

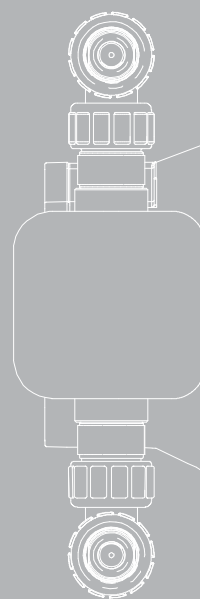
# MUNICIPAL

Diaphragm  
Metering Pumps

## CATALOG

2025

***Blue-White®***



# C2

## CHEM-FEED® Diaphragm Metering Pump



- > Built-in leak detection (DFD) senses diaphragm failure
- > Patented DiaFlex® offers zero breakdown, reducing maintenance
- > 4-20mA input and Frequency input on V model
- > Heavy duty PVDF pump head and valves are standard

### Highlights

#### Flow range

.02 - 16.5 GPH  
.1 - 62.5 LPH

#### Pressures up to

175 PSI  
(12 bar)

#### Turndown ratio

100 : 1

#### Suction lift

15 ft.  
(at sea level)

#### Exclusive

Diaphragm Failure  
Detection (DFD)

#### Motor

Brushed  
DC Motor

#### Weight

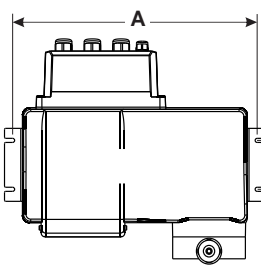
24 lb.  
(10.9 kg)

#### Warranty

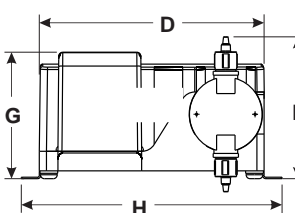
2 Years

### Dimensions

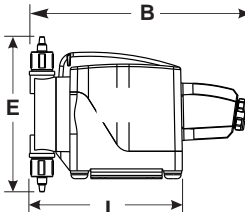
Dim	Inch	cm	Dim	Inch	cm
A	14.1"	32.5	F	7.3"	18.4
B	11.5"	29.2	G	6.5"	16.4
C	2.5"	6.4	H	15"	38.1
D	13.1"	29.9	I	8"	20.3
E	7.9"	20.1			



Top View



Front View



Side View

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

### What's in the box

C2 Diaphragm Metering Pump  
 Discharge injection fitting with check valve  
**Option "A,B,C"** – ½" ID x ¾" OD tubing pump head  
 • ½" hose barb injector • ½" hose barb foot valve  
 • Tubing and hose clamp  
**Option "D"** – ¼" ID x ¾" OD Tubing pump head  
 • Suction foot valve and ceramic weight  
 • Injector, suction tubing - 10 ft.  
 • discharge tubing - 10ft.

**Option "E"** – ½" M/NPT inlet and outlet, with ½" M/NPT injection fitting  
 • ½" M/NPT injector • ½" M/NPT foot valve  
**Option "F"** – ½" F/NPT inlet and outlet, with ½" M/NPT injection fitting  
 • ½" M/NPT injector • ½" M/NPT foot valve  
 Mounting hardware kit  
 Junction box connectors  
 QR Code link to Operating Manual



# Model Number Matrix

C2

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)							
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							
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

# C3

## CHEM-FEED® Diaphragm Metering Pump



- > Built-in leak detection (DFD) senses diaphragm failure
- > Exclusive Patented DiaFlex® diaphragm
- > Signal inputs include: 4-20mA ("V" Model), pulse inputs ("V" Model), and Remote start/stop
- > Signal outputs include: Relay (3 amp) and 4-20mA ("V" Model)

### Highlights

#### Flow range

.262 - 40.6 GPH  
.99 - 154 LPH

#### Pressures up to

150 PSI  
(10.3 bar)

#### Turndown ratio

100 : 1

#### Suction lift

15 ft. Water, 0 psig  
(4.5 m, 0 bar)

#### Exclusive

Diaphragm Failure  
Detection (DFD)

#### Motor

Brushed  
DC

#### Weight

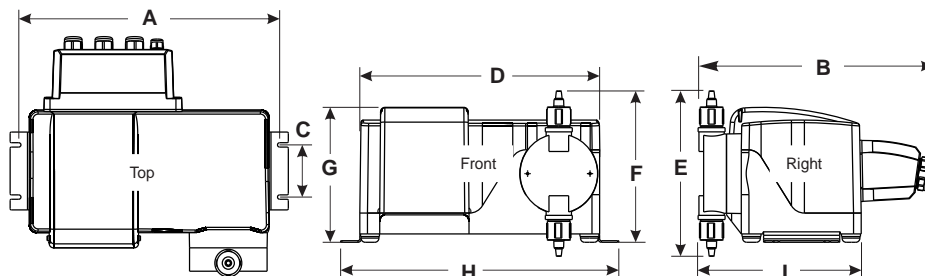
31 lb.  
(14.06 Kg)

#### Warranty

2 Years

### Dimensions

Dim	Inch	cm	Dim	Inch	cm
A	14.1"	35.8	F	7.8"	19.8
B	12"	30.5	G	6.5"	16.5
C	2.5"	6.4	H	15"	38.1
D	13.1"	33.3	I	8"	20.3
E	9"	22.9			



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

### What's in the box

C2 Diaphragm Metering Pump  
 Discharge injection fitting with check valve  
**Option "A", "B"** – ½" ID x ¾" OD tubing pump head  
 • ½" M/NPT injector • ½" hose barb foot valve  
 • Tubing and hose clamp  
**Option "C"** – ½" ID x ¾" OD tubing pump head  
 • ½" hose barb injector • ½" hose barb foot valve  
 • Tubing and hose clamp

**Option "E"** – ½" M/NPT inlet and outlet, with ½" M/NPT injection fitting  
 • ½" M/NPT injector • ½" M/NPT foot valve  
**Option "F"** – ½" F/NPT inlet and outlet, with ½" M/NPT injection fitting  
 • ½" M/NPT injector • ½" M/NPT foot valve  
 Mounting hardware kit  
 Junction box connectors  
 QR Code link to Operating Manual



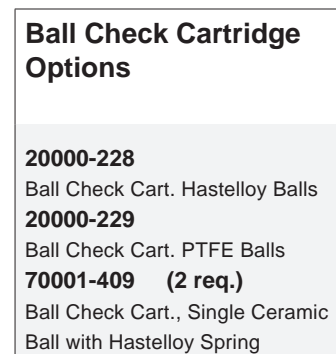
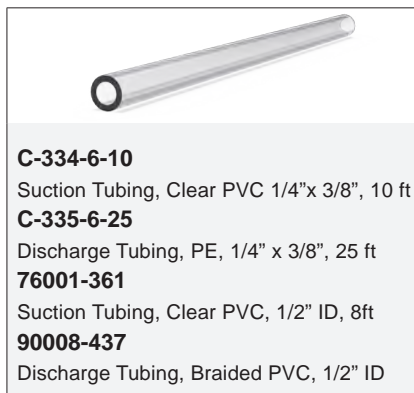
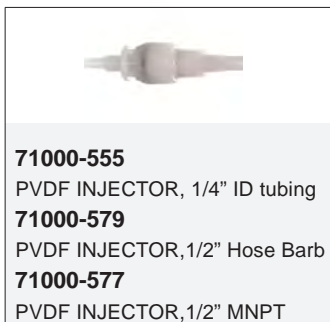
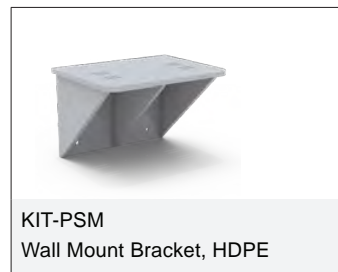
## Model Number Matrix

C3

### 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



Visit Accessory Pages for More Options

# MD1

## CHEM-FEED® Multi-Diaphragm Metering Pump

- > Diaphragm Failure Detection system senses diaphragm failure
- > Display shield protects pump controls in harsh environments
- > Exclusive Patented DiaFlex® diaphragm
- > Remote Start/Stop, non-powered dry contact closure
- > Relay outputs: single 250V/3A (TFD/FVS) relay, motor running contact closure
- > SCADA I/O: 4-20 mA input, 4-20 mA output
- > Straight and Elbow fitting options (1/4" x 3/8" tube connections, 1/2" MNPT, 1/2" Hose Barb)



### Highlights

#### Flow range

.0008 – 8.0 GPH  
.003 – 30.3 LPH  
(at 0 PSI)

#### Pressures up to

150 PSI  
(10.3 bar)

#### Turndown ratio

10,000 : 1

#### Suction lift

20 ft.  
(at sea level)

#### Exclusive

Diaphragm Failure  
Detection (DFD)

#### Motor

Brushless  
DC Motor

#### Weight

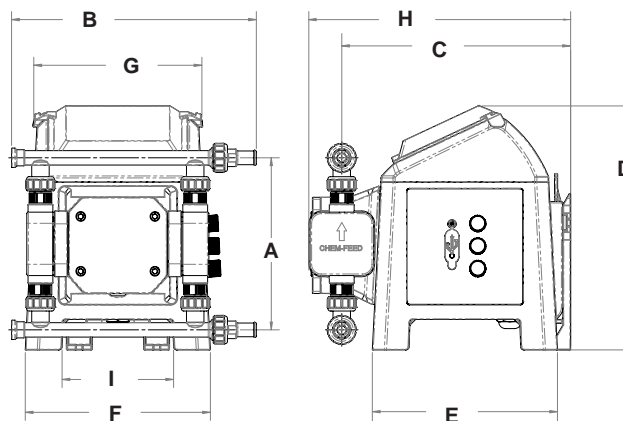
8.5 lb.  
(3.8 kg)

#### Warranty

5 Years

### Dimensions

Dim	Inch	cm	Dim	Inch	cm
A	6.67"	16.94	F	7.18"	18.23
B	9.49"	24.10	G	6.52"	16.55
C	8.87"	22.54	H	10.40"	26.41
D	9.46"	24.02	I	4.32"	10.98
E	7.18"	18.23			



### What's in the box

MD1 Multi-Diaphragm Metering Pump  
 Discharge injection fitting with check valve  
 Suction foot valve  
 Suction ceramic weight  
 Mounting hardware kit  
 Display shield  
 Instruction manual

**Optional Accessories not included:** Suction Tubing, Discharge Tubing, M12 connector cables.



# Model Number Matrix

MD1

## CHEM-FEED® Model Number

MD1		CHEM-FEED® Diaphragm Metering Pump	
Diaphragm and O-Rings Material			
V	DiaFlex® Diaphragms and TFE/P O-Rings		
W	Flex-A-Prene® Diaphragms and TFE/P O-Rings		
D	DiaFlex® Diaphragms and EP O-Rings		
E	Flex-A-Prene® Diaphragms and EP O-Rings		
Pump Fittings (Inlet / Outlet)			
B	1/2" ID Barb Straight Fittings		
C	1/2" ID Barb Elbow Fittings		
S	1/4" x 3/8" Compression Straight Fittings		
T	1/4" x 3/8" Compression Elbow Fittings		
M	1/2" M/NPT Straight Fittings		
X	1/2" M/NPT Elbow Fittings		
Power Cord - Removable (Operating voltage requirement 96VAC to 264VAC)			
4	115V 50/60Hz, power cord NEMA 5/15 plug (US)		
6	220V 50/60Hz, power cord CEE 7/V11 plug (EU)		
X	No Power Cord Provided (Power cord is required - See accessories for power cord options)		
MD1	V	B	4
Sample Model Number			

## Accessories

 <p><b>KIT-S07</b> <b>KIT-S15</b> <b>KIT-S30</b></p> <p>* Includes cover and foot valve</p> <p>KIT-S07 (7 Gallon), KIT-S15 (15 Gallon), KIT-S30 (30 Gallon) STAR III TANKS, PP</p>	 <p><b>KIT-PSM</b> WALL MOUNT BRACKET, HDPE</p>	 <p><b>CABLE-UAC</b> USB A-C CABLE - 3 ft</p>
<p><b>POWER CABLES - 6 ft</b> 90010-663 115V/60Hz NEMA 5/15 90010-664 220V/50Hz CEE 7/V11 90010-665 230V/50Hz BS 1363/A 90010-666 240V/50Hz AS 3112 90010-696 230V/60Hz NEMA 6/15 90010-821 115V Lockable</p> <p><b>POWER CABLES</b></p>	 <p><b>KIT-M12</b> TWO M12 CABLES - 9.8 ft</p>	 <p><b>KIT-CQA (Aflas) / KIT-CQE (EP)</b> QUICK CONNECT KIT MD1</p>
		<p><b>Teflon Ball Check Cartridge Valve Kit (PVDF body, TFE/P O-rings, PTFE balls) 4 cartridges included.</b></p> <p><b>KIT-DVA1-P PTFE Ball Check</b></p>

Visit Accessory Pages for More Options

# MD3

## CHEM-FEED® Multi-Diaphragm Metering Pump

- > Diaphragm Failure Detection system senses diaphragm failure
- > Exclusive Patented DiaFlex® diaphragm
- > Smooth chemical dosing, no pulsation dampener needed
- > Near pulseless flow diaphragm metering
- > Signal inputs include: 4-20mA, pulse inputs, and Remote Start/Stop
- > Communications Protocols: Ethernet IP, Profibus DP, Modbus TCP



### Highlights

#### Flow range

.03 - 52.6 GPH  
.10 - 199 LPH  
(at 0 PSI)

#### Pressures up to

145 PSI  
(10 bar)

#### Turndown ratio

2,000 : 1

#### Suction lift

19 ft.  
(at sea level)

#### Exclusive

Diaphragm Failure  
Detection (DFD)

#### Motor

Brushless  
DC Motor

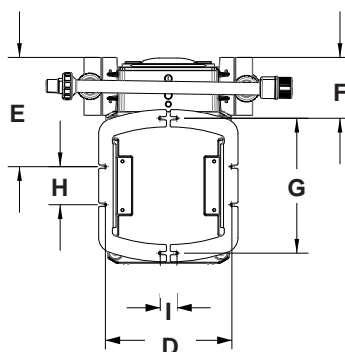
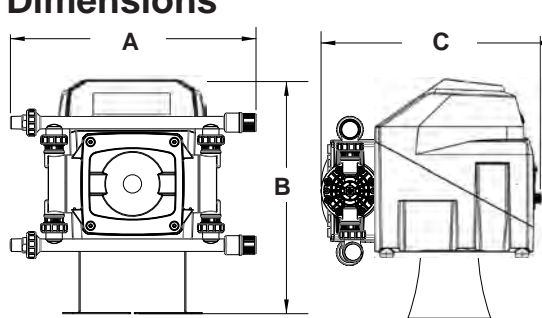
#### Weight

53 lb.  
(24.04 kg)

#### Warranty

5 Years

### Dimensions



Dim	Inch	cm	Dim	Inch	cm
A	16.13"	40.97	F	4.00"	10.15
B	16.29"	41.37	G	8.86"	22.50
C	14.12"	35.86	H	2.50"	6.35
D	8.30"	21.08	I	1.10"	2.79
E	7.24"	18.37			

### What's in the box

MD3 Multi-Diaphragm Metering Pump  
Suction foot valve, PVDF, 1/2" MNPT or 1/2" Hose Barb  
Mounting hardware kit, including extended mounting brackets  
Fitting Kit (model specific)

- 1/2" M/NPT Elbow connections, or
- 1/2" M/NPT Straight connections, or
- 1/2" Hose barb Straight connections, or
- 1/2" Hose Barb Elbow connections
- Union nuts

Quick Start Guide

**Not included: Injector, Suction Tubing, Discharge Tubing, M12 Cables**





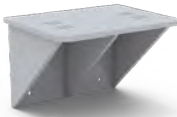



# Model Number Matrix

## CHEM-FEED® Model Number

MD3

MD3S		CHEM-FEED® Multi-Diaphragm Metering Pump				
Maximum Strokes per Minute						
2		380 SPM (190 RPM)				
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 (Pump requires power cord. See accessories for other power cord options)				
Stroke Length / Diaphragm Size						
4		.090" Stroke - Large Diaphragm				
Electrical						
X		Standard Equipment - C13 power cord connector, six M12 signal connectors, Ethernet/Modbus port & Profibus M12 connector.				
Elastomer Material (O-Rings)						
V		DiaFlex® Diaphragms and TFE/P O-rings (For most chemicals. Not compatible with Sodium Hydroxide and Aqueous Ammonia)				
E		Flex-A-Prene® Diaphragms and EPDM O-rings (for Sodium Hydroxide and Aqueous Ammonia)				
Pump Head Fittings and Foot Valve						
X		1/2" M/NPT Elbow Fittings & 1/2" M/NPT Footvalve				
M		1/2" M/NPT Straight Fittings & 1/2" M/NPT Footvalve				
B		1/2" Barb Straight Fittings & 1/2" Barb Footvalve				
C		1/2" Barb Elbow Fittings & 1/2" Barb Footvalve				
MD3S	2	4	4	X	V	X
Sample Model Number						

## Accessories

 <p><b>KIT-PSM</b> Wall Mount Bracket, HDPE</p>	 <p><b>71000-579</b> PVDF INJECTOR, 1/2" Hose Barb <b>71000-577</b> PVDF INJECTOR, 1/2" MNPT</p>	 <p><b>76001-361</b> Suction Tubing, Clear PVC, 1/2" ID, 8ft <b>90008-437</b> Discharge Tubing, Braided PVC, 1/2" ID</p>	<p><b>Ball Check Cartridge Options</b></p> <p><b>20000-229 (2 req.)</b> Ball Check Cart. PTFE Balls <b>20000-228 (2 req.)</b> Ball Check Cart. Hastelloy Balls <b>70001-409 (4 req.)</b> Ball Check Cart., Single Ceramic Ball with Hastelloy Spring</p>
 <p><b>KIT-M12</b> Two M12 Cables - 9.8 ft.</p>	 <p><b>KIT-DP3</b> Profibus Cable, 3 ft</p>	<p>90010-663 115V/60Hz NEMA 5/15 90010-664 220V/50Hz CEE 7/V11 90010-665 230V/50Hz BS 1363/A 90010-666 240V/50Hz AS 3112 90010-696 230V/60Hz NEMA 6/15 90010-711 115V Lockable</p> <p><b>POWER CABLES - 6 ft</b></p>	

Visit Accessory Pages for More Options

# DIAPHRAGM PUMP WARRANTY

## LIMITED WARRANTY

Your Blue-White product is a quality product and is warranted for a specific time from date of purchase (proof of purchase is required). The product will be repaired or replaced at our discretion. Failure must have occurred due to defect in material or workmanship and not as a result of operation of the product other than in normal operation as defined in the product manual. Warranty status is determined by the product's serial label and the sales invoice or receipt. The serial label must be on the product and legible. The warranty status of the product will be verified by Blue-White or a factory authorized service center.

CHEM-FEED® C2 and C3 pumps are warranted for 2 years from date of purchase (proof of purchase is required). CHEM-FEED® MD1 and MD3 pumps are warranted for 5 years from date of purchase (proof of purchase is required). Pumps will be repaired or replaced at our discretion.

## WHAT IS NOT COVERED

- Rubber components and wear components. Diaphragms, ball checks, O-rings, etc. They are perishable and require periodic replacement.
- Pump removal, or re-installation, and any related labor charge.
- Freight to the factory, or service center.
- Products that have been tampered with, or in pieces.
- Damage resulting from misuse, carelessness such as chemical spills on the enclosure, abuse, lack of maintenance, or alteration which is out of our control.
- Damage by faulty wiring, power surges or acts of nature.

BLUE-WHITE does not assume responsibility for any loss, damage, or expense directly or indirectly related to or arising out of the use of its products. Failure must have occurred due to defect in material or workmanship and not as a result of operation of the product other than in normal operation as defined in the pump manual.

Warranty status is determined by the pump's serial label and the sales invoice or receipt. The serial label must be on the pump and legible. The warranty status of the pump will be verified by Blue-White or a factory authorized service center.

## PROCEDURE FOR IN WARRANTY REPAIR

Warranty service must be performed by the factory or an authorized service center. Contact the factory or local repair center to obtain a RMA (Return Material Authorization) number. It is recommended to include foot strainer and injection/check valve fitting since these devices may be clogged and part of the problem. Decontaminate, dry, and carefully pack the product to be repaired. Please enclose a brief description of the problem and proof of purchase. Prepay all shipping and insurance cost. COD shipments will not be accepted. Damage caused by improper packaging is the responsibility of the sender. When In-Warranty repair is completed, the factory pays for return shipping to the dealer or customer.

## PRODUCT USE WARNING

Blue-White products are manufactured to meet the highest quality standards in the industry. Each product instruction manual includes a description of the associated product warranty and provides the user with important safety information. Purchasers, installers, and operators of Blue-White products should take the time to inform themselves about the safe operation of these products. In addition, Customers are expected to do their own due diligence regarding which products and materials are best suited for their intended applications. BLUE-WHITE is pleased to assist in this effort but does not guarantee the suitability of any particular product for any specific application as Blue-White does not have the same degree of familiarity with the application that the customer/end user has. While BLUE-WHITE will honor all of its product warranties according to their terms and conditions, Blue-White shall only be obligated to repair or replace its defective parts or products in accordance with the associated product warranties.

**BLUE-WHITE SHALL NOT BE LIABLE EITHER IN TORT OR IN CONTRACT FOR ANY LOSS OR DAMAGE WHETHER DIRECT, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL, ARISING OUT OF OR RELATED TO THE FAILURE OF ANY OF ITS PARTS OR PRODUCTS OR OF THEIR UNSUITABILITY FOR A GIVEN PURPOSE OR APPLICATION.**

## CHEMICAL RESISTANCE WARNING

BLUE-WHITE offers a wide variety of wetted parts. Purchasers, installers, and operators of Blue-White products must be well informed and aware of the precautions to be taken when injecting or measuring various chemicals, especially those considered to be irritants, contaminants or hazardous. Customers are expected to do their own due diligence regarding which products and materials are best suited for their applications, particularly as it may relate to the potential effects of certain chemicals on Blue-White products and the potential for adverse chemical interactions. Blue-White tests its products with water only. The chemical resistance information included in this instruction manual was supplied to BLUE-WHITE by reputable sources, but Blue-White is not able to vouch for the accuracy or completeness thereof. While BLUE-WHITE will honor all of its product warranties according to their terms and conditions, Blue-White shall only be obligated to repair or replace its defective parts or products in accordance with the associated product warranties.

**BLUE-WHITE SHALL NOT BE LIABLE EITHER IN TORT OR IN CONTRACT FOR ANY LOSS OR DAMAGE, WHETHER DIRECT, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL, ARISING OUT OF OR RELATED TO THE USE OF CHEMICALS IN CONNECTION WITH ANY BLUE-WHITE PRODUCTS.**

Users of electrical and electronic equipment (EEE) with the WEEE marking per Annex IV of the WEEE Directive must not dispose of end of life EEE as unsorted municipal waste, but use the collection framework available to them for the return, recycle, recovery of WEEE and minimize any potential effects of EEE on the environment and human health due to the presence of hazardous substances. The WEEE marking applies only to countries within the European Union (EU) and Norway. Appliances are labeled in accordance with European Directive 2002/96/EC. Contact your local waste recovery agency for a Designated Collection Facility in your area.