Instructions

Injecto-Flo II Single Line Pumps with Integrated Control

- 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.
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**

**FIRE AND EXPLOSION HAZARD**

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:

- 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.

**ELECTRIC SHOCK HAZARD**

This equipment must be grounded. Improper grounding, setup, or usage of the system can cause electric shock.

- 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.

**PRESSURIZED EQUIPMENT HAZARD**

Fluid from the gun/dispense valve, leaks, or ruptured components can splash in the eyes or on skin and cause serious injury.

- 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.

**EQUIPMENT MISUSE HAZARD**

Misuse can cause death or serious injury.

- 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

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

Models 122897, 122898 and 122899*
(includes all items A - N and also the following)
L Green Light
M Red Light
N Manual Push Button
P Pressure Outlet
Q Return Port

FIG. 1

Hydraulic Diagram
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

<table>
<thead>
<tr>
<th>S1</th>
<th>S2</th>
<th>S3</th>
<th>1 Lubrication Cycle Every:</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>0</td>
<td>0</td>
<td>90 Seconds</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>1</td>
<td>35 Minutes</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1 Hour</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td>3</td>
<td>80 Pulses</td>
</tr>
<tr>
<td>7</td>
<td>5</td>
<td>4</td>
<td>75 Pulses (x10) = 750 Pulses</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Type of Alarm</th>
<th>Indicates</th>
<th>To Cancel the Fault</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Red LED</td>
<td>1. Minimum level in the tank</td>
<td>1. Fill the tank and press the manual push button.</td>
</tr>
<tr>
<td></td>
<td>2. Level switch fault</td>
<td>2. Check the level switch.</td>
</tr>
<tr>
<td>2 Flashes of Red LED</td>
<td>Pressure fault (not enough pressure after motor in operating for 3 minutes)</td>
<td>Check there are no leaks in the circuit.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Check pressure switch status.</td>
</tr>
<tr>
<td>3 Flashes of Red LED</td>
<td>Device configuration fault</td>
<td>Check that pause mode selector is not out of range.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Check the tens and units selector are not set to 0 at the same time.</td>
</tr>
</tbody>
</table>

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.
- 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 resetable (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

115VAC - 230VAC
<table>
<thead>
<tr>
<th>Ref</th>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>123211</td>
<td>COVER, pump, models 122895 and 122896, Series A</td>
</tr>
<tr>
<td></td>
<td>123212</td>
<td>COVER, pump, models 122895 and 122896, Series B</td>
</tr>
<tr>
<td></td>
<td>123213</td>
<td>COVER, pump, models 122897, 122898 and 122899, Series A</td>
</tr>
<tr>
<td></td>
<td>123214</td>
<td>COVER, pump, models 122897, 122898 and 122899, Series B</td>
</tr>
<tr>
<td>2</td>
<td>123216</td>
<td>CONTROL, pump, time/pulse, 230V</td>
</tr>
<tr>
<td>3</td>
<td>123217</td>
<td>SWITCH, pressure, pump</td>
</tr>
<tr>
<td>4</td>
<td>123218</td>
<td>MOTOR, 230V, 3 liter</td>
</tr>
<tr>
<td></td>
<td>123219</td>
<td>MOTOR, 230V, 6 liter</td>
</tr>
<tr>
<td>5</td>
<td>123220</td>
<td>CONDENSER, motor, 230V</td>
</tr>
<tr>
<td>6</td>
<td>123222</td>
<td>GAUGE pressure, 40 bar, pump</td>
</tr>
<tr>
<td>7</td>
<td>123223</td>
<td>CAP, fill, pump, models 122896, 122897</td>
</tr>
<tr>
<td></td>
<td>122912</td>
<td>CAP, fill, pump, models 122895, 122898, 122899</td>
</tr>
<tr>
<td>8</td>
<td>123224</td>
<td>SEAL, fill cap, used with Ref 7, 123223</td>
</tr>
<tr>
<td></td>
<td>123225</td>
<td>SEAL, fill cap, used with Ref 7, 122912</td>
</tr>
<tr>
<td>9</td>
<td>123226</td>
<td>FILTER, fill, pump</td>
</tr>
<tr>
<td></td>
<td>123227</td>
<td>FILTER, fill, pump</td>
</tr>
<tr>
<td>10</td>
<td>123228</td>
<td>VALVE, relief, pump</td>
</tr>
<tr>
<td>11</td>
<td>123229</td>
<td>VALVE, pump, pressure limiting</td>
</tr>
<tr>
<td>12</td>
<td>123230</td>
<td>PUMP, 0.2L/min</td>
</tr>
<tr>
<td></td>
<td>123231</td>
<td>PUMP, 0.5L/min</td>
</tr>
<tr>
<td>13</td>
<td>123232</td>
<td>SWITCH, level, pump, oil, 2/3L tanks</td>
</tr>
<tr>
<td></td>
<td>123233</td>
<td>SWITCH, level, pump, oil, 6L tanks</td>
</tr>
<tr>
<td></td>
<td>123234</td>
<td>SWITCH, level, pump, fluid grease 2-3L tanks</td>
</tr>
<tr>
<td>14</td>
<td>122911</td>
<td>CONTAINER, plastic, 3L</td>
</tr>
<tr>
<td></td>
<td>15X748</td>
<td>CONTAINER, plastic, 6L</td>
</tr>
<tr>
<td>15</td>
<td>123235</td>
<td>SEAL, container, 3 L</td>
</tr>
<tr>
<td></td>
<td>123236</td>
<td>SEAL, container, 6 L</td>
</tr>
<tr>
<td>16</td>
<td>189930</td>
<td>LABEL, caution</td>
</tr>
</tbody>
</table>

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

1
2
3
4
5
6
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12
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14
15
## 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

![Diagram of Oil Systems with dimensions]

- **A**: 1.38 in. (35 mm)
- **B**: 4.33 in. (100 mm)
- **C**: 2.4 in. (61 mm)
- **D**: 3.38 in. (86 mm)

Mounting Hole Configuration

**Fig. 3**
Grease Systems

Mounting Hole Dimensions

A* = 1.38 in. (35 mm)
B* = 4.33 in. (100 mm)
C = 2.4 in. (61 mm)
D = 3.38 in. (86 mm)
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.

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