

DESCRIPTION

The TRABON LUBEMASTER is a rugged, reliable pump for use with Trabon Series Flo® divider valves to lubricate all types of machinery. It can be driven by an electric motor or a rotating or oscillating machine motion. The output is readily adjustable.

The LUBEMASTER is designed to pump grease or oil efficiently at a wide range of pump cycle rates and pressures. Anti-friction drive bearings and simplified design improve pump operation and reliability. Its board output range and interchangeability of drive and mounting selections makes it suitable for a wide range of applications. Optional high-pressure and low-level switches are available to provide protection against excessive system pressure and low reservoir lubricant levels.

FEATURES

- Adjustable output
- Broad output range
- Simplified construction
- Hardened steel piston in steel sleeve
- Soft-seat outlet check valve
- Modular components
- Driven by an electric motor (gear drive) or by a rotating or oscillating movement (clutch drive)



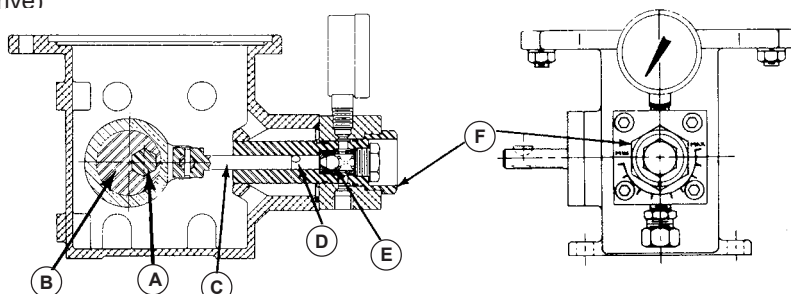
OPERATION

The LUBEMASTER piston is operated by an eccentric connected to a drive shaft. This drive shaft can be driven by the gear reducer/electric motor drive, the clutch drive option, or directly coupled to a rotating shaft.

As drive shaft (A) is rotated, eccentric (B), also rotating, moves piston (C) forward in the power stroke, closing off inlet (D). Piston (C) continues to move the lubricant forward, unseating check valve (E) and delivering lubricant to the system. The eccentric (B), as it continues to rotate, moves piston (C) back, reopening the inlet and returning piston (C) to full prime position, ready for the next delivery or power stroke.

Pump output can be varied, from .010 to .050 cu. in. (.164 to .820 cu. cm.) per cycle, by changing the position of the pump adjustment nut (F) located below the gauge.

NOTE: The adjustment settings as marked should only be used as a reference. After the pump has been adjusted, the actual output should be measured to determine if it satisfies the system requirements.



Lubemaster pump can be driven in clockwise or counter-clockwise direction.

LUBEMASTER Adjustment Chart

% Of Rated Output	Outlet Per Stroke	Adjustment Mark
100	.050 cu. in. (.820 cu. cm.)	Max.
90	.045 cu. in. (.736 cu. cm.)	* 1st
80	.040 cu. in. (.656 cu. cm.)	* 2nd
70	.035 cu. in. (.574 cu. cm.)	* 3rd
60	.030 cu. in. (.492 cu. cm.)	* 4th
50	.025 cu. in. (.410 cu. cm.)	* 5th
40	.020 cu. in. (.328 cu. cm.)	* 6th
30	.015 cu. in. (.246 cu. cm.)	* 7th
20	.010 cu. in. (.164 cu. cm.)	Min.

* All marks are counting clockwise from max. setting.

SPECIFICATIONS

Pump Data (Rotating Shaft)

Output per stroke010 - .050 cu. in.
 (0.1639 - 0.8195 cu. cm.)
 Cycle rate Minimum 1 stroke per min.
 Maximum 175 strokes per min.
 Output range Minimum .010 cu. in. per min.
 Maximum 8.62 cu. in. per min.
 (Minimum 0.1619 cu. cm. per min.
 Maximum 143.41 cu. cm. per min.)
 Maximum operating pressure 5000 PSI (340 BAR)
 Maximum torque
 at rated maximum pressure 27 ft. lbs.

Pre-Packaged Motorized Pump

Gear ratios 10:1 & 60:1 floor or wall mount
 Output range Minimum .19 cu. in. per min.
 Maximum 8.62 cu. in. per min.
 (Minimum 3.114 cu. cm. per min.
 Maximum 141.28 cu. cm. per min.)

Pre-Packaged Clutch Drive Pump

Cycle rate Minimum 5 impulses per min.
 Maximum 150 impulses per min.
 Degrees of throw 12° Minimum; 60° Maximum
 Output range Minimum .100 cu. in. per hr.
 Maximum 75 cu. in. per hr.
 (Minimum 1.639 cu. cm. per hr.
 Maximum 1229.25 cu. cm. per hr.)

Lubricants

Oil and Grease

Reservoirs

Reservoir material Plastic and metal
 Reservoir capacities
 Oil 12-pt. (5.68L), & 20-pt. (9.46L)
 Grease 12-lb. (5.44kg), & 20-lb. (9.07kg)

Operating Temperature

Reservoirs
 *Plastic Minimum 35°F (1.66°C)
 Maximum 135°F (57.2°C)
 *Metal Minimum 20°F (-6.66°C)
 Maximum 150°F (65.55°C)
 Oil 20°F (-6.66°C) — 150°F (65.55°C)

Grease

**NLGI No. 1 20°F (-6.66°C) — 150°F (65.55°C)
 **NLGI No. 2 40°F (4.44°C) — 150°F (65.55°C)

* These recommended operating temperatures are based on materials used in construction of the pump and reservoir only.

** These low-temperature, general-purpose grease ratings should be used only as a guide, since all greases exhibit different low-temperature characteristics. For information on specific applications contact Lubriquip.

Options

Low Level (Ordering Code)

LOA, LOB, LOC S.P.D.T., 15 AMP at 125, 250, 480 VAC; 1/2 AMP at 125 VDC; 1/4 AMP at 250 VDC
 LOE, LOF S.P.S.T., 10 WATTS at 120 VAC

High-Pressure Blowout Switch

Oil Factory set at 1450 PSI
 (102 kg/sq. cm.)
 S.P.D.T. 20 AMPS at 115, 250, 480 VAC
 125 VDC, 1/4 AMP at 250 VDC
 Grease Factory set at 2350 PSI
 (165 kg/sq. cm.)
 S.P.D.T. 20 AMPS at 115, 250, 480 VAC
 125 VDC, 1/4 AMP at 250 VDC

Standard Blowout Indicator at the Pump

Oil Factory set at 1450 PSI
 (10.2 kg/sq. cm.); Yellow disc
 Grease Factory set at 2350 PSI
 (165 kg/sq. cm.); Aluminum disc

Motors

115/230V 1/2 hp single phase 60 Hz 1725 RPM, T.E.
 Full load running current 9.0 AMPS
 Inrush at 115 Volts 49 AMPS; 230 Volts 24.5 AMPS
 230/460V 1/2 hp three phase 60 Hz 1725 RPM, T.E.
 Full load running current 1.03 AMPS
 Inrush at 230 Volts 12.2 AMPS; 460 Volts 6.1 AMPS
 115/230V 1/2 hp single phase 60 Hz 1140 RPM, T.E.
 Full load running current 9.0 AMPS
 Inrush at 115 Volts 49 AMPS; 230 Volts 24.5 AMPS
 230/460V 1/2 hp three phase 60 Hz 1140 RPM, T.E.
 Full load running current 1.03 AMPS
 Inrush at 230 Volts 12.2 AMPS; 460 Volts 6.1 AMPS

NOTE: When using any lubricant at the upper or lower temperature ranges, as noted above, consult lubricant manufacturer for compatibility at these temperatures.

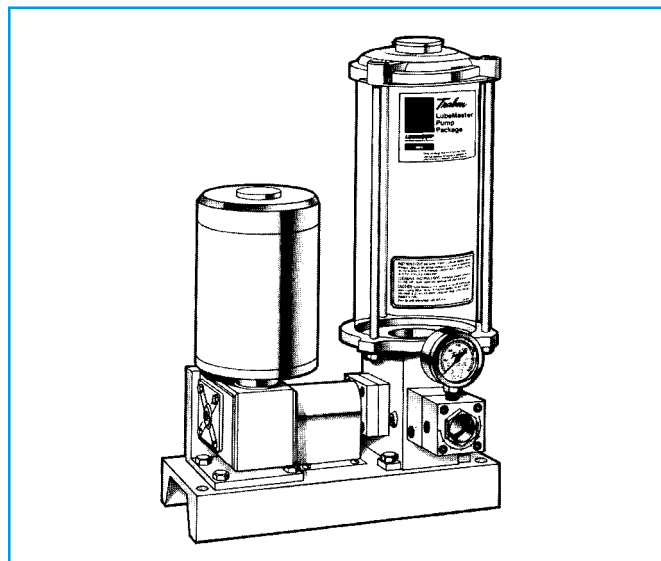
PRE-PACKAGED MOTORIZED LUBEMASTER

The rugged, compact electric motorized LUBEMASTER can be used with Series Flo, or reversing systems, where a continuous or time-controlled lubrication cycle is desired. This totally enclosed pumping unit is suitable for a wide range of applications — mills, mill tables, crushers, presses of all sizes, conveyors, shears, etc. The LUBEMASTER motor-driven pump can be wall or floor mounted. It is also the replacement for Trabon Model AKA, PME, and MP Pumps.

Theoretical Calculated Discharges of LUBEMASTER

Motor Speed	60:1 Gear Ratio		10:1 Gear Ratio	
	Min.	Max.	Min.	Max.
1140	.19 (3.114)	.95 (15.571)	1.14 (18.685)	5.7 (93.423)
1725	.28 (4.589)	1.48 (23.438)	1.72 (28.191)	8.62 (141.282)

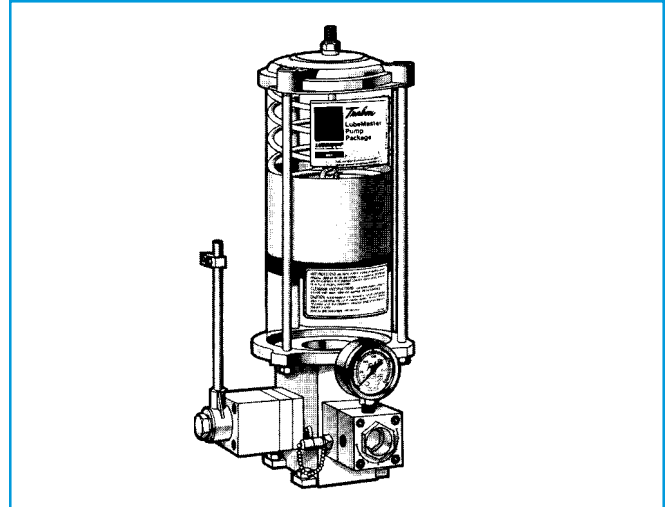
Discharge in cu. in. per min. - cu. cm. in parenthesis.



PRE-PACKAGED CLUTCH DRIVE LUBEMASTER

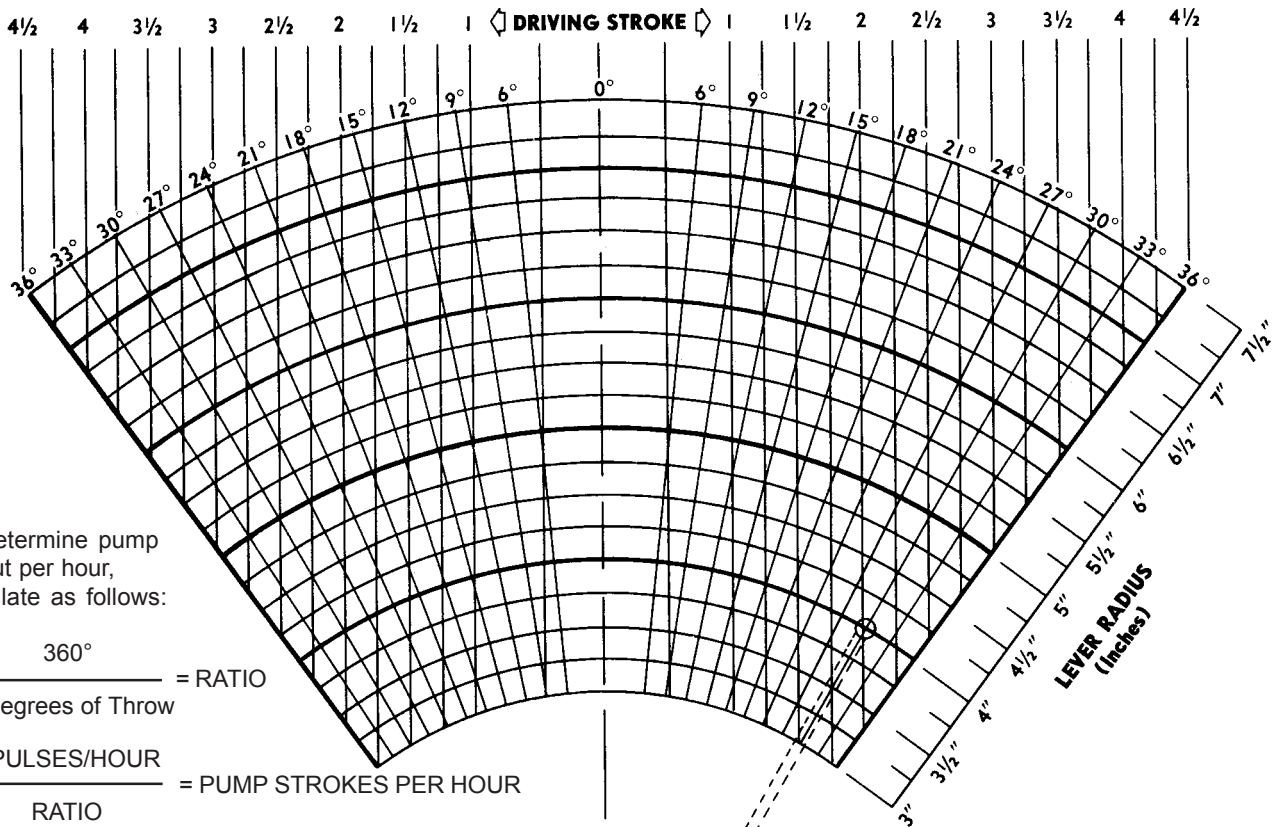
The TRABON Clutch Drive LUBEMASTER is a rugged, reliable pump designed to be driven mechanically by the machine being lubricated. The LUBEMASTER can be used with Series Progressive, Reversible or Bi-Flo systems.

This pump is ideal for use on presses, Banbury mixers, rubber mills, upsetters, heading machines, crane trolleys, etc., where ROTATING or OSCILLATING MOTION is available and continuous lubrication is desired and is the replacement for TRABON MODEL 3400 style pumps.



(Ref.) Min./Max. Pump Output Chart

Degrees of Throw	Effective Ratio	Impulses Per Minute	Pump Strokes Per Hour	Output Per Hour	
				Minimum	Maximum
12°	30:1	5 Min.	10	.100 cu. in. (1.639 cu. cm.)	.500 cu. in. (8.195 cu. cm.)
60°	6:1	150 Max.	1500	15.00 cu. in. (245.85 cu. cm.)	75.00 cu. in. (1229.25 cu. cm.)



To determine pump output per hour, calculate as follows:

$$\frac{360^\circ}{\text{* Degrees of Throw}} = \text{RATIO}$$

$$\frac{\text{IMPULSES/HOUR}}{\text{RATIO}} = \text{PUMP STROKES PER HOUR}$$

Pump strokes per hour x .010 = Minimum output per hour (cu. in.)

Pump strokes per hour x .050 = Maximum output per hour (cu. in.)

*Degrees of Throw can be found by using clutch lever diagram

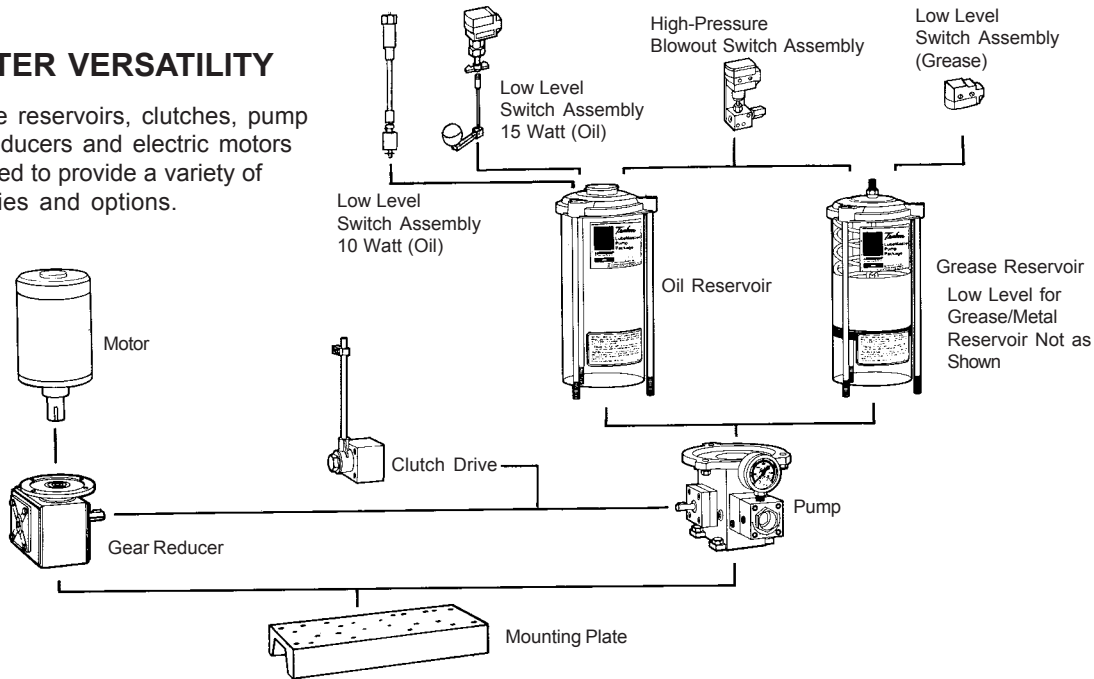
Clutch Lever Diagram

EXAMPLE:

A 4" driving stroke (2" each side of center) produces a 60° lever travel at 4" lever radius.

LUBEMASTER VERSATILITY

Interchangeable reservoirs, clutches, pump bodies, gear reducers and electric motors may be combined to provide a variety of pump assemblies and options.



ORDERING INFORMATION

* For each blank area use appropriate 3-letter code for the equipment desired.

† LUBEMASTER PUMP (521-700-000)

RESERVOIR OPTION

- OPA — 12-Pint Oil Plastic Reservoir (185-100-380)
- OPB — 20-Pint Oil Plastic Reservoir (185-100-390)
- OMA — 12-Pint Oil Metal Reservoir (185-100-400)
- OMB — 20-Pint Oil Metal Reservoir (185-100-410)
- GPA — 12-Lb. Grease Plastic Reservoir (185-100-540)
- GPB — 20-Lb. Grease Plastic Reservoir (185-100-550)
- GMA — 12-Lb. Grease Metal Reservoir (185-100-560)
- GMB — 20-Lb. Grease Metal Reservoir (185-100-570)
- OHS — Overhead Supply Reservoir (185-100-930)

†† **DRIVE OPTION ★**

- DOA — Clutch Drive With Arm (521-700-300)
- DOB — 10:1 Reduction — Floor Mounting (521-700-550)
- DOC — 10:1 Reduction — Wall Mounting (521-700-520)
- DOD — 60:1 Reduction — Floor Mounting (521-700-560)
- DOE — 60:1 Reduction — Wall Mounting (521-700-530)

MOTOR OPTION ★

- MOA — 115/230V, 1/2 HP, 1 PH, 60 Hz, 1725 RPM (492-380-040)
- MOB — 230/460V, 1/2 HP, 3 PH, 60 Hz, 1725 RPM (492-380-030)
- MOC — 115/230V, 1/2 HP, 1 PH, 60 Hz, 1140 RPM (492-380-240)
- MOD — 230/460V, 1/2 HP, 3 PH, 60 Hz, 1140 RPM (492-380-250)

LOW-LEVEL OPTION ★

- LOA — 12-Pint Oil Low Level — S.P.D.T. 15 AMPS (521-001-030)
- LOB — 20-Pint Oil Low Level — S.P.D.T. 15 AMPS (521-001-040)
- LOC — 12 and 20 LB. Grease Low Level (521-001-110)
- LOE — 12-Pint Oil Low Level — S.P.D.T. 10 Watts (456-010-172)
- LOF — 20-Pint Oil Low Level — S.P.D.T. 10 Watts (456-010-173)

PRESSURE INDICATOR OPTION ★

- POA — Standard Blowout — 1450 PSI — Oil (509-206-100)
- POB — Standard Blowout — 2350 PSI — Grease (509-206-160)
- POC — High-Pressure Blowout Switch — 1450 PSI — Oil (521-700-390)
- POD — High-Pressure Blowout Switch — 2350 PSI — Grease (521-700-400)

GAUGE OPTION

- G1 — None (1/4 Pipe Plug)
- G2 — 0-3000 PSI Gauge Standard (514-215-001)
- G3 — 0-3000 PSI Gauge Liquid Filled (526-200-300)

★ Omit if not required.

NOTE:

- Pkg. of 6 Blowout Discs.
 - Yellow 1450 PSI—Oil (560-900-270)
 - Aluminum 2350 PSI—Grease (560-900-300)
- Additional Drive Options and Motor Options can be supplied (consult factory).

LUBEMASTER PUMP REPAIR KITS:

- Seal Kit for pump (560-001-770)
- Repair Kit for clutch drive with arm (521-700-300)
- Drive Repair Kit (560-001-690)
- Output Manifold Repair Kit (560-001-700)

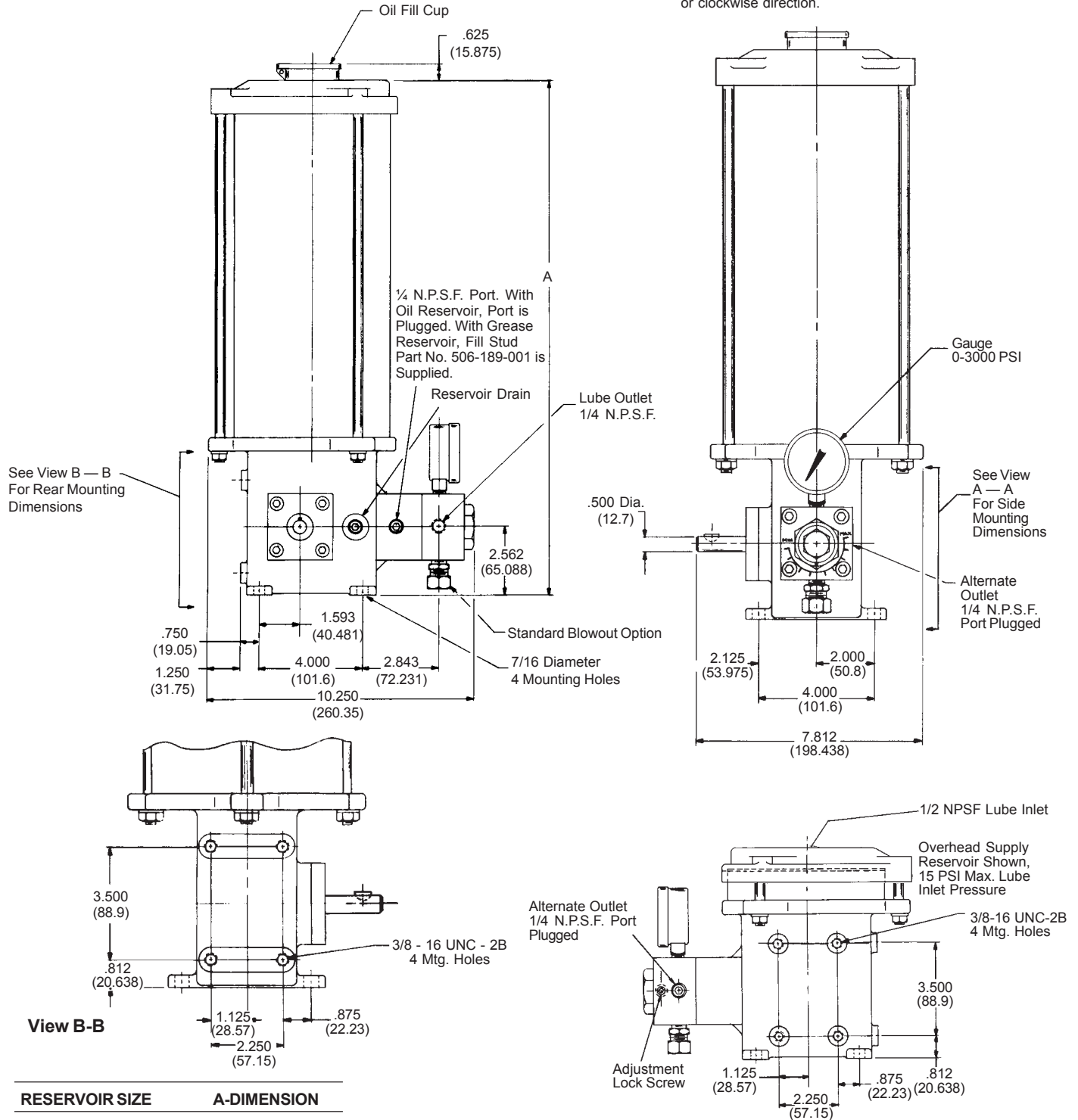
† When ordering Lubemaster Pump, part no. 521-700-000, a fill stud part no. 506-189-001 and a Standard Blowout part no. 509-206-100 (oil) or part no. 509-206-160 (grease) must be ordered as a separate line item.

†† Drive Options DOB, DOD and DOE contain all required mounting hardware including mounting plate, coupler, coupling guard, nuts, bolts and washers.

OUTLINE AND MOUNTING DIMENSIONS

LUBEMASTER and Reservoir

Pump can be driven in a counterclockwise or clockwise direction.



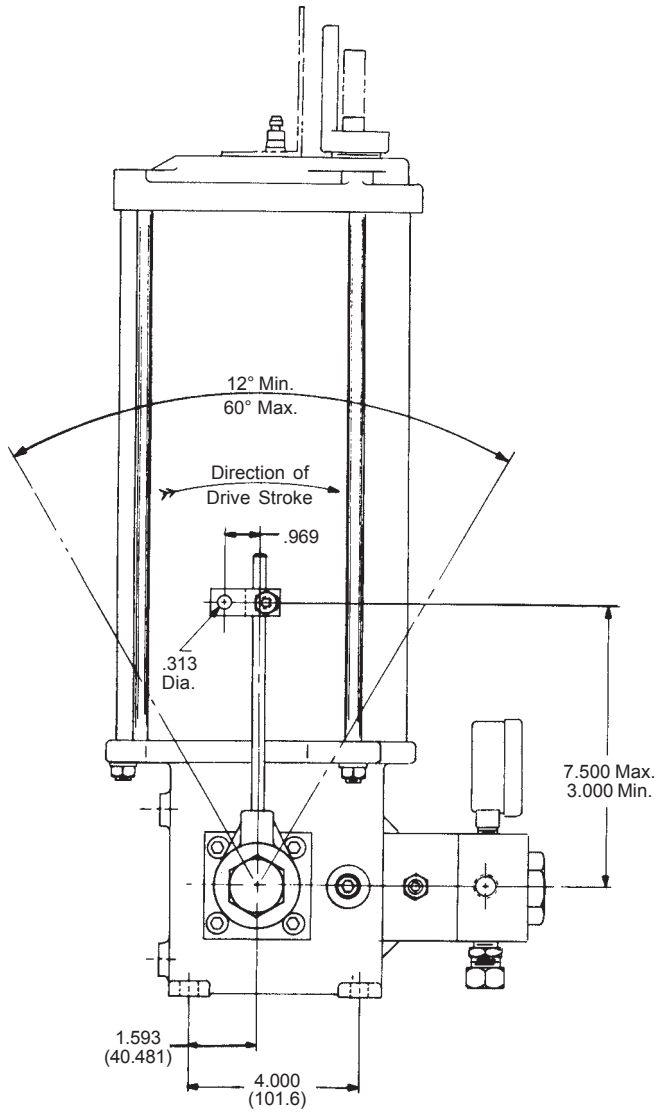
RESERVOIR SIZE	A-DIMENSION
12 PINT OIL	19.56 (496.9)
12 LB. GREASE	19.56 (496.9)
20 PINT OIL	26.56 (674.7)
20 LB. GREASE	26.56 (674.7)
OVER HEAD SUPPLY	7.66 (194.5)

View A-A

NOTE:
Millimeter Dimensions Appear in Parentheses

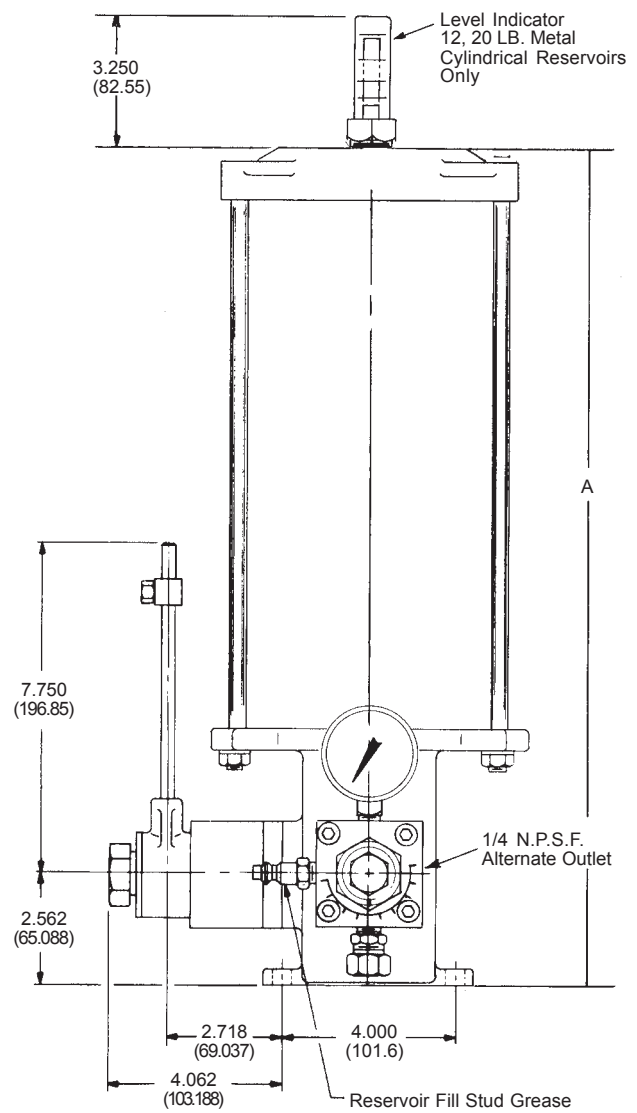
OUTLINE AND MOUNTING DIMENSIONS / continued

Pre-Packaged Clutch Drive LUBEMASTER



NOTE:
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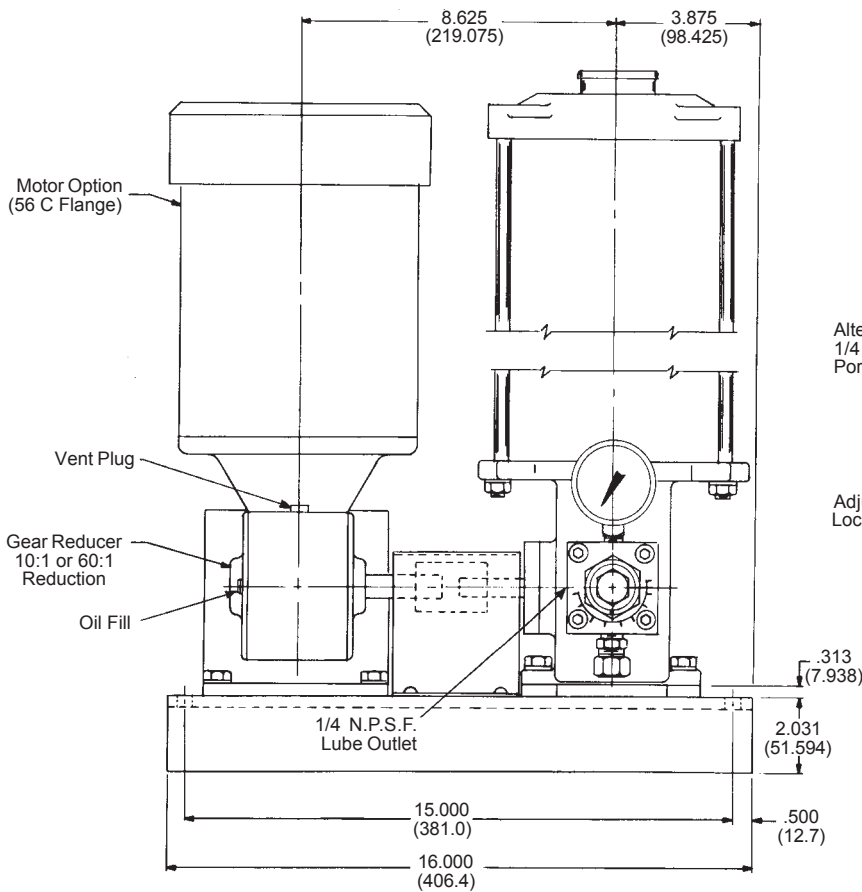
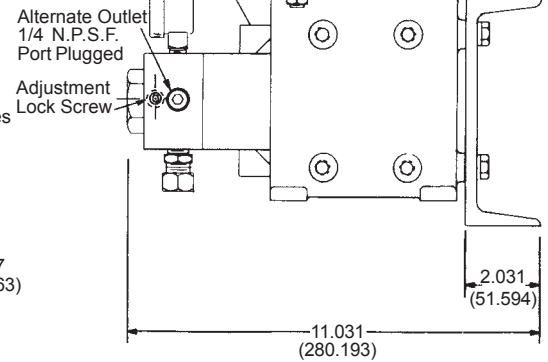
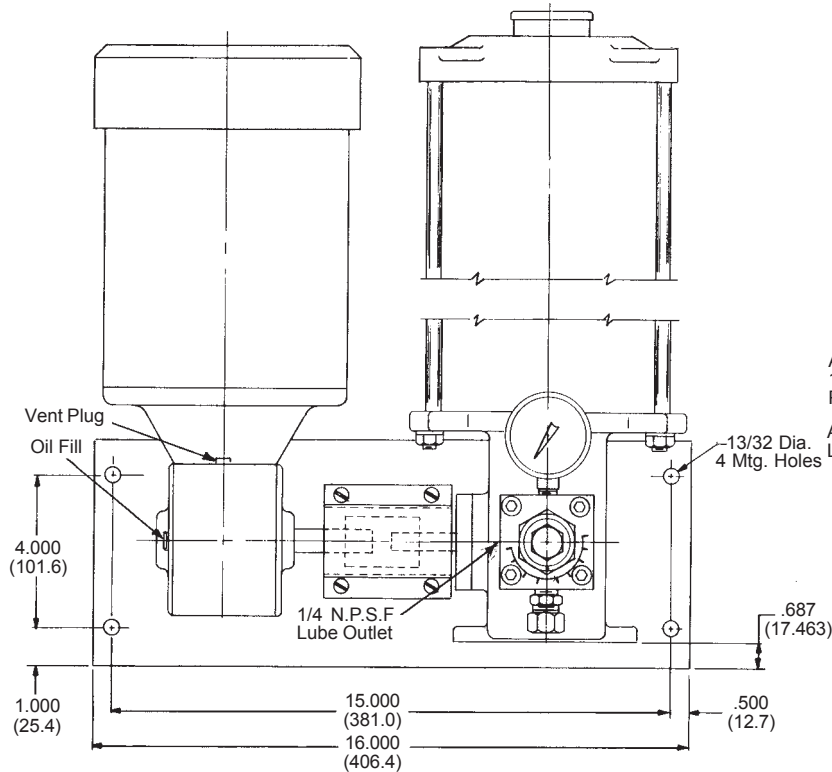
RESERVOIR SIZE	A-DIMENSION
12 PINT OIL	19.562 (496.875)
12 LB. GREASE	19.562 (496.875)
20 PINT OIL	26.562 (674.675)
20 LB. GREASE	26.562 (674.675)



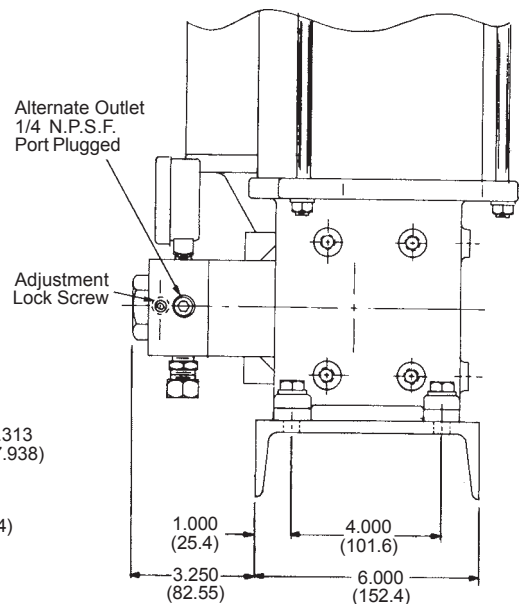
(See LUBEMASTER and Reservoir Outline and Mounting Dimensions on previous page for alternate Mounting Locations.)

OUTLINE AND MOUNTING DIMENSIONS / continued

Pre-Packaged Motorized LUBEMASTER

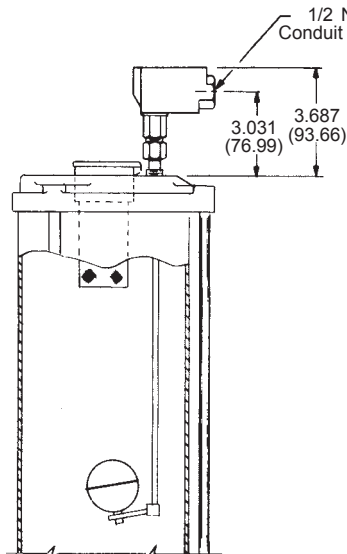


NOTE:
Millimeter Dimensions Appear in Parentheses
Below the Dimensional Figures.

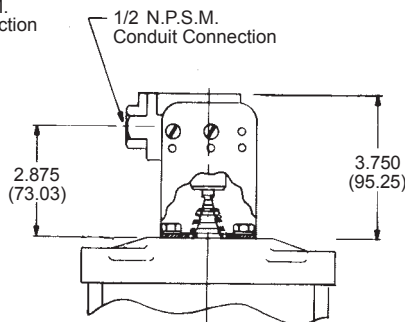


OUTLINE AND MOUNTING DIMENSIONS / continued

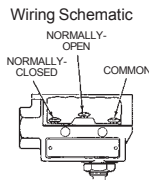
LUBEMASTER Options



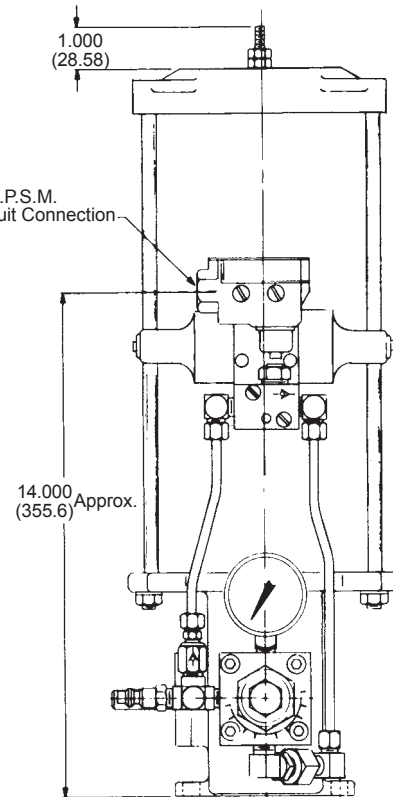
Shown: Low Level Oil, 15 AMP
LOA - 12 Pint Oil Reservoir
LOB - 20 Pint Oil Reservoir



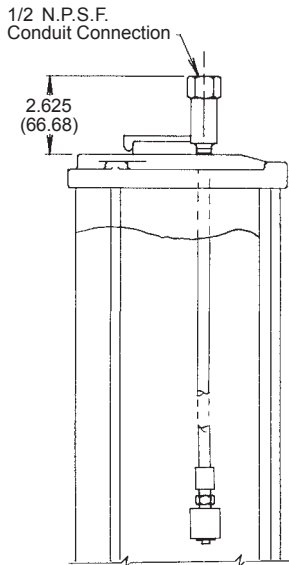
Shown: Option LOC
Low Level for 12 & 20 LB
Grease Reservoirs



Single Pole Double Throw
15 AMPS at 125.250 & 480 V.A.C.
1/2 AMP, at 125 V.D.C.
1/4 AMP at 250 V.D.C.



Shown: High-Pressure Blowout
Switch
POC — 1450 PSI Oil Reservoir
POD — 2350 PSI Grease Resv.



Shown:
Option LOE - 12 Pint Oil Reservoir
Option LOF - 20 Pint Oil Reservoir

NOTE: Millimeter dimensions appear in parentheses.

Trabon® Literature by Bulletin Number

DIVIDER VALVES

- MSP Divider Valves No. 10102
- MJ Divider Valves No. 10111
- MX Divider Valves No. 10131
- MGO Divider Valves No. 10141
- MD Divider Valves No. 10151
- Bi-Flo® Divider Valves No. 20107

PUMPS

- Manual
- Manual Pumps No. 12405
- Wall Mounted Manual Pumps No. 12406
- Filler Pak 12411
- PH Manual Pumps No. 12415

Air

- MSA 10 Pumps No. 12850
- MSA 100 Pumps No. 12851
- Modular AL Pumps No. 12000
- E-Series Lube Pkg. No. 13126
- Modu-Flo® Packages No. 12000
- Drum Pumps No. 12216
- Air Powered Barrel Pumps No. 12200

Hydraulic

- HLJ-100 Pumps No. 12306
- Modular HLJ Pumps No. 12000
- Drum Pumps No. 12216

Electric Motor

- LUBEMASTER® Pump No. 12715
- H-400 Barrel Pump No. 58-1
- Maxi-Flo® Pump No. 13110

Mechanical

- LUBEMASTER® Pump No. 12715
- MLS Pumps No. 12310

CONTROLS

- Time
- SS Timer No. 14521
- DC Timer No. 14511
- Machine Cycle
- S.C. Counter No. 14522
- Multiple System Count (time or machine cycle)
- WMP III Maxi-Monitor® No. 14750

Flow Monitoring

- Lube Meter No. 14630
- Lube Sentinel No. 44700

ACCESSORIES

- Anchor Fittings No. 15121
- Pipe Clamps and Mounting Brackets No. 15126
- In-line Filters No. 15201
- High-Pressure (Cartridge) Line Filters No. 15206
- Grease Strainers No. 15216
- Performance Indicators No. 15401
- Broken Line Indicators No. 15416
- Check Valves No. 15825