

## P55U Lubricator

**P55U Lubricator Box:** Heavy duty lubricator assemblies to convert the rotary motion of a drive assembly to linear motion by way of a rotating cam shaft and opposing pump assembly. For Professional use only.

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# 1. 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 symbols refer to procedures-specific risks. When these symbols appear in the body of this manual, refer back to these Warnings. Product-specific hazard symbols and warnings not covered in this section may appear throughout the body of this manual where applicable.

 <b>Warning</b>	
	<p><b>SKIN INJECTION HAZARD</b></p> <p>High-pressure fluid from dispensing device, hose leaks, or ruptured components will pierce skin. This may look like just a cut, but it is a serious injury that can result in amputation. <b>Get immediate surgical treatment.</b></p> <ul style="list-style-type: none"><li>• Do not point dispensing device at anyone or at any part of the body.</li><li>• Do not put your hand over the fluid outlet.</li><li>• Do not stop or deflect leaks with your hands, body, glove, or rag.</li><li>• Follow the Pressure Relief Procedure when you stop dispensing and before cleaning, checking, or servicing equipment.</li><li>• Tighten all fluid connections before operating the equipment.</li><li>• Check hoses and coupling daily. Replace worn or damaged parts immediately.</li></ul>
	<p><b>FIRE AND EXPLOSION HAZARD</b></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"><li>• Use equipment only in well ventilated area.</li><li>• Eliminate all ignition sources, such as cigarettes and portable electric lamps.</li><li>• Keep work area free of debris, including rags and spilled or open containers of solvent and gasoline.</li><li>• Do not plug or unplug power cord or turn lights on or off when flammable fumes are present.</li><li>• Ground all equipment in the work area.</li><li>• Use only grounded hoses.</li><li>• <b>Stop operation immediately</b> if static sparking occurs or you feel a shock. Do not use equipment until you identify and correct the problem.</li><li>• Keep a working fire extinguisher in the work area.</li></ul>



# Warning



## 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.
- Use fluids and solvents that are compatible with equipment wetted parts. See Technical Data in all equipment manuals. Read fluid and solvent manufacturer's warnings. For complete information about your material, request MSDS from distributor or retailer.
- Turn off all equipment and follow the **Pressure Relief Procedures** when equipment is not in use.
- Check equipment daily. Repair or replace worn or damaged parts immediately with genuine manufacturer's replacement parts only.
- Do not alter or modify equipment. Alterations or modifications may void agency approvals and create safety hazards.
- Make sure all equipment is rated and approved for the environment in which you are using it.
- Use equipment only for its intended purpose. Call CPI for information.
- Route hose 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.



## PERSONAL PROTECTIVE EQUIPMENT

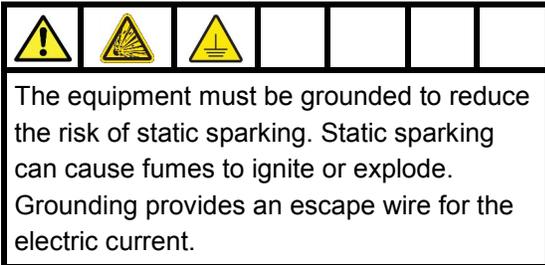
Wear appropriate protective equipment when in the work area to help prevent serious injury, including eye injury, hearing loss, inhalation of toxic fumes, and burns. This protective equipment includes but is not limited to:

- Protective eye wear, and hearing protection.
- Respirators, protective clothing, and gloves as recommended by the fluid and solvent manufacturer.

## 2. Installation Instructions

### Installing the Box

#### Grounding



Ensure the lubricator is properly grounded as the pump is grounded through the mounting screws.

### Mounting the Box

#### Note:

- When installing the P55U Lubricator box always mount it to a rigid support or frame.
- The Lubricator may be driven by the rotating source of the engine or compressor or an electric motor.
- Be careful to accurately align the lubricator to the drive shaft. Misalignment will cause stress to the drive shaft and will damage the pump seals and bearings.

## 3. Operating Instructions

1. Before running the lubricator ensure that the drive shaft, pump, and accessories are correctly specified for the chosen application.
2. Securely mount the lubricator assembly.
3. Make sure drive shaft is connected and properly aligned.
4. Before start up the lubricator must be filled to the half way mark of the sight glass with the specified lubricating oil for the operating conditions. (Minimum oil level is at top of camshaft. If oil falls below refill to appropriate oil level.)
5. Fully prime the pump as described in P-55U Pump User Instructions before operating the lubrication system.
6. Once running observe the complete system to ensure proper operation of all components. For trouble shooting of individual components refer to the individual part operations manual.

# 4. Technical Data

**Table 1**

*Pints per Day Section of the Table Applies to Box Suction and Gravity Models Only*

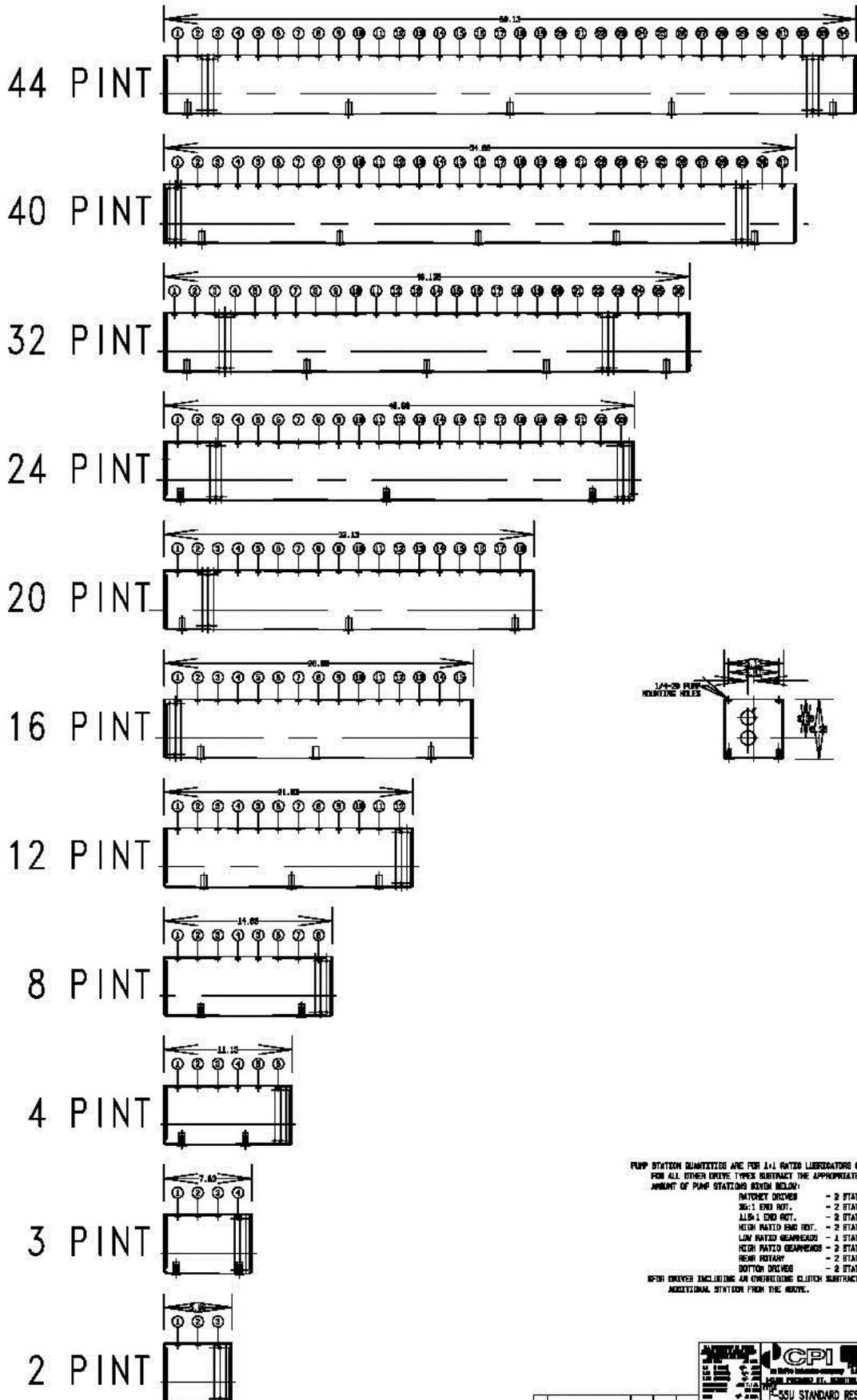
Piston Diameter		Max Outlet Pressure			Pints/Day		Cubic Inch/Stroke		Cubic cm/Stroke	
inches	mm	psi	MPa	bar	Min*	Max	Min*	Max	Min*	Max
3/16	4.76	7500	51.7	517	0	.50	0	.010	0	.163
1/4	6.35	8000	55.1	551	0	.90	0	.018	0	.295
3/8	9.53	3500	24.1	241	0	2.00	0	.041	0	.672
					*Pump adjusted to zero stroke					

- Max Lubricator Cam Shaft speed, 35RPM
- Refer to your manufacturer’s specific instruction manuals to ensure your box and lubrication system are rated for the selected pressure.
- Suitable for Use with Petroleum and Synthetic Base Lubricants
- Minimum Oil Viscosity 90 SUS
- Maximum Oil Viscosity 8000 SUS
- Based on 500 SUS oil at 70°F ambient. Heavier oil will produce fewer but larger drops.
- When approaching maximum outputs, some oils will stream rather than form drops in sight glass.
- Full Stroke—3/8 inch (9.53 mm)

**Table 2**

*Fluid Measurement Conversion Data*

Fluid Measurement Conversion Data		
(NOTE: All measurements are approximate values only)		
Number of Drops	US Measurement	Metric Measurement
1 drop	0.002 cubic inch	0.033 cubic centimeter (cc)
14,500 drops	1 pint	0.47 Liter (l)
28.875 cubic Inch	1 pint	0.47 Liter (l)
500 drops	1 cubic inch	16.39 cubic centimeter (cc)
10 drops/minute	1 pint/24 hours	0.47 Liter (l)/24 hours
30 drops	0.061 cubic inch	1 cubic centimeter (cc)



PUMP SYSTEM QUANTITIES ARE FOR 1:1 RATED LIBERATORS ONLY.  
 FOR ALL OTHER DRIVE TYPES SUBTRACT THE APPROPRIATE  
 AMOUNT OF PUMP STATIONS GIVEN BELOW:

WATNEY DRIVES	- 2 STATIONS
20:1 END PNT.	- 2 STATIONS
ALL 1:1 END PNT.	- 2 STATIONS
HIGH RATIO END PNT.	- 2 STATIONS
LOW RATIO BEARINGS	- 1 STATION
HIGH RATIO BEARINGS	- 2 STATIONS
REAR PNTARY	- 2 STATIONS
BOTTOM DRIVES	- 2 STATIONS

IF 1:1 DRIVES INCLUDING AN OVERLOADING CLUTCH SUBTRACT (1)  
 ADDITIONAL STATION FROM THE ABOVE.

DATE	SCALE	REV.	BY	CHKD.

**CPI**

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# 5. Troubleshooting

Problem	Cause	Solution

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