C2

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 display cover with UV protection (not shown)
> NSF 61 Listed

NSF Certified to NSF / ANSI Standard 61 · c ETL us · CE · NEMA 4X

Highlights

Flow range
.02 - 16.5 GPH
.09 - 62.5 LPH

Pressures
175 PSI
12.0 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
C2F	•		•		•	•			
C2V	•	•	•	•	•	•	•	•	•

For more help and information regarding **C2**, please visit www.blue-white.com or scan this QR code.

Engineering Specifications

Maximum Working Pressure	175 psig (12.0 bar) / 150 psig (10.3 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)
	230V50Hz = BS 1363/A (UK)
Duty Cycle	Continuous
Motor Speed Adjustment Resolution	100:1, (1.0% – 100% motor speed) Max. rpm = 166
Display	Backlit LCD (includes UV resistant cover)
Keypad	Positive action tactile switch keypad
Product Weight	24 lb. (10.9 Kg)
Enclosure	NEMA 4X, Polyester powder coated aluminum.
RoHS Compliant	Yes
Standards	cETLus, CE, NSF61, BABA compliant

Output Specifications

Feed Rate Range at 0 PSIg		Max Pressure	CAM Stroke Length and Diaphragm Size
GPH	**LPH**	**PSI(bar)**	
.02 - 2.3	.09 - 9.0	150 (10)	.040” (1.02 mm) stroke with Micro-Feed
.04 - 4.0	.15 - 15.0	150 (10)	.060” (1.52 mm) stroke with Micro-Feed
.067 - 6.7	.254 - 25.4	175 (12)	.040” (1.02 mm) stroke with small diaphragm
.10 - 10	.38 - 38	175 (12)	.060” (1.52 mm) stroke with small diaphragm
.165 - 16.5	.625 - 62.5	175 (12)	.060” (1.52 mm) stroke with large diaphragm

Materials of Construction

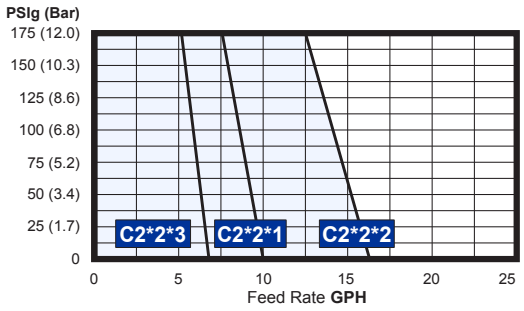
Non-wetted Components:	
Enclosure: 413 Aluminum (Polyester powder coated)	
Pump Head: PVDF	
Cover Screws: 300 Series stainless steel	
DFD System Sensor pins: Hastelloy C-276	
Power Cord: 3 conductor, SJTW-A water-resistant	
Mounting Brackets and Hardware: 316 Stainless steel	

Wetted Components:	
Pump Head Assembly:	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®)
Injection / Back-Flow Check Valve:	Body & Insert: PVDF
	Check Ball: Ceramic
	Spring: Hastelloy C-276
	O-Ring Seals: TFE/P (optional EP)
Foot Valve / Strainer:	Body & Adapter: PVDF
	Check Ball: Ceramic
	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)

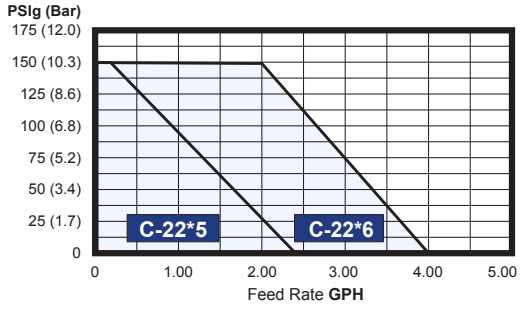
Performance

CHEM-FEED® C2 Diaphragm Metering Pump

C2 Series Models



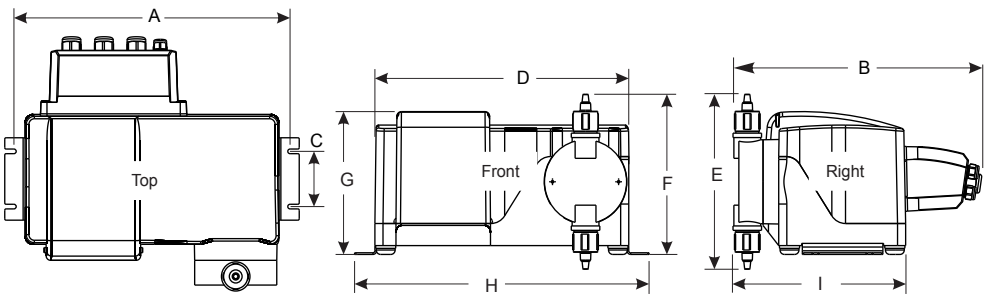
C2 Series Micro-Feed





C2 Pump with Optional Extended Brackets
Set #72000-380 includes
2 brackets and hardware

Dimensions



Dim	Inch	cm
A	14.1”	35.8
B	11.5”	29.2
C	2.5”	6.4
D	13.1”	33.2
E	7.9”	20.1
F	7.3”	18.4
G	6.5”	16.4
H	15”	38.0
I	8”	20.3

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

Model Number Matrix

Model Number

C2	Diaphragm metering pump

Series

F	Single manual output control (manual/local control only)
V	Multiple automatic input output control and alarm modes (remote control) (Includes 4-20mA output)

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 small diaphragm | .10–10 GPH | 175 PSI
2	.060” (1.52 mm) stroke with large diaphragm | .165–16.5 GPH | 175 PSI
3	.040” (1.02 mm) stroke with small diaphragm | .067–6.7 GPH | 175 PSI
5	.040” (1.02 mm) stroke with Micro-Feed | .02–2.3 GPH | 150 PSI
6	.060” (1.52 mm) stroke with Micro-Feed | .04–4.0 GPH | 150 PSI

Electrical Options

X	Standard equipment with “F” Series only
A	Standard equipment with “V” Series only - includes 4-20 mA output

Elastomer Material (o-rings)

V	TFE/P	**E**	EP (Ethylene Propylene)

Fitting Connection Types

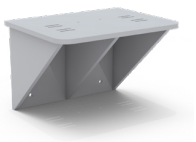
A	1/2” Hose Barb Inlet, 1/2” Male NPT Outlet, with 1/2” Male NPT Injection Fitting
B	1/2” Hose Barb Inlet, 1/2” Female NPT Outlet, with 1/2” Male NPT Injection Fitting
C	1/2” Hose Barb Inlet and Outlet, with 1/2” ID Hose Barb Injection Fitting
D	3/8” OD Tube Compression Inlet, Outlet, and Injection Fitting
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 diaphragm)

C2	**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

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