

CHEM-FEED® Diaphragm Metering Pumps

Engineering and Technical Data

4-20mA on-time cycle control



- Double-ball inlet and outlet cartridge type ceramic check valves. Chemical resistant PVDF valve body and fitting, ceramic balls, Viton static seals and TFE/P ball seat o-rings. No metal springs are used.
- 4 operating modes; manual on time per cycle adjustment, pulse input batching, 4-20mA on time per cycle adjustment, and 0-10v DC on time per cycle adjustment.
- Stroke length can be manually adjusted to 5% of maximum.
- Repeating interval on-time cycle timer is programmable in seconds, minutes, hours and days resulting in near infinite turndown ratio. Example: 5 seconds on per 10 day cycle.
- On time per cycle can be controlled via 4-20mA signal. Note: 20mA must equal maximum pump output.
- Digital interval timer & 5-100% stroke adjustment results in a high frequency of small injections per minute.
- Outputs to 15 GPH (56.8 LPH).
- Output pressures to 150 PSI (10.3 bar).
- Teflon coated EP diaphragm.
- PVDF suction (foot) valve with Viton and TFE/P o-rings, ceramic check ball and removable polypropylene filter screen.
- Includes 3/8" OD suction and discharge tubing, Injection fitting with spring-loaded check valve and all mounting hardware.
- Durable housing of chemical resistant Valox (PBT) thermoplastic.

Max. working pressure:150 psig (10.3 bar)
Max. fluid temperature:130° F (54° C)
Max. Ambient temperature: ..14° to 110° F/ -10° to 43° C
Maximum viscosity:1,000 Centipoise
Maximum suction lift:10 ft. Water 0 psig
Output adjustment range:4000:1
Stroke length:.....5-100%
Cycle Timer:0.1 - 99 seconds (0.1 - 100%)
Duty cycle:.....Continuous
Enclosure:NEMA 3R, (IP23)
Approximate shipping wt: ...10 lb. (4.2 kg)

Voltage (max amp):

-115VAC/60Hz, 14 & 30 rpm = 1.37 amp
 45, 60, 125, 250 rpm = 1.87 amp
- 230VAC/60Hz, 14 & 30 rpm = 0.64 amp
 45, 60, 125, 250 rpm = 0.74 amp
- 220VAC/50Hz, 14 & 30 rpm = 0.68 amp
 45, 60, 125, 250 rpm = 1.14 amp
- 240VAC/50Hz, 14 & 30 rpm = 0.66 amp
 45, 60, 125, 250 rpm = 1.04 amp

Power Cord Plug Type:

-115V60Hz = NEMA 5/15 (USA)
- 230V60Hz = NEMA 6/15 (USA)
- 220V50Hz = CEE 7/VII (EUROPE)
- 240V50Hz = CEE 7/VII (EUROPE)

Pump Head Inlet/outlet Valves:

Cartridge valve body:PVDF

Tube adapters:PVDF

Check Balls:Ceramic

Ball Seat O-ring:.....TFE/P (optional EP)

Static Seal O-ring:.....Viton® (optional EP)

Suction Footvalve/Strainer:

Body & Tubing adapter:.....PVDF (optional Teflon)

Strainer:Polypropylene

Check Ball:Ceramic (optional Teflon poppet)

Ball Seat O-ring:.....TFE/P (optional EP)

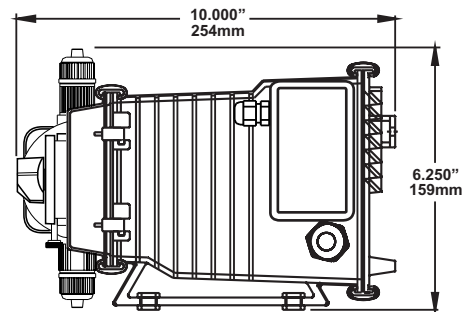
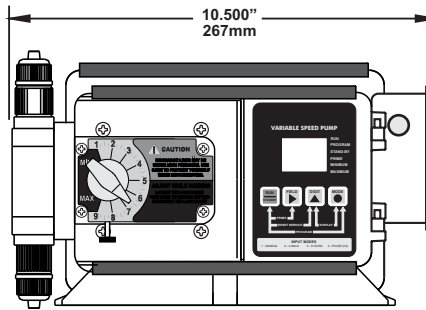
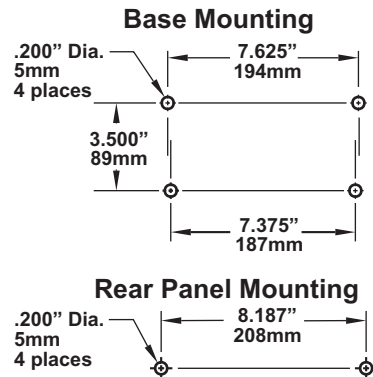
Static Seal O-ring:.....Viton® (optional EP)

Pump Head: Polypropylene (options: Teflon, Acrylic)
Suction Tubing: Clear PVC
Discharge Tubing: Natural Polyethylene (LLDPE)
Injection/Check valve:
 Body & insert: Polypropylene (optional PVDF, Teflon)
 Check Ball: Ceramic (optional Teflon poppet)
 Spring: Hastelloy C-276
 Ball Seat O-ring: TFE/P (optional EP)
 Static Seal O-ring: Viton® (optional EP)
 Duckbill Valve: Santoprene®

Blue-White Industries, Ltd.

CHEM-FEED® Diaphragm Metering Pumps

Dimensions:



Model Number Matrix:

MODEL C 11 E									
Pump system selection									
C = Pump without tank system									
T = Pump mounted on STAR-3 tank									
Output Control									
V = Digital speed control with external input									
F = Analog speed control									
C = Analog timer, 5 sec. Cycle - 100% duty									
A = Analog timer, 60 sec. Cycle - 100% duty									
E = Digital batch timer with external input									
X = No output control - fixed feed rate									
Maximum Motor RPM									
0 = 14 RPM			3 = 60 RPM						
1 = 30 RPM			4 = 125 RPM						
2 = 45 RPM			5 = 250 RPM						
Power Supply (motor protection)									
4 = 115V60Hz (TP)									
5 = 220V50Hz (TP)*									
6 = 230V60Hz (TP)									
7 = 240V50Hz (TP)*									
TP = Thermal protection									
Cam Stroke Length									
1 = .125"			3 = .187"						
2 = .055"			4 = .100"						
Electrical Options									
X = Standard Equipment									
A = Junction box replaces power cord									
P = Power cord and junction box									
R = 230V Power cord w/NEMA 6/15 plug									
Z = Proportional feed system - JBox/Cord									