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 (V model), and DFD/FVS Alarm
> Protective LCD snap-on display cover with UV protection (not shown)
> NSF 61 Listed

NSF Certified to NSF/ANSI/CAN 61 · 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)
Ambient Temperature Range	14 °F to 110 °F (-10 °C to 43 °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	115V/60Hz = NEMA 5/15 (USA)
	230V/60Hz = NEMA 6/15 (USA)
	220V/50Hz = CEE 7/VII (EU)
	240V/50Hz = AS 3112 (Australia/New Zealand)
	230V/50Hz = 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
RoHS Compliant	Yes
Standards	cETLus, CE, NSF/ANSI 61, 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 - 8.7	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)	
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	

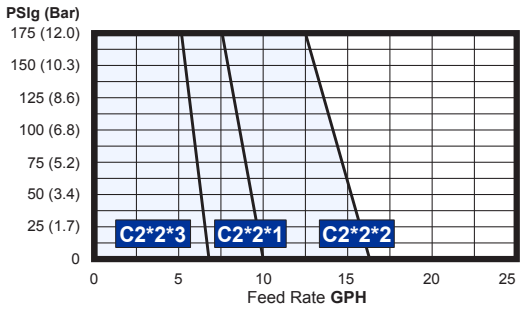
Wetted Components:	
Pump Head Assembly:	Pump Head: PVDF
	Adapter Fittings: PVDF
	Valve Cartridges: PVDF
	Valve Balls: Ceramic (optional PTFE, Hastelloy C)*
	O-Ring Seals: TFE/P (optional EP)
	Diaphragm: DiaFlex® (optional Flex-A-Prene®)
Injection / Back-Flow Check Valve:	Body & Insert: PVDF
	Check Ball: 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)

* Contact factory for ball check options.

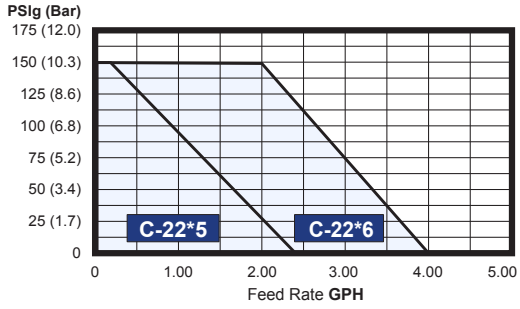
Performance

CHEM-FEED® C2 Diaphragm Metering Pump

C2 Series Models

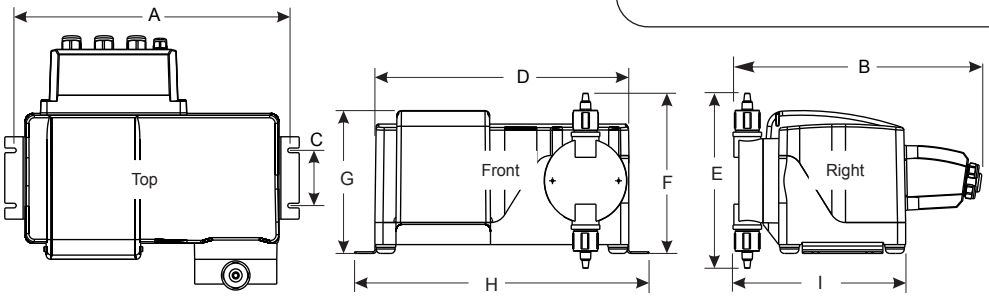


C2 Series Micro-Feed



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.

C2	Diaphragm Metering Pump

Series

F	Manual Control | Manual/Local Speed | Remote Start/Stop | DFD/FVS Alarm Output
V	Automatic Control | 4–20 mA Input | Frequency Input | Pulse Input | Remote Start/Stop

Input Voltage

4	115 V / 60 Hz | NEMA 5-15 Plug (US)	**8**	240 V / 50 Hz | AS 3112 Plug (AU/New Zealand)
5	230 V / 60 Hz | NEMA 6-15 Plug (US)	**9**	230 V / 50 Hz | BS 1363 Plug (UK)
6	220 V / 50 Hz | CEE 7/VII Plug (EU)		

CAM Stroke Length & Diaphragm Size

1	0.060” Stroke (1.52 mm) | Small Diaphragm | 0.10–10 GPH | 175 PSI
2	0.060” Stroke (1.52 mm) | Large Diaphragm | 0.165–16.5 GPH | 175 PSI
3	0.040” Stroke (1.02 mm) | Small Diaphragm | 0.067–6.7 GPH | 175 PSI
5	0.040” Stroke (1.02 mm) | Micro-Feed® | 0.02–2.3 GPH | 150 PSI
6	0.060” Stroke (1.52 mm) | Micro-Feed® | 0.04–4.0 GPH | 150 PSI

Electrical Options

X	Standard Equipment | F Series	**A**	Standard Equipment | V Series

O-Ring Material

V	TFE/P	**E**	EPDM

Fitting Connection Types | Note: Suction/Discharge tubing must be ordered separately

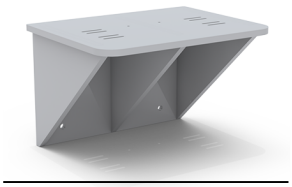
A	1/2” Hose Barb Inlet | 1/2” Male NPT Outlet | 1/2” Male NPT Injection Fitting
B	1/2” Hose Barb Inlet | 1/2” Female NPT Outlet | 1/2” Male NPT Injection Fitting
C	1/2” Hose Barb Inlet & Outlet | 1/2” ID Hose Barb Injection Fitting
D	3/8” OD Tube Compression Inlet & Outlet | Injection Fitting
E	1/2” Male NPT Inlet & Outlet | 1/2” Male NPT Injection Fitting
F	1/2” Female NPT Inlet & Outlet | 1/2” Male NPT Injection Fitting

Diaphragm Type

(Blank)	Standard DiaFlex® Diaphragm
S	Flex-A-Prene® Diaphragm | Caustic Soda Resistant

C2	F	2	4	1	X	V	A	(Blank)	**Sample Model Number**

Accessories



KIT-PSM
Wall Mount Bracket | HDPE

72000-380
Extended Mounting Bracket

More accessories available at blue-white.com

5300 Business Drive, Huntington Beach, CA 92649
TEL 714-893-8529 | FAX 714-894-9492 | www.blue-white.com | sales@blue-white.com

ISO 9001:2015 CERTIFIED

SINCE Quality 1957

MADE IN THE USA