Blue-White® Industries, Ltd.

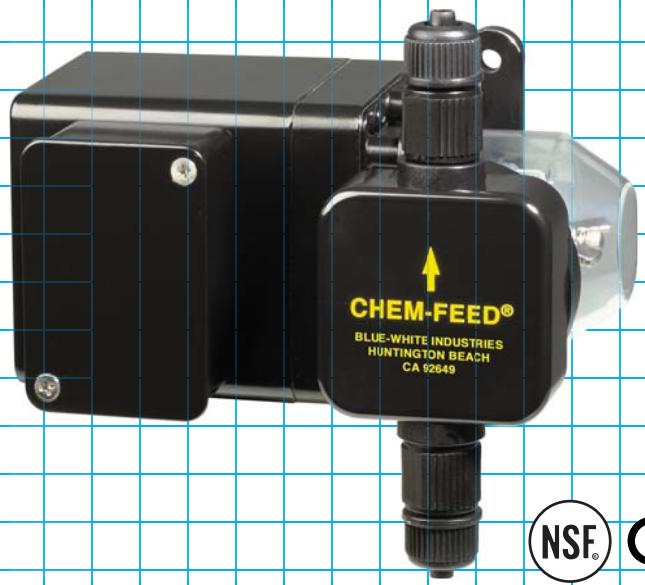
CHEM-FEED® Diaphragm Metering Pumps

Engineering and Technical Data

C-600P

Fixed Speed

Mechanical Cam Output Adjustment



Features:

- **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 pump head, valve body and fittings, ceramic balls, FKM static seals and TFE/P ball seat o-rings. No metal springs are used.**
- **Outputs to 516 GPD.**
- **Output pressures to 125 PSI.**
- **Stroke adjustment from 4-100% permits accurate small injections at a high rate per minute. 27:1 turndown**
- **PTFE coated EP diaphragm.**
- **Durable metal epoxy coated construction.**
- **PVDF suction (foot) valve with FKM and TFE/P o-rings, ceramic check ball and removable polypropylene filter screen.**
- **Includes 3/8" OD x 1/4" ID suction and discharge tubing, Injection fitting with spring-loaded check valve 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: ....4-100% stroke length
Duty cycle:.....Continuous
Enclosure: .....NEMA type 1, (IP20)

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)
12VDC (3.00 amp max)
24VDC (1.50 amp max)
Power Connection: .....Junction box for field wiring
Approximate shipping wt: ...8 lb. (3.6 kg)

Materials of Construction:

Wetted components:

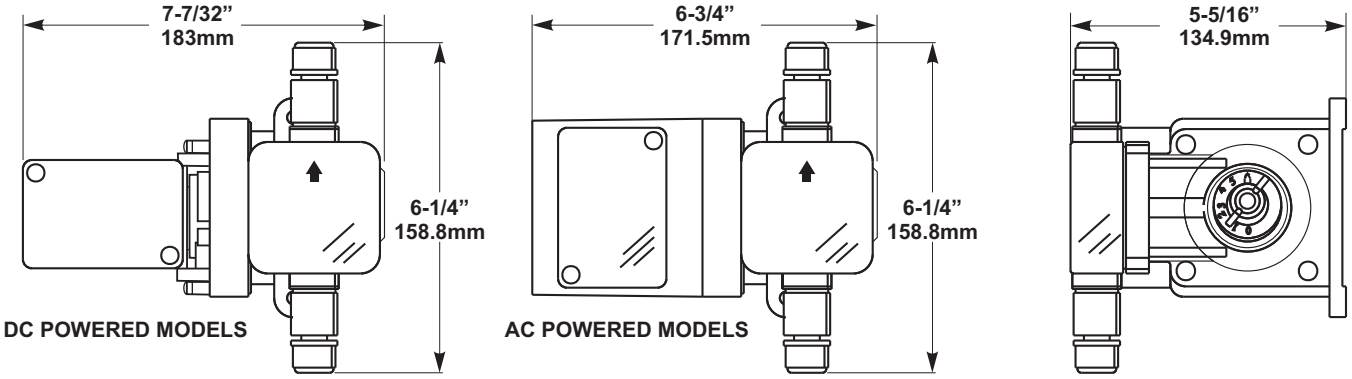
Pump Head:.....PVDF (options: PTFE, Acrylic)
Pump Head Inlet/outlet Valves:
Cartridge valve body: .....PVDF
Tube adapters: .....PVDF
Check Balls: .....Ceramic
Ball Seat O-ring:.....TFE/P (optional EP)
Static Seal O-ring:.....FKM (optional EP)
Suction Tubing:.....Clear PVC
Discharge Tubing:.....Natural Polyethylene (LLDPE)

Suction Footvalve/Strainer:
Body & Tubing adapter:.....PVDF (optional PTFE)
Strainer: .....Polypropylene
Check Ball: .....Ceramic (optional PTFE poppet)
Ball Seat O-ring:.....TFE/P (optional EP)
Static Seal O-ring:.....FKM (optional EP)
Injection/Check valve:
Body & insert: .....Polypropylene (optional PVDF, PTFE)
Check Ball: .....Ceramic (optional PTFE poppet)
Spring: .....Hastelloy C-276
Ball Seat O-ring:.....TFE/P (optional EP)
Static Seal O-ring:.....FKM (optional EP)

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CHEM-FEED® Diaphragm Metering Pumps

Dimensions:



Model Number Matrix:

MODEL C-6 [ ] [P] - [ ]

Maximum Motor RPM

14 = 14 RPM	**60** = 60 RPM
30 = 30 RPM	**125** = 125 RPM
45 = 45 RPM	**250** = 250 RPM

Pump Head / Wet Parts

P = Heavy duty cartridge style polypropylene head
HV = High volume output acrylic head

Power Supply Voltage

115VAC = 115V60Hz
220VAC = 220V50Hz (20% less output)
230VAC = 230V60Hz
24VAC = 24V60Hz
12VDC = 12V DC
24VDC = 24V DC

Flow rate and pressure capacities:

AC powered models:

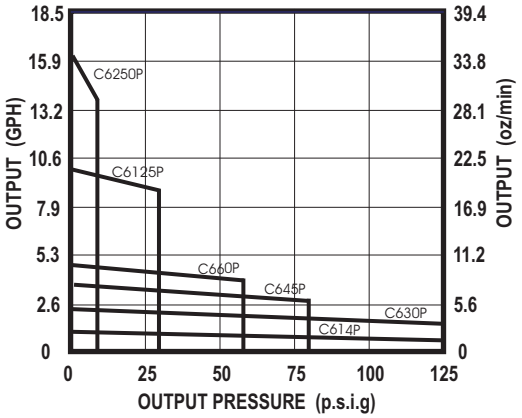
Max Output at 0 PSI GPD	GPH	LPH	OZ/MIN	Strokes Per minute	Max PSI	115V/60Hz Model Number	230V/60Hz Model Number	220V/50Hz* Model Number
24	1.0	3.8	2.7	14	125	C-614P-115VAC	C-614P-230VAC	C-614P-220VAC
58	2.4	9.3	5.2	30	125	C-630P-115VAC	C-630P-230VAC	C-630P-220VAC
91	3.8	14.9	8.1	45	80	C-645P-115VAC	C-645P-230VAC	C-645P-220VAC
110	4.6	17.4	9.8	60	60	C-660P-115VAC	C-660P-230VAC	C-660P-220VAC
237	9.9	37.0	21.1	125	30	C-6125P-115VAC	C-6125P-230VAC	C-6125P-220VAC
389	16.2	61.4	34.6	250	10	C-6250P-115VAC	C-6250P-230VAC	C-6250P-220VAC

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

DC powered models:

Max Output at 0 PSI GPD	GPH	LPH	OZ/MIN	Strokes Per minute	Max PSI	12V DC Model Number	24V DC Model Number
33	1.4	5.3	2.9	14	125	C-614P-12VDC	C-614P-24VDC
74	3.1	11.7	6.5	30	125	C-630P-12VDC	C-630P-24VDC
112	4.7	17.8	10.0	45	80	C-645P-12VDC	C-645P-24VDC
148	6.2	23.5	13.2	60	60	C-660P-12VDC	C-660P-24VDC
316	13.2	49.9	28.1	125	30	C-6125P-12VDC	C-6125P-24VDC
516	21.5	81.4	45.8	250	10	C-6250P-12VDC	C-6250P-24VDC

Maximum Output vs. Pressure Curve



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