single piece Junction Box provides quick access to the terminal block connectors, and includes additional ports for external wiring, such as; Profibus, Ethernet, Etc. Some additional Chem-Pro® features and benefits include: A remote Start/Stop function; feed rate resolution to 0.1% and a rugged Variable Speed Drive.

#### SERIAL AND ETHERNET COMMUNICATIONS

- Large single piece junction box with terminal block connectors inside (40% more room).
- SCADA Ready (Requires C2V, or C3V control options): Smart communications: Ethernet, Profibus etc.
   Communication connection shown below



## **FLUIDS**

• Chlorine, Acid, Caustic, Alum, Ferric Chloride, Sodium Bisulfite, Ink, Dye and Flocculent and other fluids.

Customers are required to do their own compatibility testing.

## **ELECTRONIC INTERFACE**

- The operator friendly touchpad with menu driven software features a one button prime mode.
- VGA Graphic Multi-Color backlit LCD Displays:
  - Motor speed
  - Input signals
  - · Service and alarm status

#### **CHEM-PRO® FEATURES**

- Smooth chemical feed- no hammering as seen with solenoid pumps.
- Increased feed rate resolution to .1% (1-100% feed rate in .1% increments).
- · Remote start/stop standard.
- Smooth, Full stroke every time avoids vapor-lock.
- Display in % motor speed.
- · Upgradeable firmware.
- Large PVDF, ceramic, TFE/P double ball check valve without metal springs.
- Compatible with FVS (Flow Verification Sensor) System; Alarm Relay monitors chemical injection failure.

# TECHNICAL SPECIFICATIONS

#### **OUTPUT FEED RATES**

- C2 Minimum .08 GPH (.31 LPH) Maximum 21 GPH (78 LPH)
- C3 Minimum .25 GPH (.96 LPH) Maximum 40 GPH (153 LPH)

#### **PRESSURE**

- C2 Maximum 175 PSI (10.3 bar) Maximum suction lift: 15ft / Water, 0 PSI (4.5 m, 0 bar)
- C3 Maximum 150 PSI (10.3 bar)
  Maximum suction lift: 15ft / Water,
  0 PSI (4.5 m, 0 bar)

#### **CONTROL OPTIONS**

#### SCADA INPUTS

- Scalable 4-20mA.
- · Frequency, AC Sine Wave, TTL, CMOS.
- Flow Verification Sensor.
- Remote start/stop (Wet 6-24 VDC and Dry non-powered Contact options).

#### OUTPUT

- · 4-20mA (optional).
- · Relay (3AMP).
- Open Collector Motor Active.

Communication interface available:
Profibus DPV1, Modbus RTU,
Modbus TCP, Industrial EtherNet/
IP, Profinet RT I/O. Communication
interface only available with the
4-20mA option.

#### MOTOR

Continuous duty cycle, variable speed DC motor.

C2 166 strokes/min

C3 130 strokes/min

# **MOTOR SPEED ADJUSTMENT RANGE**

1-100% in 0.1% increments.

# **DIMENSIONS**

 C2
 Height Width
 7.75" (19.7 cm)

 Width
 11.75" (29.8 cm)

 Depth
 10.75" (27.4 cm)

 Weight
 24 lbs. (10.9 kgs)

C3 Height 9" (22.8 cm)
Width 13.125" (33.3 cm)
Depth 10.75" (27.4 cm)
Weight 29 lbs. (13.15 kgs)

#### **ENVIRONMENT**

NEMA 4X (IP66) Washdown duty.