

Blue-White[®]

Industries, Ltd.

CHEM-FEED[®] Diaphragm Metering Pumps

Engineering and Technical Data

C-1100E

Fixed Speed

Digital Timer Control

Pulse Input Batching

**4-20mA on-time
cycle control**



Features:

- 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.

Specifications:

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/VI (EUROPE)

240V50Hz = CEE 7/VII (EUROPE)

Materials of Construction:

Wetted components:

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[®]

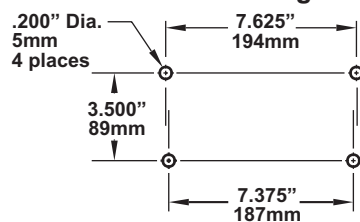
Blue-White

CHEM-FEED Diaphragm Metering Pumps

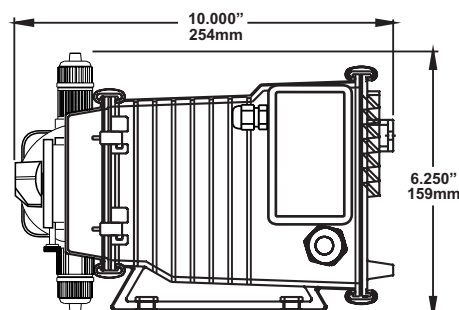
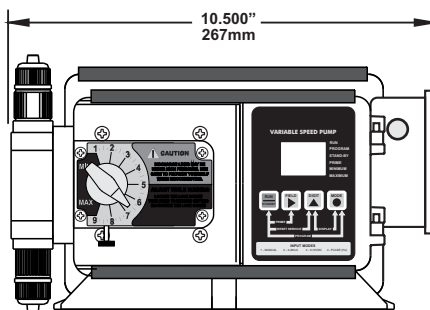
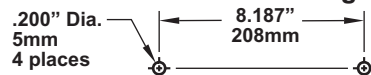
Industries, Ltd.

Dimensions:

Base Mounting



Rear Panel Mounting



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																
Footvalve / Tank Capacity		0 = C-340 1 = C-345 2 = C-340-6T A = 7 Gallons (U.S.) B = 15 Gallons (U.S.) C = 30 Gallons (U.S.)																
Injection Fitting		0 = A-014N (Polypropylene - 1/2 lb spring) 1 = C-395N (Polypropylene - 6 lb spring) A = A-014-6T (Teflon - 1/2 lb spring) B = C-395-6T (Teflon - 6 lb spring) C = A-014NK (PVDF - 1/2 lb spring) D = C-395NK (PVDF - 6 lb spring)																
Elastomer Material		V = Viton E = EP																
Diaphragm Style		0 = Large Teflon/EP 1 = Large Teflon/Viton 6 = Small Teflon / EP 7 = Small Teflon / EP																
Pump Head Style		0 = Large Diaphragm 2 = Small Diaphragm 5 = Large Pressure release 7 = Large Diaphragm w/single ball valve																
Pump Head Material		0 = Injection molded Polypropylene 4 = Machined Teflon 5 = Machined Acrylic																

Flow rate and pressure capacities:

Max Output at 0 PSI					Strokes	Max	115V/60Hz	230V/60Hz	220V/50Hz*
GPD	GPH	LPH	OZ/MIN	Per minute	PSI	Model Number	Model Number	Model Number	
57.7	2.4	9.1	5.1	60	150	C11E344X000V00	C11E364X000V00	C11E354X000V00	
119.7	4.9	18.9	10.6	125	150	C11E444X000V00	C11E464X000V00	C11E454X000V00	
155.9	6.4	24.6	13.8	125	150	C11E441X000V00	C11E461X000V00	C11E451X000V00	
260.8	10.8	41.1	23.1	250	100	C11E544X000V00	C11E564X000V00	C11E554X000V00	
360.0	15.0	56.8	32.0	250	25	C11E543X000V00	C11E563X000V00	C11E553X000V00	

Note: 50Hz units deliver 20% less output PSI

Maximum Output vs. Pressure

