

# **Drum Pumps - Single Cycle**

#### **DESCRIPTION**

Trabon Drum Pumps are single-stroke, double-acting pneumatic (or hydraulic) powered units for use with standard 35 lb and 120 lb lubricant containers. They are designed to provide controlled output from drum size containers and are suited for use on most types of off-the-road moble equipment of for industrial systems utilizing Trabon series progressive lubricating systems.

#### FEATURES/ADVANTAGES

- Hydraulically or Pneumatically powered (double-acting)
- Available in 30:1 Pneumatic Model, 4:1 and 10:1 Hydraulic Model
- Controlled cycling rating
- Fits Standard 35 lb and 120 lb lubricant container
- Follower plate standard
- Solenoid valve manifolded to pump (pneumatic only)
- High power ratio
- Cartridge discharge check valve
- Adjustable output

#### **OPERATION**

#### Pneumatic Powered Unit -

With the power piston in the up position the lubricant chamber is primed with lubricant and ready for the first pump cycle. Air is valved to the top side of the power piston, pushing the power piston and piston rod downward (See Figure 1), and forcing the lubricant out of the lubrication chamber, past the discharge check valve and out the discharge tube. Air is then valved to the bottom side of the power piston forcing it upward (See Figure 2), returning the pump piston to the prime position. As the pump piston moves upward, lubricant is drawn into the lubricant chamber through the inlet check valve. This cycle is repeated as often as air is valved to the pump.

As lubricant is pumped out of the container, atmospheric pressure, acting on the follower plate, forces it down. The follower plate wipes the side of the container and produces a positive prime pressure on the pump inlet. The output per stroke can be reduced by 50% by reversing the end cap on the air cylinder. This reduces the stroke of the pump by 50%.



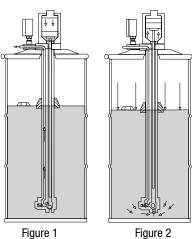
### **Hydraulic Powered Unit –**

The hydraulic unit operates in the same manner as the pneumatic unit except the power source is hydraulic instead of pneumatic.

The output per stroke can be reduced by 50% by screwing an adaptor into the hydraulic cylinder end cap. This reduces the stroke of the pump by 50%.

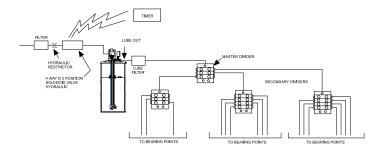
The cycling rate of the drum pump is controlled by the rate at which air (or hydraulic) flow is applied to the power cylinder. This is typically accomplished by using a timer (or controller) to operate a four-way, two position solenoid valve.

NOTE: The pump assembly and the delivery tube should be pre-packed with grease prior to first use.

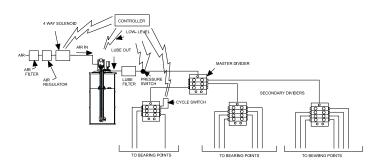


#### **TYPICAL APPLICATIONS**

The barrel pump can be used in a wide range of applications for industrial and mobile markets. Typical industrial applications include conveyor systems, presses and overhead cranes. Examples of mobile applications include front end loaders, scrapers and cranes. A simple timer may be used to activate the system or a controller can be used to monitor various functions.



COMPONENT ORDERING										
Description	Part No.	Old Part No.								
Pump Repair Kit										
Repair Kit, 10:1, Hydraulic Cycle	563943	560-002-960								
Repair Kit, Lower Pump	563944	560-002-961								
Repair Kit, 30:1, Air Cycle	1	560-900-550								
Repair Kit, 4:1, Hydraulic Cycle	1	560-002-985								
Parts & Accessories										
24 VDC, 4-way Pneumatic Solenoid Valve Assembly (includes the following solenoid valve end parts)	564393	526-100-300								
24 VDC, 4-way Pneumatic Solenoid Valve (.32A, 7.2W)	564107	526-100-310								
O-Ring for Adaptor Bolts (4 Required)*	556545	422-010-160								
Manifold*	560858	526-100-280								
Muffler (Exhaust)*	557705	526-100-320								
Adaptor Bolts (2 Required)*	560730	521-000-560								
12 VDC, 4-way Pneumatic Solenoid Valve Assembly (includes the following solenoid valve and the parts marked "*" above)	-	526-100-360								
12 VDC, 4-way Pneumatic Solenoid Valve (.63A, 7.2W)	-	526-100-350								
115 VAC, 4-way Pneumatic Solenoid Valve Assembly (includes the following solenoid valve and the parts marked "*" above)	563418	526-100-820								
115 VAC, 4-way Pneumatic Solenoid Valve (.13A inrush, .08A holding)	557712	526-100-810								
1/2 Capacity Adaptor for Hydraulic Power Unit	564840	520-100-060								
Low Level Switch Assembly, 35 lb, SPDT, 15A	563414	526-100-430								
Low Level Switch Assembly, 120 lb, SPDT, 15A	564394	526-100-440								



SPECIFICATION	
Pump Body	
Hydraulic Unit	Steel
Pneumatic Unit	Steel and Aluminum
Pump Data	
Output	240 cu.in. stroke (max) .120 cu.in. stroke (min)
Power Ratio	30:1 Pneumatic 10:1 Hydraulic 4:1 Hydraulic
Max Air Pressure	150 psi, 30:1 Air Unit
Min Air Pressure	50 psi, 30:1 Air Unit
Max Hydraulic Pressure	500 psi
Min Hydraulic Pressure	150 psi
Max Lube Outlet Pressure	3000 psi
Max Cycle Rate	
Oil	40 cycles per min
*Grease	30 cycles per min
Net Weight (less container)	
35 lb (Pneumatic)	15 lbs
35 lb (Hydraulic)	17 lbs
120 lb (Pneumatic)	18 lbs
120 lb (Hydraulic)	20 lb
Pneumatic Solenoid Valve w/Subbase and Bolts	2 lbs

Notes: For temperatures below 28°F contact factory, \*Use NLGI #1 grease at ambient temperature (75°F)

		art No. Old Part No.	35	120 Lb	Hydr 10:1		Air 30:1	Solenoid Included				Disc		. Press	
	Part No.		Lb					Not	12 VDC	24 VDC		220 VAC	Press	11 SW	Gauge
	562866	145-100-030	Χ				Х	Χ					1750		Х
	562867	145-100-130	Х			Х		Χ					3000	Х	
ſ	562864	145-100-000		Х			Х	Χ					1750		Х
	562865	145-100-010		Х	Х			Χ					1750		Х
	564263	145-100-020		Χ			Х			Χ			1750		Х
	562868	145-100-220		Х			Х				Х		1750		Х
	-	145-100-300		Χ			Х					Х	1750	Х	Х
Ī	-	145-100-310		Χ			Х				Χ		1750	Х	Х

Note: Low Level Switch also available with pump assemblies.

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.

## **Contact us today!**

To receive product information or talk with a Graco representative, call **800-533-9655** or visit us online at **www.graco.com**.

