

Lubemaster® Pump

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 broad 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)

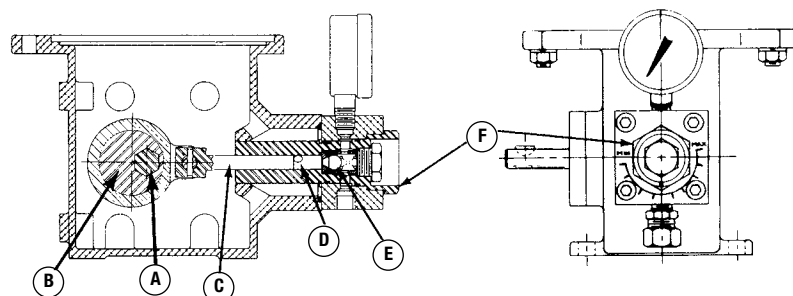
OPERATION

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 counterclockwise 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	
Output per Stroke	0.010–0.050 cu.in. (0.16399–0.8195 cu.cm.)
Cycle Rate	1–175 strokes per min
Output Range	0.010–0.862 cu.in. (0.1619–143.41cu.in.) per min
Max Operating Pressure	5000 psi (340 bar)
Max Torque @ Rated Max Pressure	27 ft lbs
Motorized Pump	
Gear Ratios	10:1 & 60:1 floor of wall mount
Output Range	0.19–8.62 cu.in (3.114–141.28 cu.cm.) per min
Clutch Drive Pump	
Cycle Rate	5–150 impulses per min
Degrees of Throw	12° to 60°
Output Range	0.100–75 cu.in (1.639–1229.25) per hr
Lubricants	Oil or Grease
Reservoirs	
Material	Plastic or Metal
Reservoir Capacities	
Oil	12 pint (5.68 liter) & 20 pint (9.46 liter)
Grease	12 lb (5.44 kg) & 20 lb (9.07 kg)
Operating Temperature	
Reservoirs	
*Plastic	35°F to 135°F (1.66°C to 57.2°C)
*Metal	20°F to 150°F (-6.66°C to 65.55°C)
Oil	20°F to 150°F (-6.66°C to 65.55°C)
Grease	
**NLGI #1	20°F to 150°F (-6.66°C to 65.55°C)
**NLGI #2	40°F to 150°F (4.44°C to 65.55°C)

Options	
Low Level (Ordering Code)	
†LOA,LOB,LOC,LOH	SPDT, 15 amp @ 125, 250, 480 VAC; 1/2 amp @ 125 VDC; 1/4 amp @ 250 VDC
LOE, LOF	SPST, 10 watts @ 120 VAC
High Pressure Blowout Switch	
Oil	Factory set @ 1450 psi (102 kg/sq.cm.), SPDT, 15 amps @ 115, 250, 480 VAC; 125 VDC, 1/4 amp @ 250 VDC
Grease	Factory set @ 2350 psi (165 kg/sq.cm.), SPDT, 15 amps @ 115, 250, 480 VAC; 125 VDC, 1/4 amp @ 250 VDC
Standard Blowout Indicator @ the Pump	
Oil	Factory set @ 1450 psi (10.2 kg/sq.cm.), Yellow Disc
Grease	Factory set @ 2350 psi (165 kg/sq.cm.), Aluminum Disc
Motors (56 C-Face)	
	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

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

**The grease must be pumpable at the lowest anticipated operating temperature

†LOH Low Level Option only Exp Proof: Class I, Group C & D; Class II, Group E, F & G

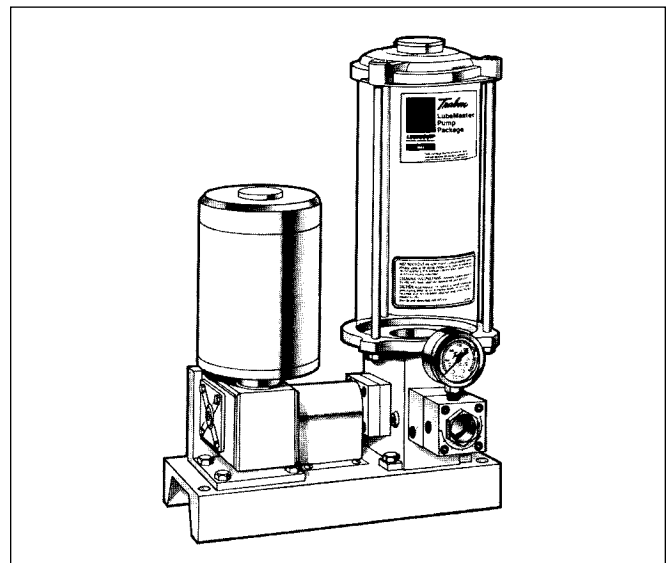
MOTORIZED Lubemaster

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)

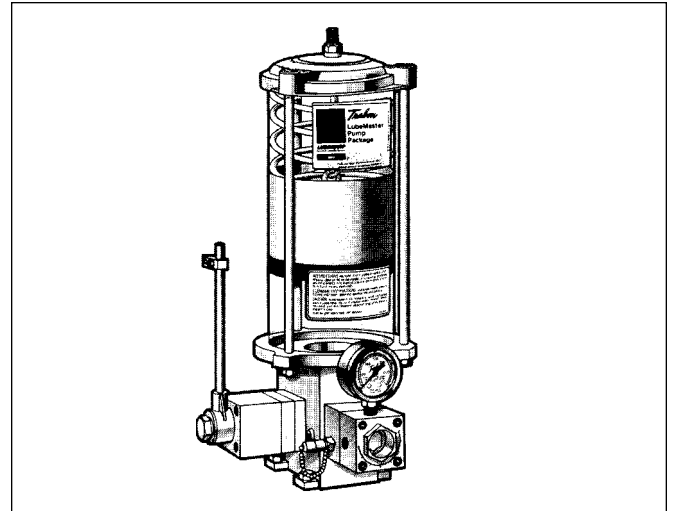
Discharge in cu. in. per min. - cu. cm. in parenthesis.



CLUTCH DRIVE Lubemaster

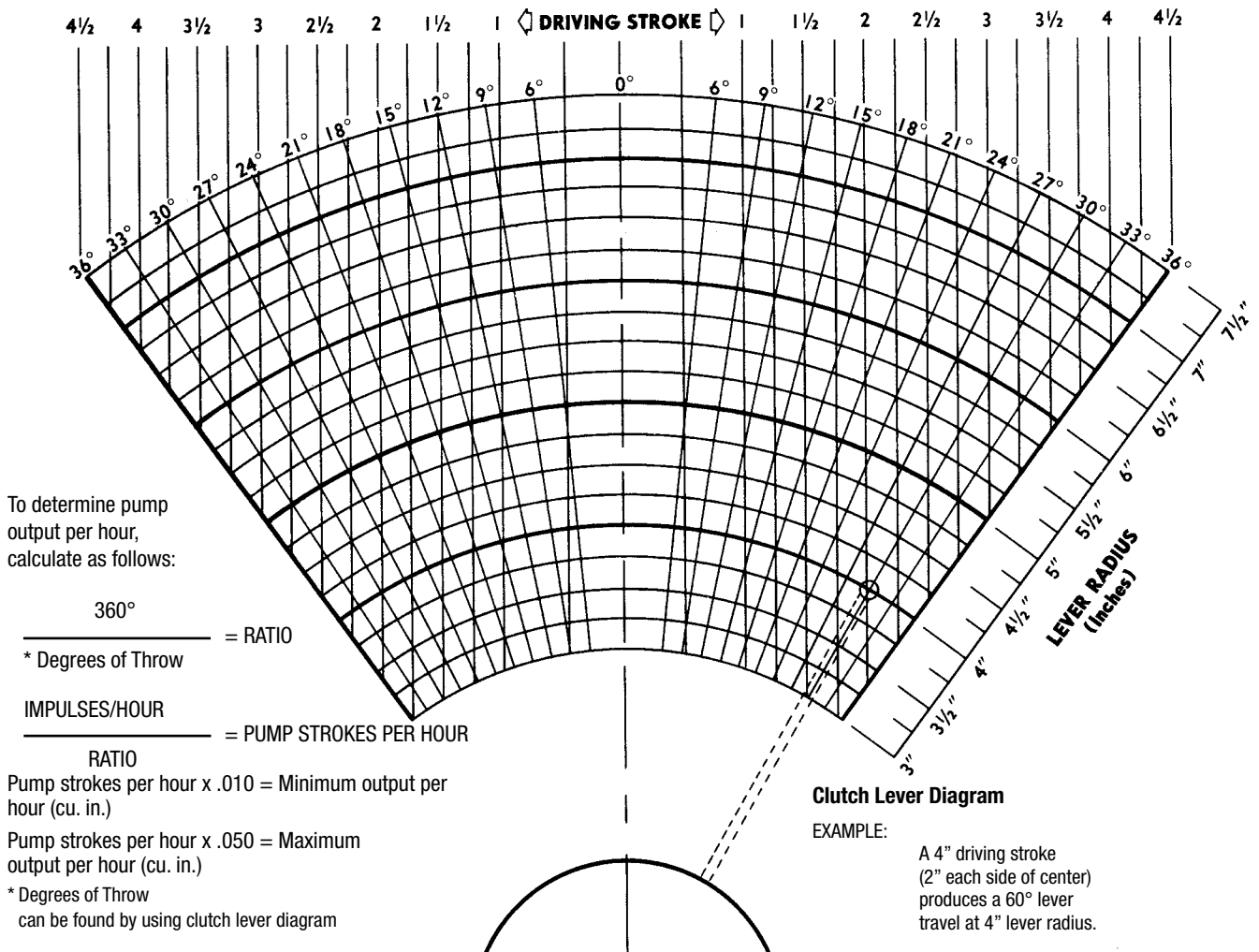
The TRABON Clutch Drive Lubemaster is a rugged, reliable pump designed to be driven mechanically by the machine being lubricated. The Lubemaster can be used with Series Progressive, Reversible or Bi-Flo systems.

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

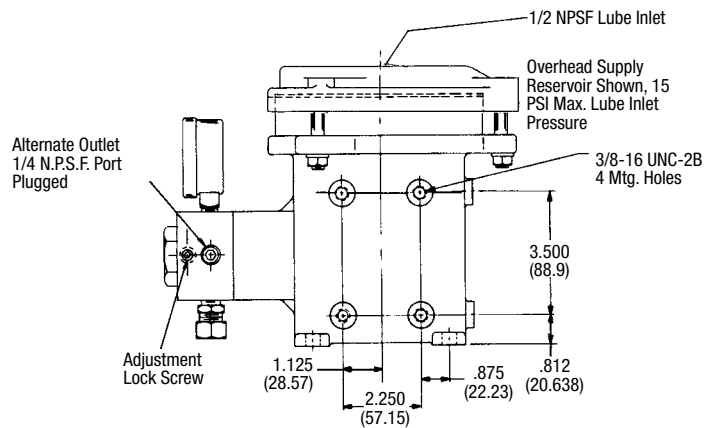
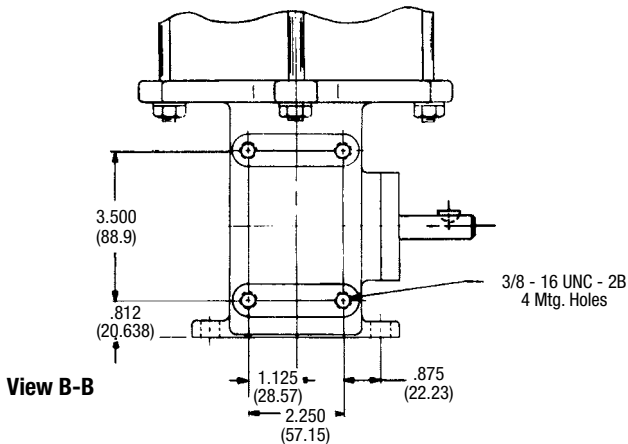
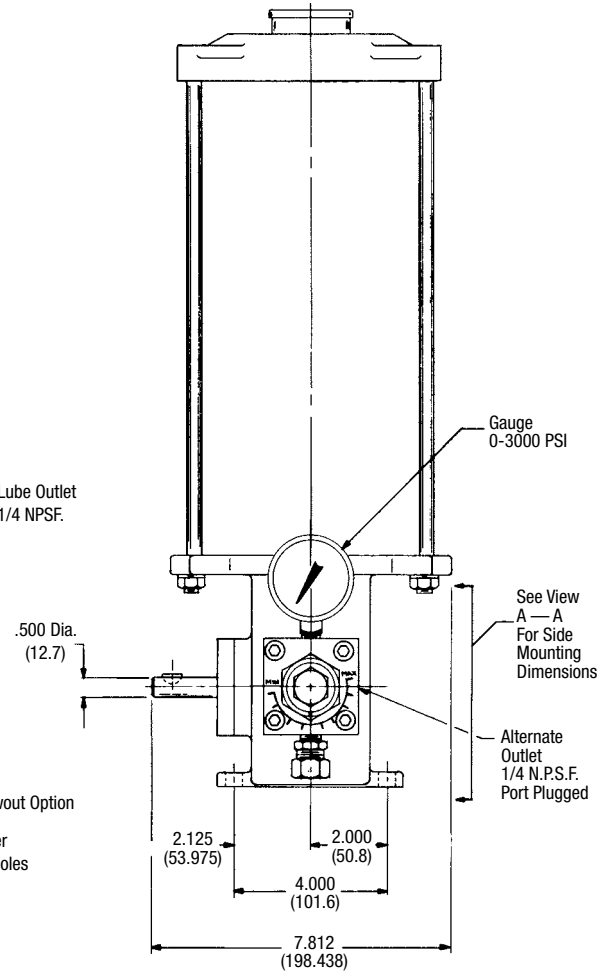
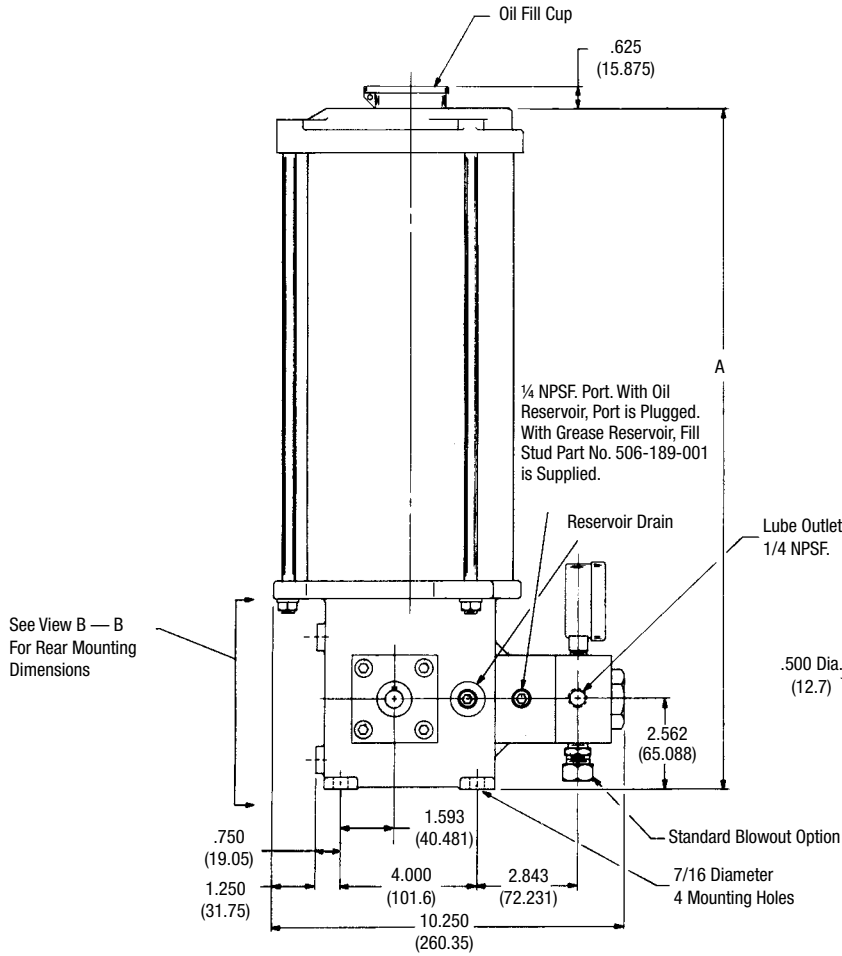
Degrees of Throw	Effective Ratio	Impulses Per Minute	Pump Strokes Per Hour	Output Per Hour	
				Minimum	Maximum
12°	30:1	5 Min.	10	.100 cu. in. (1.639 cu. cm.)	.500 cu. in. (8.195 cu. cm.)
60°	6:1	150 Max.	1500	15.00 cu. in. (245.85 cu. cm.)	75.00 cu. in. (1229.25 cu. cm.)



OUTLINE AND MOUNTING DIMENSIONS

Lubemaster and Reservoir

Pump can be driven in a counterclockwise or clockwise direction.



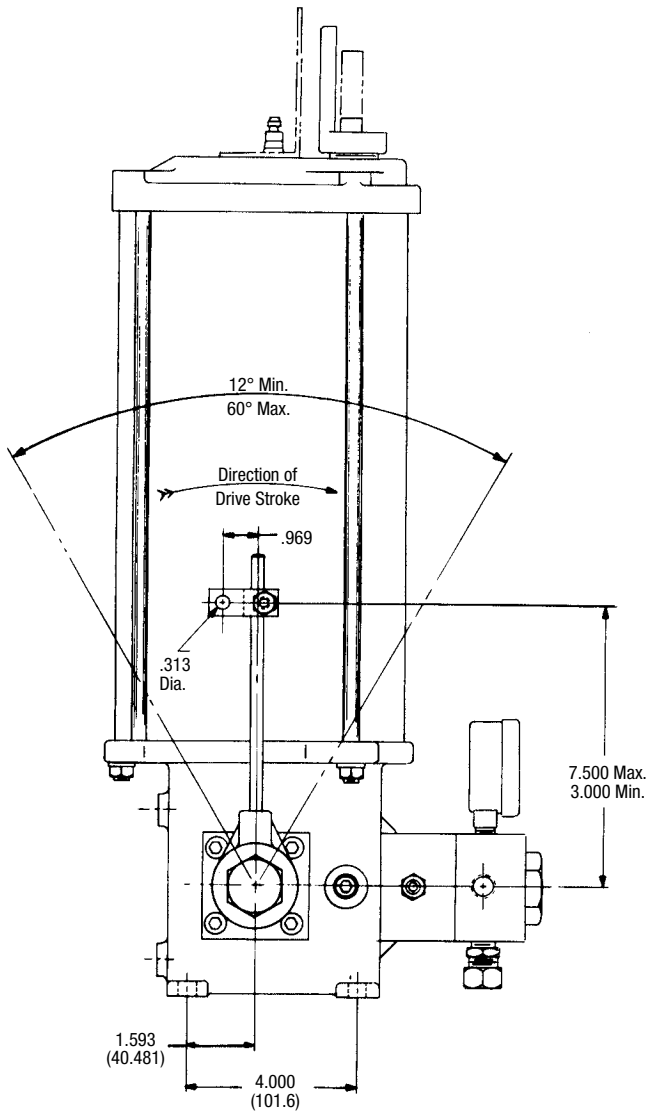
RESERVOIR SIZE	A-DIMENSION
12 PINT OIL	19.56 (496.9)
12 LB. GREASE	19.56 (496.9)
20 PINT OIL	26.56 (674.7)
20 LB. GREASE	26.56 (674.7)
OVER HEAD SUPPLY	7.66 (194.5)

View A-A

NOTE: Millimeter Dimensions Appear in Parentheses

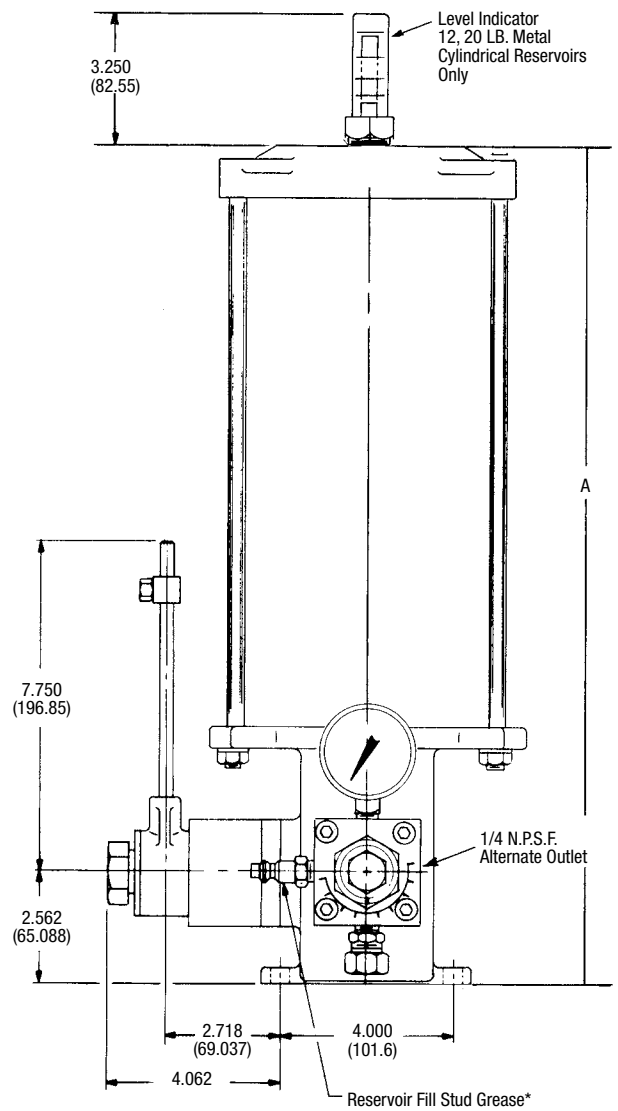
OUTLINE AND MOUNTING DIMENSIONS / continued

Pre-Packaged Clutch Drive Lubemaster



NOTE:
Millimeter Dimensions Appear in Parentheses

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)

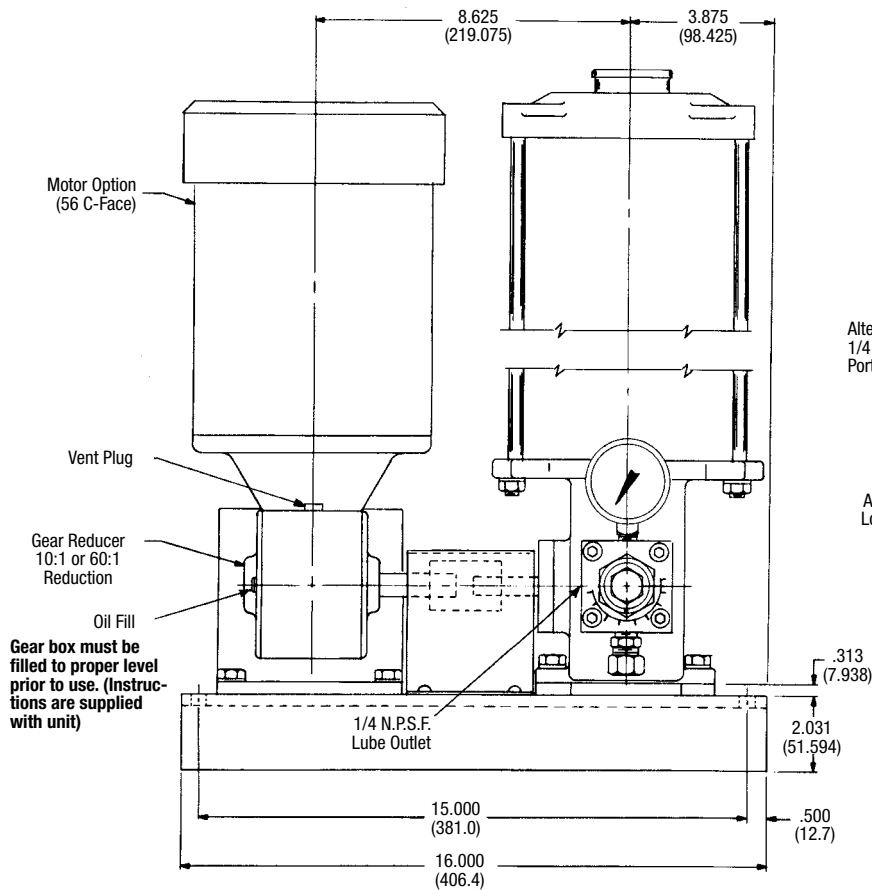
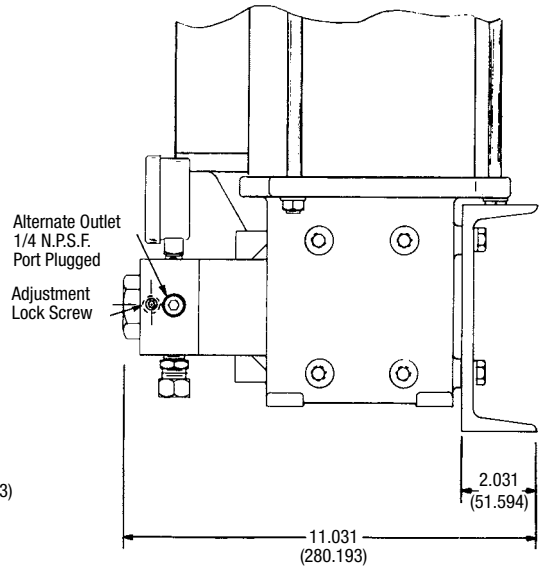
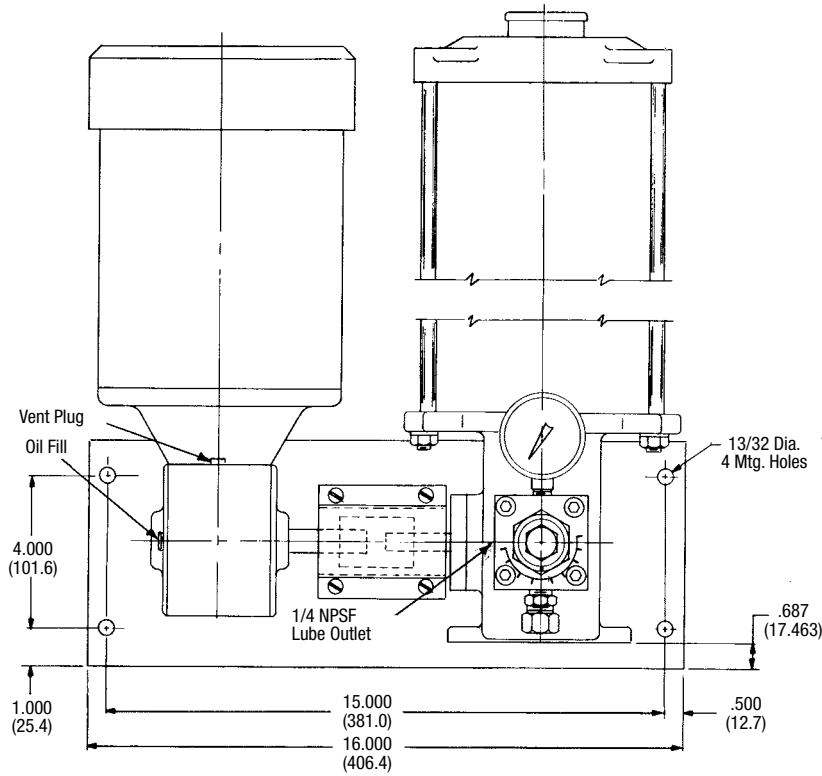


* Mating coupler 506-322-000 order separate.

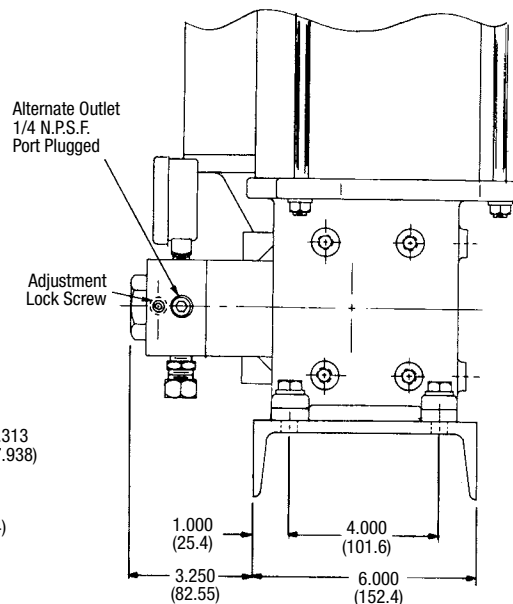
(See Lubemaster and Reservoir Outline and Mounting Dimensions on previous page for alternate Mounting Locations.)

OUTLINE AND MOUNTING DIMENSIONS / continued

Motorized Lubemaster



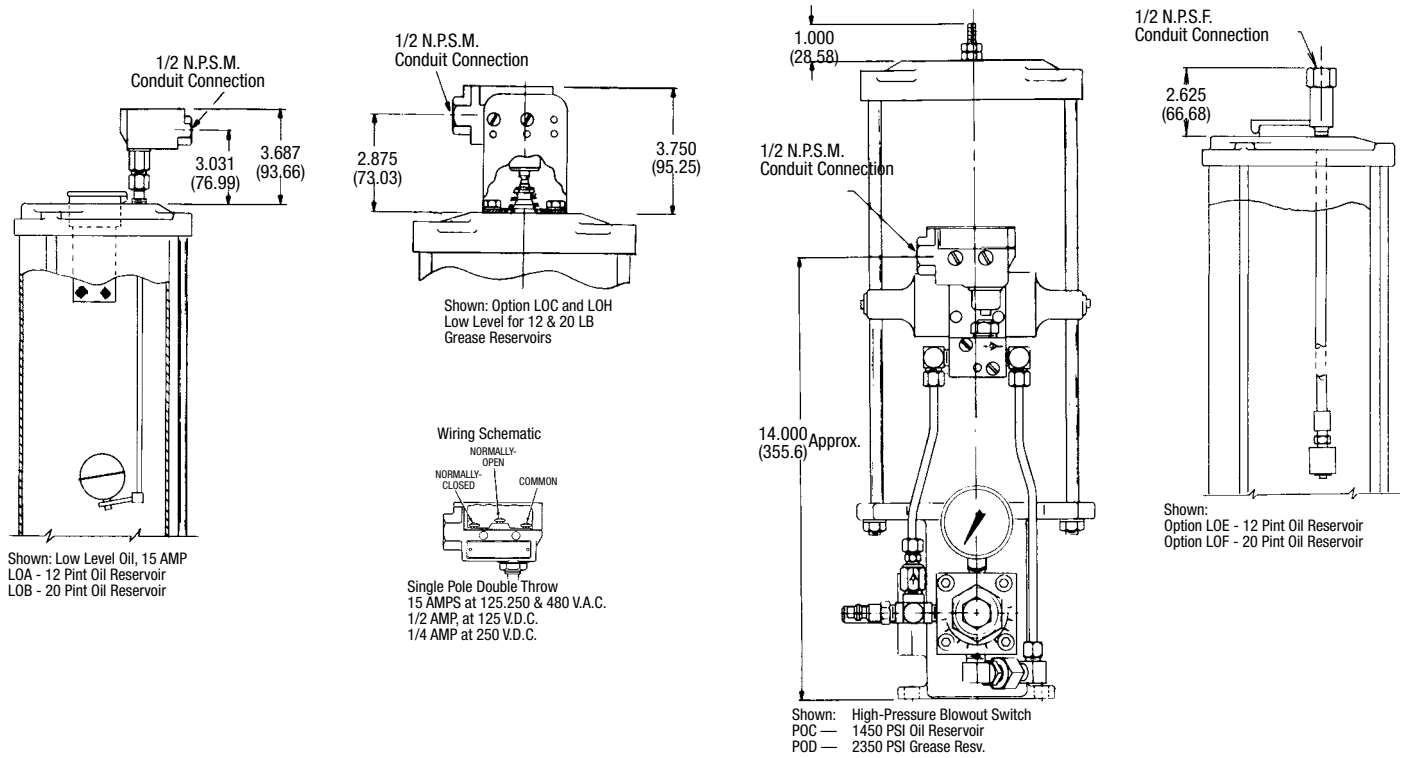
NOTE:
Millimeter Dimensions Appear in Parentheses
Below the Dimensional Figures.



OUTLINE AND MOUNTING DIMENSIONS / continued

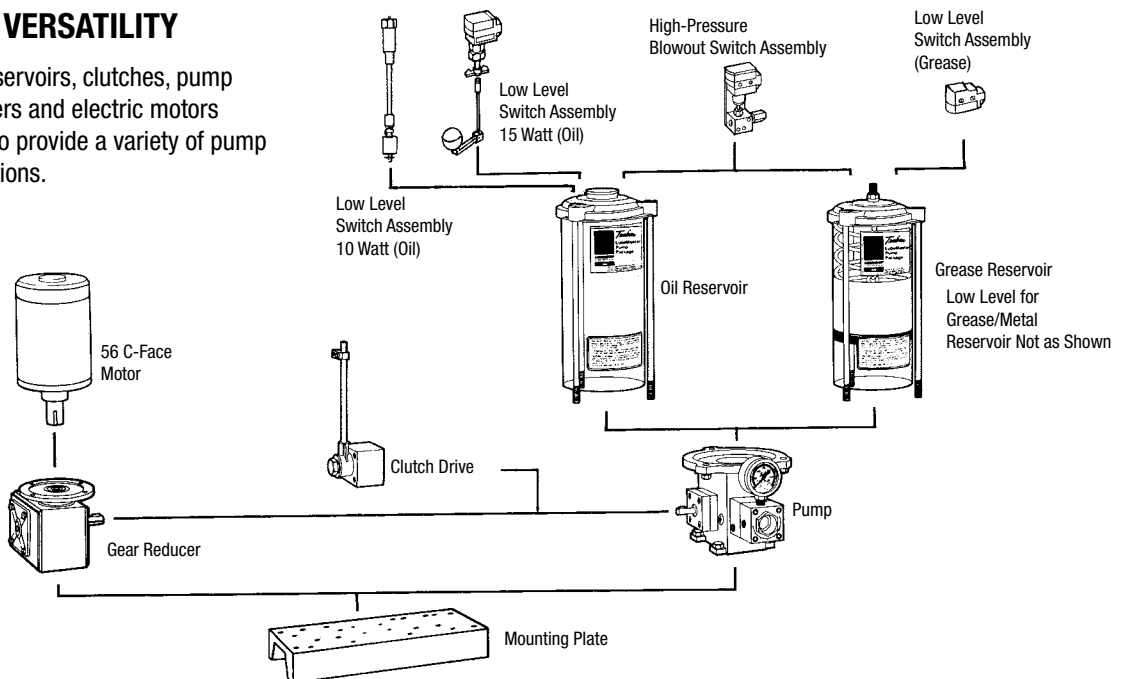
Lubemaster Options

NOTE: Millimeter dimensions appear in parentheses.



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

LUBEMASTER PUMP 563380† (521-700-000)

LUB - XXX - XXX - XXX - XXX - XXX - XX

RESERVOIR OPTION

OPA - 12 PINT OIL PLASTIC RESERVOIR, 562892 (185-100-380)
 OPB - 20 PINT OIL PLASTIC RESERVOIR, 562893 (185-100-390)
 OMA - 12 PINT OIL METAL RESERVOIR, 562894 (185-100-400)
 OMB - 20 PINT OIL METAL RESERVOIR, 562895 (185-100-410)
 GPA - 12 LB GREASE PLASTIC RESERVOIR, 562896 (185-100-540)
 GPB - 20 LB GREASE PLASTIC RESERVOIR, 562897 (185-100-550)
 GMA - 12 LB GREASE METAL RESERVOIR, 562898 (185-100-560)
 GMB - 20 LB GREASE METAL RESERVOIR, 562899 (185-100-570)
 OHS - OVERHEAD SUPPLY RESERVOIR, 562908 (185-100-930)

††DRIVE OPTION*

DOA - CLUTCH DRIVE W/ARM, 563383 (521-700-300)
 DOB - 10:1 REDUCTION, FLOOR MOUNTING, 563388 (521-700-550)
 DOC - 10:1 REDUCTION, WALL MOUNTING, 563386 (521-700-520)
 DOD - 60:1 REDUCTION, FLOOR MOUNTING, 563389 (521-700-560)
 DOE - 60:1 REDUCTION, WALL MOUNTING, 563387 (521-700-530)

MOTOR OPTION*

MOA - 115/230V, 1/2 HP, 1 PH, 60 HZ, 1725 RPM, 557271 (492-380-040)
 MOB - 230/460V, 1/2 HP, 3 PH, 60 HZ, 1725 RPM, 557270 (492-380-030)
 MOC - 115/230V, 1/2 HP, 1 PH, 60 HZ, 1140 RPM, 557272 (492-380-240)
 MOD - 230/460V, 1/2 HP, 3 PH, 60 HZ, 1140 RPM, 557273 (492-380-250)

LOW LEVEL OPTION*

LOA - 12 PINT OIL LOW LEVEL, SPDT, 15 AMPS, 563316 (521-001-030)
 LOB - 20 PINT OIL LOW LEVEL, SPDT, 15 AMPS, 563317 (521-001-040)
 LOC - 12 AND 20 LB GREASE LOW LEVEL, 563322 (521-001-110)
 LOE - 12 PINT OIL LOW LEVEL, SPDT, 10 WATTS, 563015 (456-010-172)
 LOF - 20 PINT OIL LOW LEVEL, SPDT, 10 WATTS, 563016 (456-010-173)
 **LOH - 12 AND 20 LB GREASE LOW LEVEL, EXP PROOF, 564377 (521-701-400)

PRESSURE INDICATOR OPTION*

POA - STANDARD BLOWOUT, 1450 PSI, OIL, 563179 (509-206-100)
 POB - STANDARD BLOWOUT, 2350 PSI, GREASE, 563184 (509-206-160)
 POC - HIGH-PRESSURE BLOWOUT SWITCH, 1450 PSI, OIL, 563384 (521-700-390)
 POD - HIGH-PRESSURE BLOWOUT SWITCH, 2350 PSI, GREASE, 563385 (521-700-400)

GAUGE OPTION

G1 - NONE, 1/4 PIPE PLUG
 G3 - 0-3000 PSI GAUGE LIQUID FILLED, 557713 (526-200-300)

*OMIT IF NOT REQUIRED

**CLASS I, GROUP C & D; CLASS II, GROUP E, F & G; SPDT, 15 AMP @ 125-480 VAC; 1/2 AMP, 125 VDC; 1/4 AMP, 250 VDC

†WHEN ORDERING LUBEMASTER PUMP, PART NO. 563380 (521-700-000), A FILL STUD PART NO. 557374 (506-189-001) AND A STANDARD BLOWOUT PART NO. 563179 (509-206-100) (OIL) OR PART NO. 563184 (509-206-160) (GREASE) MUST BE ORDERED AS A SEPARATE LINE ITEM.

††DRIVE OPTIONS DOB, DOC, DOD AND DOE CONTAIN ALL REQUIRED MOUNTING HARDWARE INCLUDING MOUNTING PLATE, COUPLER, COUPLING GUARD, NUTS, BOLTS AND WASHERS.

ORDERING INFORMATION

Description	Part No.	Old Part No.
Pkg. of 6 Blowout Discs, Yellow, 1450 psi, Oil	563962	560-900-270
Pkg. of 6 Blowout Discs, Aluminum, 2350 psi, Grease	563965	560-900-300
Lubemaster Pump Repair Kits		
Seal Kit for Pump	563921	560-001-770
Repair Kit for Clutch Drive w/arm	563383	521-700-300
Drive Repair Kit	563915	560-001-690
Output Manifold Repair Kit	563916	560-001-700

Refer to Bulletin L42751 for operating and service instructions.

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

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