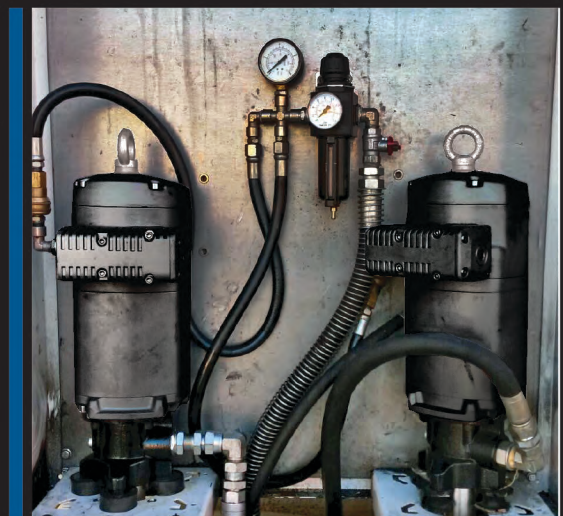


# Balcrank

## Fluid Dispensing Systems

Automotive | Commercial | Industrial

### Pumping Solutions



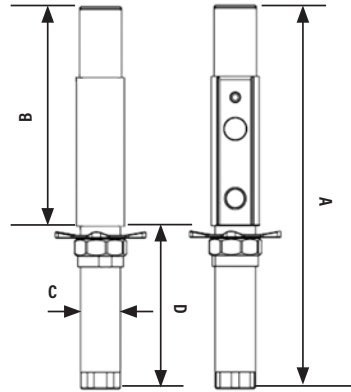
## Oil Piston Pumps Product Selection Matrix

MAX. SIMUL. DISPENSE POINTS	MAX. LINE LENGTH	MAX. FREE FLOW	FLUID INLET	FLUID OUTLET	RECOMMENDED FLUID TYPES
<b>LYNX® 1:1</b>					
1	Up to 100' (30 m)*	10.6 gal/min (40 l/min)*	1" NPT(F)	3/4" NPT(F)	Petroleum Based Oils, Synthetic Oils
<b>LYNX® 1:1 STAINLESS STEEL</b>					
1	Up to 100' (30 m)*	8.2 gal/min (31 l/min)*	1" NPT(F)	3/4" NPT(F)	Anti-freeze (Glycol), Windshield Wash Fluids
<b>LYNX® 3:1</b>					
1	Up to 125' (38 m)*	6.6 gal/min (25 l/min)*	3/4" NPT(F)	3/4" NPT(F)	Petroleum Based Oils, Synthetic Oils, Gear and ATF
<b>LYNX® 5:1 HD</b>					
1-3	up to 150' (46 m)*	10 gal/min (38 l/min)*	1" NPT(F)	3/4" NPT(F)	Petroleum Based Oils, Synthetic Oils, Gear and ATF
<b>PANTHER® 3:1</b>					
1-3*	250' (76 m)*	8 gal/min (30 l/min)*	1" NPT(F); 1 1/2" NPT(M)	3/4" NPT(F)	Petroleum Based Oils, Synthetic Oils, Gear and ATF
<b>PANTHER® 5:1</b>					
1-3*	500' (152 m)*	6 gal/min (23 l/min)*	1" NPT(F); 1 1/2" NPT(M)	1/2" NPT(F)	Petroleum Based Oils, Synthetic Oils, Gear and ATF
<b>TIGER® 6:1</b>					
2-4*	500' (152 m)*	16 gal/min (61 l/min)*	1" NPT(F); 1 1/2" NPT(M)	3/4" NPT(F)	Petroleum Based Oils, Synthetic Oils, and Anti-freeze (Glycol)
<b>LION™ 450 3:1</b>					
3-4*	Up to 250' (76 m)*	12 gal/min (45 l/min)	1 1/2" NPT(F)	3/4" NPT(F)	Petroleum Based Oils Synthetic Oils Gear and ATF
<b>LION™ 450 6:1</b>					
3-4*	Up to 500' (152 m)*	25 gal/min (95 l/min)	1 1/2" NPT(F)	3/4" NPT(F)	Petroleum Based Oils Synthetic Oils Gear and ATF
<b>LION™ 450 10:1</b>					
3-4*	Up to 750' (230 m)*	17 gal/min (65 l/min)	1 1/2" NPT(F)	3/4" NPT(F)	Petroleum Based Oils Synthetic Oils Gear and ATF
<b>LION™ 600 6:1</b>					
3-4*	Up to 500' (152 m)*	26 gal/min (100 l/min)	1 1/2" NPT(F)	3/4" NPT(F)	Petroleum Based Oils Synthetic Oils Gear and ATF
<b>LION™ 600 12:1</b>					
3-4*	Up to 750' (230 m)*	17 gal/min (65 l/min)	1 1/2" NPT(F)	3/4" NPT(F)	Petroleum Based Oils Synthetic Oils Gear and ATF

\* Pump performance is predicated on fluid viscosity, pumping distance, pipe diameter, and dispense volume requirements. Contact Balcrank for system design assistance and technical data.

# Oil Piston Pumps LYNX® 1:1 - 1:1 Stainless Steel Pump

The LYNX 1:1 ratio double acting pump is engineered for outstanding performance and reliability to dispense lubricating oils and similar products up to SAE 90.



DIMENSIONS INCHES (MM)			
<b>1110-010</b>			
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
19 9/16" (497 mm)	11 1/4" (286 mm)	2 3/64" (52 mm)	8 5/16" (211 mm)
<b>1110-009</b>			
46 1/2" (1181 mm)	11 1/4" (286 mm)	2 3/64" (52 mm)	35 1/4" (895 mm)
<b>1160-008</b>			
47 1/4" (1200 mm)	11 1/4" (286 mm)	2" (50 mm)	36" (914 mm)

TECHNICAL DATA	
Operating air pressure	45 -150 psi (3 -10 bar)
Cycles per gallon	31 cyc/gal (8.2 cyc/liter)
Air consumption 100 psi (7 bar) & 3 gal/min (1 l/min)	3.50 scfm
Max Fluid stall pressure @ 150 psi (10 bar) <sup>(1)</sup>	145 psi (10 bar)
Effective Air Piston Diameter	1.375" (35 mm)
1110-010, 1110-009 Free flow pump delivery with SAE 10W30 oil, 68 °F (20 °C), 150 psi (10 bar) air pressure	10.6 gal/min (40 l/min)
1160-008 Free flow pump delivery with SAE 10W30 oil, 68 °F (20 °C), 150 psi (10 bar) air pressure	8.2 gal/min (30 l/min)
Air inlet	1/4" NPT(F)
Fluid inlet (stub only)	1" NPT(F)
Fluid outlet 1110-010, 1110-009	3/4" NPT(F)
Fluid outlet 1160-008	3/4" NPT(M)
Wetted materials 1110-010 & 1110-009	Steel, Brass, Aluminum, Buna-N™, and Polyurethane
1160-008	Stainless Steel, Viton, and PTFE
Service Bulletin 1110-010, 1110-009	SB 1102
Service Bulletin 1160-008	SB 1143

NOTE: Thermal expansion of the fluid in a distribution system can cause an increase in system pressure that can damage lubrication system components. Use pressure relief valve kit 3120-086 for this pump.

(1) Ensure that all hose fittings and piping are rated for fluid outlet pressures. Balcrank recommends a minimum of 3x safety factor.

**Warning!** Do not use any LYNX® series products with flammable fluids.

Verify fluid compatibility with MSDS sheets.

Contact Balcrank for specific system design performance and technical data.

## Fluids & Applications

The LYNX series pump is perfect for small volume users, for synthetics, gear oils, and standard mineral oils.

The 1:1 version is best for higher volume with short distance requirements such as oil bars, tapper pumps and medium to light viscosity oils pumping short distances.

### Fluids

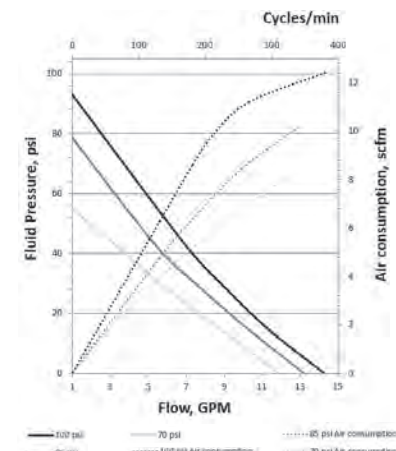
- Synthetic and mineral based lubricants
- Hydraulic fluid
- Transmission fluid
- Anti-freeze/windshield wash fluids (stainless version)

### Applications

- Tapper pumps
- Oil bar supply (pumping short distance)
- Roll-around synthetic or mineral oil packages
- Medium volume dispensing in agricultural, in-plant, and maintenance shop applications

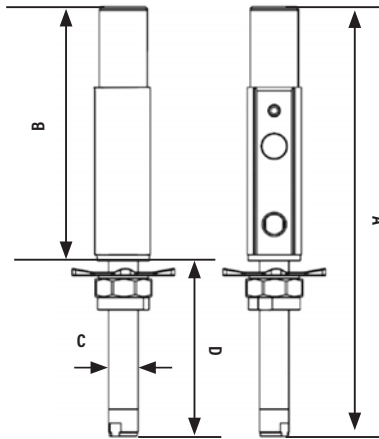
**Pressure relief valve kit 3120-086 for this pump not included.**

MODELS AVAILABLE	DESCRIPTION
<b>1110-010</b>	1:1 Bare carbon steel stub pump with bung adapter
<b>1110-009</b>	1:1 Bare carbon steel drum pump with bung adapter
<b>1160-008</b>	1:1 Bare stainless steel drum pump with bung adapter
<b>3120-086</b>	Kit, Pressure Relief, 3/4", 850 psi (59 bar)



# Oil Piston Pumps LYNX® 3:1 Pump

The LYNX® 3:1 ratio double acting pump is engineered for outstanding performance and reliability to dispense lubricating oils and similar products up to SAE 90.



DIMENSIONS INCHES (MM)			
1110-007			
A	B	C	D
19 9/16" (497 mm)	11 1/4" (286 mm)	1 11/32" (34 mm)	8 5/16" (211 mm)

TECHNICAL DATA	
Operating air pressure	45 -150 psi (3 -10 bar)
Cycles per gallon	98 cyc/gal (26.5 cyc/liter)
Air consumption 100 psi (7 bar) & 3 gal/min (11 l/min)	18.80 scfm
Max Fluid stall pressure @ 150 psi (10 bar) <sup>(1)</sup>	725 psi (50 bar)
Effective Air Piston Diameter	1.375" (35 mm)
Free flow pump delivery with SAE 10W30 oil, 68 °F (20 °C), 150 psi (10 bar) air pressure	6.6 gal/min (25 l/min)
Air inlet	1/4" NPT(F)
Fluid inlet	3/4" NPT(F)
Fluid outlet	3/4" NPT(F)
Wetted materials	Buna-N™, Steel, Brass, Aluminum, and Polyurethane
Service Bulletin	SB 1101

NOTE: Thermal expansion of the fluid in a distribution system can cause an increase in system pressure that can damage lubrication system components. Use pressure relief valve kit 3120-086 for this pump.

(1) Ensure that all hose fittings and piping are rated for fluid outlet pressures. Balcrank recommends a minimum of 3 x safety factor.

**Warning!** Do not use any LYNX® series products with flammable fluids.

Verify fluid compatibility with MSDS sheets.

Contact Balcrank for specific system design performance and technical data.

## Fluids & Applications

The LYNX® series pump is perfect for small volume users, for synthetics, and standard mineral oils. The 3:1 version is best for small tank packages, roll-around units for synthetic and mineral base drum applications.

### Fluids

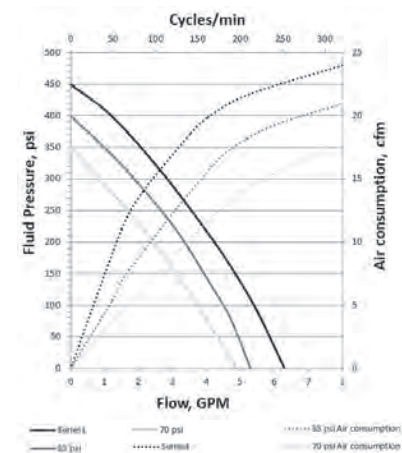
- Synthetic and mineral based lubricants
- Hydraulic fluid
- Transmission fluid

### Applications

- Oil bar supply (pumping short distance)
- Roll-around synthetic or mineral oil packages
- Low volume dispensing in agricultural, in-plant, and maintenance shop applications

**Pressure relief valve kit 3120-086 for this pump, not included.**

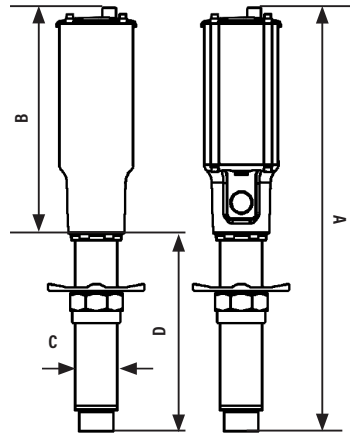
MODELS AVAILABLE	DESCRIPTION
1110-007	3:1 Bare carbon steel stub pump with bung adapter
3120-086	Kit, Pressure Relief, 3/4", 850 psi (59 bar)





## Oil Piston Pumps LYNX® 5:1 HD Pump

The LYNX® 5:1 HD ratio double acting pump is engineered for outstanding performance and reliability. The LYNX® 5:1 HD pump is designed to dispense lubricating oils and gear oils in piped systems up to SAE 90.



DIMENSIONS INCHES (MM)			
1110-012			
A	B	C	D
19 11/16" (500 mm)	10 5/8" (270 mm)	2" (50 mm)	9 1/16" (230 mm)

TECHNICAL DATA	
Operating air pressure	60-145 psi (4-10 bar)
Cycles per gallon	20 cyc/gal (5.28 cyc/liter)
Air consumption 100 psi (7 bar) & 3 gal/min (11 l/min)	18.80 scfm
Max Fluid stall pressure @ 150 psi (10 bar) <sup>(1)</sup>	725 psi (50 bar)
Effective Air Piston Diameter	3" (80 mm)
Free flow pump delivery with SAE 10W30 oil, 68 °F (20 °C), 150 psi (10 bar) air pressure	24 gal/min (90.85 l/min)
Air inlet	1/4" NPT(F)
Fluid inlet	1" NPT(F)
Fluid outlet	3/4" NPT(F)
Wetted materials	Aluminum, Buna-N™, zamak, steel, and polyurethane
Service Bulletin	SB 1128

NOTE: Thermal expansion of the fluid in a distribution system can cause an increase in system pressure that can damage lubrication system components. Use pressure relief valve kit included with this pump.

(1) Ensure that all hose fittings and piping are rated for fluid outlet pressures. Balcrank recommends a minimum of 3x safety factor.

**Warning!** Do not use any LYNX® series products with flammable fluids.

Verify fluid compatibility with MSDS sheets.

Contact Balcrank for specific system design performance and technical data.

## Fluids & Applications

The LYNX® 5:1 HD series pump is perfect for medium volume users requiring an economy unit for roll-around synthetics, gear oil and standard mineral oil dispense packages. This pump can also be used for small to medium shops supplying overhead hose reels with a maximum overall flow rate of 5 gpm.

### Fluids

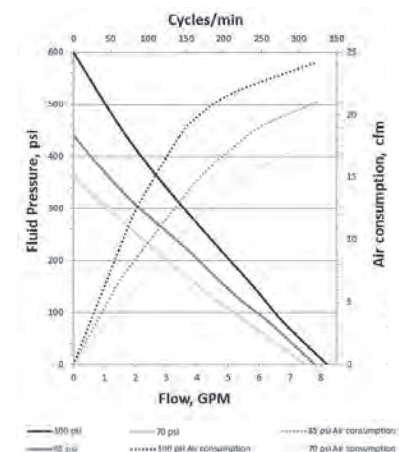
- Synthetic and mineral based lubricants
- Hydraulic fluid
- Transmission fluid
- Gear oil

### Applications

- Small to medium sized tank packages
- Low to medium volume maintenance shops
- Small car dealerships
- Quick lubes
- Roll-around gear oil packages

**Pressure relief valve kit included with this pump.**

MODELS AVAILABLE	DESCRIPTION
1110-012	5:1 Bare carbon steel stub pump with bung adapter



# Oil Piston Pumps

## LYNX® 1:1 Pump Packages & Components





LYNX® 1:1 PUMP PACKAGE					LYNX® 2:1 PUMP PACKAGE
	<b>16 GAL NON-METERED 1111-028</b>	<b>16 GAL METERED 1111-027</b>	<b>55 GAL NON-METERED 1111-030</b>	<b>55 GAL METERED 1111-029</b>	<b>TAPPER STUB 1111-035</b>
<b>PUMP</b>	1110-010	1110-010	1110-009	1110-009	LYNX® 2:1 with drip tray
<b>MP FLUID HOSE 10' x 1/2"</b>	8249-010	8249-010	8249-010	8249-010	-
<b>HANDLE FLEX-MEMORY 1/4 TURN</b>	3320-024	3330-159	3320-024	3330-159	-
<b>F/R MINI AUTO DRAIN 1/4" NPT(F)</b>	3260-033	3260-033	3260-033	3260-033	3260-033
<b>SPIGOT DISPENSE VALVE</b>	-	-	-	-	4200-013
<b>AIR COUPLER 1/4"</b>	3270-003	3270-003	3270-003	3270-003	3270-003
<b>AIR NIPPLE 1/4"</b>	3270-004	3270-004	3270-004	3270-004	3270-004
<b>SUCTION TUBE</b>	4412-044	4412-044	-	-	Suction tubes not included. *Choose from suction tubes below. *4412-046 1" NPT(M) x 26" - 30° 55 gal drum *4412-049 1" NPT(M) x 32" - 30° 275 gal tote *4412-050 1" NPT(M) x 39" - 30° 330 gal tote










LYNX® 1:1 PUMP PACKAGE COMPONENTS					
Suction tubes		<b>4412-044</b> 1" NPT(M) x 18" - 30° 16 gal drum	Control handles		<b>3330-159</b> DR, Flex-mem. ext., 1/4 turn for oil
		<b>4412-046</b> 1" NPT(M) x 26" - 30° 55 gal drum			<b>3330-192</b> MR, Qts., Flex-mem. ext., 1/4 turn for oil
		<b>4412-045</b> 1" NPT(M) x 21" - 30° 165/280 gal bench tank	Wall mount kit		<b>4410-058</b> Wall mount kit for LYNX 8132-005 LP Hose 5' x 3/8" 8261-005 MP Hose 5' x 3/4" 8171-006 Suction Hose 6' x 3/4" 4412-052 Suction Tube 1" NPT(M) x 60" - 30° 4411-008 Wall mount bracket
		<b>4412-048</b> 1" NPT(M) x 30" - 30° 165/280 gal bench tank double tap			
		<b>4412-047</b> 1" NPT(M) x 28" - 30° 250 gal bench tank double tap			
		<b>4412-051</b> 1" NPT(M) x 42" - 30° 275/330 gal horizontal obround double tap	Wall mount bracket		<b>4411-008</b> Wall mount bracket for LYNX, Panther® HP and Tiger®
		<b>4412-052</b> 1" NPT(M) x 60" - 30° 330 gal vertical obround			
		<b>4412-049</b> 1" NPT(M) x 32" - 30° 275 gal tote			
<b>4412-050</b> 1" NPT(M) x 39" - 30° 330 gal tote	Dollies		<b>4310-001</b> Band dolly, 16 gal/120 lb		
			<b>4310-003</b> Band dolly, 16 gal/120 lb wide track		
Filter regulator (F/R)		<b>3260-033</b> F/R mini auto drain 1/4" NPT(F)	<b>4310-004</b> Band dolly, 55 gal/400 lb HD		
Dispense hose		<b>8263-010</b> Dispense hose 10' x 3/4"	Carts		<b>4320-010</b> 4 Wheel drum cart: 120 lb/16 gal
		<b>8263-016</b> Dispense hose 16' x 3/4"			<b>4320-013</b> Economy drum cart: 400 lb/55 gal
Connecting hose kit		<b>4410-054</b> Connecting hose kit LYNX®: 8132-005 LP Hose 5'x3/8" 8249-005 MP Hose 5'x1/2" 3270-003 Coupler 1/4" 3270-004 Nipple 1/4" 3270-053 Bushing 3/4" x 1/2"			<b>4320-014</b> Heavy duty drum cart: 400 lb/55 gal

Note: Pump packages include all hoses and adapters required for connecting an oil pump to the air supply and oil dispense line. Balcrank does not provide wall mounting hardware (nuts, bolts, and anchors) for lube packages.

# Oil Piston Pumps

## LYNX® 3:1 Pump Packages & Components

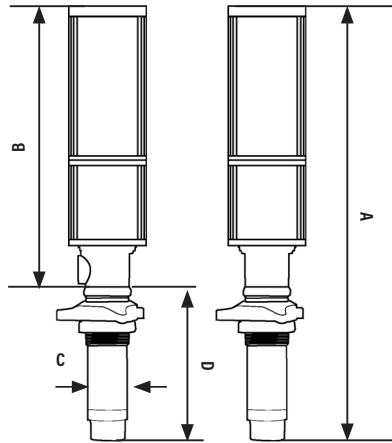
LYNX® 3:1 PUMP PACKAGE				
				
	16 GAL NON METERED 1111-032	16 GAL METERED 1111-031	55 GAL NON METERED 1111-034	55 GAL METERED 1111-033
<b>PUMP</b>	1110-007	1110-007	1110-007	1110-007
<b>MP FLUID HOSE 10' x 1/2"</b>	8249-010	8249-010	8249-010	8249-010
<b>SUCTION TUBE</b>	4412-035	4412-035	4412-037	4412-037
<b>HANDLE W/FLEX-MEMORY &amp; 1/4 TURN</b>	3320-024	3330-159	3320-024	3330-159
<b>F/R MINI AUTO DRAIN 1/4" NPT(F)</b>	3260-033	3260-033	3260-033	3260-033
<b>AIR COUPLER 1/4"</b>	3270-003	3270-003	3270-003	3270-003
<b>AIR NIPPLE 1/4"</b>	3270-004	3270-004	3270-004	3270-004

LYNX® 3:1 PUMP PACKAGE COMPONENTS								
Suction tubes		<b>4412-035</b> 3/4" NPT(M) x 18" - 30° 16 gal drum	Control handles		<b>3330-159</b> DR, Flex-mem. ext., 1/4 turn for oil			
		<b>4412-037</b> 3/4" NPT(M) x 26" - 30° 55 gal drum			<b>3330-192</b> MR, Qts., Flex-mem. ext., 1/4 turn for oil			
		<b>4412-036</b> 3/4" NPT(M) x 21" - 30° 165/280 gal bench tank			Wall mount kit		<b>4410-058</b> Wall mount kit for LYNX 8132-005 LP Hose 5' x 3/8" 8261-005 MP Hose 5' x 3/4" 8171-006 Suction Hose 6' x 3/4" 4412-052 Suction Tube 1" NPT(M) x 60" - 30° 4411-008 Wall mount bracket	
		<b>4412-039</b> 3/4" NPT(M) x 30" - 30° 165/280 gal bench tank double tap						
		<b>4412-038</b> 3/4" NPT(M) x 28" - 30° 250 gal bench tank double tap						
		<b>4412-042</b> 3/4" NPT(M) x 42" - 30° 275/330 gal horizontal obround double tap						
		<b>4412-043</b> 3/4" NPT(M) x 60" - 30° 330 gal vertical obround	Wall mount bracket					<b>4411-008</b> Wall mount bracket for LYNX, Panther® HP and Tiger®
		<b>4412-040</b> 3/4" NPT(M) x 32" - 30° 275 gal tote	Dollies					<b>4310-001</b> Band dolly, 16 gal/120 lb
		<b>4412-041</b> 3/4" NPT(M) x 39" - 30° 330 gal tote			<b>4310-003</b> Band dolly, 16 gal/120 lb wide track			
Filter regulator (F/R)		<b>3260-033</b> F/R mini auto drain 1/4" NPT(F)	<b>4310-004</b> Band dolly, 55 gal/400 lb HD					
Dispense hose		<b>8263-010</b> Dispense hose 10' x 3/4"	Carts		<b>4320-010</b> 4 Wheel drum cart: 120 lb/16 gal			
		<b>8263-016</b> Dispense hose 16' x 3/4"			<b>4320-013</b> Economy drum cart: 400 lb/55 gal			
Connecting hose kit		<b>4410-054</b> Connecting hose kit LYNX: 8132-005 LP Hose 5'x3/8" 8249-005 MP Hose 5'x1/2" 3270-003 Coupler 1/4" 3270-004 Nipple 1/4" 3270-053 Bushing 3/4" x 1/2"	<b>4320-014</b> Heavy duty drum cart: 400 lb/55 gal					

Note: Pump packages include all hoses and adapters required for connecting an oil pump to the air supply and oil dispense line. Balcrank does not provide wall mounting hardware (nuts, bolts, and anchors) for lube packages.

# Oil Piston Pumps PANTHER® HP 3:1 Pumps

The Panther® HP 3:1 ratio double acting pump is engineered for outstanding performance and reliability to dispense lubricating oils and similar products up to SAE 90.



DIMENSIONS INCHES (MM)			
1130-015 & 1130-020			
A	B	C	D
23.5" (523.9 mm)	14 3/8" (285 mm)	2 4/5" (71 mm)	6 1/2" (158.7 mm)
1130-017			
21 8/9" (555.6 mm)	14 3/8" (285 mm)	2 1/8" (54 mm)	7 1/2" (190.5 mm)



## Fluids & Applications

Pride Series pumps are manufactured with a mechanical air valve and piston design which is more forgiving to environments with contaminated air. The 3:1 version is a medium pressure pump for supplying higher volume than the 5:1 version but at lower operating pressures ideal for medium pumping distances and overall flow rates of 4-5 gpm.

### Fluids

- Synthetic and mineral based lubricants
- Hydraulic fluid
- Transmission fluid

### Applications

- Medium sized tank packages
- Medium volume maintenance shops
- Small car dealerships
- Quick lubes

**Pressure relief valve kit included with this pump.**

TECHNICAL DATA	
Operating air pressure	10-150 psi (.7-10 bar)
Cycles per gallon	34 cyc/gal (8.98 cyc/liter)
Free Flow pump delivery with SAE 10W30 oil, 68° F (20° C), 100 psi (7 bar) air pressure	8 gal/min (30 l/min)
Air consumption 100 psi (7 bar) & 4 gal/min (15 l/min)	19.70 SCFM
Max. fluid stall pressure @150 psi (10 bar) <sup>(1)</sup>	490 psi (33.7 bar)
Air inlet	1/4" NPT(F)
Fluid inlet	1" NPT(F); 1 1/2" NPT(M)
Fluid outlet	3/4" NPT(F)
Effective air piston diameter	2.5" (63.5 mm)
Wetted materials	Steel, Nickel Plated Steel, Stainless Steel, Aluminum, Ultrathane, Buna-N™, and Nylon
Service Bulletin	SB 1064

NOTE: Thermal expansion of the fluid in a distribution system can cause an increase in system pressure that can damage lubrication system components. Use pressure relief valve kit included with this pump.

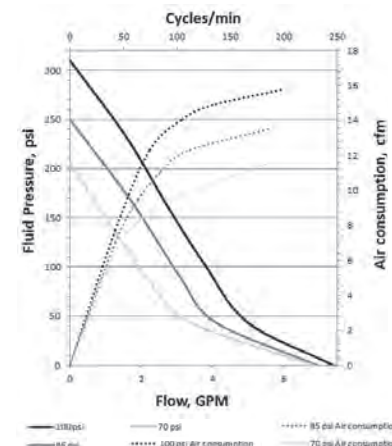
(1) Ensure that all hose fittings and piping are rated for fluid outlet pressures. Balcrank recommends a minimum of 3x safety factor.

**Warning!** Do not use any LYNX® series products with flammable fluids.

Verify fluid compatibility with MSDS sheets.

Contact Balcrank for specific system design performance and technical data.

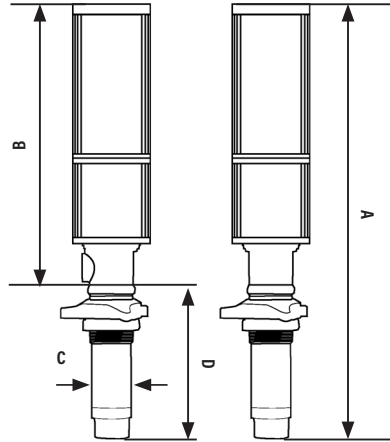
MODELS AVAILABLE	DESCRIPTION
<b>1130-015</b>	3:1 Bare carbon steel stub pump
<b>1130-017</b>	3:1 Bare carbon steel stub pump, flange mount
<b>1130-020</b>	3:1 Bare carbon steel pump with bung adapter





# Oil Piston Pumps PANTHER® HP 5:1 Pumps

The Panther® HP 5:1 ratio double acting pump is engineered for outstanding performance and reliability to dispense lubricating oils and similar products up to SAE 90.



DIMENSIONS INCHES (MM)			
1130-016 & 1130-021			
A	B	C	D
23.5" (523.9 mm)	14 3/8" (285 mm)	2 4/5" (71 mm)	6 1/2" (158.7 mm)
1130-018			
21 8/9" (555.6 mm)	14 3/8" (285 mm)	1 7/8" (47.6 mm)	7 1/2" (190.5 mm)

TECHNICAL DATA	
Operating air pressure	10-150 psi (.7-10 bar)
Cycles per gallon	57 cyc/gal (15.06 cyc/liter)
Free Flow pump delivery with SAE 10W30 oil, 68° F (20° C), 100 psi (7 bar) air pressure	6 gal/min (30 l/min)
Air consumption 100 psi (7 bar) & 4 gal/min (15 l/min)	24.80 SCFM
Max fluid stall pressure @150 psi (10 bar) <sup>(1)</sup>	760 psi (52 bar)
Air inlet	1/4" NPT(F)
Fluid inlet	1" NPT(F); 1 1/2" NPT(M)
Fluid outlet	1/2" NPT(F)
Effective air piston diameter	2.5" (63.5 mm)
Wetted materials	Steel, Nickel Plated Steel, Stainless Steel, Aluminum, Ultrathane, Buna-N™, and Nylon
Service Bulletin	SB 1064

NOTE: Thermal expansion of the fluid in a distribution system can cause an increase in system pressure that can damage lubrication system components. Use pressure relief valve kit included with this pump.

(1) Ensure that all hose fittings and piping are rated for fluid outlet pressures. Balcrank recommends a minimum of 3 x safety factor.

**Warning!** Do not use any LYNX® series products with flammable fluids.

Verify fluid compatibility with MSDS sheets.

Contact Balcrank for specific system design performance and technical data.



## Fluids & Applications

Pride Series pumps are manufactured with a mechanical air valve and piston design which is more forgiving to environments with contaminated air. The 5:1 version is a medium pressure pump for supplying higher pressures and for longer pumping distances than the 3:1 version but at lower volume ideal for longer pumping distances and overall flow rates of 4 gpm.

### Fluids

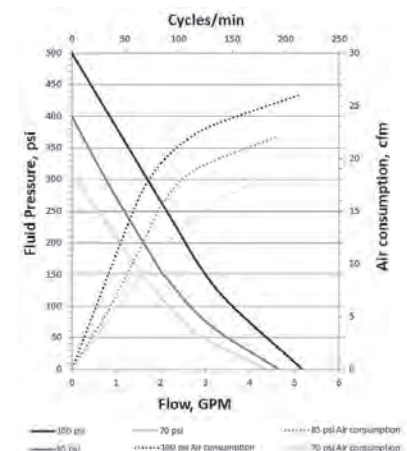
- Synthetic and mineral based lubricants
- Hydraulic fluid
- Transmission fluid
- Gear oil

### Applications





- Medium sized tank packages
- Medium volume maintenance shops
- Small car dealerships
- Quick lubes










**Pressure relief valve kit included with this pump.**

MODELS AVAILABLE	DESCRIPTION
1130-016	5:1 Bare carbon steel stub pump
1130-018	5:1 Bare carbon steel stub pump, flange mount
1130-021	5:1 Bare carbon steel pump with bung adapter







# Oil Piston Pumps Pump Packages & Components










PANTHER® 3:1 PUMP PACKAGES				
				
	<b>16 GAL PANTHER® 3:1 NON-METERED 1131-060</b>	<b>16 GAL PANTHER® 3:1 METERED 1131-059</b>	<b>55 GAL PANTHER® 3:1 NON-METERED 1131-062</b>	<b>55 GAL PANTHER® 3:1 METERED 1131-061</b>
<b>PUMP</b>	1130-015	1130-015	1130-015	1130-015
<b>MP FLUID HOSE 10' x 1/2"</b>	8249-010	8249-010	8249-010	8249-010
<b>SUCTION TUBE</b>	4412-044	4412-044	4412-046	4412-046
<b>HANDLE W/FLEX-MEMORY EXT &amp; 1/4 TURN</b>	3320-024	3330-159	3320-024	3330-159
<b>F/R MINI AUTO DRAIN 1/4" NPT (F)</b>	3260-033	3260-033	3260-033	3260-033
<b>AIR COUPLER 1/4"</b>	3270-003	3270-003	3270-003	3270-003
<b>AIR NIPPLE 1/4"</b>	3270-004	3270-004	3270-004	3270-004

PANTHER® 3:1 & LYNX® 5:1 HD PUMP PACKAGE COMPONENTS					
Suction tubes		<b>4412-044</b> 1" NPT(M) x 18" - 30° 16 gal drum	Control handles		<b>3330-159</b> DR, Flex-mem. ext., 1/4 turn for oil
		<b>4412-046</b> 1" NPT(M) x 26" - 30° 55 gal drum			<b>3330-192</b> MR, Qts., Flex-mem. ext., 1/4 turn for oil
		<b>4412-045</b> 1" NPT(M) x 21" - 30° 165/280 gal bench tank	Wall mount kit		<b>4410-022</b> Wall mount kit for PANTHER® 8132-005 LP Hose 5' x 3/8" 8249-005 MP Hose 5' x 1/2" 8181-006 Suction Hose 6' x 1" 4412-052 Suction Tube 1" NPT(M) x 60" - 30° 4411-009N Bung Adapter 4411-008 Wall mount bracket
		<b>4412-048</b> 1" NPT(M) x 30" - 30° 165/280 gal bench tank double tap			
		<b>4412-047</b> 1" NPT(M) x 28" - 30° 250 gal bench tank double tap			
		<b>4412-051</b> 1" NPT(M) x 42" - 30° 275/330 gal horizontal obround double tap	Wall mount bracket		<b>4411-008</b> Wall mount bracket for LYNX, Panther® HP and Tiger®
		<b>4412-052</b> 1" NPT(M) x 60" - 30° 330 gal vertical obround			
		<b>4412-049</b> 1" NPT(M) x 32" - 30° 275 gal tote	Dollies		<b>4310-001</b> Band dolly, 16 gal/120 lb
<b>4412-050</b> 1" NPT(M) x 39" - 30° 330 gal tote	<b>4310-003</b> Band dolly, 16 gal/120 lb wide track				
Filter regulator (F/R)		<b>3260-033</b> F/R mini auto drain 1/4" NPT(F)	<b>4310-004</b> Band dolly, 55 gal/400 lb HD		
Dispense hose		<b>8249-005</b> Dispense hose 5' x 1/2"	Carts		<b>4320-010</b> 4 Wheel drum cart: 120 lb/16 gal
		<b>8263-010</b> Dispense hose 10' x 3/4"			<b>4320-013</b> Economy drum cart: 400 lb/55 gal
		<b>8263-016</b> Dispense hose 16' x 3/4"			
Connecting hose kit		<b>4410-054</b> Connecting hose kit PANTHER®: 8132-005 LP Hose 5'x3/8" 8249-005 MP Hose 5'x1/2" 3270-003 Coupler 1/4" 3270-004 Nipple 1/4" 3270-053 Bushing 3/4" x 1/2"	<b>4320-014</b> Heavy duty drum cart: 400 lb/55 gal (to mount hose reel, use 2230-036 hose reel mount kit)		

Note: Pump packages include all hoses and adapters required for connecting an oil pump to the air supply and oil dispense line. Balcrank does not provide wall mounting hardware (nuts, bolts, and anchors) for lube packages.

## Oil Piston Pumps Pump Packages & Components

PANTHER® 5:1 PUMP PACKAGES				
				
	<b>16 GAL PANTHER® 5:1 NON-METERED 1131-064</b>	<b>16 GAL PANTHER® 5:1 METERED 1131-063</b>	<b>55 GAL PANTHER® 5:1 NON-METERED 1131-066</b>	<b>55 GAL PANTHER® 5:1 METERED 1131-065</b>
<b>PUMP</b>	1130-016	1130-016	1130-016	1130-016
<b>MP FLUID HOSE 10' x 1/2"</b>	8249-010	8249-010	8249-010	8249-010
<b>SUCTION TUBE</b>	4412-044	4412-044	4412-046	4412-046
<b>HANDLE W/FLEX-MEMORY EXT &amp; 1/4 TURN</b>	3320-024	3330-159	3320-024	3330-159
<b>F/R MINI AUTO DRAIN 1/4" NPT (F)</b>	3260-033	3260-033	3260-033	3260-033
<b>AIR COUPLER 1/4"</b>	3270-003	3270-003	3270-003	3270-003
<b>AIR NIPPLE 1/4"</b>	3270-004	3270-004	3270-004	3270-004

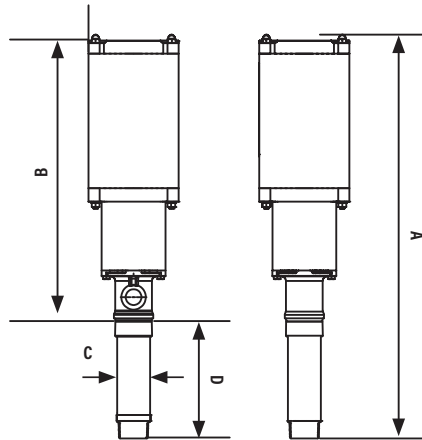
PANTHER® 3:1 & TIGER® 6:1 PUMP PACKAGE COMPONENTS								
Suction tubes		<b>4412-044</b> 1" NPT(M) x 18" - 30° 16 gal drum	Control handles		<b>3330-159</b> DR, Flex-mem. ext., 1/4 turn for oil			
		<b>4412-046</b> 1" NPT(M) x 26" - 30° 55 gal drum			<b>3330-192</b> MR, Qts., Flex-mem. ext., 1/4 turn for oil			
		<b>4412-045</b> 1" NPT(M) x 21" - 30° 165/280 gal bench tank			Wall mount kit		<b>4410-022</b> Wall mount kit for PANTHER® 8132-005 LP Hose 5' x 3/8" 8249-005 MP Hose 5' x 1/2" 8181-006 Suction Hose 6' x 1" 4412-052 Suction Tube 1" NPT(M) x 60" - 30° 4411-009N Bung Adapter 4411-008 Wall mount bracket *4411-009X Bung Adapter. Not included in kit. Needed for Tiger®	
		<b>4412-048</b> 1" NPT(M) x 30" - 30° 165/280 gal bench tank double tap						
		<b>4412-047</b> 1" NPT(M) x 28" - 30° 250 gal bench tank double tap						
		<b>4412-051</b> 1" NPT(M) x 42" - 30° 275/330 gal horizontal obround double tap						
		<b>4412-052</b> 1" NPT(M) x 60" - 30° 330 gal vertical obround	Wall mount bracket					<b>4411-008</b> Wall mount bracket for LYNX, Panther® HP and Tiger®
		<b>4412-049</b> 1" NPT(M) x 32" - 30° 275 gal tote						
		<b>4412-050</b> 1" NPT(M) x 39" - 30° 330 gal tote	Dollies		<b>4310-001</b> Band dolly, 16 gal/120 lb			
	<b>4310-003</b> Band dolly, 16 gal/120 lb wide track							
Filter regulator (F/R)		<b>3260-033</b> F/R mini auto drain 1/4" NPT(F). For Panther®		<b>4310-004</b> Band dolly, 55 gal/400 lb HD				
		<b>3260-035</b> F/R mini auto drain 1/4" NPT(F). For Tiger®						
Dispense hose		<b>8249-005</b> Dispense hose 5' x 1/2"	Carts		<b>4320-010</b> 4 Wheel drum cart: 120 lb/16 gal			
		<b>8263-010</b> Dispense hose 10' x 3/4"			<b>4320-013</b> Economy drum cart: 400 lb/55 gal			
		<b>8263-016</b> Dispense hose 16' x 3/4"				<b>4320-014</b> Heavy duty drum cart: 400 lb/55 gal (to mount hose reel, use 2230-036 hose reel mount kit)		
Connecting hose kit		<b>4410-054</b> Connecting hose kit Panther® : 8132-005 LP Hose 5'x3/8" 8249-005 MP Hose 5'x1/2" 3270-003 Coupler 1/4" 3270-004 Nipple 1/4" 3270-053 Bushing 3/4" x 1/2"						

Note: Pump packages include all hoses and adapters required for connecting an oil pump to the air supply and oil dispense line. Balcrank does not provide wall mounting hardware (nuts, bolts, and anchors) for lube packages.

# Oil Piston Pumps

## TIGER® HP 6:1 Pumps

The Tiger® HP 6:1 ratio double acting pump is engineered for outstanding performance and reliability to dispense lubricating oils and similar products up to SAE 90.



DIMENSIONS INCHES (MM)			
A	B	C	D
21 5/7" (514.5 mm)	16 1/4" (412.9 mm)	2 4/5" (71 mm)	4" (101.6 mm)



## Fluids & Applications

Tiger® is the largest of the Pride series pumps. Pride series pumps are manufactured with a mechanical air valve and piston design which is more forgiving to environments with contaminated air. The 6:1 version is a medium pressure pump for supplying higher pressures and longer pumping distances. The larger 3.2" air motor makes this pump ideal for larger users who need higher flow rates and slower pump cycle rates.

### Fluids

- Synthetic and mineral based lubricants
- Hydraulic fluid
- Transmission fluid
- Gear oil

### Applications

- Large sized tank packages
- Medium-large volume maintenance shops
- Medium to large volume car dealerships
- HD truck/fleet shops
- Off-road construction maintenance shops
- Mass-transit maintenance shops

**Pressure relief valve kit included with this pump.**

TECHNICAL DATA	
Operating air pressure	40-150 psi (3-10 bar)
Cycles per gallon	31 cyc/gal (8.2 cyc/liter)
Free flow pump delivery with SAE 10W30 oil, 68° F (20° C), 100 psi (7 bar) air pressure	16 gal/min (6 l/min)
Air consumption 100 psi (7 bar) & 8 gal/min (30 l/min)	59 SCFM
Max fluid stall pressure @150 psi (10 bar) <sup>(1)</sup>	870 psi (60 bar)
Air inlet	3/8" NPT(F)
Fluid inlet	1" NPT(F); 1 1/2" NPT(M)
Fluid outlet	3/4" NPT(F)
Effective Air Piston Diameter	3.2" (81 mm)
Wetted materials 1130-019 - 1130-025 - 1130-026	Carbon steel, Buna-N™, Stainless steel, Ultrathane® and Aluminum.
1160-007	Stainless Steel and Viton®
Service Bulletin	SB 1065

NOTE: Thermal expansion of the fluid in a distribution system can cause an increase in system pressure that can damage lubrication system components. Use pressure relief valve kit included with this pump.

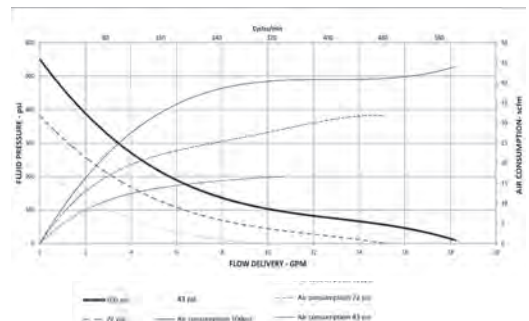
(1) Ensure that all hose fittings and piping are rated for fluid outlet pressures. Balcrank recommends a minimum of 3 x safety factor.

**Warning!** Do not use any LYNX® series products with flammable fluids.

Verify fluid compatibility with MSDS sheets.

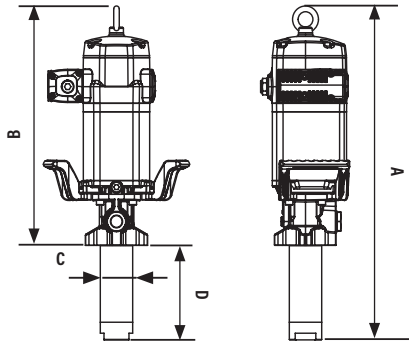
Contact Balcrank for specific system design performance and technical data.

MODELS AVAILABLE	DESCRIPTION
<b>1130-019</b>	6:1 Bare carbon steel stub pump
<b>1130-025</b>	6:1 Bare carbon steel stub pump, flange mount
<b>1130-026</b>	6:1 Bare carbon steel stub pump with bung adapter
<b>1160-007</b>	6:1 Bare stainless steel stub pump with bung adapter





# Oil Piston Pumps Lion™ 450 - 3:1 Pump



DIMENSIONS INCHES (MM)			
A	B	C	D
27 7/8" (708 mm)	19 7/8" (505 mm)	3 35/64" (90 mm)	8 1/32" (204 mm)

TECHNICAL DATA	
Operating air pressure	30 to 180 psi (2 to 12.4 bar)
Cycles per gallon	6
Air Consumption <sup>(1)</sup>	28 cfm (800 NI/min)
Max fluid outlet pressure <sup>(3)</sup>	510 psi (36 bar)
Air motor effective diameter	4.5" (115 mm)
Air motor stroke	4" (100 mm)
Delivery at 80 cpm	12 gal/min (45 l/min)
Max free flow delivery	32 gal/min (120 l/min)
Air inlet	1/2" NPT (F)
Fluid inlet	1 1/2" NPT (F)
Fluid outlet	3/4" NPT (F)
Wetted materials	Steel, Hard Chromed Steel, Zinc Plated Steel, Stainless Steel, Cast Iron, polyurethane, Buna-N™, Bronze Filled PTFE
Noise level <sup>(2)</sup>	80 dB
Service Bulletin	SB 1134

(1) Maximum air consumption with 75 psi (5 bar) air inlet pressure and 80 cpm.  
 (2) Maximum noise level measured at 3' (1 m) from the pump, 100 psi (7 bar) air pressure and free delivery.  
 (3) Ensure that all hose fittings and piping are rated for fluid outlet pressures. Balcrank recommends a minimum of 3 x safety factor.

NOTE: Thermal expansion of the fluid in a distribution system can cause an increase in system pressure that can damage lubrication system components. Use pressure relief valve kit included with this pump.

**Warning!** Do not use any Lion™ 450/600 series products with flammable fluids.

Verify fluid compatibility with MSDS sheets.

Contact Balcrank for specific system design performance and technical data.

## Fluids & Applications

Medium pressure pump for oil systems where high volume dispensing using simultaneous dispense points is required. Medium pressure pump is recommended for moderate pumping distances. Wall or floor mount only. Pump OD does not fit 2" bung adapter.

### Fluids

- Synthetic and mineral based lubricants
- Hydraulic fluid
- Gear oil
- Transmission fluid

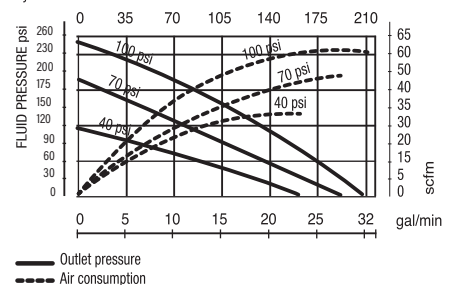
### Applications

- Heavy duty truck/fleet
- Railroad/mass transit vehicle maintenance
- In-plant high volume transfer
- Marine
- Mining vehicle maintenance
- Large automotive dealerships

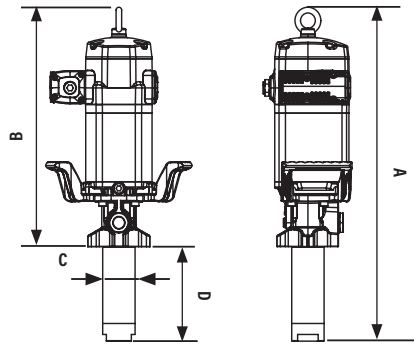
**Pressure relief valve kit included with this pump.**

MODELS AVAILABLE	DESCRIPTION
<b>1430-001</b>	Lion™ 450 3:1 stub pump

TEST FLUID: SAE 10  
Cycles/min.



# Oil Piston Pumps Lion™ 450 - 6:1 Pump



DIMENSIONS INCHES (MM)			
A	B	C	D
28" (702 mm)	20" (502 mm)	2 3/4" (70 mm)	8" (200 mm)

## Fluids & Applications

Medium pressure pump for oil systems where high volume dispensing using simultaneous dispense points is required. Medium/high pressure pump is recommended for longer pumping distances.

### Fluids

- Synthetic and mineral based lubricants
- Hydraulic fluid
- Gear oil
- Transmission fluid

### Applications

- Heavy duty truck/fleet
- Railroad/mass transit vehicle maintenance
- In-plant high volume transfer
- Marine
- Mining vehicle maintenance
- Large automotive dealerships

**Pressure relief valve kit included with this pump.**

TECHNICAL DATA	
Operating air pressure	30 to 180 psi (2 to 12.4 bar)
Cycles per gallon	11
Air Consumption <sup>(1)</sup>	29 cfm (830 NI/min)
Max fluid outlet pressure <sup>(3)</sup>	1,020 psi (72 bar)
Air motor effective diameter	4.5" (115 mm)
Air motor stroke	4" (100 mm)
Delivery at 80 cpm	7 gal/min (25 l/min)
Max free flow delivery	26 gal/min (98 l/min)
Air inlet	1/2" NPT (F)
Fluid inlet	1 1/2" NPT (F)
Fluid outlet	3/4" NPT (F)
Wetted materials	Cast iron, hard chromed steel, steel, polyurethane Buna-N™ and zinc
Noise level <sup>(2)</sup>	80 dB
Service Bulletin	SB 1135

- (1) Maximum air consumption with 75 psi (5 bar) air inlet pressure and 80 cpm.
- (2) Maximum noise level measured at 3' (1 m) from the pump, 100 psi (7 bar) air pressure and free delivery.
- (3) Ensure that all hose fittings and piping are rated for fluid outlet pressures. Balcrank recommends a minimum of 3 x safety factor.

NOTE: Thermal expansion of the fluid in a distribution system can cause an increase in system pressure that can damage lubrication system components. Use pressure relief valve kit included with this pump.

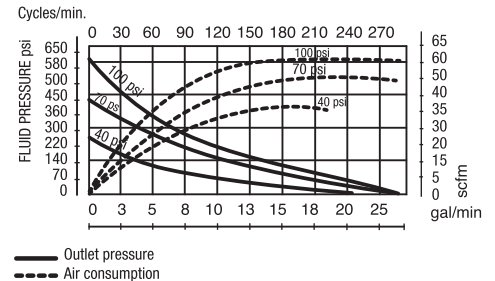
**Warning!** Do not use any Lion™ 450/600 series products with flammable fluids.

Verify fluid compatibility with MSDS sheets.

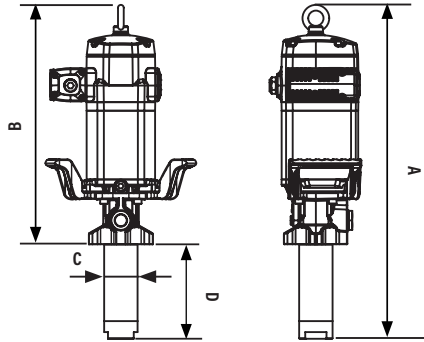
Contact Balcrank for specific system design performance and technical data.

MODELS AVAILABLE	DESCRIPTION
1430-002	Lion™ 450 6:1 stub pump

### TEST FLUID: SAE 10



## Oil Piston Pumps Lion™ 450 - 10:1 Pumps



DIMENSIONS INCHES (MM)			
<b>1430-003</b>			
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
28" (702 mm)	20" (502 mm)	2" (54 mm)	8" (200 mm)
<b>1430-004</b>			
56 1/4" (1430 mm)	19 7/8" (505 mm)	2 1/8" (54 mm)	36 13/32" (925 mm)

TECHNICAL DATA	
Operating air pressure	30 to 180 psi (2 to 12.4 bar)
Cycles per gallon	19
Air Consumption <sup>(1)</sup>	30 cfm (850 NI/min)
Max fluid outlet pressure <sup>(3)</sup>	1,700 psi (120 bar)
Air motor effective diameter	4.5" (115 mm)
Air motor stroke	4" (100 mm)
Delivery at 80 cpm	4 gal/min (15 l/min)
Max free flow delivery	18 gal/min (68 l/min)
Air inlet	1/2" NPT(F)
Fluid inlet	1 1/2" NPT(F)
Fluid outlet	3/4" NPT(F)
Wetted materials	Cast iron, hard chromed steel, steel, polyurethane Buna-N™ and zinc
Noise level <sup>(2)</sup>	80 dB
Service Bulletin	SB1136

(1) Maximum air consumption with 75 psi (5 bar) air inlet pressure and 80 cpm.

(2) Maximum noise level measured at 3' (1 m) from the pump, 100 psi (7 bar) air pressure and free delivery.

(3) Ensure that all hose fittings and piping are rated for fluid outlet pressures. Balcrank recommends a minimum of 3 x safety factor.

NOTE: Thermal expansion of the fluid in a distribution system can cause an increase in system pressure that can damage lubrication system components. Use pressure relief valve kit included with this pump.

**Warning!** Do not use any Lion™ 450/600 series products with flammable fluids.

Verify fluid compatibility with MSDS sheets.

Contact Balcrank for specific system design performance and technical data.

## Fluids & Applications

High pressure pump for oil systems where medium volume dispensing using simultaneous dispense points is required. High pressure pump is recommended for long pumping distances and/or cold weather applications.

### Fluids

- Synthetic and mineral based lubricants
- Hydraulic fluid
- Gear oil
- Transmission fluid

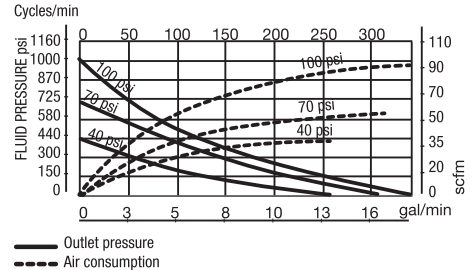
### Applications

- Heavy duty truck/fleet
- Railroad/mass transit vehicle maintenance
- In-plant high volume transfer
- Marine
- Mining vehicle maintenance
- Large automotive dealerships

**Pressure relief valve kit included with this pump.**

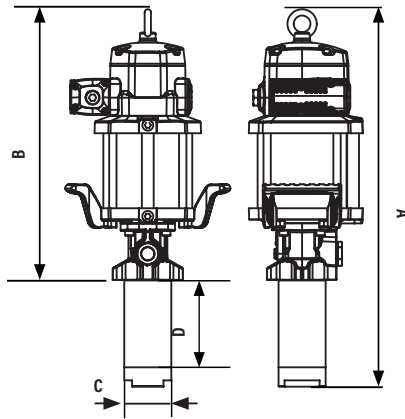
MODELS AVAILABLE	DESCRIPTION
<b>1430-003</b>	Lion™ 450 10:1 stub pump
<b>1430-004</b>	Lion™ 450 10:1 drum pump

### TEST FLUID: SAE 10



# Oil Piston Pumps

## Lion™ 600 - 6:1 Pump



DIMENSIONS INCHES (MM)			
A	B	C	D
28 3/8" (721 mm)	20 23/64" (517 mm)	3 35/64" (90 mm)	8 1/32" (204 mm)

## Fluids & Applications

Lion™ 600 - 6:1 operates at slow cycle rates for high volume applications. Medium pressure pump for oil systems where high volume dispensing using simultaneous dispense points is required. Medium/high pressure pump is recommended for longer pumping distances.

### Fluids

- Synthetic and mineral based lubricants
- Hydraulic fluid
- Gear oil
- Transmission fluid

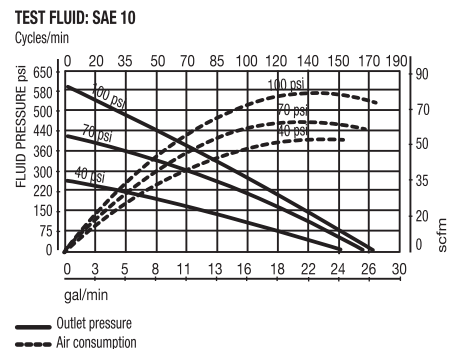
### Applications

- Heavy duty truck/fleet
- Railroad/mass transit vehicle maintenance
- In-plant high volume transfer
- Marine
- Mining vehicle maintenance
- Large automotive dealerships

**Pressure relief valve kit included with this pump.**

TECHNICAL DATA	
Operating air pressure	30 to 175 psi (2 to 12 bar)
Cycles per gallon	6
Air Consumption <sup>(1)</sup>	39 cfm (1,100 NI/min)
Max fluid outlet pressure <sup>(3)</sup>	1,020 psi (72 bar)
Air motor effective diameter	6" (150 mm)
Air motor stroke	4" (100 mm)
Delivery at 60 cpm	9 gal/min (35 l/min)
Max free flow delivery	26 gal/min (100 l/min)
Air inlet	1/2" NPT(F)
Fluid inlet	1 1/2" NPT(F)
Fluid outlet	3/4" NPT(F)
Wetted materials	Cast iron, aluminum, nickel, steel, polyurethane, Buna-N™ and zinc
Noise level <sup>(2)</sup>	80 dB
Service Bulletin	SB1137

MODELS AVAILABLE	DESCRIPTION
1430-005	Lion™ 600 6:1 stub pump



(1) Maximum air consumption with 75 psi (5 bar) air inlet pressure and 80 cpm.  
 (2) Maximum noise level measured at 3' (1 m) from the pump, 100 psi (7 bar) air pressure and free delivery.  
 (3) Ensure that all hose fittings and piping are rated for fluid outlet pressures. Balcrank recommends a minimum of 3 x safety factor.

NOTE: Thermal expansion of the fluid in a distribution system can cause an increase in system pressure that can damage lubrication system components. Use pressure relief valve kit included with this pump.

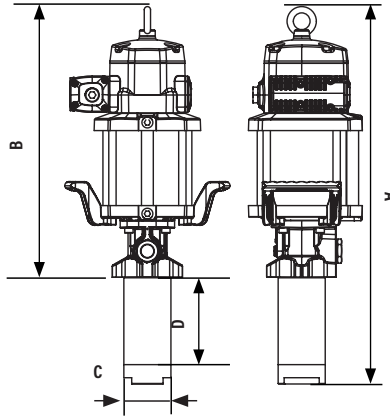
**Warning!** Do not use any Lion™ 450/600 series products with flammable fluids.

Verify fluid compatibility with MSDS sheets.

Contact Balcrank for specific system design performance and technical data.



## Oil Piston Pumps Lion™ 600 - 12:1 Pump



DIMENSIONS INCHES (MM)			
A	B	C	D
28 1/4" (716 mm)	20 1/3" (516 mm)	2 3/4" (70 mm)	8" (200 mm)

TECHNICAL DATA	
Operating air pressure	30 to 180 psi (2 to 12.4 bar)
Cycles per gallon	11
Air Consumption <sup>(1)</sup>	41 cfm (1,150 NI/min)
Max fluid outlet pressure <sup>(3)</sup>	2,040 psi (144 bar)
Air motor effective diameter	6" (150 mm)
Air motor stroke	4" (100 mm)
Delivery at 60 cpm	5 gal/min (20 l/min)
Max free flow delivery	17 gal/min (65 l/min)
Air inlet	1/2" NPT(F)
Fluid inlet	1 1/2" NPT(F)
Fluid outlet	3/4" NPT(F)
Wetted materials	Cast iron, hard chromed steel, steel, polyurethane and Buna-N™
Noise level <sup>(2)</sup>	80 dB
Service Bulletin	SB1138

(1) Maximum air consumption with 75 psi (5 bar) air inlet pressure and 80 cpm.

(2) Maximum noise level measured at 3' (1 m) from the pump, 100 psi (7 bar) air pressure and free delivery.

(3) Ensure that all hose fittings and piping are rated for fluid outlet pressures. Balcrank recommends a minimum of 3 x safety factor.

NOTE: Thermal expansion of the fluid in a distribution system can cause an increase in system pressure that can damage lubrication system components. Use pressure relief valve kit included with this pump.

**Warning!** Do not use any Lion™ 450/600 series products with flammable fluids.

Verify fluid compatibility with MSDS sheets.

Contact Balcrank for specific system design performance and technical data.

## Fluids & Applications

Lion™ 600 - 12:1 operates at slow cycle rates for large shops requiring long pumping distances. High pressure pump for oil systems where high volume dispensing using simultaneous dispense points is required. High pressure pump is recommended for long pumping distances and/or cold weather applications.

### Fluids

- Synthetic and mineral based lubricants
- Hydraulic fluid
- Gear oil
- Transmission fluid

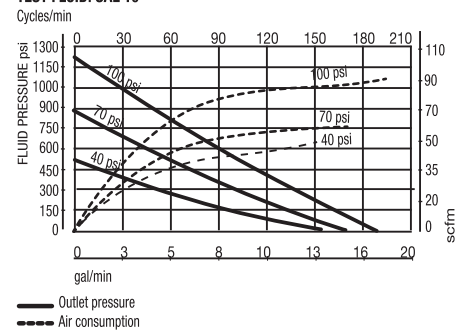
### Applications

- Heavy duty truck/fleet
- Railroad/mass transit vehicle maintenance
- In-plant high volume transfer
- Marine
- Mining vehicle maintenance
- Large automotive dealerships

**Pressure relief valve kit included with this pump.**

MODELS AVAILABLE	DESCRIPTION
<b>1430-006</b>	Lion™ 600 12:1 stub pump

### TEST FLUID: SAE 10



## Oil Piston Pumps Accessories Mobile Oil Packages



	<b>7120-018 PANTHER® HP 3:1</b>	<b>7120-019 PANTHER® HP 5:1</b>	<b>7120-017 TIGER® HP 6:1</b>
Designed For Drum Size	400 lb / 55 gal	400 lb / 55 gal	400 lb / 55 gal
Bare Pump	1130-015	1130-016	1130-019
Air Hose 5'	8132-005	8132-005	8144-005
Fluid Hose 10'	8262-010	8262-010	8261-010
Suction Tube 26.5" X 1" NPT(M)	4412-046	4412-046	4412-046
Drum Cover Offset	4420-013	4420-013	4420-013
Hold Down Rod	7120-024	7120-024	7120-024

\* Includes flange mount kit 7120-026 for fitting bare pump onto drum cover

### Mobile drum covers



MODEL #	DESCRIPTION
<b>4420-014</b>	120 lb / 16 gal (Lion™ 450/600)
<b>4420-013</b>	400 lb / 55 gal (Lion™ 450/600)
<b>7120-012</b>	400 lb / 55 gal (Panther™)

### Hold down rod kit







MODEL #	DESCRIPTION
<b>7120-025</b>	120 lb / 16 gal Hold down rod kit, 120 lb for use with 4420-011, 4420-014, and 7120-020 Drum cover
<b>7120-024</b>	400 lb / 55 gal, Hold down rod kit, 400 lb for use with 4420-013 Drum cover

### 4-Way reversing valve



MODEL #	DESCRIPTION
<b>3230-014</b>	4-Way reversing valve 1" NPT(F) Pressure 200 psi (13.8 bar)

# Oil Piston Pumps Lion™ 450 - 600 Accessories















LION™ 450 - 600 OIL PUMP COMPONENTS					
Suction tubes		<b>4412-031</b> 1 1/2" NPT(M) x 38" - 30° 55 gal drum & bench tank	Control handles		<b>3330-159 DR</b> Flex-mem. ext., 1/4 turn for oil
		<b>4412-032</b> 1 1/2" NPT(M) x 47" - 30° horizontal obround tank			<b>3330-192 MR, Qts.</b> Flex-mem. ext., 1/4 turn for oil
		<b>4412-033</b> 1 1/2" NPT(M) x 63" - 30° 275 gal vertical obround tank			<b>3320-051</b> Hi-flow, non-metered, rigid ext., 3/4" inlet
		<b>4412-034</b> 1 1/2" NPT(M) x 75" - 30° 330 gal vertical obround tank			<b>3320-052</b> Hi-flow, non-metered, flex ext., 3/4" inlet
Connecting hose kit		<b>4410-062</b> Connecting hose kit Lion™ 450/600 8149-005 LP Hose 5'x1/2" 8264-005 MP Hose 5'x3/4" 3270-132 Coupler, air 3/8" body, 1/2" FPT 3270-143 Nipple, air 3/8" body, 1/2" FPT 3270-158 Elbow 1/2" 3270-057 Union Swivel 3/4"	Control handles		<b>3320-053</b> Hi-flow, non-metered, rigid ext., 1" inlet
		<b>4410-064</b> Suction hose kit Lion™ 450/600 4411-021 Bung Adapter for suction tubes 8191-005 Suction Hose 5'x1 1/2" 833595 Elbow 1 1/2" 3270-160 Hex Nipple 1 1/2" *Select Suction Tube from above			<b>3320-054</b> Hi-flow, non-metered, flex ext., 1" inlet
Filter/regulator (F/R)		<b>3260-036</b> F/R auto drain 1/2" NPT(F)	Control handles		<b>3330-197</b> Hi-flow, metered, rigid ext., 3/4" inlet
Mounting brackets		<b>4411-031</b> Floor mount for Lion™ 450/600			Control handles
		<b>4411-030</b> Wall mount for new style Lion™ 450/600	<b>3330-199</b> Hi-flow, metered, rigid ext., 1" inlet		
					<b>3330-200</b> Hi-flow, metered, flex ext., 1" inlet

# Oil Piston Pumps Accessories Valves & Bung Adapters

PISTON PUMP ACCESSORIES			VALVES		
Bung adapters		<b>4411-009N</b> Bung adapter: Panther® HP & Tiger® W/ pressure relief port	Foot valve		<b>4411-029</b> Foot valve 3/4" NPT
		<b>4411-009QX</b> Bung adapter: Panther® HP W/ pressure relief port - 10 pieces			<b>4411-026</b> Foot valve 1" NPT
		<b>4411-007N</b> Bung adapter, steel: Lion™ HP (old style) 5:1 W/ pressure relief port	<b>HP FOR USE WITH LION™ 450 10:1 &amp; LION™ 600 12:1</b>		
		<b>4411-018N</b> Double tap bushing, nickel plated stainless steel: for use with Panther® HP W/ pressure relief	Ball valve fully ported		<b>3230-023</b> Ball valve, 3/8", 7250 psi (500 bar)
		<b>4411-022</b> Bung adapter: LYNX 3:1 & LYNX 5:1			<b>3230-015</b> Ball valve, 1/2", 7250 psi (500 bar)
		<b>4411-021</b> Bung adapter: LYNX: 1:1 SS, LYNX 5:1 HD, Lion 450/600 Grease and 1 1/2" suction tube			<b>3230-016</b> Ball valve, 3/4", 5800 psi (400 bar)
	<b>4411-012</b> Bung adapter kit: for use with 1" OD suction tube	<b>3230-017</b> Ball valve, 1", 5075 psi (350 bar)			
		<b>4411-024</b> Bung adapter, PVC: W/ pressure relief port-2" for use when no additional ports are not available on the tank for pressure relief discharge tube	<b>MP FOR USE WITH OIL/AIR</b>		
Couplers, strainers Y-Strainer - For filtering debris at the pump - 580 psi (40 bar) - all strainers have 40 mesh.		<b>3120-211</b> , 1/2" NPT(F)	Ball valve fully ported no bleed		<b>3230-006</b> Ball valve, 3/8", 2,000 psi (138 bar)
		<b>3120-212</b> , 3/4" NPT(F)			<b>3230-002</b> Ball valve, 1/2", 2,000 psi (138 bar)
		<b>3120-213</b> , 1" NPT(F)			<b>3230-007</b> Ball valve, 3/4", 2,000 psi (138 bar)
Ensure that all hose fittings and piping are rated for fluid outlet pressures. Balcrank recommends a minimum of 3 x safety factor.					
In-line pressure relief		<b>3120-085</b> Pressure relief kit, 1/2" NPT(M) 850 psi for use with Panther® 3:1 and 5:1	<b>LP/FOR USE WITH AIR BLEED TYPE</b>		
		<b>3120-086</b> Pressure relief kit, 3/4" NPT(M) 850 psi for use with LYNX 1:1, 3:1	Shut-off valve bleed type for air		<b>3230-009</b> Shut-off valve, 3/8" NPT(F), 200 psi (13.7 bar)
		<b>3120-087</b> Pressure relief kit, 3/4" NPT(M) 1400 psi			<b>3230-010</b> Shut-off valve, 1/2" NPT(F), 200 psi (13.7 bar)
Pressure relief valves		<b>3120-214</b> Kit, PR valve 1/4" NPT(M) 850 psi for use with Lion™ 450 3:1, 6:1 and Lion™ 600 6:1, kit includes return tube and 1/8" NPT(M) adapter	Low level cut-off prevents air intake when fluid runs out		<b>4411-005</b> Air eliminator 3/4" NPT(F)/ 1 1/2" NPT(M) adapter
		<b>3120-215</b> Kit, PR valve 1/4" NPT(M) 1,450 psi for use with Lion™ 450 10:1 and Lion™ 600 12:1, kit includes return tube and 1/8" NPT(M) adapter	Pump runaway control prevents runaway condition when out of oil		<b>4411-010</b> Air eliminator 1/4" NPT(F)/ 1" NPT(M) adapter
				<b>3241-001</b> Pump runaway control 1/2" NPT(F)	
				<b>3241-002</b> Pump runaway control 1/4" NPT(F)	

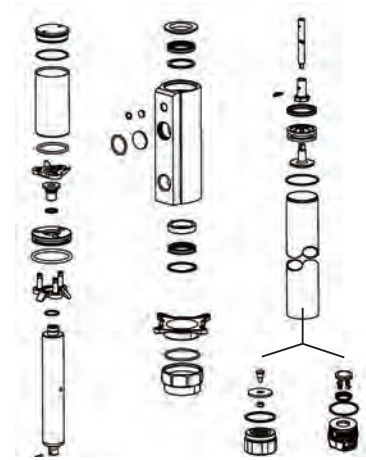


# Oil Piston Pumps Accessories Covers, Carts & Accessories

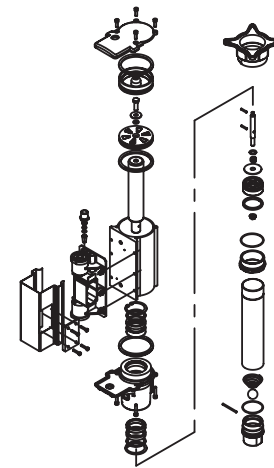
COUPLERS & NIPPLES			COVERS & CARTS						
Balcrank Series		3270-003 Coupler, 1/4" NPT(F)	Covers for <b>25-35 lb / 5 gal pail</b>		4420-010 25-35 lb/5 gal (for use with 2" bung stub pumps)				
		3270-120 Coupler, 3/8" NPT(F)			Covers for <b>120 lb / 16 gal drum</b>		4420-011 120 lb/16 gal (LYNX for use with 2" bung stub pumps)		
		3270-119 Coupler, 1/4" NPT(M)					Covers for <b>400 lb / 55 gal drum</b>		4420-005 120 lb/16 gal (Panther® HP, Tiger™)
		3270-121 Coupler, 3/8" NPT(M)							4420-014 120 lb/16 gal (Lion™ 450/600)
	3270-005 Nipple, 1/4" NPT(F)	Covers for <b>400 lb / 55 gal drum</b>		4420-013 400 lb/55 gal (Lion™ 450/600)					
	3270-122 Nipple, 3/8" NPT(F)			Dollies		4310-001 Band dolly, 16 gal/120 lb			
	3270-004 Nipple, 1/4" NPT(M)					4310-003 Band dolly, 16 gal/120 lb wide track			
	3270-123 Nipple, 3/8" NPT(M)					Carts		4310-004 Band dolly, 55 gal/400 lb HD	
<b>INDUSTRIAL INTERCHANGE SERIES</b>			Carts						4320-010 4 Wheel drum cart: 120 lb/16 gal
Industrial interchange Series		3270-132 Coupler, air 3/8" body, 1/2" NPT(F)		Carts					4320-013 Economy drum cart: 400 lb/55 gal
		3270-133 Coupler, air 3/8" body, 1/2" NPT(M)							Carts
		3270-142 Nipple, air 3/8" body, 1/2" NPT(F)				Carts			
		3270-143 Nipple, air 3/8" body, 1/2" NPT(M)							
<b>MOUNTING BRACKETS</b>			Carts						
Mounting brackets		4411-001 Wall mount bracket for Lion™ HP old style 1130-024 & 1130-027			Carts				
		4411-008 Wall mount bracket for LYNX, Panther® HP, and Tiger™							
<b>SUCTION TUBES</b>									
<b>LYNX 1:1, LYNX 5:1 HD, PANTHER® 3:1 &amp; 5:1, TIGER 6:1 HP</b>			4412-049 1" NPT(M) x 32" - 30°	275 gal tote		4412-042 3/4" NPT(M) x 42" - 30°	275/330 gal horizontal obround double tap		
4412-044 1" NPT(M) x 18" - 30°	16 gal drum	4412-050 1" NPT(M) x 39" - 30°	330 gal tote	4412-043 3/4" NPT(M) x 60" - 30°	330 gal vertical obround				
4412-046 1" NPT(M) x 26" - 30°	55 gal drum	<b>LYNX 3:1</b>			4412-040 3/4" NPT(M) x 32" - 30°	275 gal tote			
4412-045 1" NPT(M) x 21" - 30°	165/280 gal bench tank	4412-035 3/4" NPT(M) x 18" - 30°	16 gal drum	4412-041 3/4" NPT(M) x 39" - 30°	330 gal tote				
4412-048 1" NPT(M) x 30" - 30°	165/280 gal bench tank double tap	4412-037 3/4" NPT(M) x 26" - 30°	55 gal drum	<b>LION™ 450/600</b>					
4412-047 1" NPT(M) x 28" - 30°	250 gal bench tank double tap	4412-036 3/4" NPT(M) x 21" - 30°	165/280 gal bench tank	4412-031 1 1/2" NPT(M) x 38" - 30°	55 gal drum & bench tank				
4412-051 1" NPT(M) x 42" - 30°	275/330 gal horizontal obround double tap	4412-039 3/4" NPT(M) x 30" - 30°	165/280 gal bench tank double tap	4412-032 1 1/2" NPT(M) x 47" - 30°	horizontal obround tank				
4412-052 1" NPT(M) x 60" - 30°	330 gal vertical obround	4412-038 3/4" NPT(M) x 28" - 30°	250 gal bench tank double tap	4412-033 1 1/2" NPT(M) x 63" - 30°	275 gal vertical obround tank				
				4412-034 1 1/2" NPT(M) x 75" - 30°	330 gal vertical obround tank				

# Piston Pump Repair Kits for Oil

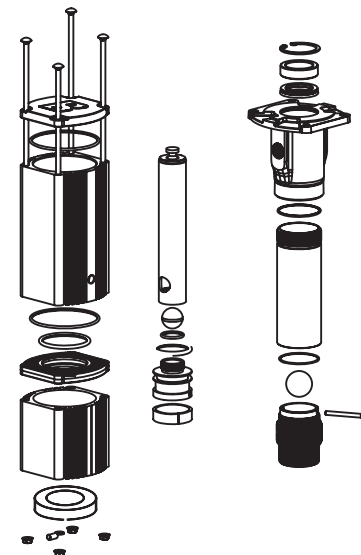
LYNX 1:1 & 3:1		
PUMP MODELS	KIT NUMBER	DESCRIPTION
<b>LYNX SERIES PUMPS 1:1 - 1110-010, 1110-009, 1160-008</b>		
1110-009 & 1110-010 Fluid	<b>833109</b>	Fluid seal kit
1110-009, 1110-010, 1110-007	<b>833110</b>	Air valve kit
1160-008	<b>833525</b>	Fluid seal kit
<b>LYNX SERIES PUMP 2:1 - 1111-035</b>		
1111-035	<b>83346</b>	Air filter kit
	<b>833110</b>	Air valve kit
	<b>833111</b>	Fluid seal kit
<b>LYNX SERIES PUMPS 3:1 - 1110-007</b>		
1110-007	<b>833111</b>	Fluid seal kit
1110-007	<b>833110</b>	Air valve kit



LYNX 5:1 HD		
PUMP MODELS	KIT NUMBER	DESCRIPTION
<b>LYNX SERIES PUMPS 5:1 HD - 1110-012</b>		
1110-012	<b>833437</b>	Air motor, complete kit
1110-012	<b>833438</b>	Air motor, complete kit
1110-012	<b>833439</b>	Pump tube, repair kit
1110-012	<b>833440</b>	Fluid piston kit

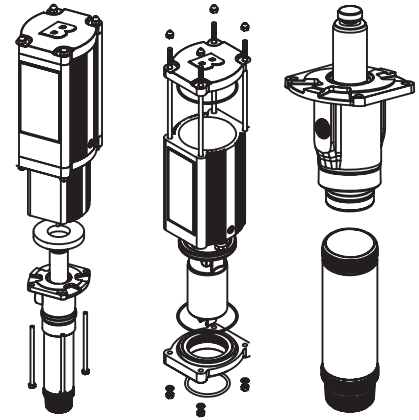


PANTHER® HP 3:1 & 5:1		
PUMP MODELS	KIT NUMBER	DESCRIPTION
<b>PANTHER® HP SERIES PUMPS 3:1 - 1130-015, 1130-017, 1130-020 &amp; 5:1 - 1130-016, 1130-018, 1130-021</b>		
Panther® HP Series Pumps - All	<b>900019</b>	Air motor kit - Trip Rod Assembly
Panther® HP Series Pumps - All	<b>900031</b>	Air motor kit - SOFT parts only
Panther® HP Series Pumps - All	<b>831614</b>	Air motor assembly kit- Includes Piston
Panther® HP Series Pumps - All oil	<b>831613</b>	Air - complete assembly
1130-015, 1130-017 & 1130-020	<b>900020</b>	Fluid seal kit
1130-016, 1130-018 & 1130-021	<b>900021</b>	Fluid seal kit
1130-015, 1130-017 & 1130-020	<b>831612N</b>	Fluid - complete assembly
1130-016, 1130-018 & 1130-021	<b>831615N</b>	Fluid - complete assembly

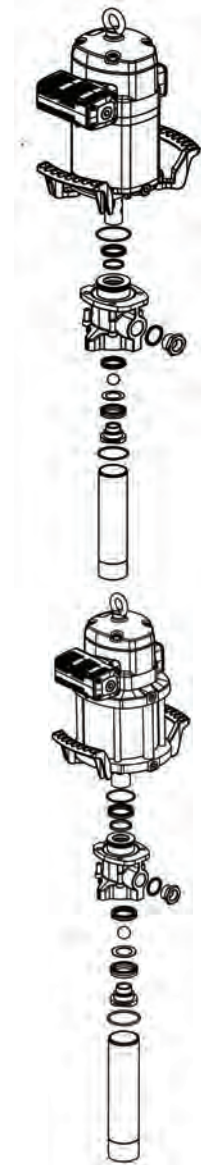


## Piston Pump Repair Kits for Oil

TIGER 6:1		
PUMP MODELS	KIT NUMBER	DESCRIPTION
<b>TIGER SERIES PUMPS 6:1 - 1130-019, 1130-025, 1130-026, 1160-007</b>		
Tiger HP Series Pumps - All	<b>900027</b>	Air motor kit - Trip Rod Assembly
Tiger HP Series Pumps - All	<b>900028</b>	Air motor kit - SOFT parts only
Tiger HP Series Pumps - All	<b>831671</b>	Air - complete assembly
1130-019, 1130-025 & 1130-026	<b>900020</b>	Fluid seal kit
1160-007	<b>828070</b>	Fluid seal kit (Stainless Steel)
1130-019, 1130-025 & 1130-026	<b>831672N</b>	Fluid - complete assembly



LION™ 450		
PUMP MODELS	KIT NUMBER	DESCRIPTION
<b>LION™ 450 SERIES PUMPS 3:1 - 1430-001, 6:1 1430-002, 10:1 - 1430-003, 1430-004</b>		
1430-001, 1430-002, 1430-003, 1430-004	<b>833412</b>	Air motor seals kit
1430-001, 1430-002, 1430-003, 1430-004	<b>833413</b>	Exhaust muffler kit
1430-001, 1430-002, 1430-003, 1430-004	<b>833414</b>	Spools & seals kit
1430-001	<b>833509</b>	Foot valve kit 3:1
1430-002	<b>833510</b>	Foot valve kit 6:1
1430-001	<b>833512</b>	Lower seals kit 3:1
1430-002	<b>833513</b>	Lower seals kit 6:1
1430-003, 1430-004	<b>833600</b>	Foot valve kit 10:1
1430-003, 1430-004	<b>833603</b>	Lower seals kit 10:1
1430-003, 1430-004	<b>833604</b>	Suction tube kit 10:1



LION™ 600		
PUMP MODELS	KIT NUMBER	DESCRIPTION
<b>LION™ 600 SERIES PUMPS 6:1 - 1430-005, 12:1 - 1430-006</b>		
1430-005, 1430-006	<b>833413</b>	Exhaust muffler kit
1430-005, 1430-006	<b>833414</b>	Spools & seals kit
1430-005	<b>833509</b>	Foot valve kit 6:1
1430-006	<b>833510</b>	Foot valve kit 12:1
1430-005, 1430-006	<b>833511</b>	Air motor seals kit
1430-005	<b>833512</b>	Lower seals kit 6:1 1430-006
1430-006	<b>833513</b>	Lower seals kit 12:1



## Grease Piston Pumps Product Selection Matrix

MAX. SIMUL. DISPENSE POINTS	MAX. LINE LENGTH	MAX. - FREE FLOW	AIR INLET	FLUID OUTLET	RECOMMENDED FLUID TYPES
<b>LYNX 55:1</b>					
1	50' (50 m)	1.2 lb/min (0,5 kg/min)	1/4" NPT	1/4" NPT	Up to NLGI#2 grease
<b>PANTHER® 50:1</b>					
1-2*	100' (30 m)*	3.4 lb/min (1.54 kg/min)*	1/4" NPT	1/4" NPT	Up to NLGI#2 grease
<b>LION™ 450 - 25:1</b>					
1	250' (75 m)	35 lb/min (16 kg/min)*	1/2" NPT	1/2" NPT	Up to NLGI#2 grease High viscosity oil
<b>LION™ 450 40:1</b>					
4	400' (120 m)	24 lb/min (11 kg/min)*	1/2" NPT	1/2" NPT	Up to NLGI#2 grease**
<b>LION™ 450 70:1</b>					
4	600' (180 m)	16 lb/min (7.25 kg/min)*	1/2" NPT	1/2" NPT	Up to NLGI#2 grease**
<b>LION™ 600 12:1</b>					
1	30' (10 m)	88 lb/min (40 kg/min)*	1/2" NPT	1" NPT	Up to NLGI#2 grease
<b>LION™ 600 80:1</b>					
4	800' (240m)	18 lb/min (8 kg/min)*	1/2" NPT	1/2" NPT	Up to NLGI#2 grease**

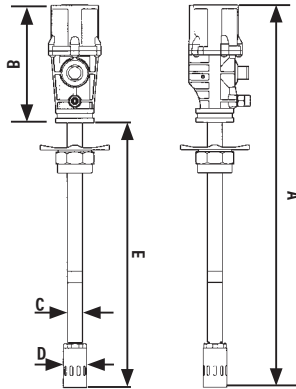
\* Pump performance is predicated on viscosity (temperature), pumping distance, pipe diameter and dispense volume requirements. Contact Balcrank for system design assistance and technical data.

Always ensure hoses, fittings, and piping are rated for fluid outlet pressures. Balcrank recommends a minimum of three times the safety factor.

\*\* Grease viscosity above NLGI 2 requires additional accessories. Contact Balcrank for product recommendations.



## Grease Piston Pumps LYNX 55:1 Pumps



DIMENSIONS INCHES (MM)				
<b>1150-022</b>				
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
24 13/32" (620 mm)	8" (202 mm)	1" (26 mm)	1 9/16" (40 mm)	16 1/2" (418 mm)
<b>1150-023</b>				
36 5/8" (930 mm)	8" (202 mm)	1" (26 mm)	1 9/16" (40 mm)	28 21/32" (728 mm)
<b>1150-024</b>				
44 1/8" (1120 mm)	8" (202 mm)	1" (26 mm)	1 9/16" (40 mm)	36 9/64" (918 mm)

## Fluids & Applications

Designed for 25-35, 120 and 400 lb. drums, portable use, and single point dispense. Ideal for the low volume user for grease fittings on smaller vehicles. LYNX grease pumps are double acting positive displacement capable of delivering up to 1.2 lbs. per minute.

### Fluids

- Grease up to NLGI-2

### Applications

- Roll-around unit for small vehicle grease points
- Agriculture/farm implements
- Small auto/truck shops
- Tire & transmission shops
- In-plant low volume use

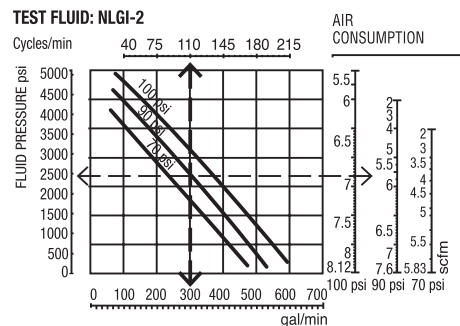
TECHNICAL DATA	
Pump ratio	55:1
Cycles per lb @ 100 psi (7 bar) free flow	318
Operating air pressure range	20-140 psi (1.5-10 bar)
Pump delivery, 100 psi (7 bar) air pressure and free flow	1.2 lb/min (0.5 kg/min)
Air consumption 90 psi (6 bar) & 110 cycles per minute	5.8 SCFM
Max fluid stall pressure @140 psi (10 bar) air	7,700 psi (550 bar)
Air inlet	1/4" NPT(F)
Fluid outlet:	1/4" NPT(F)
Effective Air Piston Diameter:	2.75" (70 mm)
Wetted materials	Steel, Zinc, Aluminum, Buna-N™, PTFE (Teflon)
Service Bulletin	SB1116

**Warning!** Do not use any LYNX series products with flammable fluids.

Verify fluid compatibility with MSDS sheets.

Contact Balcrank for pumping grease higher than NLGI-2 and specific system design performance technical data.

MODELS AVAILABLE	DESCRIPTION
<b>1150-022</b>	55:1 LYNX Grease 25-35 lbs
<b>1150-023</b>	55:1 LYNX Grease 120 lbs
<b>1150-024</b>	55:1 LYNX Grease 400 lbs




















## Grease Piston Pumps LYNX 55:1 Pump Packages

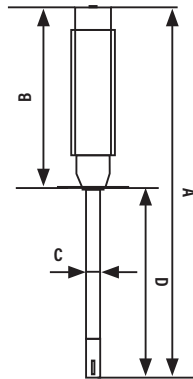


STATIONARY (Drum and pail not included)	1151-034 LYNX 55:1 GREASE 25-35 LB STATIONARY	1151-035 LYNX 55:1 GREASE 120 LB PORTABLE	1151-036 LYNX 55:1 GREASE 400 LB PORTABLE
Bare Pump	1150-022	1150-023	1150-024
Bung Adapter	4411-023	4411-023	4411-023
Fluid Hose 10' x 3/8"	8331-010	8331-010	8331-010
F/R Auto Drain 1/4" NPT(F)	3260-033	3260-033	3260-033
Comfort Grip Grease Handle	3310-030	3310-030	3310-030
Drum Cover	4420-010 <sup>(1)</sup>	4420-011	4420-015
Follower Plate	4440-013	4440-014	4440-018
Dolly	Optional	4320-012	4320-013

(1) includes carrying handle

Grease handle accessories		<b>8390-002</b> , 18" Whip Hose HP Flexible Extension <b>8390-003</b> , 36" Whip Hose HP Flexible Extension <b>8390-004</b> , 42" Whip hose HP flexible extension. Max. pressure 5,000 psi (345 bar). Hose end 1/8" NPT(M) on both ends.	Dollies		<b>4310-005</b> Dolly Base, 5 gal/25 - 35 lb
		<b>5310-018</b> Z-Swivel 1/4" NPT(F) x 1/4" NPT(M)			<b>4310-001</b> Band Dolly, 16 gal/120 lb
		<b>3310-030</b> Comfort Grip Grease Handle <b>3310-031</b> Comfort Grip Grease Handle with 18" Whip Hose and Z-swivel <b>3310-032</b> Comfort Grip Grease Handle with 36" Whip Hose and Z-swivel			<b>4310-003</b> Dolly, 16 gal/120 lb wide track
		<b>5310-024</b> Grease coupler 4-Jaws			<b>4310-004</b> Band Dolly, 55 gal/400 lb HD
		<b>4420-012</b> Holster, for grease gun - mounts on pail cover 4420-010			
Drum Covers		<b>4420-010</b> , 25-35 lb Pail LYNX 55:1	Carts		<b>4320-011</b> Drum cart: 35 lb grease, 2 wheels
		<b>4420-011</b> , 120 lb LYNX 55:1			<b>4320-012</b> Drum cart: 120 lb/16 gal grease, 2 rear wheels. Front stabilizing rubber pads.
		<b>4420-015</b> , 400 lb for LYNX 55:1			
Follower plates		<b>4440-013</b> , 25-35 lb pail for LYNX/Lion™			<b>4320-013</b> Drum cart: 400 lb/55 gal, 3 wheels
		<b>4440-014</b> , 120 lb for LYNX/Lion™			
		<b>4440-018</b> , 400 lb for LYNX/Lion™			

# Grease Piston Pumps Panther® HP 50:1 Pumps



DIMENSIONS INCHES (MM)			
<b>1150-009</b>			
A	B	C	D
36 3/4" (933 mm)	18 3/4" (476 mm)	1 1/4" (31.75 mm)	18" (457 mm)
<b>1150-010</b>			
46 3/4" (1187 mm)	18 3/4" (476 mm)	1 1/4" (31.75 mm)	28" (711 mm)
<b>1150-011</b>			
52 3/4" (1340 mm)	18 3/4" (476 mm)	1 1/4" (31.75 mm)	34" (834 mm)

## Fluids & Applications

Designed for lower volume users up to 2 dispense points. Designed for 25-35, 120 and 400 lb. drums. Ideal for lower volume grease fittings on trucks and farm implements. Panther® pump is a double acting positive displacement capable of delivering up to 3.4 lbs. per minute.

### Fluids

- Grease up to NLGI-2

### Applications

- Roll-around unit for small vehicle grease points
- Agriculture/farm implements
- Small auto/truck shops
- Tire & transmission shops
- In-plant low volume use

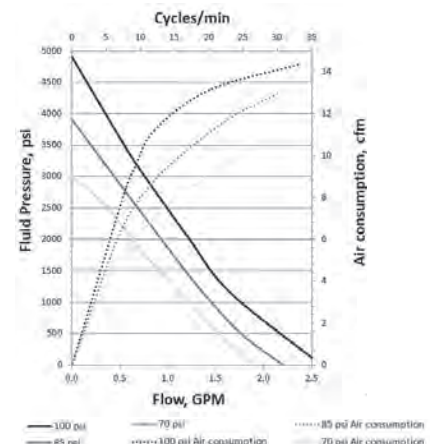
TECHNICAL DATA	
Pump ratio	50:1
Cycles per lb @ 100 psi (7 bar) free flow	70
Operating air pressure range	40-150 psi (2.8-10 bar)
Pump delivery with NLGI#2, 75° F (23.8° C), 100 psi (7 bar) air pressure and free flow	3.4 lb/min (1.54 kg/min)
Air consumption 100 psi (7 bar) & 1.5 lb/min (.68 kg/min)	14.5 SCFM
Max fluid stall pressure @150 psi (10 bar) air	7500 psi (517 bar)
Air inlet	1/4" NPT(F)
Fluid outlet:	1/4" NPT(F)
Effective Air Piston Diameter:	2 1/2" (63.5 mm)
Wetted materials	Stainless Steel, Carbon Steel, Brass, Aluminum, Delrin®, Ultrathane®, and Buna-N™
Service Bulletin	SBI063

NOTE: Pumping distance and pipe diameter will effect dispensing performance.  
**Warning!** Do not use any LYNX series products with flammable fluids.

Verify fluid compatibility with MSDS sheets.

Contact Balcrank for pumping grease higher than NLGI-2 and specific system design performance technical data.

MODELS AVAILABLE	DESCRIPTION
<b>1150-009</b>	50:1 Panther® HP bare 25-35 lbs
<b>1150-010</b>	50:1 Panther® HP bare 120 lbs
<b>1150-011</b>	50:1 Panther® HP bare 400 lbs

















# Grease Piston Pumps Panther® HP 50:1 Pump Packages

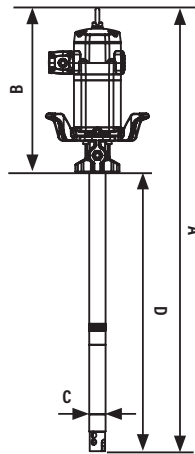


PORTABLE / STATIONARY (Drum and pail not included)	1151-003 25-35 LB PORTABLE	1151-005 120 LB PORTABLE (DOLLY)	1151-006* 400 LB STATIONARY
Bare Pump	1150-009	1150-010	1150-011
Air Hose 5' x 3/8"	8132-005	8132-005	8132-005
Fluid Hose 10' x 3/8"	8331-010	8331-010	8331-010
Comfort Grip Grease Handle w/Swivel	3310-030	3310-030	-
Drum Cover	4420-008	4420-009	4420-004
Follower Plate	4440-007	4440-008	4440-009
Dolly Base, 120 lb / 16 gal	-	4310-001	-

\* Note: Pump packages include all hoses and adapters required for connecting a grease pump to the air supply and dispense line.

Grease handle accessories		<b>8390-002</b> , 18" Whip Hose HP Flexible Extension <b>8390-003</b> , 36" Whip Hose HP Flexible Extension <b>8390-004</b> , 42" Whip hose HP flexible extension. Max. pressure 5,000 psi (345 bar). Hose end 1/8" NPT(M) on both ends. Compatible fluid NLGI #2 Grease	Dollies		<b>4310-001</b>	<b>4310-005</b> Dolly Base, 5 gal/25 - 35 lb	
		<b>5310-018</b> Z-Swivel 1/4" NPT(F) x 1/4" NPT(M)			<b>4310-003</b>	<b>4310-001</b> Band Dolly, 16 gal/120 lb	<b>4310-003</b> Dolly, 16 gal/120 lb wide track
		<b>3310-030</b> Comfort Grip Grease Handle			<b>4310-001</b>	<b>4310-001</b>	<b>4310-001</b> Drum cart: 35 lb grease, 2 wheels
		<b>3310-031</b> Comfort Grip Grease Handle with 18" Whip Hose and Z-swivel					
		<b>3310-032</b> Comfort Grip Grease Handle with 36" Whip Hose and Z-swivel					
		<b>5310-024</b> Grease coupler 4-Jaws					
	<b>4420-012</b> Holster, for grease gun	Carts		<b>4310-012</b>	<b>4310-012</b> Drum cart: 120 lb/16 gal grease, 2 rear wheels. Front stabilizing rubber pads.		
	<b>4420-008</b> , 25-35 lb Pail Panther® HP 50:1						
	<b>4420-009</b> , 120 lb Panther® HP 50:1						
	<b>4420-004</b> , 400 lb for Panther® 50:1						
Follower plates		<b>4440-007</b> , 25-35 lb pail for Panther® HP 50:1		<b>4310-013</b>	<b>4310-013</b> Drum cart: 400 lb/55 gal, 3 wheels		
		<b>4440-008</b> , 120 lb for Panther® HP 50:1					
		<b>4440-009</b> , 400 lb for Panther® HP 50:1					

# Grease Piston Pumps Lion™ 450 - 25:1 Pump



DIMENSIONS INCHES (MM)			
A	B	C	D
53 1/4" (1,357 m)	19 3/4" (502 mm)	2" (50 mm)	33 1/2" (855 mm)

## Fluids & Applications

Lion™ 450 - 25:1. This medium pressure double ball pump can be used for both grease and oil in high volume medium pressure bulk transfer applications. The construction of the pump allows for dual use for grease systems that don't require high pressure or a high volume medium pressure oil system.

### Fluids

- Grease up to NLGI-2
- High viscosity oil

### Applications

- Lube trucks bulk transfer
- Mining and construction; grease and oil transfer
- In-plant supply/maintenance

TECHNICAL DATA	
Continuous duty flow rate	13 lb/min (6 kg/min)
Cycles per lb	6
Maximum free flow	35 lb/min (16 kg/min)
Operating air pressure	30 - 200 psi (1.38 - 14 bar)
Maximum outlet pressure	5,000 psi (350 bar)
Air motor effective dia.	4.5" (115 mm)
Air motor stroke	4" (100 mm)
Air consumption <sup>(1)</sup>	47 cfm (1.340 NI/min)
Air inlet	1/2" NPT(F)
Fluid outlet	1/2" NPT(F)
Wetted materials	Cast Iron, Steel, Hard chromed steel, UHMWPE, and Buna-N™
Noise level <sup>(2)</sup>	80 dB
Service bulletin	SB1139

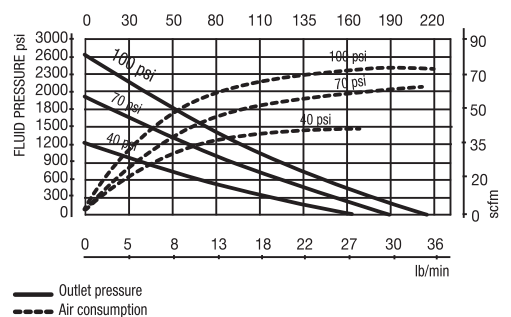
1) Maximum air consumption with 5 bar air inlet pressure and 80 cpm.  
2) Maximum noise level measured at 1 m from the pump, 7 bar air pressure and free delivery.

**Warning!** Do not use any Lion™ series products with flammable fluids. Verify fluid compatibility with MSDS sheets.

Contact Balcrank for pumping grease higher than NLGI-2 and specific system design performance technical data.

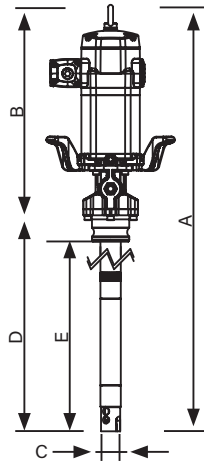
MODELS AVAILABLE	DESCRIPTION
<b>1450-001</b>	Lion™ 450 25:1 grease 400 lb drum pump

TEST FLUID: NLGI-0  
Cycles/min





# Grease Piston Pumps Lion™ 450 - 40:1 Pumps



DIMENSIONS INCHES (MM)				
1450-002				
A	B	C	D	E
53 1/4" (1,357 mm)	19 3/4" (502 mm)	2" (50 mm)	33 1/2" (855 mm)	N/A
1450-003				
45 1/4" (1,152 mm)	19 3/4" (502 mm)	2" (50 mm)	25 1/2" (650 mm)	N/A
1450-004				
39" (992 mm)	19 3/4" (502 mm)	2" (50 mm)	19 1/4" (490 mm)	16 1/4" (410 mm)

TECHNICAL DATA	
Continuous duty flow rate	8 lb/min (3.5 kg/min)
Cycles per lb	10
Maximum free flow	24 lb/min (11 kg/min)
Operating air pressure	30 - 200 psi (1.38 - 14 bar)
Maximum outlet pressure	8,000 psi (560 bar)
Air motor effective dia.	4.5" (115 mm)
Air motor stroke	4" (100 mm)
Air consumption <sup>(1)</sup>	26.5 cfm (750 NI/min)
Air inlet	1/2" NPT(F)
Fluid outlet	1/2" NPT(F)
Wetted materials	Cast Iron, Steel, Hard chromed steel, UHMWPE, Buna-N™ and PTFE
Noise level (2)	80 dB
Service Bulletin	SB 1131

(1) Air consumption at 5 bar air pressure, NLGI-0 grease at 20° C and 80 cpm.  
(2) Noise level measured at 1 m from the pump, 7 bar air pressure and free delivery.

**Warning!** Do not use any Lion™ 450/600 series products with flammable fluids.

Verify fluid compatibility with MSDS sheets.

Contact Balcrank for pumping grease higher than NLGI-2 and specific system design performance technical data.

## Fluids & Applications

Designed for medium volume applications that require higher flow and pressure delivery. This pump can be used with a follower plate system, combined with a gravity inductor system, or a double post RAM for simultaneous dispense, and higher flow applications.

### Fluids

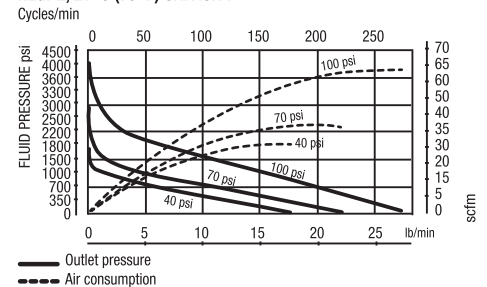
- Grease up to NLGI-2

### Applications

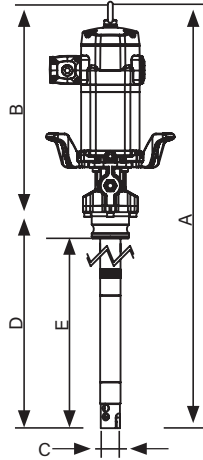
- HD truck grease dispensing needing simultaneous dispense points
- Truck fleets fifth wheel applications
- Lube trucks
- Railroad/mass transit
- In-plant
- Marine

MODELS AVAILABLE	DESCRIPTION
<b>1450-003</b>	Lion™ 450 40:1 grease 120 lb drum pump
<b>1450-002</b>	Lion™ 450 40:1 grease 400 lb drum pump
<b>1450-004</b>	Lion™ 450 40:1 grease bulk tote pump

### NLGI-2, 21 °C (70 °F) CAPACITY



# Grease Piston Pumps Lion™ 450 - 70:1 Pumps



DIMENSIONS INCHES (MM)				
1450-005				
A	B	C	D	E
53 1/4" (1,357 mm)	19 3/4" (502 mm)	2" (50 mm)	33 1/2" (855 mm)	n/a
1450-006				
45 1/4" (1,152 mm)	19 3/4" (502 mm)	2" (50 mm)	25 1/2" (650 mm)	n/a
1450-007				
39" (992 mm)	19 3/4" (502 mm)	2" (50 mm)	19 1/4" (490 mm)	16 1/4" (410 mm)

## Fluids & Applications

Designed for very cold environments and/or applications where only medium pressure air is available to power the pump which could limit the performance and application of greasing. This pump can be used with a follower plate system, combined with a gravity inductor system, or a double post RAM for simultaneous dispense or higher flow applications.

### Fluids

- Grease up to NLGI-2

### Applications

- Lube trucks
- Railroad/mass transit
- In-plant
- Marine
- Oil fields/fracking

TECHNICAL DATA	
Continuous duty flow rate	5 lb/min (2 kg/min)
Cycles per lb	17
Maximum free flow	16 lb/min (7.25 kg/min)
Operating air pressure	* 30 - 100 psi (1.38 - 7 bar)
Maximum outlet pressure	7000 psi (490 bar)
Air motor effective dia.	4.5" (115 mm)
Air motor stroke	4" (100 mm)
Air consumption <sup>(1)</sup>	32.6 cfm (925 NI/min)
Air inlet	1/2" NPT(F)
Fluid outlet	1/2" NPT(F)
Wetted materials	Cast Iron, Steel, Hard chromed steel, UHMWPE, Buna-N™ and PTFE
Noise level <sup>(2)</sup>	80 dB
Service Bulletin	SB 1140

(1) Air consumption at 5 bar air pressure, NLGI-0 grease at 20° C and 80 cpm.

(2) Noise level measured at 1 m from the pump, 7 bar air pressure and free delivery.

\* Pump air limited to 100 psi (7 bar) due to connecting hose pressure limits.

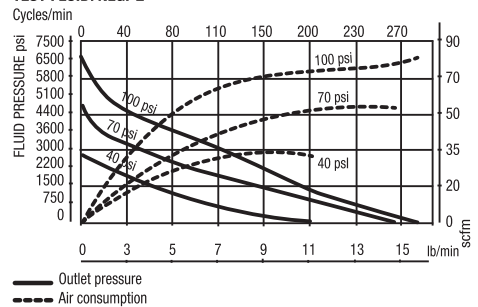
**Warning!** Do not use any Lion™ 450/600 series products with flammable fluids.

Verify fluid compatibility with MSDS sheets.

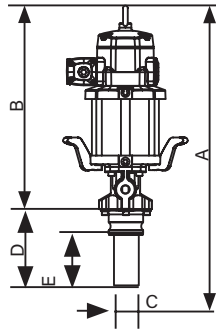
Contact Balcrank for pumping grease higher than NLGI-2 and specific system design performance technical data.

MODELS AVAILABLE	DESCRIPTION
1450-006	Lion™ 450 70:1 grease 120 lb drum pump
1450-005	Lion™ 450 70:1 grease 400 lb drum pump
1450-007	Lion™ 450 70:1 grease bulk tote pump

### TEST FLUID: NLGI-2



# Grease Piston Pumps Lion™ 600 - 12:1 Pump



DIMENSIONS INCHES (MM)				
A	B	C	D	E
29" (742 mm)	20" (516 mm)	2 3/4" (70 mm)	9" (226 mm)	5 3/4" (146 mm)

TECHNICAL DATA	
Continuous duty flow rate	33 lb/min (15 kg/min)
Cycles per lb	2
Maximum free flow	88 lb/min (40 kg/min)
Operating air pressure	30 - 100 psi (1.38 - 7 bar)
Maximum outlet pressure	1,200 psi (84 bar)
Air motor effective dia.	6" (150 mm)
Air motor stroke	4" (100 mm)
Air consumption <sup>(1)</sup>	39 cfm (1.100 NI/min)
Air inlet	1/2" NPT(F)
Fluid outlet	1" NPT(F)
Wetted materials	Cast Iron, Steel, Hard chromed steel, UHMWPE, Buna-N™, PTFE and Polyurethane
Noise level <sup>(2)</sup>	80 dB
Service bulletin	SB 1142

(1) Air consumption at 5 bar air pressure, NLGI-0 grease at 20° C and 80 cpm.  
(2) Noise level measured at 1 m from the pump, 7 bar air pressure and free delivery.

**Warning!** Do not use any Lion™ 450/600 series products with flammable fluids.

Verify fluid compatibility with MSDS sheets.  
Contact Balcrank for pumping grease higher than NLGI-2 and specific system design performance technical data.

## Fluids & Applications

Medium pressure grease pump for very high volume applications. Bulk transfer of grease from large containers to drums or pails, lube trucks or other transfer applications at high delivery rates. Pump comes with a 3" camlock for easy installation into grease totes.

### Fluids

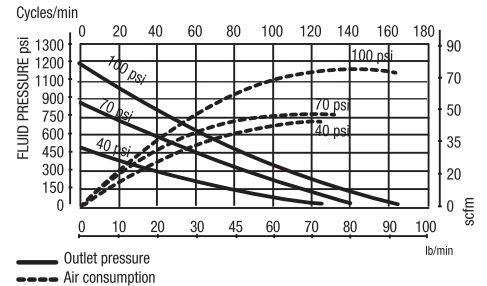
- Grease up to NLGI-2

### Applications

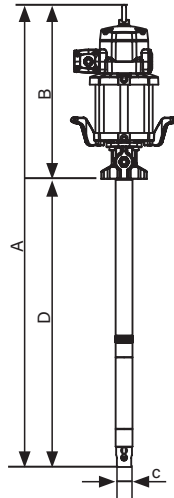
- Mining and construction
- Railroad/mass transit
- In-plant grease transfer

MODELS AVAILABLE	DESCRIPTION
<b>1450-010</b>	Lion™ 600 12:1 grease bulk tote pump

### TEST FLUID: NLGI-2



# Grease Piston Pumps Lion™ 600 - 80:1 Pumps



DIMENSIONS INCHES (MM)			
1450-008			
A	B	C	D
53 1/2" (1,371 mm)	20" (516 mm)	2" (50 mm)	33 1/2" (855 mm)
1450-009			
45 1/2" (1,166 mm)	20" (516 mm)	2" (50 mm)	25 1/2" (650 mm)

## Fluids & Applications

Designed for very cold environments and/or applications where only medium pressure air is available to power the pump which could limit the performance and application of greasing. This pump can be used with a follower plate system, combined with a gravity inductor system, or a double post RAM for simultaneous dispense, or higher flow applications. Similar to the Lion™ 450 70:1 pump but operates at lower cycle rates for severe environments

### Fluids

- Grease up to NLGI-2

### Applications

- Lube trucks
- Railroad/mass transit
- In-plant
- Marine
- Oil fields/fracking

TECHNICAL DATA	
Continuous duty flow rate	6 lb/min (2.5 kg/min)
Cycles per lb	11
Maximum free flow	18 lb/min (8 kg/min)
Operating air pressure	* 30 - 100 psi (1.38 - 7 bar)
Maximum outlet pressure	8,000 psi (560 bar)
Air motor effective dia.	6" (150 mm)
Air motor stroke	4" (100 mm)
Air consumption <sup>(1)</sup>	39 cfm (1,100 NI/min)
Air inlet	1/2" NPT(F)
Fluid outlet	1/2" NPT(F)
Wetted materials	Cast Iron, Steel, Hard chromed steel, UHMWPE, Buna-N™ and PTFE
Noise level <sup>(2)</sup>	80 dB
Service Bulletin	SB 1141

(1) Air consumption at 5 bar air pressure, NLGI-0 grease at 20° C and 80 cpm.

(2) Noise level measured at 1 m from the pump, 7 bar air pressure and free delivery

\* Pump air limited to 100 psi (7 bar) due to connecting hose pressure limits.

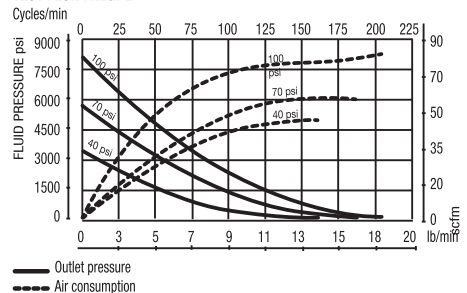
**Warning!** Do not use any Lion™ 450/600 series products with flammable fluids.

Verify fluid compatibility with MSDS sheets.

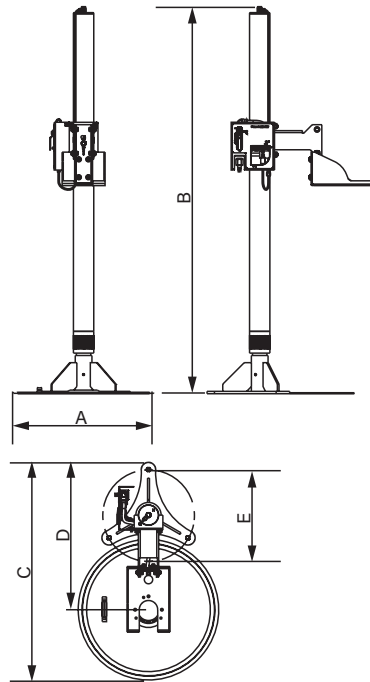
Contact Balcrank for pumping grease higher than NLGI-2 and specific system design performance technical data.

MODELS AVAILABLE	DESCRIPTION
1450-009	Lion™ 600 80:1 grease 120 lb drum pump
1450-008	Lion™ 600 80:1 grease 400 lb drum pump

### TEST FLUID: NLGI-2



## Grease Piston Pumps Lion™ Inductor



DIMENSIONS INCHES (MM)				
A	B LOWERED/ RAISED	C	D	E
23 1/4" (588 mm)	58" (1470 mm) 94 1/2" (2400 mm)	35 3/4" (910 mm)	24 1/32" (617 mm)	15" (381 mm)

TECHNICAL DATA	
Diameter of the pneumatic cylinder	3" (75 mm)
Stroke of the pneumatic cylinder	36.6" (930 mm)
Minimum height of equipment	58" (1,470 mm)
Maximum height of equipment	94.5" (2,400 mm)
Air inlet	1/2" NPT(M)
Maximum air pressure	116 psi (8 bar)
Service Bulletin	SB 4228

**Warning!** Do not use any Lion™ 450/600 series products with flammable fluids.

Verify fluid compatibility with MSDS sheets.

Contact Balcrank for pumping grease higher than NLGI-2 and specific system design performance technical data.

## Fluids & Applications

Lion™ 450 and Lion™ 600 grease pumps are used with 400 lb drums in applications where higher volumes of grease are required. The air operated pump hoist lifts and lowers the pump, making drum changes easier, faster and safer. The pumps lower end is rigidly fixed to a follower plate with a single rubber lip. The weight of the pump, pump bracket and follower plate plus atmospheric pressure push the assembly against the grease eliminating channeling and air pockets, keeping grease free from contaminants, minimizing waste and aiding pump priming.

### Fluids

- NLGI #2 Grease

### Applications

- High volume grease applications such as fifth wheel
- Medium / large volume vehicle maintenance shops
- Grease transfer
- In-plant grease supply

MODELS AVAILABLE	DESCRIPTION
<b>1451-004</b>	Package, Lion™ 450, 40:1 Inductor Includes: 1450-002 Lion™ 450, 40:1 pump 4450-003 Inductor, Gravity, Pump Lift & follower plate
<b>1451-005</b>	Package, Lion™ 450, 70:1 Inductor Includes: 1450-005 Lion™ 450, 70:1 pump 4450-003 Inductor, Gravity, Pump Lift & follower plate
<b>1451-006</b>	Package, Lion™ 600, 80:1 Inductor Includes: 1450-008 Lion™ 600, 80:1 pump 4450-003 Inductor, Gravity, Pump Lift & follower plate
<b>4450-005</b>	Base for Grease hoist & inductor
<b>4450-003</b>	Bare Inductor



## Grease Piston Pumps Lion™ Inductor, Double Post RAM

## Fluids & Applications

Lion™ 450 and Lion™ 600 grease pumps are used with 400 Lb. drums in applications where high volumes of grease are required, environmental temperatures are low or higher viscosity greases are used. The air operated double post RAM inductor features controlled RAM pressure to assist in pump priming. When the double lip inductor plate is rigidly attached to the lower end of pump tube, the weight of the pump and lift pneumatic pressure of the RAM plus atmospheric pressure on the material forces and improves pump priming. The inductor plate also serves as protection against contaminants and eliminates material waste. For use with 400 lb. (185 kg) drums.

### Fluids

- NLGI #2 Grease
- NLGI #3 Grease

### Applications

- High volume grease applications such as fifth wheel with multiple dispense points
- High volume large vehicle maintenance shops
- Industrial grease transfer to machines
- Mining
- Bulk transfer
- Grease transfer

Unit also includes guide rods, drum retaining mechanism and a control box with the following features:

- On-off control of the pump
- Up-down control of the RAM (drum exchange)
- Two independent air pressure regulators, one for the pump and for the power RAM cylinders
- Pump independent air pressure gauge
- Empty drum shut-off safety feature
- Automatic vacuum release

When purchasing the double post inductor without a pump, contact Balcrank technical support for pump requirements.

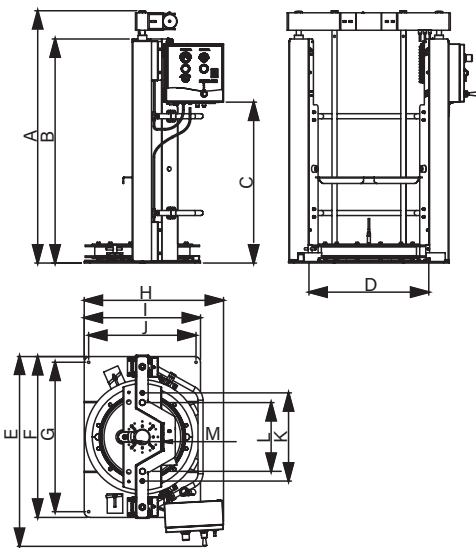
**Warning!** Do not use any Lion™ 450/600 series products with flammable fluids.

Verify fluid compatibility with MSDS sheets. Contact Balcrank for pumping grease higher than NLGI-2 and specific system design performance technical data.



1451-001

MODELS AVAILABLE	DESCRIPTION
4450-004	Inductor, double post air operated.
1451-001	Package, Lion™ 450, 40:1 pump. Double Post Inductor. Includes: 1450-003 Lion™ 450, 40:1 pump 4450-004 Double Post Inductor 833650 Kit, Collar/Follower-Plate
1451-002	Package, Lion™ 450, 70:1 pump. Double Post Inductor. Includes: 1450-006 Lion™ 450, 70:1 pump 4450-004 Double Post Inductor 833650 Kit, Collar/Follower-Plate
1451-003	Package, Lion™ 600, 80:1 pump. Double Post Inductor. Includes: 1450-009 Lion™ 600, 80:1 pump 4450-004 Double Post Inductor 833650 Kit, Collar/Follower-Plate
1451-007	Package, Lion™ 600, 12:1 pump. Double Post Inductor. Includes: 1450-010 Lion™ 600, 12:1 pump 4450-004 Double Post Inductor 833650 Kit, Collar/Follower-Plate
SERVICE BULLETIN	SB 4229






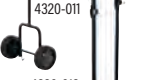











DIMENSIONS INCHES (MM)							
A	B	C	D	E	F	G	H
LOWERED/ RAISED							
52" (1,320 mm) 88" (2,230 mm)	45 1/2" (1,156 mm)	32 2/3" (830 mm)	24 1/2" (74 mm)	38 3/4" (554 mm)	32 2/3" (830 mm)	30 1/3" (771 mm)	28 1/3" (720 mm)
I	J	K	L	M			
23 2/3" (600 mm)	21 3/4" (554 mm)	18" (455 mm)	14" (355 mm)	4" (104 mm)			

# Grease Piston Pumps Accessories

GREASE PUMP COMPONENTS							
Drum cover 25-35 lb		4420-010, 25-35 lb Pail LYNX 55:1 4420-008, 25-35 lb Pail Panther® HP 50:1	Inlet screen mesh		4430-003, Inlet Screen, 30-Mesh Lion™ old style 50:1 4430-004, Inlet Screen, 30-Mesh Panther® HP Grease Pump		
Holster		4420-012, Holster, grease gun holder for LYNX drum cover 4420-010	Grease handles		3310-008, Pro Series Grease Handle 3310-010, Pro Series Grease Handle with Z-swivel 3310-025, Pro Series Grease Handle with 18" Whip Hose and Z-swivel 3310-020, Pro Series Grease Handle with 36" Whip Hose and Z-swivel 3310-007, Pro Series Booster Grease Handle 3310-009, Pro Series Booster Grease Handle with Z-swivel 3310-030, Comfort Grip Grease Handle 3310-031, Comfort Grip Grease Handle with 18" Whip Hose and Z-swivel 3310-032, Comfort Grip Grease Handle with 36" Whip Hose and Z-swivel		
Drum cover 120 lb		4420-011, 120 lb LYNX 55:1 4420-009, 120 lb Panther® HP 50:1 4420-014, Drum cover Lion™ 450/600 120 lb					
Drum cover 400 lb		4420-007, 400 lb Off-Set 4420-015, 400 lb for LYNX 55:1					
		4420-004, 400 lb for Panther® 50:1					
		4420-013, 400 lb for Lion™ 450/600					
		4420-003, 400 lb for Lion™ HP 50:1 (Old Style)					
Follower plate 25-35 lb		4440-013, 25-35 lb pail for LYNX/Lion™ 4440-007, 25-35 lb pail for Panther® HP 50:1			Other accessories		8390-002, 18" Whip Hose HP 8390-003, 36" Whip Hose HP 8390-004, 42" Whip hose HP Max. pressure 5,000 psi (345 bar) Hose end 1/8" NPT(M) on both ends Compatible fluid NLGI #2 Grease Flexible Extension 5310-018, Z-Swivel 1/4" NPT(F) x 1/4" NPT(M) 5200-017, Quick Lock grease coupler 1/8" NPT(F) 5310-024, Grease coupler 4-Jaws 5400-003, Bearing Packer
Follower plate 120 lb		4440-014, 120 lb for LYNX/ Lion™ 4440-008, 120 lb for Panther® HP 50:1 4440-017, 120 lb for Lion™ 450/600					
Follower plate 400 lb		4440-018, 400 lb for LYNX/ Lion™ 4440-009, 400 lb for Panther® HP 50:1 4440-012, 400 lb for Lion™ HP (Old Style 50:1) 4440-015, 400 lb for Lion™ 450/600					Pump runaway control
Bung Adapters		4411-023 Bung adapter, aluminium: LYNX 55:1 4411-021 Bung adapter, aluminium: Lion™ 450/600 25:1, 40:1, & 70:1			Connecting hose kit		4410-035, Connecting Hose Kit w/ Grease Handle for Panther® Grease: 8132-005 LP Hose 5'x3/8" 8331-010 HP Hose 10'x3/4" 3270-004 Nipple 1/4" 3270-003 Coupler 1/4" 3310-030 Grease Handle 4410-036, Connecting Hose Kit for Panther® Grease: 8132-005 LP Hose 5' x 3/8" 8331-010 HP Hose 10' x 3/8" 3270-004 Nipple 1/4" 3270-003 Coupler 1/4" 4410-030, Connecting Hose Kit for Lion™ Grease: 8144-005 LP Hose 5' x 1/2" 8333-010 HP Hose 10' x 3/4" 3270-001 Nipple 3/8" 3270-002 Coupler 3/8"
Cam-lock		4140-058, Male cam-lock 3" for Lion™ 450/600 for tote applications 4140-059, Female cam-lock 3" for Lion™ 450/600 for tote applications					
Filter regulator (F/R)		3260-036, F/R auto drain 1/2" NPT(F)					

## Grease Piston Pumps Accessories

LYNX 55:1 SERIES					
Dollies		4310-005, Dolly Base, 25 - 35 lb/5 gal	Hold down rod kits		7120-025, Hold down rod kit, Lion™ 450/600 120 lb for use with 4420-014 Drum cover for Lion™ 450/600, 120 lb
		4310-001, Band Dolly, 120 lb/16 gal			
		4310-003, Band dolly, 120 lb/16 gal wide track			
		4310-004, Band dolly, 400 lb/55 gal HD			
Carts		4320-011, Drum cart: 35 lb grease	Grease pump hoist		7120-024, Hold down rod kit, Lion™ 450/600 400 lb for use with 4420-013 Drum cover Lion™ 450/600, 400 lb
		4320-012, Drum cart: 120 lb/16 gal grease, 2 rear wheels. Front stabilizing rubber pads.			
		4320-013, Drum cart: 400 lb/55 gal	Mobile drum cover		4420-014, Mobile drum cover, 120 lb for Panther® HP 50:1- Center (Mobile drum covers require hold down rods, use 7120-025). For use with Panther® pump. Ask for flange mount kit 7120-026.
		4320-014, Drum cart: 400 lb/55gal heavy duty			
Ball valve fully ported		3230-023, Ball valve, 3/8" 7250 psi (500 bar)	Mobile drum cover		4420-013, Mobile drum cover, 400 lb for Panther® HP 50:1- Center hole (Mobile drum covers require hold down rods, use 7120-024).
		3230-015, Ball valve, 1/2" 7250 psi (500 bar)			
		3230-016, Ball valve, 3/4" 5800 psi (400 bar)			
		3230-017, Ball valve, 1" 5075 psi (350 bar)			
Filter / Regulator		3260-036, filter/reg, auto drain 1/2"	Mobile drum cover		4420-013, Mobile drum cover, 400 lb for Panther® HP 50:1- Center hole (Mobile drum covers require hold down rods, use 7120-024).
		3260-033, filter/reg, mini, auto drain 1/4"			

## Mobile Grease Packages

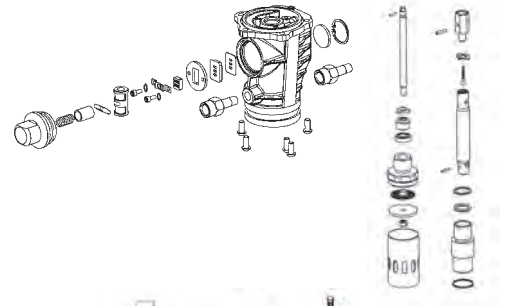


\* Flange mount kit 7120-026 included in package

	7120-015 PANTHER® HP 50:1	7120-016 PANTHER® HP 50:1
Designed For Drum Size	120 lb / 16 gal	400 lb / 55 gal
Bare Pump	1150-010	1150-011
Air Hose 5' x 3/8"	8132-005	8132-005
Fluid Hose 10' x 3/8"	8331-010	8331-010
Follower Plate	4440-008	4440-009
Drum Cover Mount	4420-014*	4420-013*
Hold Down Rod	7120-025	7120-024

# Piston Pump Repair Kits for Grease

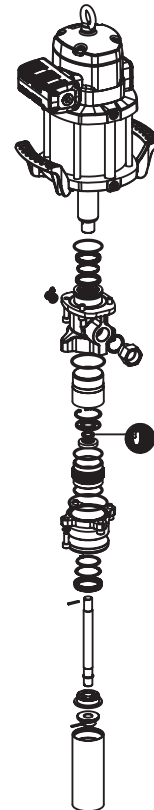
LYNX 55:1 SERIES		
PUMP MODELS	KIT NUMBER	DESCRIPTION
<b>LYNX 55:1 SERIES PUMPS, 1150-022, 1150-023, 1150-024</b>		
1150-022, 1150-023, 1150-024	<b>833038</b>	Air motor kit
1150-022, 1150-023, 1150-024	<b>833039</b>	Packing Seal kit
1150-022, 1150-023, 1150-024	<b>833040</b>	Foot Valve Kit
1150-022, 1150-023, 1150-024	<b>833041</b>	HP Piston/cylinder & check valve



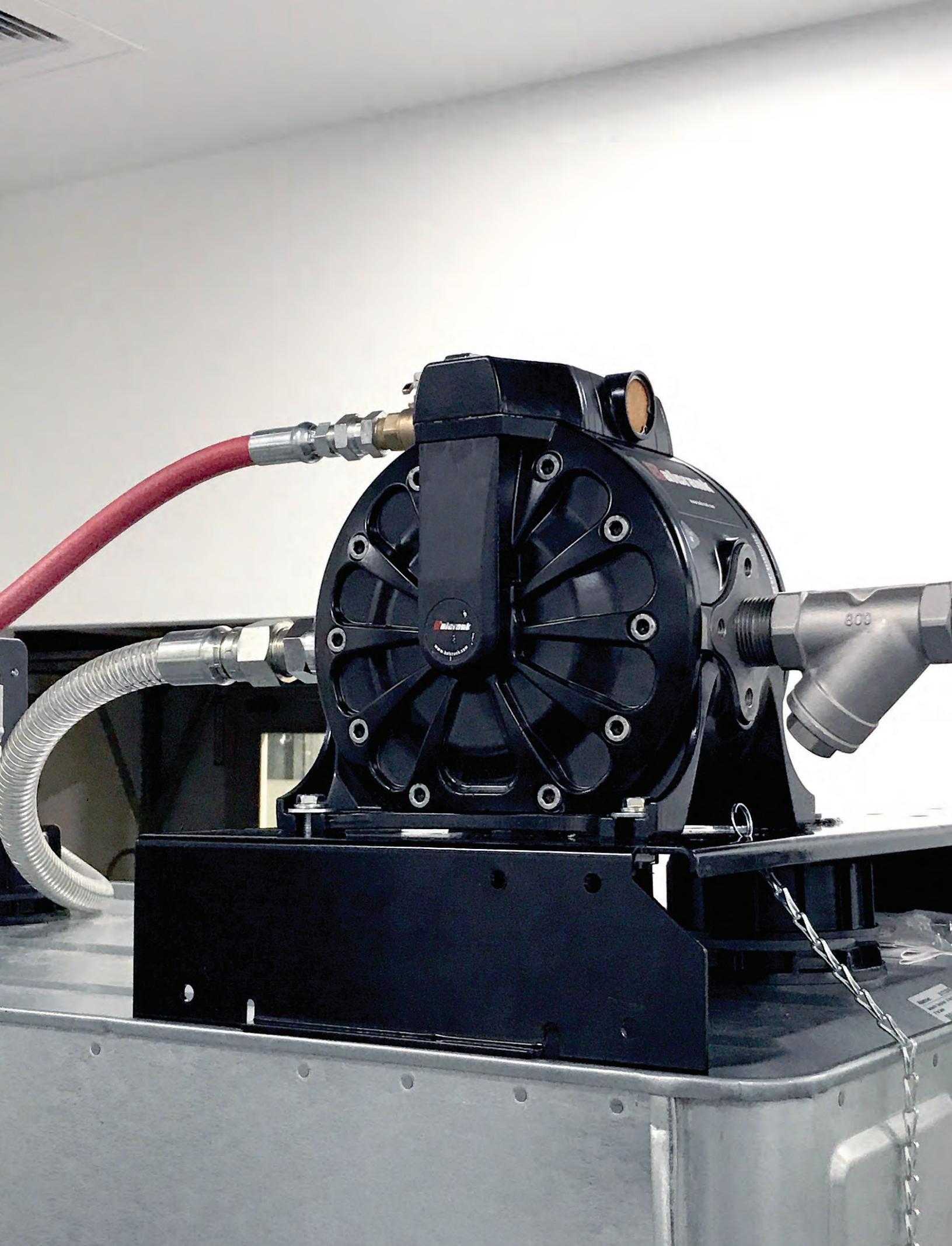
PANTHER® HP 50:1 SERIES		
PUMP MODELS	KIT NUMBER	DESCRIPTION
<b>PANTHER® 50:1 SERIES PUMPS, 1150-009, 1150-010, 1150-011</b>		
Panther® HP Series Pumps - All	<b>900019</b>	Air motor kit - Trip Rod Assembly
Panther® HP Series Pumps - All	<b>831614</b>	Air motor assembly kit- Includes Piston
Panther® HP Series Pumps - All grease	<b>831619</b>	Air - complete Pump assembly
Panther® HP Series Pumps - All grease	<b>900022</b>	Fluid seal kit
1150-009	<b>831616</b>	Fluid - complete Pump assembly
1150-010	<b>831617</b>	Fluid - complete Pump assembly
1150-011	<b>831618</b>	Fluid - complete Pump assembly
1150-017 (stub pump)	<b>832185</b>	Fluid - complete Pump assembly



Lion™ 450/600		
PUMP MODELS	KIT NUMBER	DESCRIPTION
<b>Lion™ 450 SERIES PUMPS 25:1, 1430-001, 40:1 - 1430-002, 1430-003, 1430-004, 70:1 - 1430-005, 1430-006, 1430-007</b>		
<b>Lion™ 600 SERIES PUMPS 12:1 - 1430-010, 80:1 - 1430-008, 1450-009</b>		
1450-002, 1450-003, 1450-004, 1450-008, 1450-009	<b>833409</b>	Lower seals kit 40:1 & 80:1
1450-002, 1450-003, 1450-004, 1450-008, 1450-009	<b>833410</b>	Foot Valve kit 40:1
1450-002, 1450-003, 1450-004, 1450-005, 1450-006, 1450-007, 1450-008, 1450-009	<b>833411</b>	Upper Valve kit 40:1 & 70:1
1450-001, 1450-002, 1450-003, 1450-004, 1450-005, 1450-006, 1450-007	<b>833412</b>	Air motor seals kit
1450-001, 1450-002, 1450-003, 1450-004, 1450-005, 1450-006, 1450-007, 1450-008, 1450-009, 1450-010	<b>833413</b>	Exhaust muffler kit
1450-001, 1450-002, 1450-003, 1450-004, 1450-005, 1450-006, 1450-007, 1450-008, 1450-009, 1450-010	<b>833414</b>	Spools & seals kit
1450-002, 1450-006, 1450-009	<b>833650</b>	Collar/follower plate kit
1450-005, 1450-006, 1450-007	<b>833598</b>	Lower seals kit 70:1
1450-005, 1450-006, 1450-007	<b>833599</b>	Foot valve kit 70:1
1450-001	<b>833605</b>	Lower seals kit 25:1
1450-001	<b>833606</b>	Foot valve kit 25:1
1450-001	<b>833607</b>	Upper valve kit 25:1
1450-008, 1450-009, 1450-010	<b>833511</b>	Air motor seals kit Lion™ 600
1450-010	<b>833601</b>	Lower seals kit 12:1
1450-010	<b>833602</b>	Foot valve kit 12:1







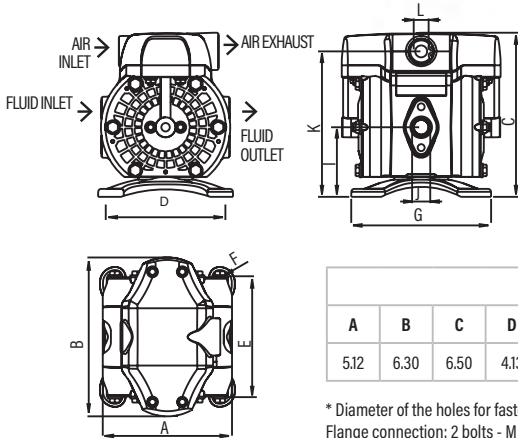


# CenterFlo Air Operated Double Diaphragm Selection Matrix

MAX. FREE FLOW	AIR INLET	FLUID IN / OUT	WETTED PARTS		RECOMMENDED FLUID TYPES	RECOMMENDED APPLICATIONS
			CHECK BALLS	DIAPHRAGM		
<b>CF10 POLYPROPYLENE</b>						
10 gal/min (38 l/min)	3/8" NPSM(F)	1/2" NPT(F)	PTFE (Teflon)	Hytrel <sup>®</sup>	Anti-freeze (Glycol) and windshield wash solution	Fluid dispensing and transfer
<b>CF10 POLYPROPYLENE/DEF</b>						
10 gal/min (38 l/min)	3/8" NPSM(F)	1/2" BSPP(F)	PTFE (Teflon)	Hytrel <sup>®</sup>	Diesel exhaust fluid	Fluid dispensing and transfer
<b>CF15 POLYPROPYLENE</b>						
15 gal/min (50 l/min)	3/8" NPSM(F)	1/2" NPT(F)	PTFE (Teflon)	Hytrel <sup>®</sup>	Anti-freeze (Glycol) and windshield wash solution	Fluid dispensing, transfer, and evacuation
<b>CF15 POLYPROPYLENE/DEF</b>						
15 gal/min (50 l/min)	3/8" NPSM(F)	1/2" BSPP(F)	PTFE (Teflon)	Hytrel <sup>®</sup>	Diesel exhaust fluid	Fluid dispensing and transfer
<b>CF15 ALUMINUM</b>						
15 gal/min (50 l/min)	3/8" NPSM(F)	1/2"NPT(F)	Buna-N™	Buna-N™	Light viscosity fluids synthetic, mineral oils, and used oil	Fluid dispensing, transfer, and evacuation
<b>CF15 SPECIALTY/MIXING</b> NOTE: both fluids and their resulting solution must be compatible with the pump wetted materials						
15 gal/min (50 l/min)	3/8" NPSM(F)	IN - 2-3/8" NPT(F) Out - 1/2" NPT(F)	PTFE (Teflon)	Hytrel <sup>®</sup>	1:1 solutions of water, Anti-freeze (Glycol), and windshield wash	Dual inlet pumps for 1:1 proportion mixing of fluids with similar viscosity
<b>CF30 POLYPROPYLENE</b>						
28 gal/min (106 l/min)	3/8" NPSM(F)	1" NPT(F)	PTFE (Teflon)	Hytrel <sup>®</sup>	Anti-freeze (Glycol) and windshield wash solution	Fluid dispensing, transfer, and evacuation
<b>CF30 POLYPROPYLENE/DEF</b>						
28 gal/min (106 l/min)	3/8" NPSM(F)	1" BSPP(F)	PTFE (Teflon)	Hytrel <sup>®</sup>	Diesel exhaust fluid	Fluid dispensing and transfer
<b>CF30 ALUMINUM</b>						
28 gal/min (106 l/min)	3/8" NPSM(F)	1" NPT(F)	Buna-N™	Buna-N™	Light viscosity fluids synthetic, mineral, oils, used oil, and diesel	Fluid dispensing, transfer, and evacuation
<b>CF50 POLYPROPYLENE</b>						
50 gal/min (200 l/min)	3/8" NPSM(F)	1" ANSI FLANGE	Acetal	Hytrel <sup>®</sup>	Diesel exhaust fluid, Anti-freeze, (Glycol) and windshield wash solution	Fluid dispensing and transfer
<b>CF50 ALUMINUM</b>						
50 gal/min (200 l/min)	3/8" NPSM(F)	1" NPT(F)	Buna-N™	Buna-N™	Light viscosity fluids, synthetic, mineral oils, used oil, and diesel	Fluid dispensing and transfer
<b>CF65 ALUMINUM</b>						
65 gal/min (250 l/min)	1/2" NPSM(F)	1 1/2" NPT(F)	Acetal	Hytrel <sup>®</sup>	Light viscosity fluids, synthetic, mineral oils, used oil, windshield wash solution, and diesel	High volume transfer, bulk fill, de-watering, and evacuation
65 gal/min (250 l/min)	1/2" NPSM(F)	1 1/2" NPT(F)	Buna-N™	Buna-N™	Light viscosity fluids synthetic, mineral, oils, used oil, and diesel	Fluid dispensing, transfer, and evacuation



# AODD CenterFlo CF10



DIMENSIONS INCHES										
A	B	C	D	E	F*	G	I	J	K	L
5.12	6.30	6.50	4.13	4.80	0.31	5.54	2.76	1/2" (F)	5.75	3/8" (F)

\* Diameter of the holes for fasteners in each of the four pump feet.  
Flange connection: 2 bolts - M 5 (1.61" between centers)

TECHNICAL DATA	
Air inlet	3/8" NPSM(F)
Fluid inlet port	1/2" NPT(F) 1120-029A 1/2" BSPP(F) for DEF 1120-034
Fluid outlet port	1/2" NPT(F) 1120-029A 1/2" BSPP(F) for DEF 1120-034
Max. free flow	10 gal/min (38 l/min)
Air pressure range	22 to 102 psi (1.5 to 7 bar)
Solids in suspension	1/8" (3 mm)
Wetted Materials	PTFE (Teflon), Viton <sup>®</sup> , Polypropylene, Stainless Steel, Acetal, and Hytrel <sup>®</sup>
Recommended Fluids	Anti-freeze (Glycol) and windshield wash solution
Recommended Applications	Fluid dispensing, transfer, DEF, and evacuation
Service Bulletin	SB 1121

\*\* Balcrank does not recommend pumping windshield wash or any other fluid below 100° flash point. Contact Balcrank for additional information.

## Fluids & Applications

CenterFlo pumps can handle a wide range of fluids used for vehicle service.

Typical applications are transferring, dispensing, and evacuation, up to 10 gal/min. They can be used as stand-alone pumps for transfer applications or as systems pumps in distribution systems that include hose reels.

### Fluids

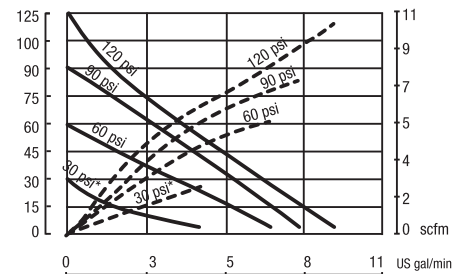
- Anti-freeze (Glycol)
- Windshield wash solution
- DEF

### Markets Served

- Car and truck dealers
- Fleets
- Mining and construction
- Railroad and mass transit vehicles
- In-plant
- Lube truck

**Pressure relief valve kit 3120-201 for this pump is recommended and not included.**

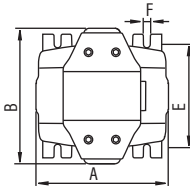
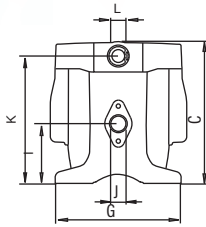
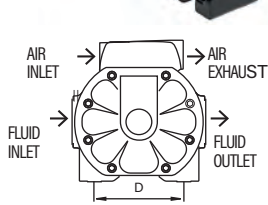
MODELS AVAILABLE	DESCRIPTION
<b>1120-029A</b>	CF10 Polypropylene
<b>1120-034</b>	CF10 Polypropylene / DEF
<b>3120-201</b>	Pressure Relief for Diaphragm 1/2" NPT



FLUID PRESSURE psi  
— Outlet pressure  
--- Air consumption

(\*) 2 bar test with a PTFE (Teflon) diaphragms pump.

# AODD CenterFlo CF15



DIMENSIONS INCHES FOR ALUMINUM PUMP											
A	B	C	D	E	F*	G	I	J	K	L	
6.14	6.30	6.57	4.13	4.80	0.31	5.75	2.76	1/2" (F)	5.91	3/8" (F)	
DIMENSIONS INCHES FOR POLYPROPYLENE PUMP											
6.14	6.30	7.28	4.13	4.80	0.31	5.54	3.27	1/2" (F)	6.54	3/8" (F)	

\* Diameter of the holes for fasteners in each of the four pump feet.  
Flange connection: 2 bolts - M 5 (1.61" between centers)

TECHNICAL DATA	
Air inlet	3/8" NPSM(F)
Fluid inlet port	1/2" NPT(F) 1120-023A, 1120-027 1/2" BSPP(F) for DEF 1120-025A
Fluid outlet port	1/2" NPT(F) 1120-023A, 1120-027 1/2" BSPP(F) for DEF 1120-025A
Max. Free Flow	15 gal/min (50 l/min)
Air pressure range	22 to 102 psi (1.5 to 7 bar)
Solids in suspension	1/8" (3 mm)
Wetted Materials	
1120-023A - 1120-025A	PTFE (Teflon), Viton <sup>®</sup> , Polypropylene, Stainless Steel, and Hytrel <sup>®</sup>
1120-027	Aluminum, PTFE, Viton <sup>®</sup> , Polypropylene, Buna-N <sup>™</sup> , and Stainless Steel
Recommended fluids	
1120-023A	Anti-freeze (Glycol) and windshield wash solution
1120-025A	Diesel exhaust fluid
1120-027	Light viscosity fluids, synthetic, mineral oils, anti-freeze, and used oil
Recommended Applications	Fluid dispensing, transfer, and evacuation
Service Bulletin	SB 1122

## Fluids & Applications

CenterFlo pumps can handle a wide range of fluids used for vehicle service.

Typical applications are transferring, dispensing, and evacuation up to 15 gal/min. They can be used as stand-alone pumps for transfer applications or as systems pumps in distribution systems that include hose reels.

### Fluids

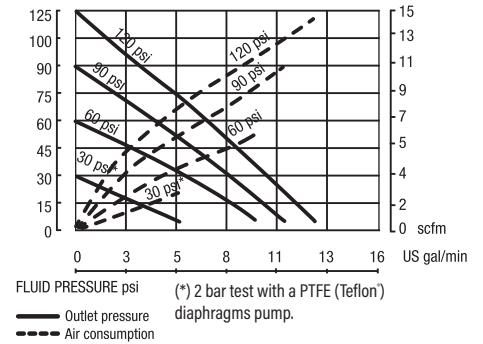
- Anti-freeze (Glycol)
- Light viscosity fluids
- Windshield wash solution
- Synthetic and mineral oils
- DEF
- Used oil & anti-freeze

### Markets Served

- Car and truck dealers
- Fleets
- Mining and construction
- Railroad and mass transit vehicles
- In-plant
- Lube trucks

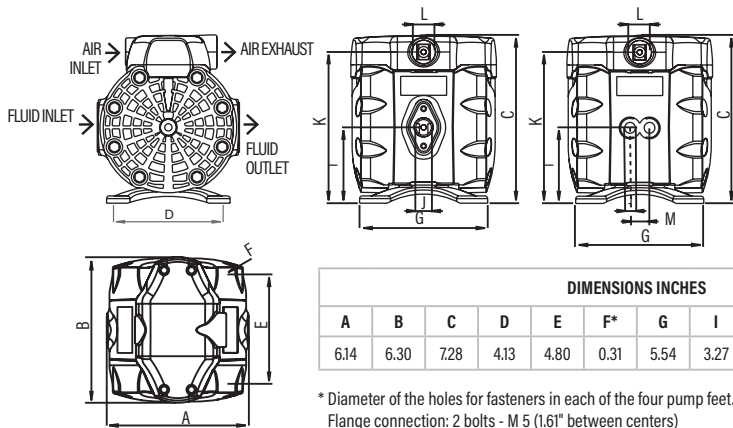
**Pressure relief valve kit 3120-201 for this pump is recommended and not included.**

MODELS AVAILABLE	DESCRIPTION
<b>1120-023A</b>	CF15 Polypropylene
<b>1120-027</b>	CF15 Aluminum
<b>1120-025A</b>	CF15 Polypropylene / DEF
<b>3120-201</b>	Pressure Relief for Diaphragm 1/2" NPT



\*\* Balcrank does not recommend pumping windshield wash or any other fluid below 100° flash point. Contact Balcrank for additional information.

# AODD CenterFlo CF15 Mixing



DIMENSIONS INCHES											
A	B	C	D	E	F*	G	I	J	K	L	M
6.14	6.30	7.28	4.13	4.80	0.31	5.54	3.27	1/2" (F)	6.54	3/8" (F)	0.94

\* Diameter of the holes for fasteners in each of the four pump feet.  
Flange connection: 2 bolts - M 5 (1.61" between centers)

TECHNICAL DATA	
Air inlet	3/8" NPSM(F)
Fluid inlet port	2 - 3/8" NPT(F)
Fluid outlet port	1/2" NPT(F) & flange
Max. free flow	15 gal/min (50 l/min)
Air pressure range	22 to 102 psi (1.5 to 7 bar)
Solids in suspension	1/8" (3 mm)
Wetted Materials	Teflon, Viton, Polypropylene, Stainless Steel, Acetal, and Hytrel
Recommended Fluids	Anti-freeze (Glycol) and windshield wash solution
Recommended Applications	Dual inlet pumps for 1:1 proportion mixing of fluids with similar viscosity. NOTE: both fluids and their resulting solution must be compatible with the pump wetted materials
Service Bulletin	SB 1123

\*\* Balcrank does not recommend pumping windshield wash or any other fluid below 100° flash point.  
Contact Balcrank for additional information.

## Fluids & Applications

CenterFlo pumps with a dual inlet for 1:1 ratio mixing of fluids with similar viscosities, like windshield wash or anti-freeze with water. All dual inlet pumps have 2 x 2 - 3/8" NPT(F) inlet ports.

### Fluids

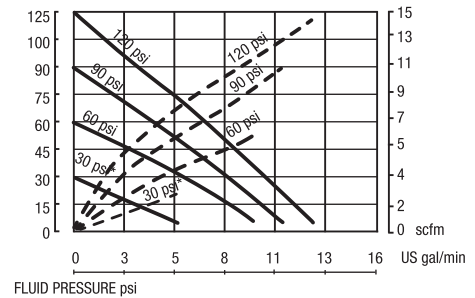
- Anti-freeze (glycol)
- Windshield wash solution

### Markets Served

- Car and truck dealers
- Fleets
- Mining and construction
- Railroad and mass transit vehicles
- In-plant

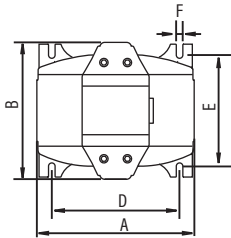
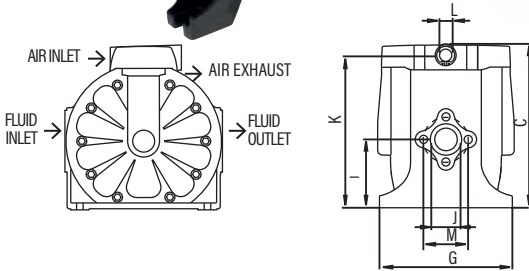
**Pressure relief valve kit 3120-201 for this pump is recommended and not included.**

MODELS AVAILABLE	DESCRIPTION
<b>1120-028A</b>	CF15 Polypropylene Mixing
<b>3120-201</b>	Pressure Relief for Diaphragm 1/2" NPT



(\* ) 2 bar test with a PTFE (Teflon) diaphragms pump.

# AODD CenterFlo CF30



DIMENSIONS INCHES FOR ALUMINUM PUMP												
A	B	C	D	E	F*	G	I	J	K	L	M	
8.50	7.44	8.94	6.89	6.06	0.35	7.24	3.72	1" (F)	8.27	3/8"(F)	2.44**	
DIMENSIONS INCHES FOR POLYPROPYLENE PUMP												
8.50	8.58	9.06	6.89	6.06	0.31	7.24	3.72	1" (F)	8.33	3/8" (F)	2.44**	

\*Diameter of the holes for fasteners in each of the four pump feet.  
\*\*Flange connection: 4 bolts - M 10 (2.44" between centers).

TECHNICAL DATA	
Air inlet	3/8" NPSM(F)
Fluid inlet port	1" NPT(F) 1120-026A, 1120-024 1" BSPP(F) for DEF 1120-031A
Fluid outlet port	1" NPT(F) 1120-026A, 1120-024 1" BSPP(F) for DEF 1120-031A
Max. free flow	28 gal/min (106 l/min)
Air pressure range	22 to 102 psi (1.5 to 7 bar)
Solids in suspension	3/16" (4 mm)
<b>Wetted Materials</b>	
1120-026A and 1120-031A	PTFE Teflon <sup>®</sup> , Viton <sup>®</sup> , Polypropylene, Stainless Steel, and Hytrel <sup>®</sup>
1120-024	Aluminum, Acetal Teflon <sup>®</sup> , Buna-N, and Stainless Steel
<b>Recommended fluids</b>	
1120-026A	Windshield wash solution
1120-024	Light viscosity fluids, synthetic, mineral oils, Anti-freeze, and used oil
1120-031A	Diesel exhaust fluid
Recommended applications	Fluid dispensing, transfer, DEF, and evacuation
Service Bulletin	SB 1124

\*\* Balcrank does not recommend pumping windshield wash or any other fluid below 100° flash point. Contact Balcrank for additional information.

## Fluids & Applications

CenterFlo pumps can handle a wide range of fluids used for vehicle service.

Typical applications are transferring, dispensing, and evacuation up to 28 gal/min. They can be used as stand-alone pumps for transfer applications or as systems pumps that include hose reels.

### Fluids

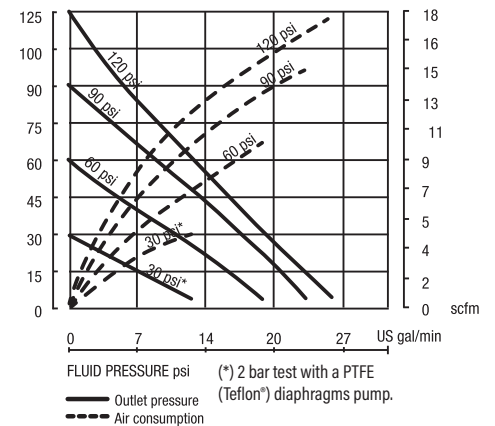
- Anti-freeze (Glycol)
- Light viscosity fluids
- Windshield wash solution
- Synthetic and mineral oils
- DEF
- Used Fluids

### Markets Served

- Car and truck dealers
- Fleets
- Mining and construction
- Railroad and mass transit vehicles
- In-plant
- Lube trucks

**Pressure relief valve kit 3120-201 for this pump is recommended and not included.**

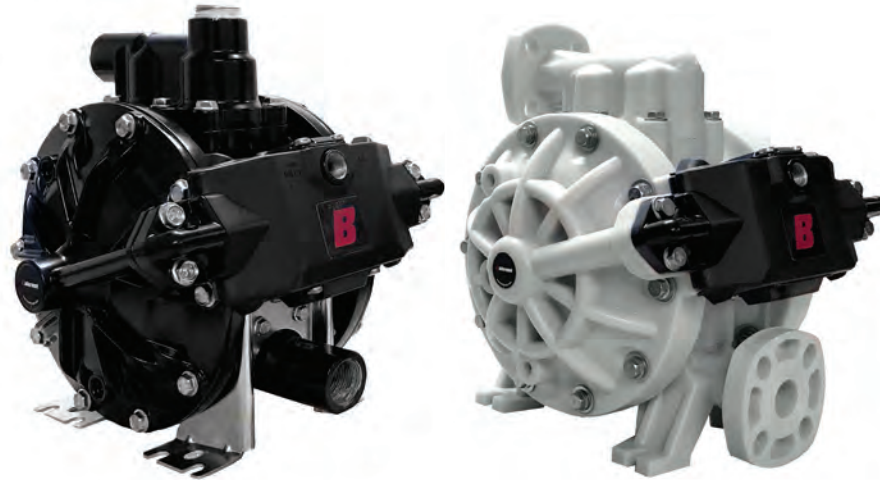
MODELS AVAILABLE	DESCRIPTION
<b>1120-026A</b>	CF30 Polypropylene
<b>1120-024</b>	CF30 Aluminum
<b>1120-031A</b>	CF30 Polypropylene/DEF
<b>3120-201</b>	Pressure Relief for Diaphragm 1/2" NPT





# AODD CenterFlo CF50

## Fluids & Applications



CF50 is a high performance 1" AODD pump with many unique features. Similar to all our CF series pumps, the new CF50 utilizes a flow through fluid design that is more air efficient than traditional AODD pumps. Capable of distributing up to 50 gal/min. This equates to higher performance, versatility along with easy serviceability.

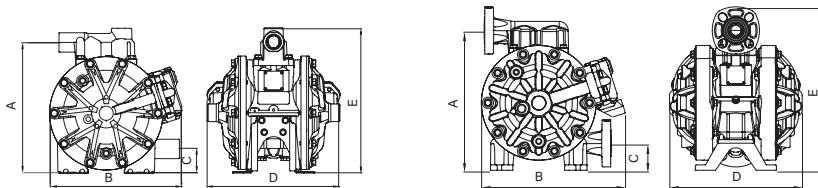
- High performance; increased flow rate with minimal air consumption
- Dependability; non-icing air motor
- Versatile; inlet and outlet ports can be oriented to fit the installation/application
- Ease of service; diaphragms and air motor can be serviced with the pump installed without removal.

### Fluids

- Used oil
- Used anti-freeze
- Synthetic and mineral based motor oils
- Windshield wash solution

### Markets served

- Car and truck dealers
- Mining and construction
- Fleets
- Railroad and mass transit
- In-plant
- Lube trucks



DIMENSIONS INCHES (MM)				
A	B	C	D	E
11" (278)	11" (280)	2" (52)	11" (281)	12 2/16" (308)

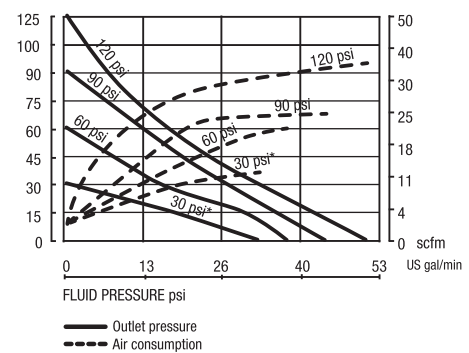
DIMENSIONS INCHES (MM)				
A	B	C	D	E
12 1/4" (311)	12 19/32" (320)	2 1/3" (60)	11" 2/3 (295)	14 1/3" (364)

**Pressure relief valve kit 3120-202 for this pump is recommended and not included.**

**1120-038 includes flange kit 4411-037 for pump mounting.**

TECHNICAL DATA	
Air inlet	3/8" NPSM(F)
Fluid inlet port	1" NPT(F) 1120-037 / 1" ANSI flange B16.5 150 lb 1120-038
Fluid outlet port	1" NPT(F) 1120-037 / 1" ANSI flange B16.5 150 lbs 1120-038
Max. free flow	53 gal/min (200 l/min)
Air pressure range	22-102 psi (1.5-7 bar)
Solids in suspension	1/8" (3.2 mm)
Wetted Materials	
1120-037	Aluminum, Hytrel, Acetal, Buna-N™, Stainless Steel
1120-038	PTFE (Teflon), Polypropylene, Stainless Steel, Hytrel®, FKM
Recommended Fluids	
1120-037	Light viscosity fluids, synthetic, mineral oils, anti-freeze, and used oil
1120-038	Windshield wash solution
Recommended Applications	Fluid dispensing, transfer, and evacuation
Service Bulletin	SB 1147

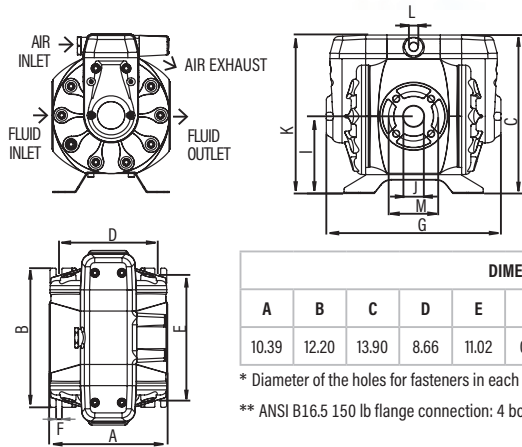
MODELS AVAILABLE	DESCRIPTION
<b>1120-037</b>	CF50 Aluminum
<b>1120-038</b>	CF50 Polypropylene
<b>3120-202</b>	Pressure Relief for Diaphragm 1" NPT



\*\* Balcrank does not recommend pumping windshield wash or any other fluid below 100° flash point. Contact Balcrank for additional information.



# AODD CenterFlo CF65



DIMENSIONS INCHES												
A	B	C	D	E	F*	G	I	J	K	L	M	
10.39	12.20	13.90	8.66	11.02	0.51	15.35	6.77	11/2"(F)	12.87	1/2" (F)	4.33**	

\* Diameter of the holes for fasteners in each of the four pump feet.

\*\* ANSI B16.5 150 lb flange connection: 4 bolts - UNC 1/2" - 13 (3.87" between centers)

TECHNICAL DATA	
Air inlet	1/2" NPSM(F)
Fluid inlet port	1 1/2" NPT(F) + ANSI flange B16.5 150 lb
Fluid outlet port	1 1/2" NPT(F) + ANSI flange B16.5 150 lb
Max. free flow	65 gal/min (250 l/mn)
Air pressure range	22-102 psi (1.5-7 bar)
Solids in suspension	1/4" (6 mm)
Wetted Materials	Aluminum, Acetal, Buna-N, Stainless Steel
Recommended fluids	Anti-freeze (Glycol)
Recommended applications	Fluid dispensing, transfer, and evacuation
Service Bulletin	SB 1132

\*\* Balcrank does not recommend pumping windshield wash or any other fluid below 100° flash point. Contact Balcrank for additional information.

## Fluids & Applications

CenterFlo pumps can handle a wide range of fluids used for vehicle service. Typical applications are high volume transferring, bulk fill, and evacuation up to 65 gal/min. They can be used as stand-alone pumps for transfer applications or as systems pumps that include hose reels.

### Fluids

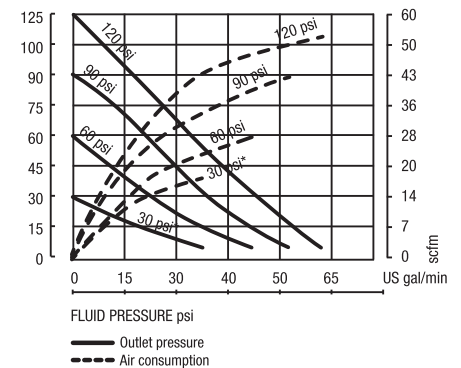
- Anti-freeze (Glycol)
- Light viscosity fluids
- Windshield wash solution
- Synthetic and mineral oil
- Used oil and anti-freeze

### Markets Served

- Car and truck dealers
- Fleets
- Mining and construction
- Railroad and mass transit vehicles
- In-plant
- Lube trucks

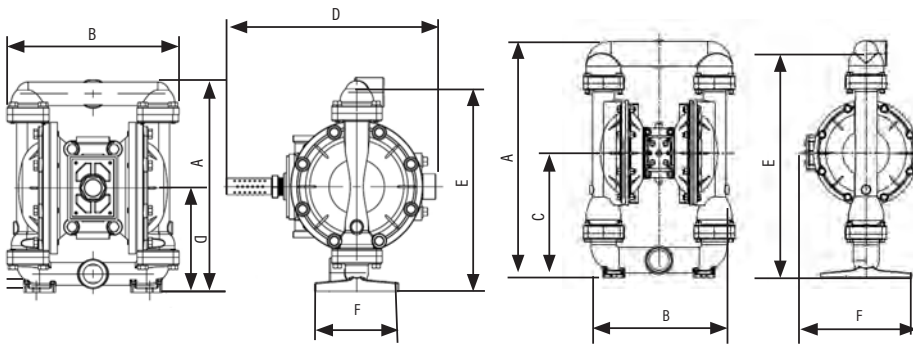
**Pressure relief valve kit 3120-202 for this pump is recommended and not included.**

MODELS AVAILABLE	DESCRIPTION
<b>1120-033</b>	CF65 Diaphragm Pump
<b>1120-039</b>	CF65 Diaphragm Pump Buna-N™



(\* ) 2 bar test with a Hytrel® diaphragms pump.

# AODD Conventional 1" UL and 2" Aluminum



DIMENSIONS INCHES					
A	B	C	D	E	F
12 23/32"	10 1/4"	6 7/32"	12 1/2"	11 27/32"	5"

DIMENSIONS INCHES					
A	B	C	D	E	F
26 3/16"	16 7/8"	13 11/16"	12 19/32"	24 5/8"	10"

	TECHNICAL DATA	
	1120-015S	1120-030S
Air inlet	1/2" NPT(F)	3/4" NPT(F)
Fluid inlet port	1" NPT(F)	2" NPT(F)
Fluid outlet port	1" NPT(F)	2" NPT(F)
Max. free flow	45 gal/min (170 l/min)	150 gal/min (586 l/min)
Air pressure range	45 -100 psi (3-6.8 bar)	125 (8.5 bar)
Solids in suspension	1/4" (6 mm)	1/4" (6 mm)
Wetted Materials	Nitrile, Neoprene, PTFE, Polypropylene and Polyethylene	Nitrile, PTFE (Teflon), Aluminum, Acetal, and Buna-N™
Recommended fluids	Light viscosity fluids synthetic, mineral oils, and Diesel Fuel	Light viscosity fluids synthetic, mineral oils, Used Oil, and Diesel Fuel
Recommended applications	Fluid dispensing, transfer, and evacuation.	
Service Bulletin	SB 1113	SB 1118

\*\* Balcrank does not recommend pumping windshield wash or any other fluid below 100° flash point. Contact Balcrank for additional information.

## Fluids & Applications

These conventional pumps may be used as stand-alone pumps for transfer applications or as system pumps that include hose reels. Model 1120-015S is UL79 listed for pumping: Diesel Fuel, No. 4 Fuel Oils (or lighter), Motor Oil, Kerosene, and Water.

### Fluids

- Light viscosity fluids
- Synthetic and mineral oils
- Diesel Fuel
- Used Fluids

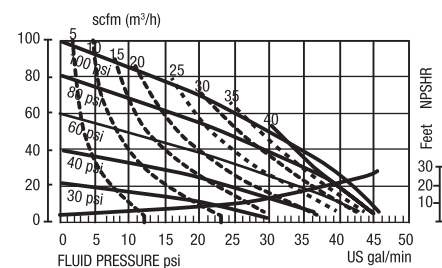
### Markets Served

- Car and truck dealers
- Fleets
- Construction
- Mass transit vehicles
- In-plant
- Lube trucks

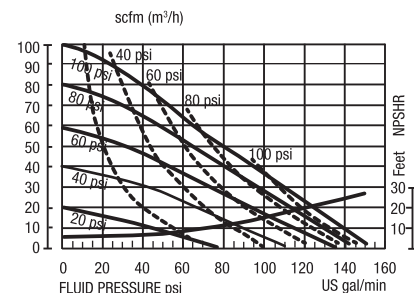
\*Pressure relief valve kit 3120-202 for this pump is recommended and not included.

MODELS AVAILABLE	DESCRIPTION
*1120-015S	1" UL Aluminum AODD Pump
1120-030S	2" Aluminum AODD Pump

### 1120-015S



### 1120-030S



## AODD Packages

### Conventional 1" UL Evacuation Package

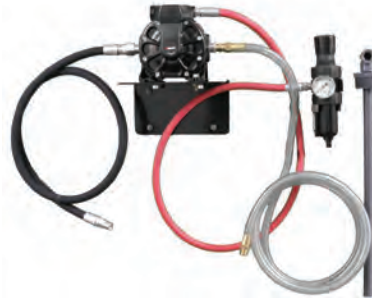
Evacuation system for use when UL is specified. Package designed for used oil disposal.



1121-026 UL SPECIFIED EVACUATION PACKAGE FOR USED OIL	
INCLUDES	
1120-015S	1" UL Aluminum AODD Pump
8134-005	LP Hose Assembly 5' x 3/8"
3260-035	F/R Auto Drain 3/8" NPT(F)
8281-005	MP Hose Assembly 5' x 1"
8182-005	LP Hose Assembly 5' x 1"
3230-022	LP Air Ball Valve 1" NPT(F) no bleed
3230-019	LP Air Ball Valve 3/8" NPT(F) no bleed
4140-017	Cam-lock Coupler 1"
4140-053	Dust Plug 1"
4411-016	Mounting Bracket for Diaphragm Pump
3120-219	Y-Strainer 1" NPT(F)

### CF15 Series Wall-Mount Package

Wall mount pumping system for anti-freeze (Glycol) or windshield washer solution, designed for the CF15 series



1121-015* CF15 WALL-MOUNT PACKAGE FOR ANTI-FREEZE & WINDSHIELD WASH SOLUTIONS	
INCLUDES	
1120-023A	Polypropylene CF15 Diaphragm Pump
8134-005	LP Hose Assembly 5' x 3/8"
3260-035	F/R Auto Drain 3/8" NPT(F)
8249-005	MP Hose Assembly 5' x 1/2"
8145-005	LP Suction Rated Hose Assembly 5' x 1/2"
4412-019	CenterFlo AODD Suction Tube Kit
4411-025	Mounting Bracket for AODD Pumps

\*Pressure relief recommended. See pg. 55 for pressure relief kits.

### CF15 Series Mixing Package

Blending pump system for anti-freeze (Glycol) or windshield washer solution, designed for the CF15 mixing.



1121-016* CF15 MIXING PACKAGE FOR BLENDING ANTI-FREEZE & WINDSHIELD WASH SOLUTIONS	
INCLUDES	
1120-028A	Mixing CF15 Diaphragm Pump
8134-005	LP Hose Assembly 5' x 3/8"
3260-035	F/R Auto Drain 3/8" NPT(F)
8249-005	MP Hose Assembly 5' x 1/2"
8146-010	Qty 2 - LP Suction Rated Hose Assembly 10' x 1/2"
4412-019	Qty 2 - CenterFlo AODD Suction Tube Kit
4411-025	Mounting Bracket for AODD Pumps

\*Pressure relief recommended. See pg. 55 for pressure relief kits.

### CF30 Series Accessory Package (does not include pump)

4410-063* CF30 WALL-MOUNT PACKAGE	
INCLUDES	
8134-005	LP Hose Assembly 5' x 3/8"
8264-005	MP Hose Assembly 5' x 3/4"
8181-006	LP Hose Assembly 6' x 1"
3230-019	LP Air Ball Valve 3/8" NPT(F) no bleed
3260-035	F/R Auto Drain 3/8" NPT(F)
4411-025	Mounting Bracket for AODD Pumps

\*Pressure relief recommended. See pg. 55 for pressure relief kits.

4140-062 EVACUATION PACKAGE FOR OIL DESIGNED FOR THE CF30	
INCLUDES	
8134-005	LP Hose Assembly 5' x 3/8"
8264-005	MP Hose Assembly 5' x 3/4"
8181-006	LP Hose Assembly 6' x 1"
4140-017	Cam-lock Coupler 1"
3230-019	LP Air Ball Valve 3/8" NPT(F) no bleed
3230-022	LP Air Ball Valve 1" NPT(F) no bleed
3260-035	F/R Auto Drain 3/8" NPT(F)
4411-025	Mounting Bracket for AODD Pumps

4140-063* EVACUATION PACKAGE FOR ANTI-FREEZE DESIGNED FOR THE CF30	
INCLUDES	
8134-005	LP Hose Assembly 5' x 3/8"
8264-005	Qty 2 - MP Hose Assembly 5' x 3/4"
4140-044	Cam-lock Coupler 3/4"
3230-019	LP Air Ball Valve 3/8" NPT(F) no bleed
3230-021	LP Air Ball Valve 3/4" NPT(F) no bleed
3260-035	F/R Auto Drain 3/8" NPT(F)
4411-025	Mounting Bracket for AODD Pumps

\*Pressure relief recommended. See pg. 55 for pressure relief kits.

# AODD CenterFlo Packages

## CF15 Series Evacuation Package

Evacuation system for used oil or anti-freeze disposal



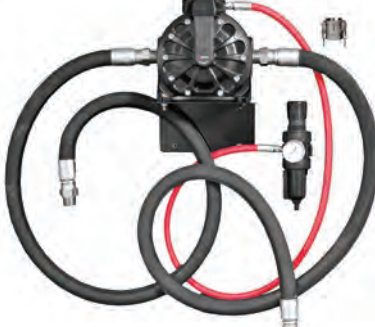
1121-020 CF15 EVACUATION PACKAGE FOR USED OIL	
INCLUDES	
1120-027	Aluminum CF15 Diaphragm Pump
8134-005	LP Hose Assembly 5' x 3/8"
8249-005	MP Hose Assembly 5' x 1/2"
8145-005	LP Suction Rated Hose Assembly 5' x 1/2"
4140-017	Cam-lock Coupler 1"
3230-019	LP Air Ball Valve 3/8" NPT(F) no bleed
3230-020	LP Air Ball Valve 1/2" NPT(F) no bleed
3260-035	F/R Auto Drain 3/8" NPT(F)
4411-025	Mounting Bracket for AODD Pumps
3120-211	Y-Strainer 1/2" NPT(F)

1121-021* CF15 EVACUATION PACKAGE FOR USED ANTI-FREEZE	
INCLUDES	
1120-027	Aluminum CF15 Diaphragm Pump
8134-005	LP Hose Assembly 5' x 3/8"
8249-005	MP Hose Assembly 5' x 1/2"
8145-005	LP Suction Rated Hose Assembly 5' x 1/2"
4140-044	Cam-lock Coupler 3/4"
3230-019	LP Air Ball Valve 3/8" NPT(F) no bleed
3230-020	LP Air Ball Valve 1/2" NPT(F) no bleed
3260-035	F/R Auto Drain 3/8" NPT(F)
4411-025	Mounting Bracket for AODD Pumps

\*Pressure relief recommended. See pg. 55 for pressure relief kits.

## CF30 Series Evacuation Package

Evacuation system for used oil or anti-freeze disposal



1121-022 CF30 EVACUATION PACKAGE FOR USED OIL	
INCLUDES	
1120-024	Aluminum CF30 Diaphragm Pump
8134-005	LP Hose Assembly 5' x 3/8"
8264-005	MP Hose Assembly 5' x 3/4"
8181-006	LP Hose Assembly 6' x 1"
4140-017	Cam-lock Coupler 1"
3230-019	LP Air Ball Valve 3/8" NPT(F) no bleed
3230-022	LP Air Ball Valve 1" NPT(F) no bleed
3260-035	F/R Auto Drain 3/8" NPT(F)
4411-025	Mounting Bracket for AODD Pumps
3120-219	Y-Strainer 1" NPT(F)

1121-023* CF30 EVACUATION PACKAGE FOR USED ANTI-FREEZE	
INCLUDES	
1120-024	Aluminum CF30 Diaphragm Pump
8134-005	LP Hose Assembly 5' x 3/8"
8264-005	Qty 2 - MP Hose Assembly 5' x 3/4"
4140-044	Cam-lock Coupler 3/4"
3230-019	LP Air Ball Valve 3/8" NPT(F) no bleed
3230-021	LP Air Ball Valve 3/4" NPT(F) no bleed
3260-035	F/R Auto Drain 3/8" NPT(F)
4411-025	Mounting Bracket for AODD Pumps

\*Pressure relief recommended. See pg. 55 for pressure relief kits.

## CF50 Series Evacuation Package

Evacuation system for used oil or anti-freeze disposal
















1121-024 CF50 EVACUATION PACKAGE FOR USED OIL	
INCLUDES	
1120-037	Aluminum CF50 Diaphragm Pump
8134-005	LP Hose Assembly 5' x 3/8"
8281-005	MP Hose Assembly 5' x 1"
8182-005	LP Hose Assembly 5' x 1"
4140-017	Cam-lock Coupler 1"
4140-053	Dust Plug 1"
3230-019	LP Air Ball Valve 3/8" NPT(F) no bleed
3230-022	LP Air Ball Valve 1" NPT(F) no bleed
3260-035	F/R Auto Drain 3/8" NPT(F)
4411-036	Mounting Bracket for CF50 AODD Pumps
3120-219	Y-Strainer 1" NPT(F)

1121-025* CF50 EVACUATION PACKAGE FOR USED ANTI-FREEZE	
INCLUDES	
1120-037	Aluminum CF50 Diaphragm Pump
8134-005	LP Hose Assembly 5' x 3/8"
8264-005	Qty 2 - MP Hose Assembly 5' x 3/4"
4140-044	Cam-lock Coupler 3/4"
4140-052	Dust Plug 3/4"
3230-019	LP Air Ball Valve 3/8" NPT(F) no bleed
3230-021	LP Air Ball Valve 3/4" NPT(F) no bleed
3260-035	F/R Auto Drain 3/8" NPT(F)
4411-036	Mounting Bracket for CF50 AODD Pumps

\*Pressure relief recommended. See pg. 55 for pressure relief kits.

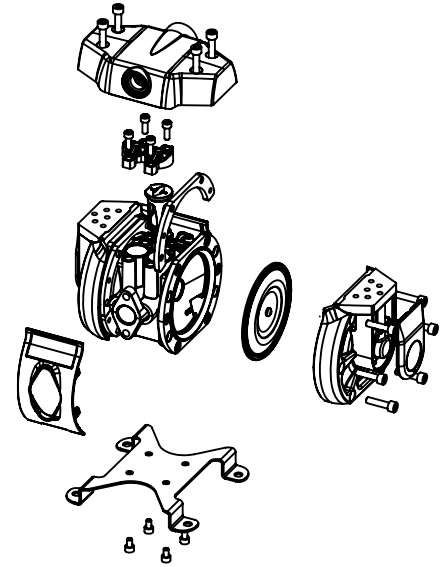


# AODD Pump Accessories

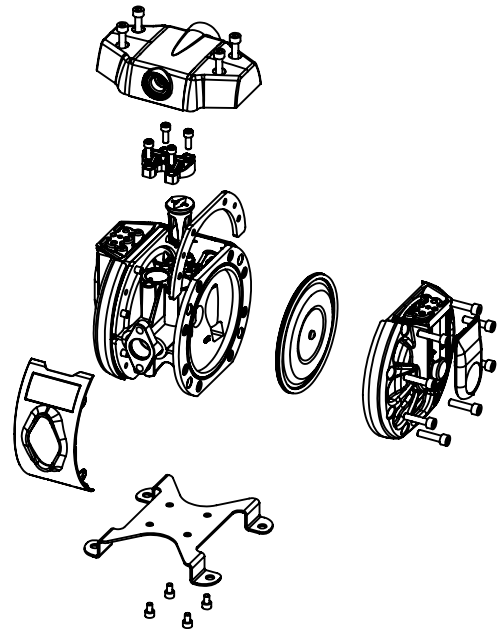
Y-STRAINER - 580 PSI (40 BAR) ALL STRAINERS HAVE 40 MESH		PRESSURE RELIEF KITS		
Y-Strainer		3120-211, 1/2" NPT(F)	 <b>3120-201</b> Pressure Relief for Diaphragm 1/2" NPT 250 psi (17.2 bar) Includes: Valve, Tube 3' x 1/4" and 1/2" nipple	
		3120-212, 3/4" NPT(F)		
		3120-213, 1" NPT(F)	 <b>3120-202</b> Pressure Relief for Diaphragm 1" NPT 150 psi (10.3 bar) Includes: Valve, Tube 3' x 1/4" and 1" nipple	
SUCTION LINE-STRAINER - 150 PSI (10 BAR) ALL STRAINERS HAVE 20 MESH		SUCTION TUBES		
Suction Line-Strainer		3120-219, 1" NPT(F)		
DRY BREAK COUPLER & NIPPLE RATED FOR VACUUM OR UP TO 3,000 PSI (207 BAR)				
Dry Break Coupler & Nipple		4140-016 Coupler 3/4" NPT(F)	 Suction Tubes	
		4140-050 Coupler 1" NPT(F)		
		4140-023 Nipple 3/4" NPT(F)		
		4140-051 Nipple 1" NPT(F)		
CAM-LOCK COUPLER & NIPPLE RATED FOR 250 PSI (17 BAR)				
Cam-Lock Coupler & Nipple		4140-044 Coupler 3/4" NPT(F)		 Wall-mount bracket
		4140-017 Coupler 1" NPT(F)		
		4140-054 Nipple 3/4" NPT(F)		
		4140-055 Nipple 1" NPT(F)		
		4140-045 Nipple 3/4" NPT(M)		
		4140-018 Nipple 1" NPT(M)		
		4140-046 Dust Cap 3/4"	 Ball valve fully ported no bleed	
		4140-019 Dust Cap 1"		
		4140-052 Dust Plug 3/4"		
		4140-053 Dust Plug 1"		
Auto Shut-off Controls (SB 4222)		4520-001 Overfill pump control, auto shut-off, non-electric, sensing tube, pump controller		 Shut-off valve bleed type for air
		4520-002 Overfill pump control with alarm, auto shut-off, non-electric, sensing tube, pump controller		
			<b>4412-044</b> 1" NPT(M) x 18" - 30° 16 gal drum <b>4412-046</b> 1" NPT(M) x 26" - 30° 55 gal drum <b>4412-045</b> 1" NPT(M) x 21" - 30° 165/280 gal bench tank <b>4412-048</b> 1" NPT(M) x 30" - 30° 165/280 gal bench tank double tap <b>4412-047</b> 1" NPT(M) x 28" - 30° 250 gal bench tank double tap <b>4412-051</b> 1" NPT(M) x 42" - 30° 275/330 gal horizontal obround double tap <b>4412-052</b> 1" NPT(M) x 60" - 30° 330 gal vertical obround <b>4412-049</b> 1" NPT(M) x 32" - 30° 275 gal tote <b>4412-050</b> 1" NPT(M) x 39" - 30° 330 gal tote <b>4411-016</b> Wall Mount Bracket for conventional diaphragm pumps <b>4411-025</b> Wall Mount Bracket for CenterFlo diaphragm pumps <b>3230-018</b> Ball valve, 1/4", 580 psi (40 bar) <b>3230-019</b> Ball valve, 3/8", 580 psi (40 bar) <b>3230-020</b> Ball valve, 1/2", 580 psi (40 bar) <b>3230-021</b> Ball valve, 3/4", 580 psi (40 bar) <b>3230-022</b> Ball valve, 1", 580 psi (40 bar) <b>3230-009</b> Shut-off valve, 3/8" NPT(F), 200 psi (13.7 bar) <b>3230-010</b> Shut-off valve, 1/2" NPT(F), 200 psi (13.7 bar) <b>3230-011</b> Shut-off valve, 3/4" NPT(F), 200 psi (13.7 bar)	

## AODD Pumps Repair Kits (CenterFlo)

CF10		
PUMP MODELS	KIT NUMBER	DESCRIPTION
<b>CF10 AODD PUMPS - 1120-029A, 1120-034</b>		
1120-029A, 1120-034	<b>833206</b>	Air valve kit
1120-029A, 1120-034	<b>833207</b>	Stroke sensor kit
1120-029A, 1120-034	<b>833208</b>	Check Ball kit
1120-029A, 1120-034	<b>833209</b>	Ball Seats, O-rings, ball guides
1120-029A	<b>833238</b>	Diaphragms kit (Prior to 2/1/2013)
1120-029A, 1120-034	<b>833337</b>	Diaphragms kit (After to 2/1/2013)
1120-029A	<b>833331</b>	Bushing, seal, push rod (Prior to 2/1/2013)
1120-029A, 1120-034	<b>833336</b>	Bushing, seal, push rod (After to 2/1/2013)



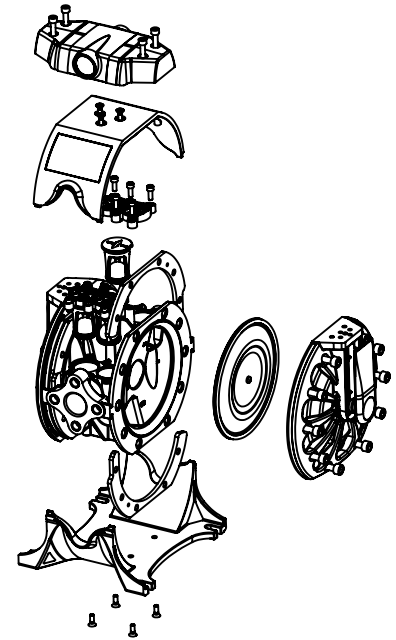
CF15		
PUMP MODELS	KIT NUMBER	DESCRIPTION
<b>CF15 AODD PUMPS - 1120-023A, 1120-025A, 1120-027, 1120-028A</b>		
1120-023A, 1120-025A, 1120-027, 1120-028A	<b>833206</b>	Air valve kit
1120-023A, 1120-025A, 1120-027, 1120-028A	<b>833207</b>	Stroke sensor kit
1120-023A, 1120-025A	<b>833208</b>	Check Ball kit
1120-027, 1120-028A	<b>833236</b>	Check Ball kit
1120-027, 1120-028A	<b>833330</b>	Ball Seats, O-rings, ball guides
1120-023, 1120-025A, 1120-027, 1120-028A	<b>833209</b>	Ball Seats, O-rings, ball guides
1120-023, 1120-025A, 1120-028A	<b>833210</b>	Bushing, seal, push rod (Prior to 2/1/2013)
1120-023, 1120-025A, 1120-028A	<b>833332</b>	Bushing, seal, push rod (After to 2/1/2013)
1120-027	<b>833237</b>	Bushing, seal, push rod
1120-027	<b>833333</b>	Diaphragms kit (After to 2/1/2013)
1120-023, 1120-025A, 1120-027, 1120-028A	<b>833211</b>	Diaphragms kit (Prior to 2/1/2013)
1120-023, 1120-025A, 1120-027, 1120-028A	<b>833338</b>	Diaphragms kit (After to 2/1/2013)
1120-023, 1120-025A, 1120-027, 1120-028A	<b>833341</b>	Retrofit Kit (Updates pumps prior to 2/1/2013)



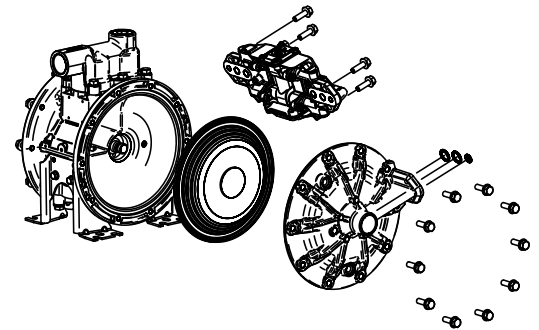


## AODD Pumps Repair Kits (CenterFlo)

CF30		
PUMP MODELS	KIT NUMBER	DESCRIPTION
<b>CF30 AODD PUMPS 1120-024, 1120-026A, 1120-031A</b>		
1120-024, 1120-026A, 1120-031A	<b>833212</b>	Air valve kit
1120-024, 1120-026A, 1120-031A	<b>833207</b>	Stroke sensor kit
1120-026A, 1120-031A	<b>833233</b>	Check Ball kit
1120-024	<b>833213</b>	Check Ball kit
1120-026A, 1120-031A	<b>833234</b>	Ball Seats, O-rings, ball guides
1120-024	<b>833214</b>	Ball Seats, O-rings, ball guides
1120-026A, 1120-031A	<b>833235</b>	Bushing, seal, push rod (Prior to 2/1/2013)
1120-026A, 1120-031A	<b>833335</b>	Bushing, seal, push rod (After to 2/1/2013)
1120-024	<b>833334</b>	Bushing, seal, push rod (After to 2/1/2013)
1120-024	<b>833215</b>	Bushing, seal, push rod (Prior to 2/1/2013)
1120-024, 1120-026A, 1120-031A	<b>833339</b>	Diaphragms kit (After to 2/1/2013)
1120-024, 1120-026A, 1120-031A	<b>833342</b>	Retrofit Kit (Updates pumps prior to 2/1/2013)

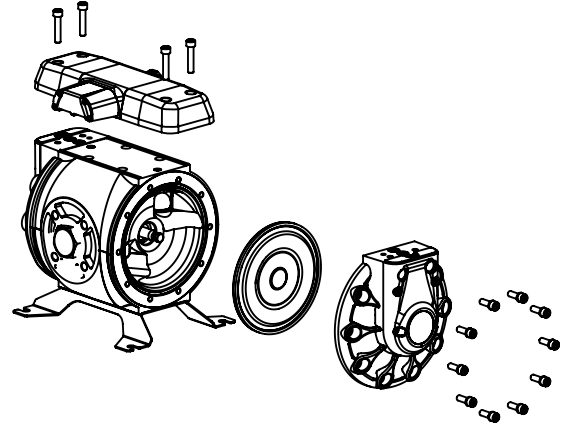


CF50		
PUMP MODELS	KIT NUMBER	DESCRIPTION
1120-037	<b>833692</b>	Air Valve Kit
1120-038	<b>833693</b>	Stroke sensor kit
1120-037	<b>833698</b>	Bushing, seal, push rod (Acetal/Buna-N/SS)
1120-038	<b>833699</b>	Bushing, seal, push rod (PTFE/Viton/SS)
1120-037	<b>833696</b>	Ball Seats/Seal (Buna-N)
1120-038	<b>833697</b>	Ball Seats/Seal (PP/Viton)
1120-037	<b>833694</b>	Check Ball kit (Acetal)
1120-038	<b>833695</b>	Check Ball kit (PTFE)
1120-037	<b>833700</b>	Diaphragms kit (Buna-N)
1120-038	<b>833436</b>	Diaphragms kit (Hytrel)



## AODD Pumps Repair Kits (CenterFlo and Conventional)

CF65		
PUMP MODELS	KIT NUMBER	DESCRIPTION
<b>CF65 AODD PUMPS - 1120-033, 1120-039</b>		
1120-033	<b>833431</b>	Air valve kit
1120-033	<b>833432</b>	Stroke sensor kit
1120-033	<b>833433</b>	Check Ball kit
1120-033	<b>833434</b>	Ball Seats, O-rings, ball guides
1120-033	<b>833435</b>	Bushing, seal, push rod
1120-033	<b>833436</b>	Diaphragms kit
1120-037	<b>833709</b>	Kit, Balls, Buna-N, CF65
1120-037	<b>833710</b>	Kit, Ball Seat/Seal/Cage, CF65 Buna-N



CONVENTIONAL AODD PUMPS		
PUMP MODELS	KIT NUMBER	DESCRIPTION
<b>ALUMINUM AODD PUMPS - 1120-015S, 1120-030S</b>		
1120-015S	<b>833103</b>	Air seal kit
1120-015S	<b>832973</b>	Air assembly kit
1120-015S	<b>832974</b>	Fluid seal kit
1120-030S	<b>833175</b>	Air seal kit
1120-030S	<b>833174</b>	Air assembly kit
1120-030S	<b>833173</b>	Fluid seal kit

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