

Blue-White[®]

Industries, Ltd.

CHEM-FEED[®] Diaphragm Metering Pumps

Engineering and Technical Data

C-1700N

Dual Independently Adjustable Heads

Fixed Speed



Features:

- Simultaneously feed two chemicals, in proportion to each other, with one pump.
- All ball bearing, permanently lubricated gear motor for smooth, quiet, powerful operation.
- 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.
- Dual, Independent stroke adjustment from 5-100% permits accurate small injections at a high rate per minute.
- Outputs to 48 LPH (304.2 GPD). (Total both heads)
- Output pressures to 125 PSI.
- Teflon coated EP diaphragms.
- Includes visual flow indicators on the suction line tubing.
- Outdoor rated enclosure.
- Durable housing of chemical resistant Valox (PBT) thermoplastic.
- PVDF suction (foot) valves with Viton and TFE/P o-rings, ceramic check balls and polypropylene filter screens.
- Includes 2 sets of 3/8" OD suction and discharge tubing, 2 Injection fittings with spring-loaded check valves and all mounting hardware.

Specifications:

Max. working pressure:125 psig (8.6 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:5-100% stroke length
 Duty cycle:Continuous
 Enclosure:NEMA type 3R, (IP23)

Voltage (amp draw):115VAC/60Hz, 1ph (.74 amp max)
 230VAC/60Hz, 1ph (.36 amp max)
 220VAC/50Hz, 1ph (.31 amp max)
 24VAC/60Hz, 1ph (3.40 amp max)
 Power Cord Plug Type:115V60Hz = NEMA 5/15 (USA)
 230V60Hz = None (junction box)
 220V50Hz = CEE 7/VII (EUROPE)
 24V50Hz = None (junction box)

Approximate shipping wt: ...8 lb. (3.6 kg)

Materials of Construction:

Wetted components:

Pump Head:Polypropylene (options: Teflon, Acrylic)
 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 Tubing:Clear PVC
 Flow indicator:Clear PVC body, glass ball
 (Carwash models use 316 SS ball)
 Discharge Tubing:Natural Polyethylene (LLDPE)

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)

Injection/Check valve:

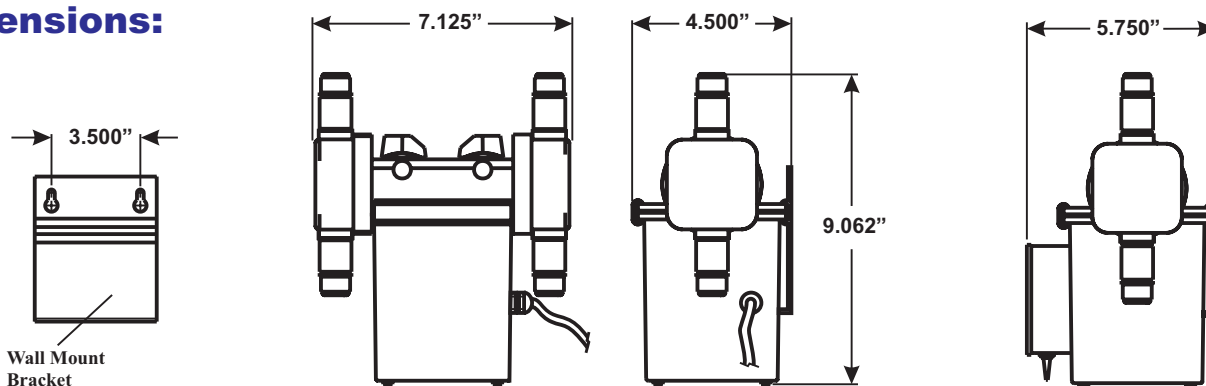
Body & insert:Polypropylene (optional PVDF, Teflon)
 Check Ball:Ceramic (optional Teflon poppet)
 Spring:Hastelloy C-276
 Ball Seat O-ring:TFE/P (optional EP)
 Static Seal O-ring:Viton[®] (optional EP)

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Dimensions:



Model Number Matrix:

MODEL C17N											
Maximum Motor RPM		Footvalve		Injection Fitting		Elastomer Material		Diaphragm Style		Pump Head Style	
0 = 14 RPM	3 = 60 RPM	0 = C-340 (PVDF/Polypropylene)	0 = A-014HD (Polypropylene - 1/2 lb spring)	V = Viton	0 = Large Teflon/EP	0 = Large Diaphragm	0 = Injection molded Polypropylene				
1 = 30 RPM	4 = 125 RPM	1 = C-345 (PVDF/Polypropylene - bulkhead mount)	1 = C-395HD (Polypropylene - 6 lb spring)	E = EP	1 = Large Teflon/Viton	2 = Small Diaphragm	4 = Machined Teflon				
2 = 45 RPM		2 = C-340-6T (Teflon)	A = A-014-6T (Teflon - 1/2 lb spring)		2 = Small Diaphragm	4 = Large Diaphragm Carwash	5 = Machined Acrylic				
Power Supply (motor protection)											
0 = 115V60Hz (IP)	6 = 230V60Hz (TP)										
1 = 220V50Hz (IP)	7 = 24V60Hz (ID)										
2 = 230V60Hz (IP)	8 = 115V60Hz (TP/ID)										
3 = 24V60Hz (IP)	9 = 220V50Hz (TP/ID)										
4 = 115V60Hz (TP)	A = 240V50Hz (TP)										
5 = 220V50Hz (TP)											
IP = impedance protection, TP = Thermal protection, ID = intermittent duty only											
Cam Stroke Length											
1 = .125"	3 = .187"										
2 = .055"	4 = .100"										
Output Control & Electrical											
X = Standard Equipment											
I = Analog timer, 5 sec. Cycle - 100% duty											
K = Analog timer, 60 sec. Cycle - 100% duty											
A = Junction box replaces power cord											
C = On/Off switch and junction box											
P = Power cord and junction box											
R = 230V Power cord w/NEMA 6/15 plug											
T = 230V Power cord and on/off switch											
Z = Proportional feed system - JBox/Cord											

Flow rate and pressure capacities:

Standard models with Stroke Adjustment (20:1 turndown)

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
14.2	0.6	2.3	1.3	14	125	C17N002X000V00	C17N022X000V00	C17N012X000V00
28.9	1.2	4.5	2.6	14	125	C17N004X000V00	C17N024X000V00	C17N014X000V00
50.2	2.1	7.9	4.4	45	125	C17N202X000V00	C17N222X000V00	C17N212X000V00
62.3	2.6	9.8	5.5	60	125	C17N302X000V00	C17N322X000V00	C17N312X000V00
89.7	3.7	14.1	8.0	45	125	C17N204X000V00	C17N224X000V00	C17N214X000V00
119.0	5.0	18.8	10.6	60	125	C17N304X000V00	C17N324X000V00	C17N314X000V00
133.8	5.5	21.1	11.9	125	125	C17N402X000V00	C17N422X000V00	C17N412X000V00
243.3	10.1	38.4	21.6	125	70	C17N404X000V00	C17N424X000V00	C17N414X000V00
304.2	12.6	48.0	27.0	125	20	C17N401X000V00	C17N421X000V00	C17N411X000V00

* Note: 220V/50Hz models deliver approximately 20% less output.

Maximum Output vs. Pressure

