

# C2

## CHEM-FEED® Diaphragm Metering Pump



### Features

- > Diaphragm Failure Detection system senses diaphragm failure
- > Exclusive DiaFlex® Diaphragm guaranteed to last the life of the pump
- > Signal inputs include: 4-20mA, pulse inputs, and Remote start/stop
- > Signal outputs include: Relay (3 amp), Motor Status
- > Protective LCD snap-on cover, (UV, in field wear and tear)



**NEMA 4X**

### Highlights

**Flow range**

.02 - 16.5 GPH  
.09 - 62.5 LPH

**Pressures**

175 PSI  
(12 bar)

**Turndown ratio**

100 : 1

**Exclusive**

Diaphragm Failure Detection

**Motor**

Brushed  
DC Motor

**Warranty**

2 Years

### Control Methods

Control Methods	Manual Control	4-20mA Input	Remote Start/Stop	Alarm Output	FVS	Motor Status Output	Frequency Input	Pulse Batching
C2F	•		•	•	•			
C2V	•	•	•	•	•	•	•	•



<b>Maximum Working Pressure</b>	175 psig (12 bar)
<b>Maximum Fluid Temperature</b>	130 °F (54 °C)
<b>Maximum Ambient Temperature</b>	14 °F to 110 °F (-10 °C to 46 °C )
<b>Maximum Viscosity</b>	1,000 Centipoise
<b>Maximum Suction Lift</b>	15 ft. Water, 0 psig (4.5 m, 0 bar)
<b>Operating Voltage</b>	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)
<b>Power Cord Options</b>	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)
<b>Duty Cycle</b>	Continuous
<b>Motor Speed Adjustment Resolution</b>	100:1, (1.0% – 100% motor speed) Max. rpm = 166
<b>Display</b>	Backlit LCD, UV resistant
<b>Keypad</b>	Positive action tactile switch keypad
<b>Product Weight</b>	24 lb. (10.9 Kg)
<b>Enclosure</b>	NEMA 4X (IP66), Polyester powder coated aluminum.
<b>RoHS Compliant</b>	Yes
<b>Standards</b>	cETLus, CE

## 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

## 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

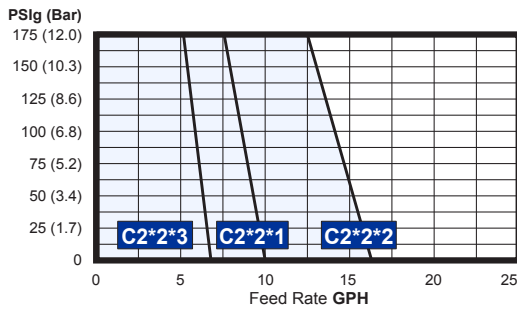
**Mounting Brackets and Hardware:** 316 Stainless steel

## Performance

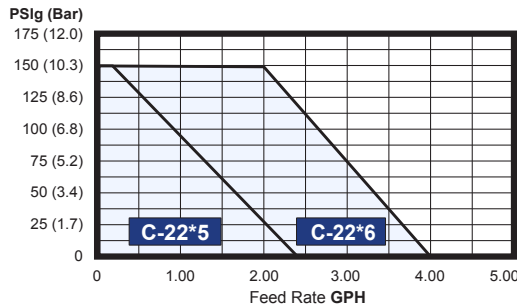
### CHEM-FEED® C2 Diaphragm Metering Pump

**NOTE:** All tests performed after approximately 30 minutes tube break-in period.

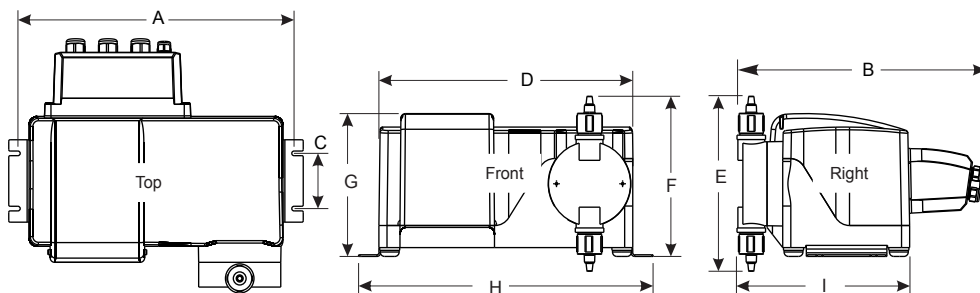
**C2 Series Models**



**C2 Series Micro-Feed**



## 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 previous page for details.

## Wetted Components:

### Pump Head Assembly:

Pump Head: PVDF

Adapter Fittings: PVDF

Valve Cartridges: PVDF

Valve Balls: Ceramic (optional EP)

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

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

Body & Insert: PVDF

### Injection / Back-Flow Check Valve:

Check Ball: Ceramic

Spring: Hastelloy C-276

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

Body & Adapter: PVDF

Check Ball: Ceramic

### Foot Valve / Strainer:

Spring: Hastelloy C-276

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

Filter Screen: PVDF

### Suction Tubing

3/4" x 1/2" Tube connections: Not supplied

1/4" x 3/8" Tube connections:  
Clear PVC

### Discharge Tubing

3/4" x 1/2" Tube connections: Not supplied

1/4" x 3/8" Tube connections:  
Natural Polyethylene (LLDPE)

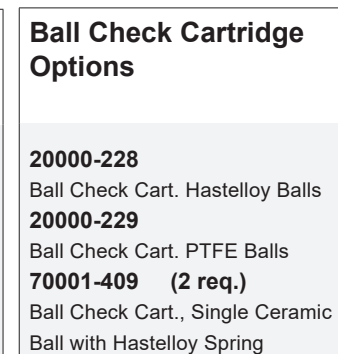
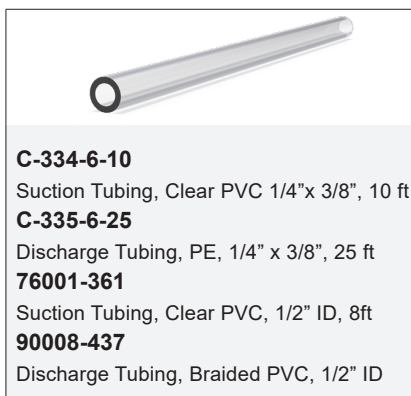
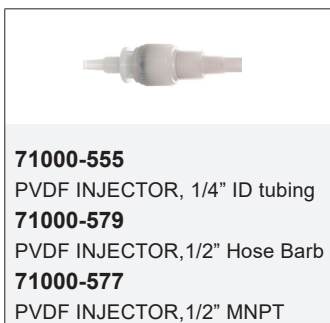
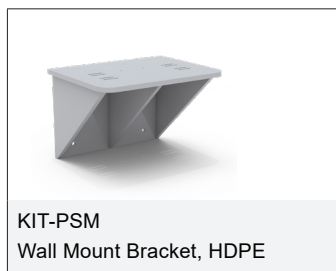
# Model Number Matrix

C2

## Model Number

<b>C2</b>	Diaphragm metering pump									
<b>Series</b>										
<b>F</b>	Single manual output control (manual/local control only)									
<b>V</b>	Multiple automatic input output control and alarm modes (remote control)									
<b>Input Voltage</b>										
<b>4</b>	115V / 60Hz, power cord NEMA 5/15 plug (US)				<b>8</b>	240V / 50HZ, power cord AS 3112 plug (AU/New Zealand)				
<b>5</b>	230V / 60Hz, power cord NEMA 6/15 plug (US)				<b>9</b>	230V / 50HZ, power cord BS 1363 plug (UK)				
<b>6</b>	220V / 50Hz, power cord CEE 7/VI plug (EU)									
<b>CAM Stroke Length and Diaphragm Size</b>										
<b>1</b>	.060" (1.52 mm) stroke with small diaphragm   .10–10 GPH   175 PSI									
<b>2</b>	.060" (1.52 mm) stroke with large diaphragm   .165–16.5 GPH   175 PSI									
<b>3</b>	.040" (1.02 mm) stroke with small diaphragm   .067–6.7 GPH   175 PSI									
<b>5</b>	.040" (1.02 mm) stroke with Micro-Feed   .02–2.3 GPH   150 PSI									
<b>6</b>	.060" (1.52 mm) stroke with Micro-Feed   .04–4.0 GPH   150 PSI									
<b>Electrical Options</b>										
<b>X</b>	Standard equipment									
<b>Elastomer Material (o-rings)</b>										
<b>V</b>	TFE/P				<b>E</b>	EP (Ethylene Propylene)				
<b>Fitting Connection Types</b>										
<b>A</b>	1/2" Hose Barb Inlet, 1/2" Male NPT Outlet, with 1/2" Male NPT Injection Fitting									
<b>B</b>	1/2" Hose Barb Inlet, 1/2" Female NPT Outlet, with 1/2" Male NPT Injection Fitting									
<b>C</b>	1/2" Hose Barb Inlet and Outlet, with 1/2" ID Hose Barb Injection Fitting									
<b>D</b>	3/8" OD Tube Compression Inlet, Outlet, and Injection Fitting									
<b>E</b>	1/2" Male NPT Inlet and Outlet, with 1/2" Male NPT Injection Fitting									
<b>F</b>	1/2" Female NPT Inlet and Outlet, with 1/2" Male NPT Injection Fitting									
<b>Miscellaneous Options</b> (leave blank for standard model)										
<b>S</b>	Flex-A-Prene® Diaphragms (Caustic Soda resistant diaphragms)									
<b>C2</b>	<b>F</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>X</b>	<b>V</b>	<b>A</b>	<b>S</b>	<b>Sample Model Number</b>	

## Accessories



Visit Accessory Pages for More Options