Blue-White®

CD3

CHEM-FEED® Multi-Diaphragm Metering Pump

Video link:

Features

> Diaphragm Failure Detection (DFD) system senses diaphragm failure
> Exclusive DiaFlex® Diaphragm minimizes maintenance
> Smooth chemical dosing, no pulsation dampener needed
> Multi-diaphragm technology eliminates vapor locking
> Signal inputs: 4-20mA, Pulse inputs, and Remote start/stop
> Signal oututs: 4-20mA, Pulse, and 4 programmable relay outputs

NEMA 4X

Highlights

Flow range
0.05 – 52.6 GPH
0.19 – 199 LPH

Pressures
145 PSI
(10 bar)

Turndown ratio
1,000 : 1

Exclusive
Diaphragm Failure Detection (DFD)

Motor
1/4 HP Brushless DC Motor

Warranty
2 Years

Control Methods

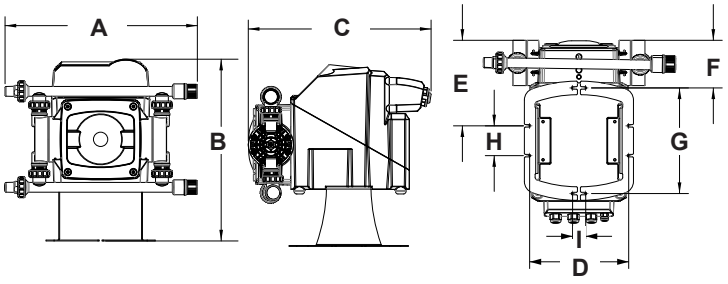
Control Methods	Manual Control	4-20mA Input	Remote Start/Stop	Pulse Input	Alarm Output	Motor Status Output	0-10VDC
CD3	•	•	•	•	•	•	•

For more help and information regarding **CD3**, please visit www.blue-white.com or scan this QR code.

Engineering Specifications

Maximum Working Pressure	145 psig (10 bar)
Maximum Fluid Temperature	185 °F (85 °C)
Maximum Ambient Temperature	14 °F to 115 °F (-10 °C to 46 °C)
Maximum Viscosity	1,000 Centipoise
Maximum Suction Lift	23 ft. Water, 0 psig (7 m, 0 bar)
Operating Voltage	115VAC/60Hz, 1ph (2.0 Amp Maximum)
	230VAC/60Hz, 1ph (1.0 Amp Maximum)
	220VAC/50Hz, 1ph (1.0 Amp Maximum)
	240VAC/50Hz, 1ph (1.0 Amp Maximum)
	230VAC/50Hz, 1ph (2.0 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 plug (United Kingdom)
Duty Cycle	Continuous
Motor	1/4 HP Brushless DC motor
Motor Speed Adjustment Range	1,000:1 (0.1% - 100% motor speed) Max RPM = 190
Motor Speed Adjustment Resolution	0.1% increments > 10% motor speed
	0.01% increments > 1% motor speed and < 10%
	0.001% increments < 1% motor speed
Display	3 color VGA backlit LCD, UV resistant
Display Languages	English, Spanish, French or German selectable
Keypad	Positive action tactile switch keypad
Security	Programmable 4-digit password
Maximum Overall Dimensions	16-1/8”W x 15-1/4”H x 15-5/16”D (40.9W x 38.7H x 38.9D cm)
Approximate Shipping Weight	53lb. (24.04 Kg)
Enclosure	NEMA 4X (IP66), Polyester powder coated aluminum
RoHS Compliant	Yes
Standards	cETLus, CE

Dimensions



Dim	Inch	cm	Dim	Inch	cm
A	16.13”	40.97	**F**	4.00”	10.15
B	15.25”	38.72	**G**	8.86”	22.50
C	15.33”	38.95	**H**	2.50”	6.35
D	8.30”	21.08	**I**	1.10”	2.79
E	7.18”	18.22			

Materials of Construction

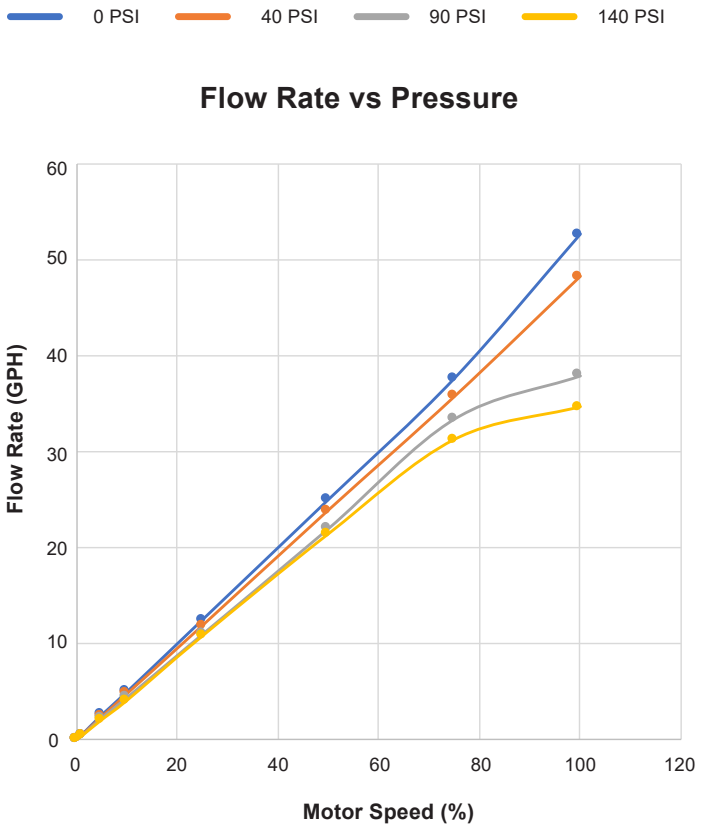
Non-wetted Components:
Enclosure: 413 Aluminum (Polyester powder coated)
Drive Enclosure: Valox (PBT) thermoplastic
Permanently lubricated sealed motor shaft support ball bearing
Drive Enclosure Cover: Polycarbonate
Cover Screws: 300 Series stainless steel, polypropylene cap
Pump Head Cover: 316 Stainless Steel
Motor Shaft: Chrome plated 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 Connections: PVDF
	Valve Cartridges : PVDF
	Valve Balls : Ceramic
	Elastomers : TFE/P
	Static 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, 6 lbs.
	O-Ring Seals : TFE/P (optional EP)
Foot Valve / Strainer:	Body & Adapter : PVDF
	Check Ball : Ceramic
	Spring : Hastelloy C-276, 6 lbs.
	O-Ring Seals : TFE/P (optional EP)
	Filter Screen : PVDF

* Consult factory for chemical compatibility

Performance

CHEM-FEED® CD3 Multi-Diaphragm Metering Pump



Motor Speed 380 Strokes/min	RPM	Flow Rate GPH Pressure			
		0 PSIg	40 PSIg	90 PSIg	140 PSIg
0%	0	0	0	0	0
1%	1.3	0.5	0.5	0.4	0.4
5%	10	2.6	2.4	2.3	2.1
10%	19	5.0	4.8	4.4	4.1
25%	48	12.5	11.9	11.0	10.8
50%	95	25.0	23.9	22.0	21.4
75%	142	37.6	35.7	33.4	31.2
100%	190	52.6	48.2	37.9	34.6

*190 Strokes per minute

Model Number Matrix

Multi-Diaphragm Model Number

CD3	CHEM-FEED® Multi-Diaphragm Metering Pump

Input Voltage / Power Cord

4	115V / 60Hz, power cord NEMA 5/15 plug (US)
5	230V / 60Hz, power cord NEMA 6/15 plug (US)
6	220V / 50HZ, power cord CEE 7/VII plug (EU)
8	240V / 50HZ, power cord AS 3112 plug (Australia/New Zealand)
9	230V / 50HZ, power cord BS 1363/A plug (United Kingdom)
X	No Power Cord

Elastomer Material (O-Rings)

V	TFE/P
E	EP

Diaphragm Type

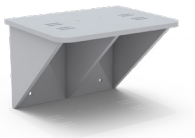
(blank)	Standard
S	Flex-A-Prene® Diaphragms (Caustic Soda resistant diaphragms)

Check Balls

(blank)	Standard
H	PTFE balls (double ball check valve, injection fitting) low viscosity/density fluids only

CD3	2	4	4	X	V	X	-		Sample Model Number

Accessories



KIT-PSM
Wall Mount Bracket, HDPE

71000-579
PVDF INJECTOR,1/2" Hose Barb
71000-577
PVDF INJECTOR,1/2" MNPT

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 (2 req.)
Ball Check Cart. Hastelloy Balls
70001-409 (4 req.)
Ball Check Cart., Single Ceramic Ball with Hastelloy Spring

Visit Accessory Pages for More Options

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