

Injecto-Flo II Single Line Pumps with Integrated Control

313838C
EN

- For feeding, controlling or monitoring, volumetric dosing meters in a single-line system -
- Not for use in hazardous locations -

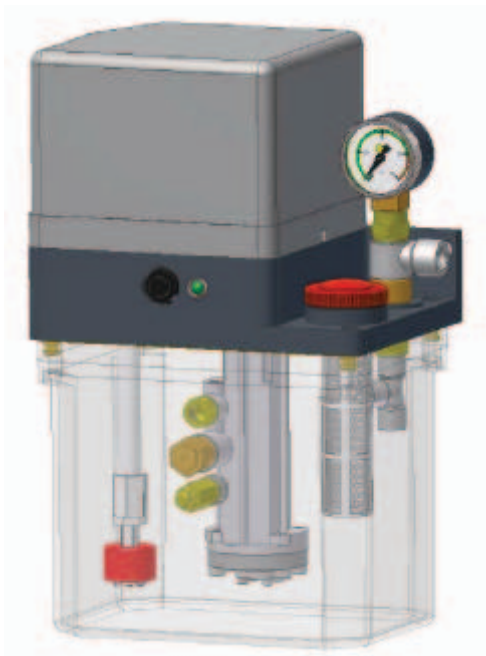
Part No.: Oil - 122895, 122897, 122898; Grease - 122896, 122899

435 psi (3.0 MPa, 30 bar) Maximum Working Pressure

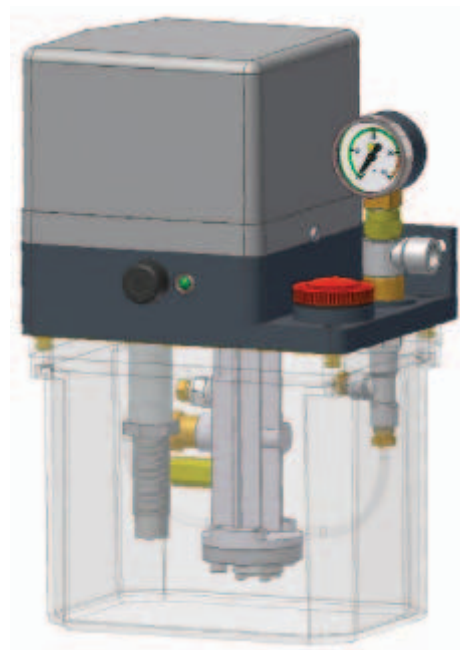


Important Safety Instructions

Read all warnings and instructions in this manual. Save these instructions.



Model 122895 Shown








Model 122896 Shown

TXXXX

Warnings

The following warnings are for the setup, use, grounding, maintenance, and repair of this equipment. The exclamation point symbol alerts you to a general warning and the hazard symbol refers to procedure-specific risk. Refer back to these warnings. Additional, product-specific warnings may be found throughout the body of this manual where applicable.

 WARNING	
	<p>FIRE AND EXPLOSION HAZARD</p> <p>When flammable fluids are present in the work area, such as gasoline and windshield wiper fluid, be aware that flammable fumes can ignite or explode. To help prevent fire and explosion:</p> <ul style="list-style-type: none"> • Use equipment only in well ventilated area. • Eliminate all ignition sources, such as cigarettes and portable electric lamps. • Keep work area free of debris, including rags and spilled or open containers of solvent and gasoline. • Do not plug or unplug power cords or turn lights on or off when flammable fumes are present. • Ground all equipment in the work area. • Use only grounded hoses. • If there is static sparking or you feel a shock, stop operation immediately. Do not use equipment until you identify and correct the problem. • Keep a working fire extinguisher in the work area.
	<p>ELECTRIC SHOCK HAZARD</p> <p>This equipment must be grounded. Improper grounding, setup, or usage of the system can cause electric shock.</p> <ul style="list-style-type: none"> • Turn off and disconnect power at main switch before disconnecting any cables and before servicing equipment. • Connect only to grounded power source. • All electrical wiring must be done by a qualified electrician and comply with all local codes and regulations.
	<p>PRESSURIZED EQUIPMENT HAZARD</p> <p>Fluid from the gun/dispense valve, leaks, or ruptured components can splash in the eyes or on skin and cause serious injury.</p> <ul style="list-style-type: none"> • Follow Pressure Relief Procedure in this manual, when you stop spraying and before cleaning, checking, or servicing equipment. • Tighten all fluid connections before operating the equipment. • Check hoses, tubes, and couplings daily. Replace worn or damaged parts immediately.
	<p>EQUIPMENT MISUSE HAZARD</p> <p>Misuse can cause death or serious injury.</p> <ul style="list-style-type: none"> • Do not operate the unit when fatigued or under the influence of drugs or alcohol. • Do not exceed the maximum working pressure or temperature rating of the lowest rated system component. See Technical Data in all equipment manuals. • Check equipment daily. Repair or replace worn or damaged parts immediately with genuine manufacturer's replacement parts only. • Do not alter or modify equipment. • Use equipment only for its intended purpose. Call your distributor for information. • Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces. • Do not kink or over bend hoses or use hoses to pull equipment. • Keep children and animals away from work area. • Comply with all applicable safety regulations.

Installation

Component Identification

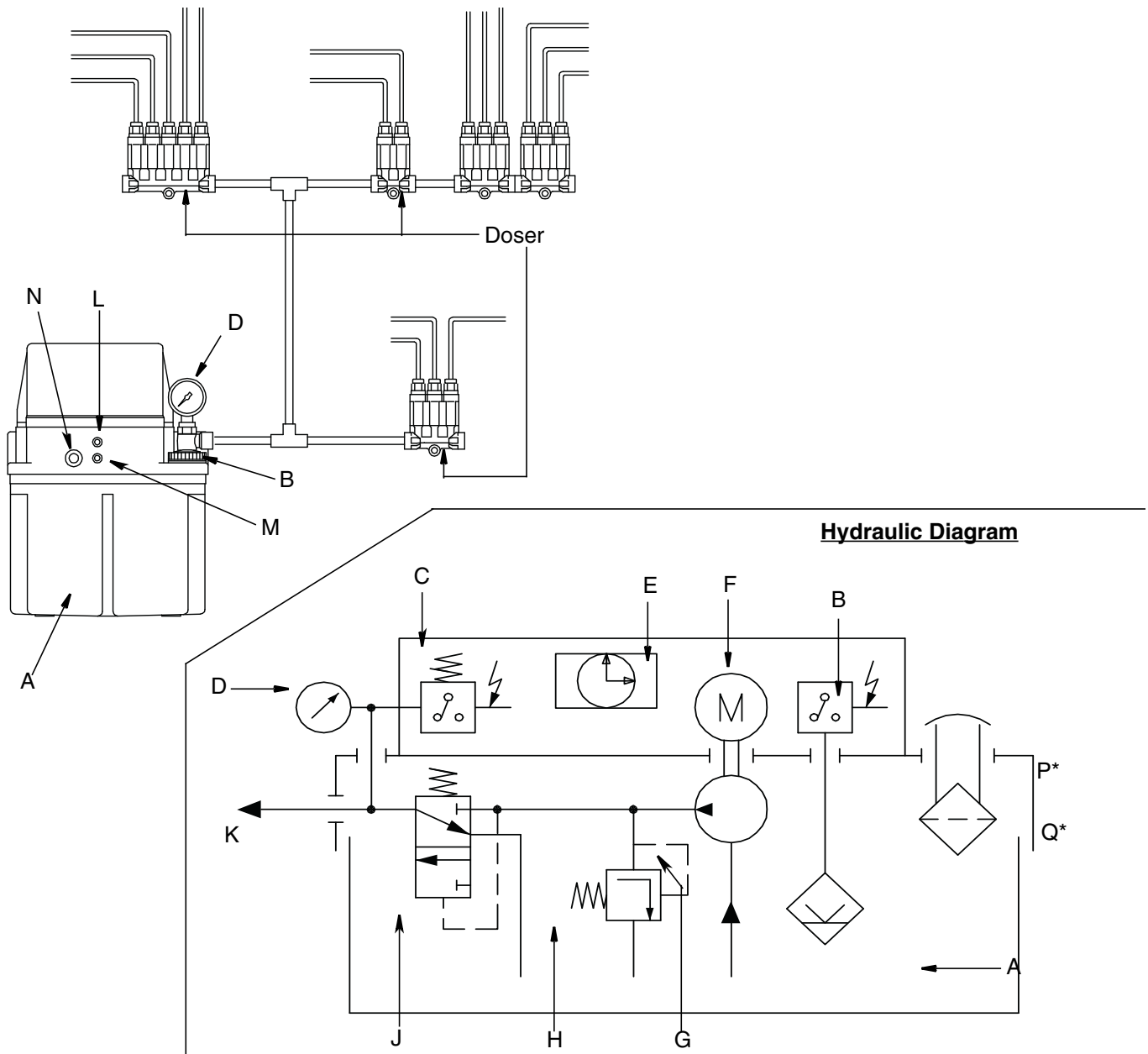


FIG. 1

Key: Models 122895 and 122896

- A Tank
- B Filling Cap - Filter
- C Pressure Switch
- D Pressure Gauge
- E Electric Motor
- F Level Switch
- G Gear Pump
- H Pressure Limiting Valve
- J Decompression Valve
- K Pressure Outlet

- L Green Light
- M Red Light
- N Manual Push Button

Models 122897, 122898 and 122899*
(includes all items A - N and also the following)

- P Pressure Outlet
- Q Return Port

Control and Monitoring

Without Control Device

The unit can be programmed from the machine's automation (PLC, Automation, etc.). Additional control devices are not required.

With Control Devices

Control and monitoring devices check the correct operation of the pressure and decompression cycles.

Different accessories for monitoring and controlling operation can be added:

- Manual Push Button: for intermediate lubrication
- Electrical Level: for minimal level control in the tank
- Pressure Gauge: for visual control of pressure cycle
- Green Light: indicates voltage input
- Red Light: indicates alarm or system fault

Setting Up Controls

1. Select the desired Pause Mode using Selector 3: Time (0 - 2) or Pulses (3 - 4).
2. Select the value of the pause via selectors S1 (tens) and S2 (units).

Pause Time

Programmable by time or pulses via the selector (FIG. 2).

- Selector S1 - Sets Tens (10's)
- Selector S2 - Sets Units
- Selector S3 - Sets Pulse Mode
 - 0 - Pause in seconds
 - 1 - Pause in minutes
 - 2 - Pause in hours
 - 3 - Pause in pulses
 - 4 - Pause in pulses x 10

Application Examples

S1	S2	S3	1 Lubrication Cycle Every:
9	0	0	90 Seconds
3	5	1	35 Minutes
0	1	2	1 Hour
8	0	3	80 Pulses
7	5	4	75 Pulses (x10) = 750 Pulses

Operation Time

- Pressure switch signal + 10 seconds. Depends on flow and number of points in the installation.
- Maximum duration of 3 minutes is set. After 3 minutes alarm will be activated.

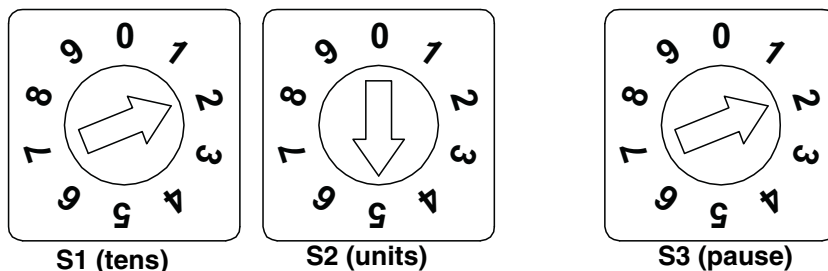


FIG. 2: Selectors

System Monitoring

Alarms

If the alarm is activated during startup- the red LED will light up and flash, indicating the relevant fault.

Type of Alarm	Indicates	To Cancel the Fault
Fixed Red LED	<ol style="list-style-type: none"> 1. Minimum level in the tank 2. Level switch fault 	<ol style="list-style-type: none"> 1. Fill the tank and press the manual push button. 2. Check the level switch.
2 Flashes of Red LED	Pressure fault (not enough pressure after motor in operating for 3 minutes)	<p>Check there are no leaks in the circuit.</p> <p>Check pressure switch status.</p>
3 Flashes of Red LED	Device configuration fault	<p>Check that pause mode selector is not out of range.</p> <p>Check the tens and units selector are not set to 0 at the same time.</p>

Grounding



The equipment must be grounded. Grounding reduces the risk of static and electric shock by providing an escape wire for the electrical current due to static build up or in the event of a short circuit.

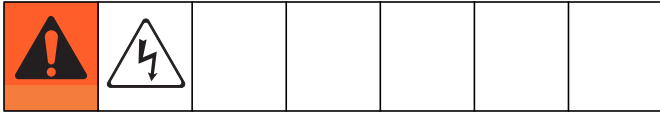
Pressure Relief Procedure



To relieve pressure, loosen outlet fitting connection to bleed air and relieve pressure.

NOTE: Pumps have a built-in decompression valve that relieves pressure when cycle is complete.

Electrical Diagram



- All contacts on this diagram are indicated at rest position.
- For Oil dispensing models only: Tank without lubricant - Minimum level contact is activated by the float.

- For Grease dispensing model only: Tank without lubricant - Minimum level contact is open.

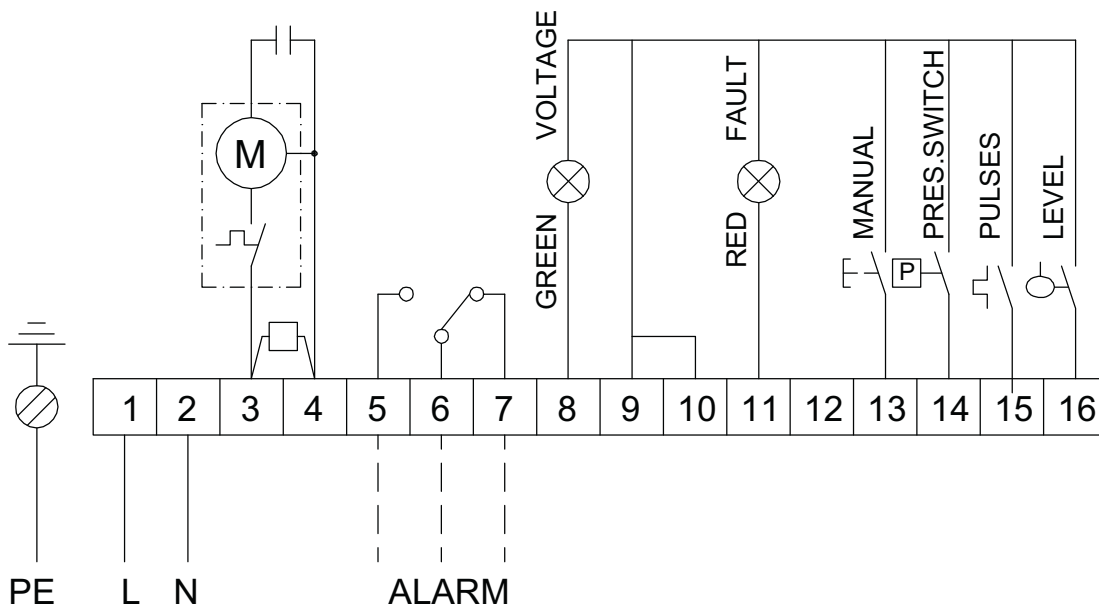
Electrical Level ⇨ Tank without oil

Pressure Switch ⇨ Circuit without pressure

Manual push button ⇨ Not pressed

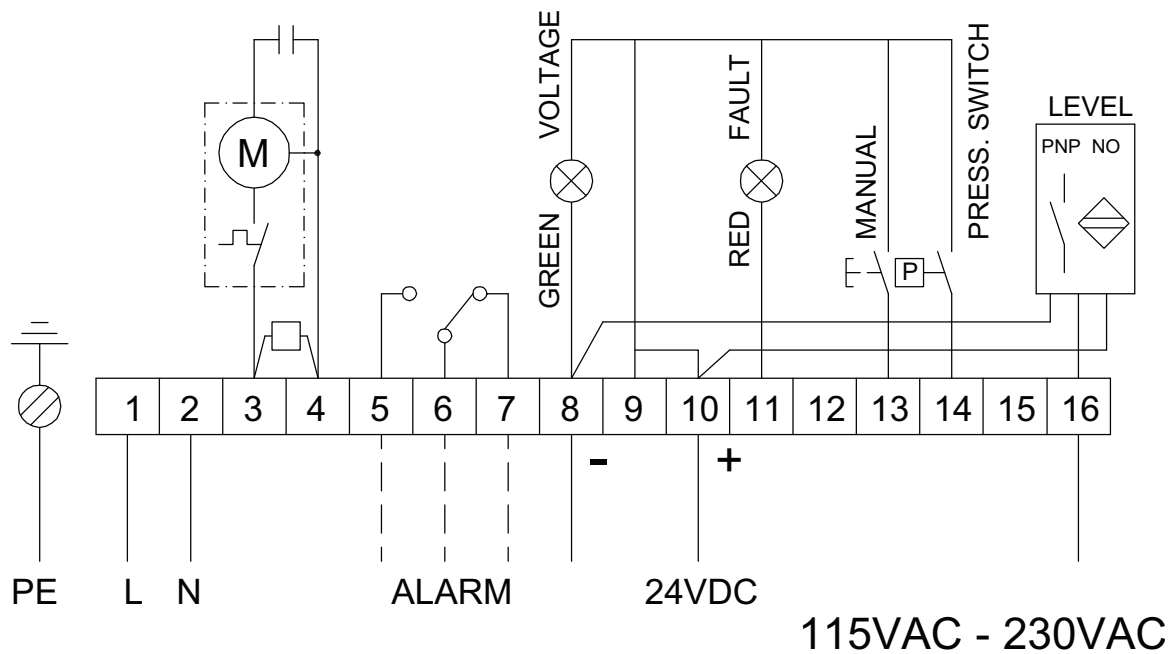
- Heat protectors only incorporated in single-phase motors 115 VAC - 230 VAC.
- If the current is cut as a result of abnormal overheating, this device is resettable (it is automatically reactivated when the temperature returns to normal), therefore it is not necessary to carry out any work on the motor.

Oil Models: 122895, 122897, 122898



115VAC - 230VAC

Grease Models: 122896 and 122899

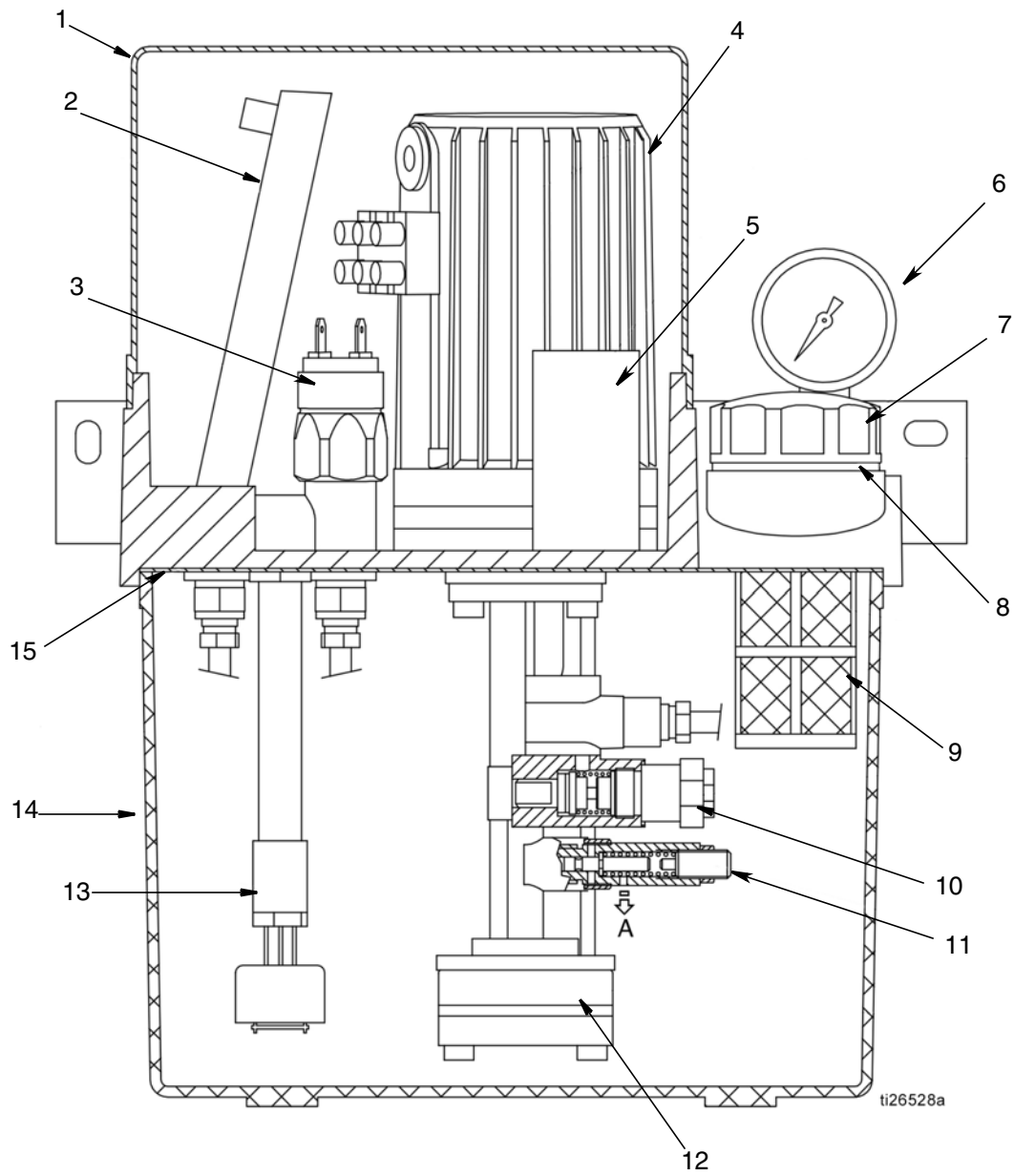


Parts

Ref	Part No.	Description
1	123211	COVER, pump, models 122895 and 122896, Series A
	123212	COVER, pump, models 122895 and 122896, Series B
	123213	COVER, pump, models, 122897, 122898 and 122899, Series A
	123214	COVER, pump, models 122897, 122898 and 122899, Series B
2	123216	CONTROL, pump, time/pulse, 230V
3	123217	SWITCH, pressure, pump
4	123218	MOTOR, 230V, 3 liter
	123219	MOTOR, 230V,6 liter
5	123220	CONDENSER, motor, 230V
6	123222	GAUGE pressure, 40 bar, pump
7	123223	CAP, fill,pump, models122896, 122897
	122912	CAP, fill,pump, models 122895, 122898, 122899
8	123224	SEAL, fill cap, used with Ref 7, 123223
	123225	SEAL, fill cap, used with Ref 7, 122912
9	123226	FILTER, fill, pump
	123227	FILTER, fill, pump
10	123228	VALVE, relief, pump
11	123229	VALVE, pump, pressure limiting
12	123230	PUMP, 0.2L/min
	123231	PUMP, 0.5L/min
13	123232	SWITCH, level, pump, oil, 2/3L tanks
	123233	SWITCH, level, pump, oil, 6Ltanks
	123234	SWITCH, level, pump, fluid grease 2-3Ltanks
14	122911	CONTAINER, plastic, 3L
	15X748	CONTAINER, plastic, 6L
15	123235	SEAL, container, 3 L
	123236	SEAL, container, 6 L
16▲	189930	LABEL, caution

▲ Replacement Danger and Warning labels, tags and cards are available at no cost.

Parts



Technical Data

Tank Capacity

Models 122895, 122896	0.8 gallons (3 liters)
Models 122897, 122898, 122899	1.6 gallons (6 liters)

Tank Material

Models 122895, 122896, 122899	Plastic
Model 122897, 122898	Plastic, Aluminum, Metal

Output Connection

Models 122895, 122896	M14 x 1'5
Models 122897, 122898, 122899	2 x G1/4BSP (left and right side)

Return Connection

Models 122897, 122898, 122899	G1/4BSP
-------------------------------	---------

Pump

Lubricant

Models 122895, 122897, 122898	Mineral or synthetic oil
Models 122896, 122899	Fluid grease NLGI00-000

Flow

Model 122895, 122897, 122899	0.05 gal/min (0.2 L/min)
Model 122898	0.13 gal/min (0.5 L/min)

Maximum Pressure 435 psi (3.0 MPa, 30 bar)

Working Temperature 50°F to 104°F (10°C to 40°C)

A/C Motor

Voltage / Frequency 115 VAC 50/60 Hz - 230 VAC 50/60 Hz

Consumption 0.5A - 50 Hz / 0.7A - 60 Hz

Service Mode 3S 20%*

Maximum Operation Time 15 Minutes

Maximum Cycles / Hour 20

* 20% is the ratio between the operation time and the stop time. For example, 1 minute of operation time corresponds to 5 minutes stop time.

Dimensions

Oil Systems

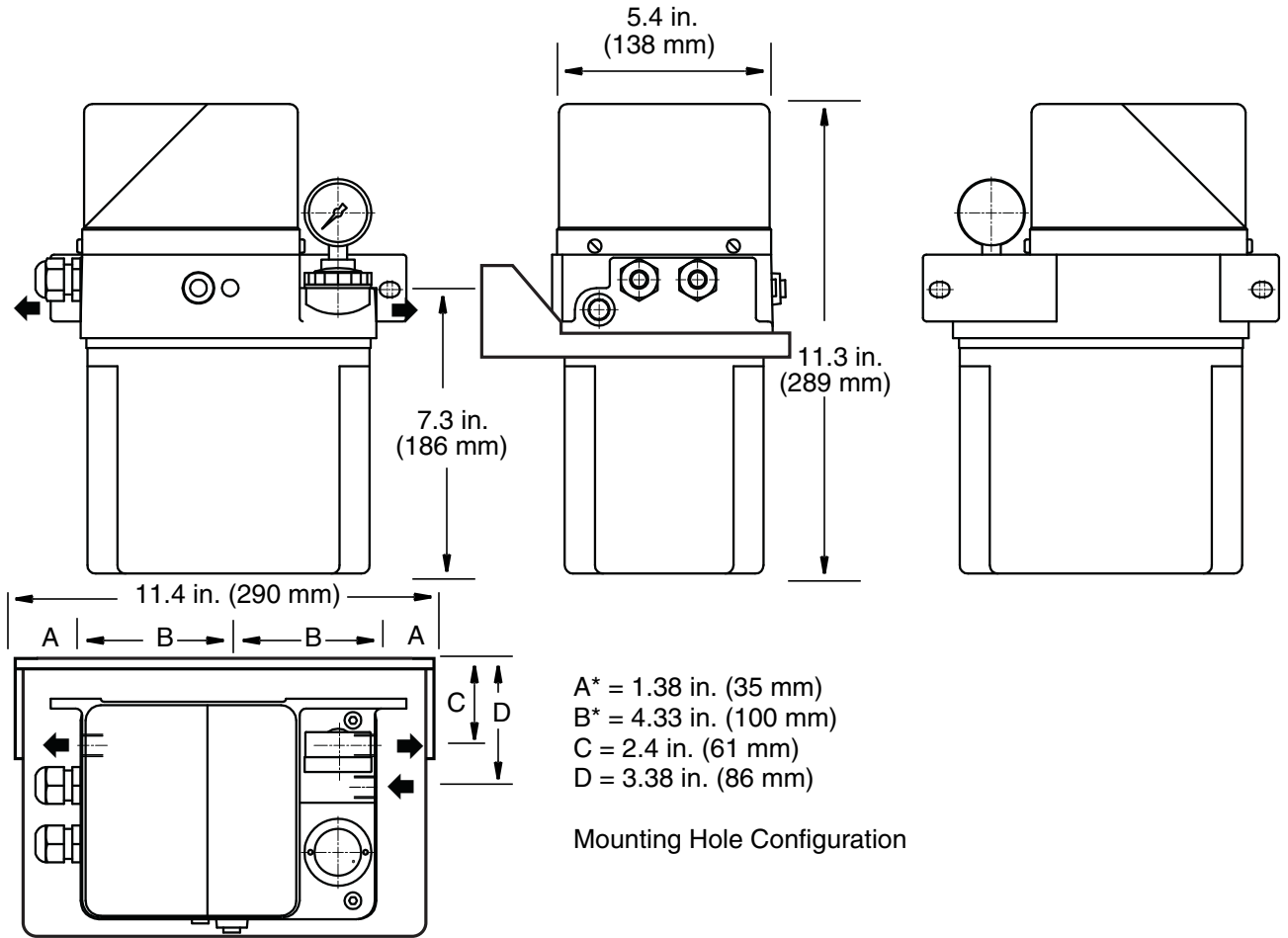


FIG. 3

Grease Systems

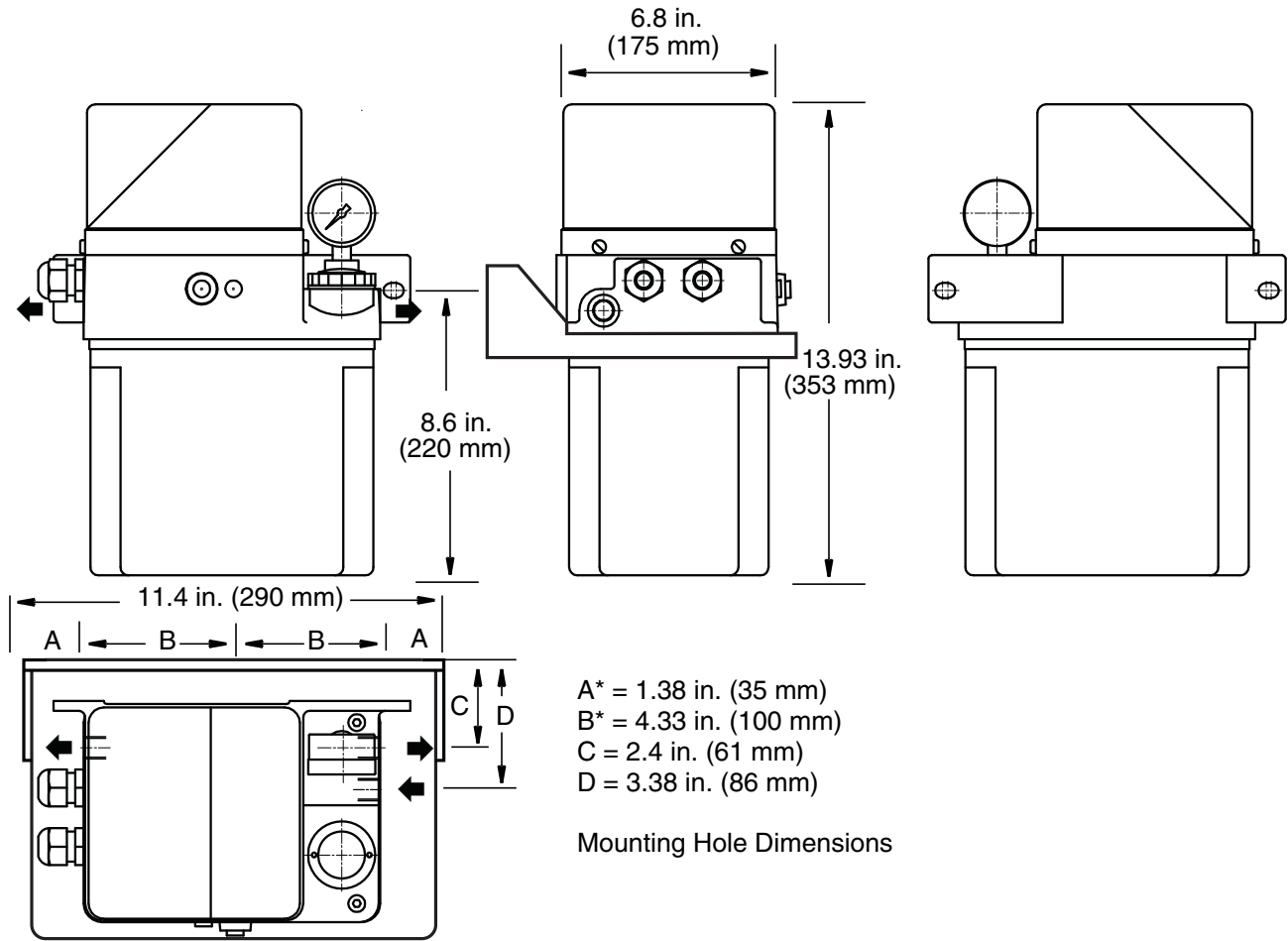


FIG. 4

Graco Standard Warranty

Graco warrants all equipment referenced in this document which is manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

This warranty does not cover, and Graco shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

THIS WARRANTY IS EXCLUSIVE, AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

Graco's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

GRACO MAKES NO WARRANTY, AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IN CONNECTION WITH ACCESSORIES, EQUIPMENT, MATERIALS OR COMPONENTS SOLD BUT NOT MANUFACTURED BY GRACO. These items sold, but not manufactured by Graco (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. Graco will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

In no event will Graco be liable for indirect, incidental, special or consequential damages resulting from Graco supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of Graco, or otherwise.

FOR GRACO CANADA CUSTOMERS

The Parties acknowledge that they have required that the present document, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English. Les parties reconnaissent avoir convenu que la rédaction du présente document sera en Anglais, ainsi que tous documents, avis et procédures judiciaires exécutés, donnés ou intentés, à la suite de ou en rapport, directement ou indirectement, avec les procédures concernées.

Graco Information

For the latest information about Graco products, visit www.graco.com.

TO PLACE AN ORDER, contact your Graco distributor or call to identify the nearest distributor.

Phone: 612-623-6928 or **Toll Free:** 1-800-533-9655, **Fax:** 612-378-3590

*All written and visual data contained in this document reflects the latest product information available at the time of publication.
Graco reserves the right to make changes at any time without notice.*

For Patent Information: www.graco.com/patents

This manual contains English. MM 313838

Graco Headquarters: Minneapolis
International Offices: Belgium, China, Japan, Korea

GRACO INC. P.O. BOX 1441 MINNEAPOLIS, MN 55440-1441

Copyright 2009, Graco Inc. is registered to ISO 9001

www.graco.com

July 2015