

C3

CHEM-FEED® Diaphragm Metering Pump



Features

- > Diaphragm Failure Detection system senses diaphragm failure.
- > Exclusive DiaFlex® Diaphragm minimizes maintenance
- > Remote Start/Stop Input
- > Input Modes (V model): 4-20mA, Frequency Input, and Pulse Batch
- > Outputs: 4-20mA (V model), Motor Active, and DFD/FVS Alarm
- > Protective LCD snap-on cover, (UV, in field wear and tear)
- > NSF 61 Listed



NEMA 4X

Highlights

Flow range

.262 - 40.6 GPH
.99 - 154 LPH

Pressures

150 PSI
(10.3 bar)

Turndown ratio

100 : 1

Exclusive

Diaphragm Failure Detection

Motor

Brushed
DC Motor

Warranty

2 Years

Control Methods

	Manual Speed Control	4-20mA Input	Remote Start/Stop	4-20mA Output	Alarm Output	FVS	Motor Status Output	Frequency Input	Pulse Batching
C3F	•		•		•	•			
C3V	•	•	•	•	•	•	•	•	•



Maximum Working Pressure	150 psig (10.3 bar) / 100 psig (6.8 bar) (reference pump curves)
Maximum Fluid Temperature	130 °F (54 °C)
Maximum Ambient Temperature	14 °F to 110 °F (-10 °C to 46 °C)
Maximum Viscosity	1,000 Centipoise
Maximum Suction Lift	15 ft. Water, 0 psig (4.5 m, 0 bar)
Operating Voltage	115VAC/60Hz, 1ph (1.5 Amp Maximum)
	230VAC/60Hz, 1ph (0.7 Amp Maximum)
	220VAC/50Hz, 1ph (1.0 Amp Maximum)
	240VAC/50Hz, 1ph (1.0 Amp Maximum)
	230VAC/50Hz, 1ph (1.0 Amp Maximum)
Power Cord Options	115V60Hz = NEMA 5/15 (USA)
	230V60Hz = NEMA 6/15 (USA)
	220V50Hz = CEE 7/VII (EU)
	240V50Hz = AS 3112 (Australia/New Zealand)
Duty Cycle	Continuous
Motor Speed Adjustment Resolution	100:1, (1.0% – 100% motor speed) Max. rpm = 130
Display	Backlit LCD, UV resistant
Keypad	Positive action tactile switch keypad
Product Weight	29 lb. (13.1 Kg)
Enclosure	NEMA 4X (IP66), Polyester powder coated aluminum.
RoHS Compliant	Yes
Standards	cETLus, NSF61, CE, BABA Compliant

Output Specifications

Feed Rate Range at 0 PSig		Max Pressure	CAM Stroke Length
GPH	LPH	PSI (bar)	
.262 - 26.2	.99 - 99	150 (10.3)	.060" (1.52 mm) stroke with large diaphragm
.406 - 40.6	1.54 - 154	100 (6.8)	.100" (2.54 mm) stroke with large diaphragm

Non-wetted Components:

Enclosure: 413 Aluminum (Polyester powder coated)

Pump Head: PVDF

Cover Screws: 300 Series stainless steel

DFD System Sensor pins: Hastelloy C-276

Power Cord: 3 conductor, SJTW-A water-resistant

Mounting Brackets and Hardware: 316 Stainless steel

Wetted Components:

Pump Head: PVDF

Adapter Fittings: PVDF

Valve Cartridges: PVDF

Valve Balls: Ceramic (optional PTFE, Hastelloy C)

O-Ring Seals: TFE/P (optional EP)

Diaphragm: DiaFlex® (optional Flex-A-Prene®)

Body & Insert: PVDF

Check Ball: Ceramic

Spring: Hastelloy C-276

O-Ring Seals: TFE/P (optional EP)

Body & Adapter: PVDF

Check Ball: Ceramic

Injection / Back-Flow Check Valve:

Foot Valve / Strainer: Spring: Hastelloy C-276

O-Ring Seals: TFE/P (optional EP)

Filter Screen: PVDF

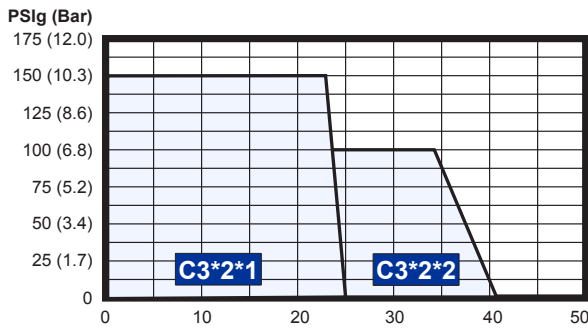
Suction Tubing Not provided (order separately)

Discharge Tubing Not provided (order separately)

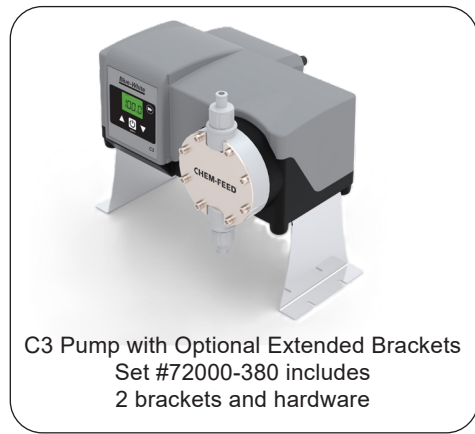
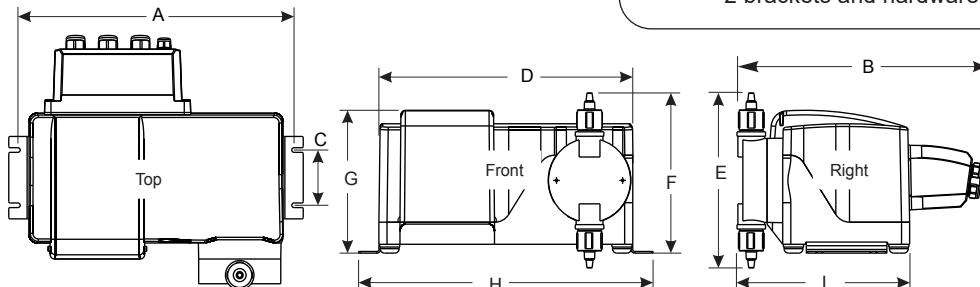
Performance

CHEM-FEED® C3 Diaphragm Metering Pump

C3 Series Models



Dimensions



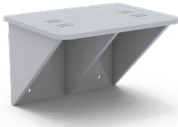
Dim	Inch	cm
A	14.1"	35.8
B	12"	29.2
C	2.5"	6.4
D	13.1"	33.2
E	9"	20.1
F	7.8"	19.8
G	6.5"	16.4
H	15"	38
I	8"	20.3

NOTE: Optional Extended Bracket adds 4.5" (11.43cm) to overall height (dimension F and G).


Model Number

C3	Diaphragm metering pump									
Series										
F	Single manual output control (manual/local control only)									
V	Multiple automatic input/output control and alarm modes (remote control)									
Input Voltage										
4	115V / 60Hz, power cord NEMA 5/15 plug (US)				8	240V / 50HZ, power cord AS 3112 plug (AU/New Zealand)				
5	230V / 60Hz, power cord NEMA 6/15 plug (US)				9	230V / 50HZ, power cord BS 1363 plug (UK)				
6	220V / 50HZ, power cord CEE 7/VII plug (EU)									
CAM Stroke Length and Diaphragm Size										
1	.060" (1.52 mm) stroke with large diaphragm .262–26.2 GPH 150 PSI									
2	.100" (2.54 mm) stroke with large diaphragm .406–40.6 GPH 100 PSI									
Electrical Options										
X	Standard equipment with "F" Series only									
A	Standard equipment with "V" Series only - includes 4-20ma output									
Elastomer Material (o-rings)										
V	TFE/P				E	EP (Ethylene Propylene)				
Fitting Connection Types										
A	1/2" Hose Barb Inlet, 1/2" Male NPT Outlet, with 1/2" Male NPT Injection Fitting									
B	1/2" Hose Barb Inlet, 1/2" Female NPT Outlet, with 1/2" Male NPT Injection Fitting									
C	1/2" Hose Barb Inlet and Outlet, with 1/2" ID Hose Barb Injection Fitting									
E	1/2" Male NPT Inlet and Outlet, with 1/2" Male NPT Injection Fitting									
F	1/2" Female NPT Inlet and Outlet, with 1/2" Male NPT Injection Fitting									
Diaphragm Type										
(Blank)	Standard DiaFlex® Diaphragm									
S	Flex-A-Prene® Diaphragm (Caustic Soda resistant diaphragms)									
C3	F	2	4	1	X	V	A	Sample Model Number		


Accessories



KIT-PSM
Wall Mount Bracket, HDPE



71000-555
PVDF INJECTOR, 1/4" ID tubing
71000-579
PVDF INJECTOR, 1/2" Hose Barb
71000-577
PVDF INJECTOR, 1/2" MNPT



C-334-6-10
Suction Tubing, Clear PVC 1/4"x 3/8", 10 ft
C-335-6-25
Discharge Tubing, PE, 1/4" x 3/8", 25 ft
76001-361
Suction Tubing, Clear PVC, 1/2" ID, 8ft
90008-437
Discharge Tubing, Braided PVC, 1/2" ID

Ball Check Cartridge Options

20000-228
Ball Check Cart. Hastelloy Balls
20000-229
Ball Check Cart. PTFE Balls
70001-409 (2 req.)
Ball Check Cart., Single Ceramic Ball with Hastelloy Spring

Visit Accessory Pages for More Options