

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 valve body and fitting, ceramic balls, Viton 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
- Teflon coated EP diaphragm.
- Durable metal epoxy coated construction.
- 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

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: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

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)

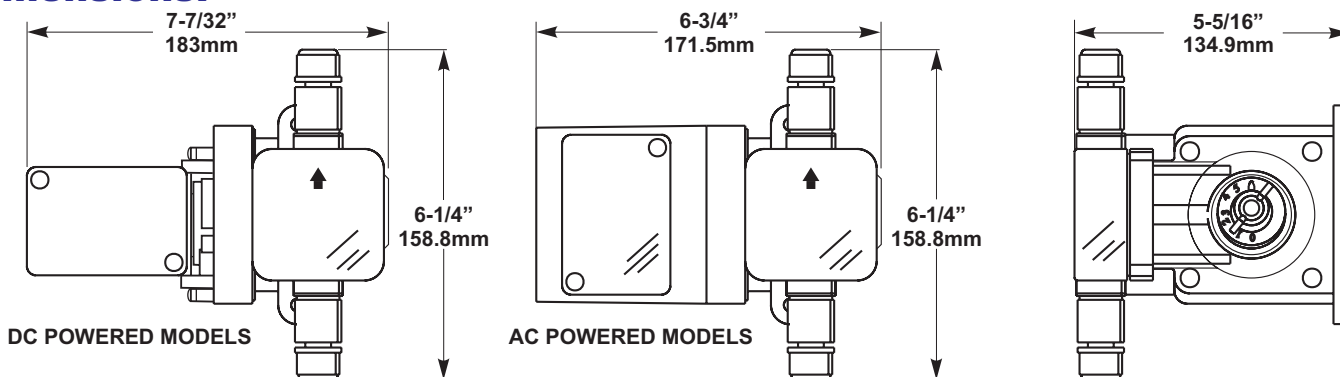
Spring:Hastelloy C-276

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

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

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Dimensions:



Model Number Matrix:

MODEL 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 = 115V/60Hz | |
| 220VAC = 220V/50Hz (20% less output) | |
| 230VAC = 230V/60Hz | |
| 24VAC = 24V/60Hz | |
| 12VDC = 12V DC | |
| 24VDC = 24V DC | |

Flow rate and pressure capacities:

AC powered models:

| Max Output at 0 PSI | | | | Strokes Per minute | Max PSI | Model Number | | |
|---------------------|------|------|--------|--------------------|---------|----------------|----------------|----------------|
| GPD | GPH | LPH | OZ/MIN | | | 115V/60Hz | 230V/60Hz | 220V/50Hz* |
| 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 | | | | Strokes Per minute | Max PSI | Model Number | |
|---------------------|------|------|--------|--------------------|---------|---------------|---------------|
| GPD | GPH | LPH | OZ/MIN | | | 12V DC | 24V DC |
| 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

