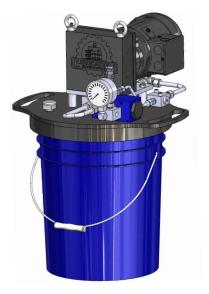
# **ELECTRIC BARREL PUMPS**









#### **35LB BARREL PUMP**

1/4 HP 24VDC PART NUMBER: LEBP-E24DC-375-35

1/4 HP 115/230VAC PART NUMBER: LEBP-110B-375-35

#### **120LB BARREL PUMP**

1/4 HP 24VDC PART NUMBER: LEBP-E24DC-375-120

1/4 HP 115/230VAC PART NUMBER: LEBP-110B-375-120

#### **400LB BARREL PUMP**

1/4 HP 24VDC PART NUMBER: LEBP-E24DC-375-400 1/4 HP 115/230VAC

PART NUMBER: LEBP-110B-375-400

#### AVAILABLE IN 1/2HP OR 1HP, 115/208/230/480VAC MOTORS WITH GEAR REDUCER. EXPOLOSION PROOF OPTIONS ALSO AVAILABLE.

## **TABLE OF CONTENTS**

<b>35LB PUMP</b> SAFTEY INSTRUCTIONS, SPECIFICATIONS AND DIMENSIONS	PAGE 3
<b>120LB PUMP</b> SAFTEY INSTRUCTIONS, SPECIFICATIONS AND DIMENSIONS	PAGE 4
400LB PUMP SAFTEY INSTRUCTIONS, SPECIFICATIONS AND DIMENSIONS	PAGE 5
INLET BLOCK REPLACEMENT	PAGE 6
UPPER PUMP MOTOR ASSEMBLY PARTS LIST	PAGE 7
UPPER PUMP OUTLET, RETURN, RELIEF PARTS LIST	PAGE 8
LOWER PUMP PARTS LIST	PAGE 9
TROUBLESHOOTNG	PAGE 10

#### ACCESSORIES

DIRT TRAP FILTER	PAGE 11
OPTIONAL ACCESSORIES	12-14

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### LEBP-E24DC/110-375-35

#### SAFETY INSTRUCTIONS

DO NOT EXCEED MAXIMUM WORKING PRESSURE. SYSTEMS SHOULD NOT BE IN OPERATION WHILE CONDUCTING ANY ASSEMBLY OR DISASSEMBLY OF COMPONENTS.

SPECIFICATIONS			
LUBE PUMP PE	RFORMANC	E AND SPECIFIC	CATIONS
MOTOR, HP		1/4 HP	
OPERATING VOLTAGE	24VDC 115/230VAC 115/230VAC		
HZ	N/A	60	50
AMPS	9.80	2.35/1.125	2.60/1.35
RPM	170 159 133		133
RATIO		10.6:1	
OUTPUT, PER STROKE	0.066 CU-IN		
OUTPUT, PER MINUTE	11 CUIN	10.5 CU IN	8.8 CU IN
MAX PRESSURE	5,000 PSI		

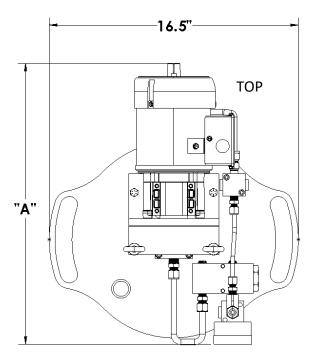
DIMENSIONS		
MOTOR	DIMENSION "A"	
24VDC	21″	
110VAC	19"	

#### FAST FILL PUMP AVAILABLE AT .12 CU/IN PER STROKE. 2000PSI MAXIMUM PRESSURE. LEBP-XXX-500-XXX

AVAILABLE IN 1/2HP OR 1HP, 115/208/230/480VAC MOTORS WITH GEAR REDUCER. EXPOLOSION PROOF OPTIONS ALSO AVAILABLE.

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(24" REF.)



### LEBP-E24DC/110-375-120

#### SAFETY INSTRUCTIONS

DO NOT EXCEED MAXIMUM WORKING PRESSURE. SYSTEMS SHOULD NOT BE IN OPERATION WHILE CONDUCTING ANY ASSEMBLY OR DISASSEMBLY OF COMPONENTS.

SPECIFICATIONS				
LUBE PUMP PERFO	LUBE PUMP PERFORMANCE AND SPECIFICATIONS			
MOTOR, HP		1/4 HP		
OPERATING VOLTAGE	24VDC	115/230VAC	115/230VAC	
HZ	N/A	60	50	
AMPS	9.80	2.35/1.125	2.60/1.35	
RPM	170	159	133	
RATIO	10.6:1			
OUTPUT, PER STROKE	0.066 CU-IN			
OUTPUT, PER MINUTE	11 CUIN	10.5 CU IN	8.8 CU IN	
MAX PRESSURE	5,000 PSI			

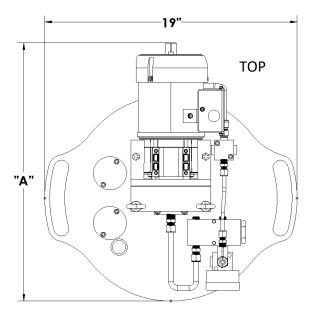
DIMENSIONS		
MOTOR	DIMENSION "A"	
24VDC	21″	
110VAC	19"	

#### FAST FILL PUMP AVAILABLE AT .12 CU/IN PER STROKE. 2000PSI MAXIMUM PRESSURE. LEBP-XXX-500-XXX

AVAILABLE IN 1/2HP OR 1HP, 115/208/230/480VAC MOTORS WITH GEAR REDUCER. EXPOLOSION PROOF OPTIONS ALSO AVAILABLE.

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(37" APPROX.)



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### LEBP-E24DC-375-400

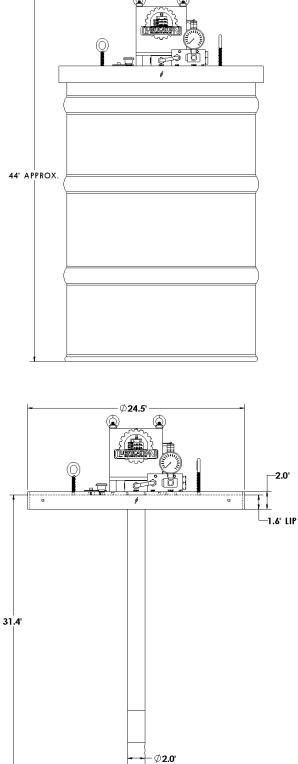
#### DIMENSIONS

#### DO NOT EXCEED MAXIMUM WORKING PRESSURE. SYSTEMS SHOULD NOT BE IN **OPERATION WHILE CONDUCTING ANY** ASSEMBLY OR DISASSEMBLY OF COMPONENTS. 44 APPROX. **SPECIFICATIONS** LUBE PUMP PERFORMANCE AND SPECIFICATIONS MOTOR, HP 1/4 HP OPERATING VOLTAGE 115/230 VAC 115/230 VAC ΗZ 60 50 AMPS 2.35/1.125 2.60/1.35 RPM 133 159 RATIO 10.6:1 0.066 CU-IN **OUTPUT, PER STROKE OUTPUT, PER MINUTE** 10.5 CU IN 8.8 CU IN MAX PRESSURE 5,000 PSI FAST FILL PUMP AVAILABLE AT .12 CU/IN PER STROKE.

SAFETY INSTRUCTIONS

FAST FILL PUMP AVAILABLE AT .12 CU/IN PER STROKE. 2000PSI MAXIMUM PRESSURE. LEBP-XXX-500-XXX

AVAILABLE IN 1/2HP OR 1HP, 115/208/230/480VAC MOTORS WITH GEAR REDUCER. EXPOLOSION PROOF OPTIONS ALSO AVAILABLE.



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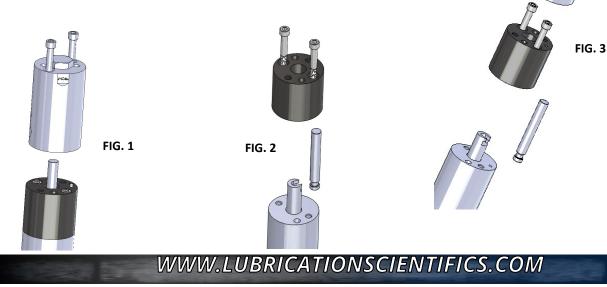
## **REPLACING INLET BLOCK (PUMPING ELEMENT)**

#### **REMOVING INLET BLOCK**

- 1. TURN OFF POWER TO LCPR CONTROLLER AND DISCONNECT LEADS TO THE 24 VOLT MOTOR. RELIEVE HYDRAULIC PRESSURE IN SYSTEM SLOWLY BREAK LOOSE OUTLET AND RETURN LINES, TO VERIFY THERE IS NO PRESSURE, THEN DISCONNECT.
- 2. REMOVE THE SIX 3/8 BOLTS, NUTS, WASHERS, AND TWO EYE BOLTS FROM RESERVOIR LID. YOU WILL NEED TWO 9/16 END WRENCHES.
- 3. ONCE THE PUMP ASSEMBLY IS REMOVED FROM THE RESERVOIR, FLIP ASSEMBLY UPSIDE DOWN AND GENTLY LAY THE MOTOR SIDE ON SOMETHING SOFT OR ANYTHING TO PRO-TECT FROM COSMETIC DAMAGE.
- 4. CLEAN OFF EXCESS GREASE OR OIL FROM PICKUP TUBE ASSEMBLY.
- 5. WITH ONE HAND SUPPORTING THE INLET BLOCK, REMOVE THE TWO 1/4-28 X 3-1/2" SOCKET HEAD CAP SCREWS USING A 3/16" ALLEN KEY. (FIG. 1)
- 6. SLIDE INLET BLOCK OFF THE PISTON AND SET ASIDE (FIG. 1)
- 7. USING THE USING THE 3/16 ALLEN KEY, REMOVE THE TWO 1/4-28 X 2" SOCKET HEAD CAP SCREWS FROM THE BLACK PICK UP TUBE SPACER AND SET SPACER AND HARDWARE ASIDE. REMOVE THE INLET BLOCK PISTON FROM THE SLOTTED FIT AND INSERT IT BACK INTO THE OLD INLET BLOCK(FIG. 2)

#### **REPLACING INLET BLOCK**

- 1. CLEAN ALL MATING SURFACES OF ANY FOREIGN DEBRIS.
- LINES, TO VERIFY THERE IS NO PRESSURE, THEN 2. REMOVE PISTON FROM NEW INLET BLOCK, LUBE PISTON WITH CLEAN GREASE OR OIL AND SLIP PISTON INTO THE SLOT. (FIG. 3)
  - REPLACE ORINGS ON THE BLACK PICKUP TUBE SPACER AND REINSTALL USING TWO NEW 1/4-28 X 2" SOCKET HEAD CAP SCREWS PROVIDED US-ING LOCTITE AND TORQUE TO 84 IN/LBS. (FIG. 3)
  - DOUBLE CHECK SEALING SURFACES AND VERIFY O-RINGS ARE IN PLACE ON THE NEW INLET BLOCK. INSTALL NEW INLET BLOCK USING TWO NEW 1/4-28 X 3-1/2" SOCKET HEAD CAP SCREWS. PUT LOCTITE ON THE THREADS AND TORQUE TO 84 IN/LBS OR 7 FT/LBS. (FIG. 3)

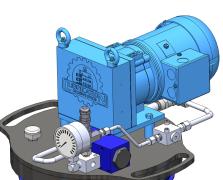


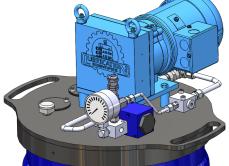
## **UPPER PUMP MOTOR ASSEMBLY—PARTS IDENTIFICATION**

### **35LB PUMP**

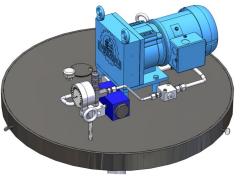
120LB PUMP

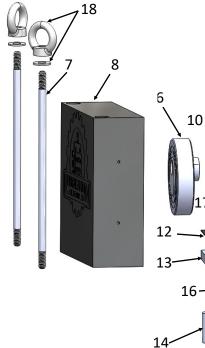
**400LB PUMP** 

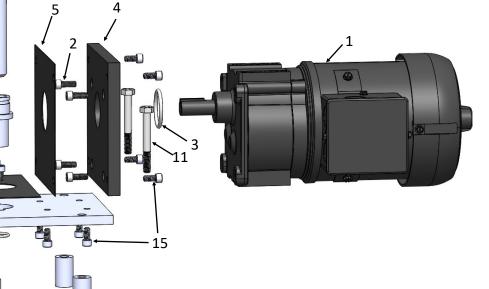




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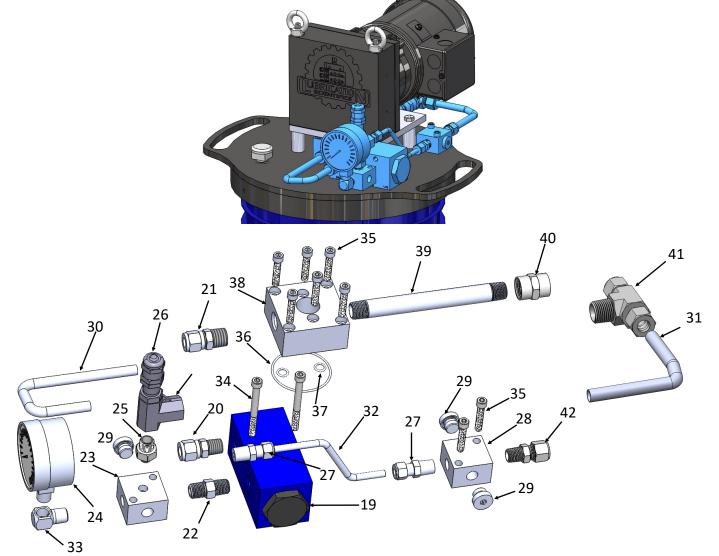


ITEM	DESCRIPTION	QTY
1	24VDC /110AC MOTOR (110AC SHOWN)	1
2	1/4 - 28 X 5/8" SOCKET HEAD CAP SCREW	4
3	-220 VITON ORING	1
4	ECCENTRIC HOUSING BACK PLATE	1
5	ECCENTRIC HOUSING BACK PLATE GASKET	1
6	ECCENTRIC CAM	1
7	5/16 - 18 TIE RODS	2
8	ECCENTRIC FRONT COVER	1
9	DRIVE PISTON	1

ITEM	DESCRIPTION	QTY
10	DRIVE PISTON SLEEVE	1
11	5/16-18 X 2" HEX HEAD SCREW	2
12	ECCENTRIC HOUSING LOWER GASKET	1
13	MOTOR MOUNTING PLATE	1
14	SPACER	4
15	1/4-20 X 1/2" SOCKET HEAD CAP SCREWS	8
16	-910 VITON ORING	1
17	1/4 - 28 X 5/16" SOCKET HEAD CAP SCREW	2
18	5/16-18 EYE NUTS WITH 5/16" WASHERS	2

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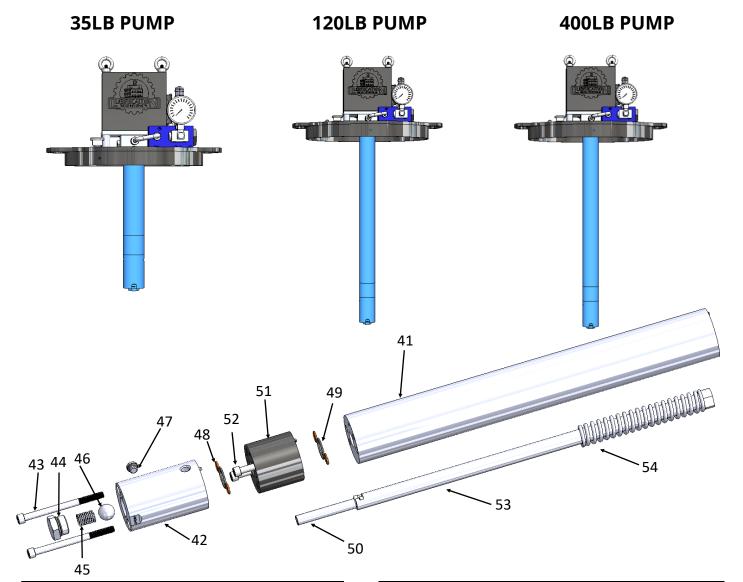
## UPPER PUMP OUTLET/RETURN/RELIEF—PARTS IDENTIFICATION



ITEM	DESCRIPTION	QTY
19	MINI DIRT TRAP	1
20	TUBE FITTING 3/8" TUBE X 1/4 NPT	1
21	TUBE FITTING 3/8" TUBE X 3/8" NPT	2
22	1/4" NPT PIPE NIPPLE	1
23	5 WAY CROSS, 1/4 NPSF (4) , 1/8 NPSF (1)	1
24	2-1/2" X 1/4" NPT 5,000 PSI GAUGE	1
25	1/8" NPT X 1/4" NPT REDUCING ADAPTER	1
26	HIGH PRESSURE RELIEF VALVE 1/4" NPT (F)	1
27	TUBE FITTING 1/4" TUBE X 1/4" NPT	2
28	4 WAY CROSS 1/4 NPSF (4)	1
29	1/4 NPS FACE SEAL PLUG	3
30	3/8" OUTLET TUBING	1
31	3/8" RETURN TUBING	1

ITEM	DESCRIPTION	QTY
32	1/4" RELIEF TUBING	1
33	1/4 NPTF (M) X 1/4 NPSF (F) ELBOW	1
34	1/4-28 X 2-1/4" SOCKET HEAD CAP SCREW	2
35	1/4-28 X 1-1/4" SOCKET HEAD CAP SCREW	8
36	-034 VITON ORING	1
37	-011 VITON ORING	2
38	OUTLET/RETURN MANIFOLD	1
39	3/8" NPT X 6" LONG PIPE THREADED BOTH ENDS	1
40	3/8" NPT FEMALE STRAIGHT PIPE FITTING	1
41	3/8" NPT MALE X 3/8" TUBE COMPRESSION TEE	1
42	1/4" NPT X 3/8" TUBE FITTING	1

## LOWER PUMP PICKUP TUBE—PARTS IDENTIFICATION



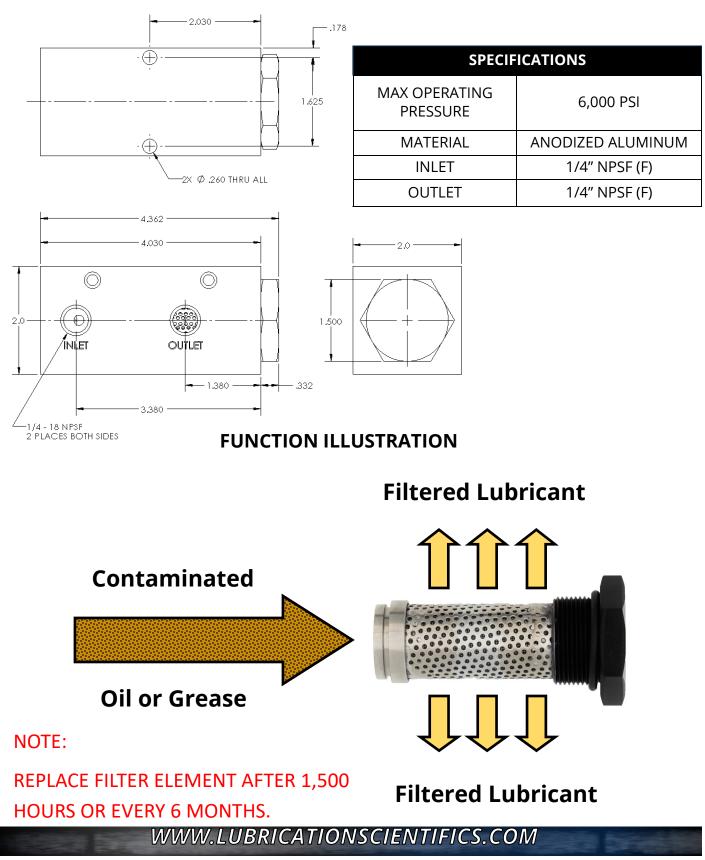
ITEM	DESCRIPTION	QTY
41	PICK UP TUBE	1
42	PUMPING ELEMENT BODY (INLET BLOCK)	1
43	1/4-28 X 3-1/2 SOCKET HEAD CAP SCREW	2
44	CHECK SPRING RETAINER	1
45	CHECK SPRING	1
46	5/8" TUNGSTEN CARBIDE CHECK BALL	1
47	5/16-24 PLUG	2
48	-011 VITON ORING	4
49	-018 VITON ORING	2
50	3/8" LUBE PISTON	1
51	PICK UP TUBE SPACER	1

ITEM	DESCRIPTION	QTY
52	1/4-28 X 3-1/2" SOCKET HEAD CAP SCREW	2
53	PLUNGER PISTON	1
54	RETURN SPRING	1

## TROUBLESHOOTING

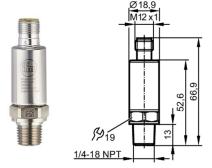
CONDITION	POSSIBLE CAUSE	CORRECTIVE ACTION
Pump does notNo electrical power to pumpoperate		Turn on or connect 24 VDC power
operate	Insufficient power to pump	Power supply with adequate
		amperage rating
Relay failure Re		Replace relay
	Broken gearset or shaft	Repair/replace motor assembly
	Blown fuse	Replace fuse, check for cause of overload
Low/no output, Pump runs	Pump is not yet primed	Let pump run up to 5 minutes for lubricant to reach output point
excessively	System component leaking	Repair Leaks
	Injector bypass	Repair/replace injectors
	Vent valve damage or	Repair, clean, or replace vent valve
contamination causing bypass		assembly
	Low level or empty reservoir	Fill reservoir and purge system of air
	Inlet block check valve damaged or contaminated	Repair check or remove contamination
or contaminated		Contamination
	Inlet block worn body or piston	Replace inlet block assembly
	Worn or broken cam assembly	Replace cam assembly
	Inlet block installed backwards	Install inlet block "OUTLET FRONT" facing in the same direction as the motor cam cover
Lubricant leaking from Safety Relief	Pressure of system is too high	Adjust pressure switch setting
Valve	Blockage downstream of relief valve	Repair faulty components
	Relief Valve damage or contaminated	Replace Safety relief valve

### **DIRT TRAP FILTER**



## OPTIONAL ACCESSORIES HIGH PRESSURE SWITCH/VENT VALVE

**APPLICATION:** TURN THE BARREL PUMP INTO A SINGLE LINE CENTRAL INJECTOR STATION UTILIZING A VENT VALVE AND HIGH PRESSURE SWITCH. INJECTOR CONTROL SYSTEM KIT P/N: BP-ICSK-VV

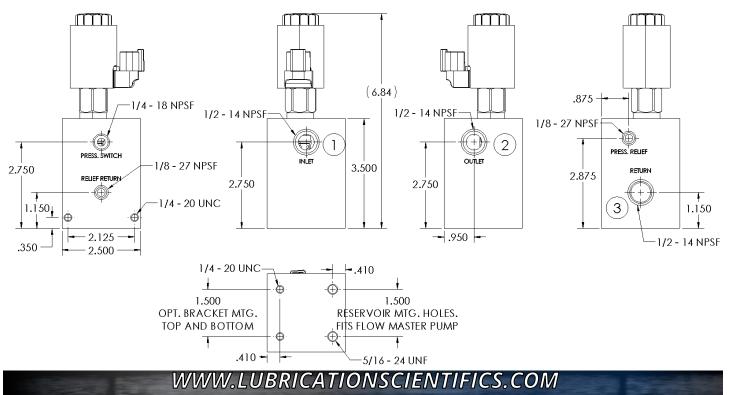


VEINT VALVE OPERATION.	VENT	VALVE	<b>OPERATION:</b>
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THIS SOLENOID-OPERATED 2-WAY, 2-POSITION VENT VALVE IS A DIRECT-ACTING, POPPET STYLE DIRECTIONAL VALVE. THE VALVE IS NORMALLY OPEN BETWEEN PORTS 1 INLET 2 OUTLET AND 3 RETURN. ENERGIZING THE VALVE ALLOWS FLOW THROUGH PORT 1 INLET AND PORT 2 OUTLET BLOCKING FLOW TO PORT 3 RETURN. PRESSURE IN PORT 1 INLET AND PORT 2 OUTLET IS VENTED THROUGH PORT 3 RETURN WHEN DE-ENERGIZED.

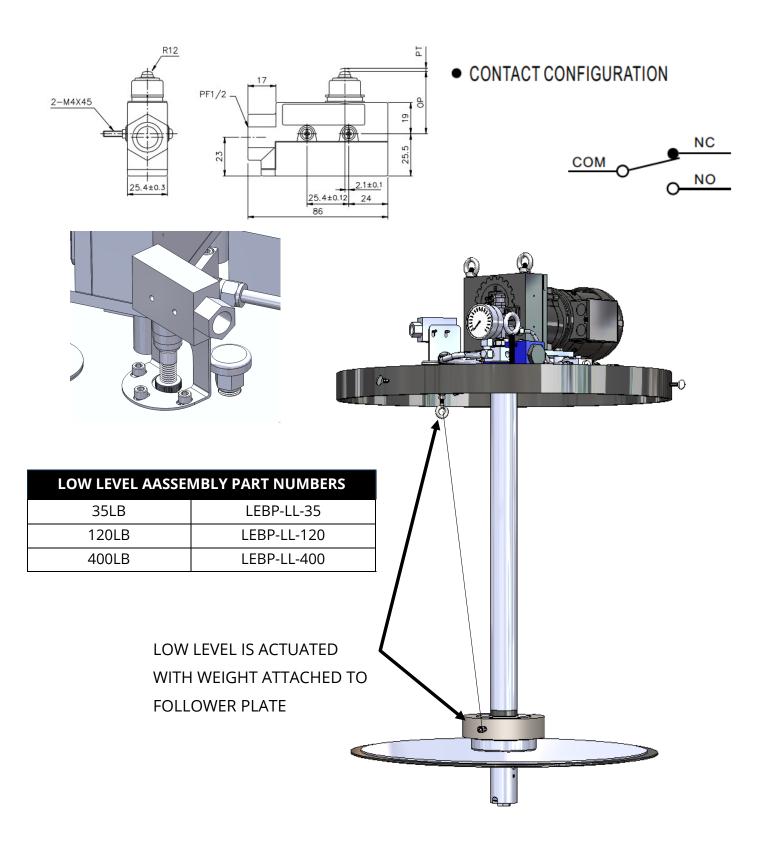
LP-HPS-PV7601 PRESSURE SWITCH SPECIFICATIONS		
OPERATING VOLTAGE	18-30 VDC, 2, PNP	
PRESSURE RANGE	0 - 3,625 PSI	
FACTORY SET PRESSURE	3,000 PSI	
CONNECTION	1/4" NPT (M)	
MATERIAL	316L STAINLESS	

VENT VALVE SI	PECIFICATIONS
MAX OPERATING PRESSURE	5,000 PSI
MATERIAL	ZINC PLATED CAR- BON STEEL
VOLTAGE	24VDC
DUTY CYCLE	100%
VALVE INSTALL TORQUE	30-35 lbf ft
TEMP. RANGE	-22 TO 230° F



### **OPTIONAL ACCESSORY:**

LOW LEVEL ASSEMBLY FOR 32LB, 120LB & 400LB



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### **OPTIONAL ACCESSORY:**

## MAXIMUM FILL SHUT OFF ASSEMBLY "MFSO" FOR 120LB & 400LB

#### **DESCRIPTION:**

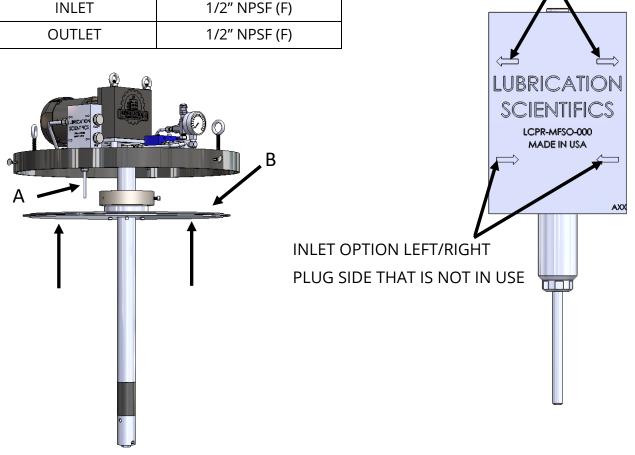
FOR LARGE SYSTEMS SUPPORTED BY BULK GREASE CONTAINERS. A FILL PUMP IS CONNECTED TO EITHER LEFT OR RIGHT INLET PORT ON THE MFSO BODY. THE LEFT OR RIGHT OUTLET PORT IS CONNECTED TO THE RESERVOIR RETURN LINE . AS THE RESEVOIR FILLS THE FOLLOWER (B) MOVES UP. ONCE THE FOLLOWER MAKES CONTACT WITH THE MFSO SHUT OFF PISTON ROD (A), THE FILL FLOW PATH IS SHUT OFF. THE FILL PUMP WILL BUILD PRESSURE (UP TO 6,000 PSI) AND AUTOMATIICALLY SHUT OFF.

#### **APPLICATION:**

FOR CIRCUMSTANCES WHERE SPACE IS LIMITED AND/OR THE PUMP IS BEING UTILIZED AS A CENTRAL STATION FOR AN INJECTOR SYSTEM OR DUAL LINE APPLICATION. INSTEAD OF TRANSFERRING YOUR SYSTEM FROM BARREL TO BARREL, SIMPLY REFILL THE DEPLETED BARREL USING A TRANSFER PUMP THROUGH THE MFSO.

SPECIFICATIONS		
MAX OPERATING PRESSURE	6,000 PSI	
MATERIAL	ZINC PLATED CARBON STEEL	
INLET	1/2" NPSF (F)	
OUTLET	1/2" NPSF (F)	

OUTLET OPTION LEFT/RIGHT PLUG SIDE THAT IS NOT IN USE



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	Cell: 832-585-7065	9	Call Factory Direct - 877-452-0157
	Email: c.walker@lubricationscientifics.com	10	Call Factory Direct - 877-452-0157

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