



**Balcrank**

Pumping Solutions

Automotive | Commercial | Industrial

# 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), Windshield Wash Fluids
<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.



LYNX® SERIES



LYNX® HD SERIES



PANTHER® SERIES



TIGER® SERIES

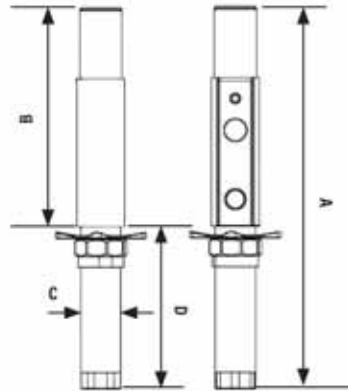


LION™ SERIES

# 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)			
1110-010			
A	B	C	D
19 9/16" (497 mm)	11 1/4" (286 mm)	2 3/64" (52 mm)	8 5/16" (211 mm)
1110-009			
A	B	C	D
46 1/2" (1181 mm)	11 1/4" (286 mm)	2 3/64" (52 mm)	35 1/4" (895 mm)
1160-008			
A	B	C	D
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 (11 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(F)
Wetted materials 1110-010 & 1110-009	Steel, Brass, Aluminum, Buna-N <sup>®</sup> , 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

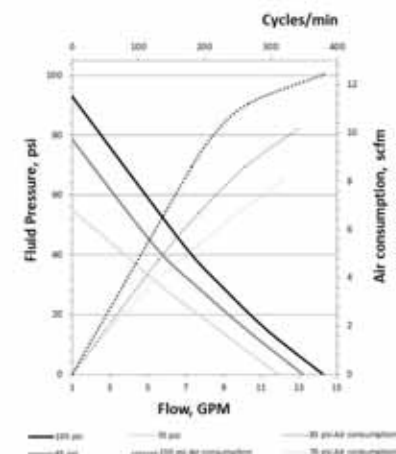
- Synthetic and mineral based lubricants
- Hydraulic fluid
- Transmission fluid
- Anti-freeze/windshield wash fluids (stainless version)

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



# Oil Piston Pumps

## LYNX® 1:1 Pump Packages



16 GAL PUMP PACKAGES	16 GAL NON-METERED 1111-028	16 GAL METERED 1111-027
PUMP	1110-010	1110-010
MP FLUID HOSE 10' x 1/2"	8249-010	8249-010
HANDLE FLEX-MEMORY 1/4 TURN	3320-024	3330-159
F/R MINI AUTO DRAIN 1/4" NPT(F)	3260-033	3260-033
AIR COUPLER 1/4"	3270-003	3270-003
AIR NIPPLE 1/4"	3270-004	3270-004
SUCTION TUBE 1" NPT(M) X 18" - 30"	4412-044	4412-044
LP HOSE 5' X 3/8"	8132-005	8132-005













55 GAL PUMP PACKAGES	55 GAL NON-METERED 1111-030	55 GAL METERED 1111-029
PUMP	1110-009	1110-009
MP FLUID HOSE 10' x 1/2"	8249-010	8249-010
HANDLE FLEX-MEMORY 1/4 TURN	3320-024	3330-159
F/R MINI AUTO DRAIN 1/4" NPT(F)	3260-033	3260-033
AIR COUPLER 1/4"	3270-003	3270-003
AIR NIPPLE 1/4"	3270-004	3270-004
LP HOSE 5' X 3/8"	8132-005	8132-005



LYNX® 2:1 PUMP PACKAGE	TAPPER STUB 1111-035	
PUMP	LYNX® 2:1 with double bung bushing adapter and drip tray	
F/R MINI AUTO DRAIN 1/4" NPT(F)	3260-033	
SPIGOT DISPENSE VALVE	4200-013	
AIR COUPLER 1/4"	3270-003	
AIR NIPPLE 1/4"	3270-004	
SUCTION TUBE	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

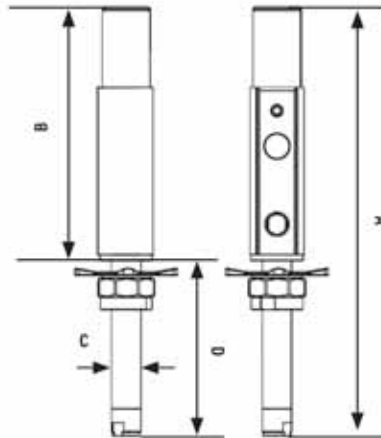
# Oil Piston Pumps LYNX® 1:1 Pump Components

Suction tubes		4412-044 1" NPT(M) x 18" - 30" 16 gal drum	Control handles		3330-159 DR, Flex-mem. ext., 1/4 turn for oil
		4412-046 1" NPT(M) x 26" - 30" 55 gal drum			3330-205 MD, Flex-mem. ext., 1/4 turn for oil
		4412-045 1" NPT(M) x 21" - 30" 165/280 gal bench tank			3330-192 MR, Qts., Flex-mem. ext., 1/4 turn for oil
		4412-048 1" NPT(M) x 30" - 30" 165/280 gal bench tank double tap	Wall mount kit		4410-058 Wall mount kit for LYNX® 8132-005 LP Hose 5' x 3/8" 8249-005 MP Hose 5' x 1/2" 8171-006 Suction Hose 6' x 3/4" 4412-027 Suction Tube 3/4" NPT(M) x 60" - 30" 4411-008 Wall mount bracket
		4412-047 1" NPT(M) x 28" - 30" 250 gal bench tank double tap			
		4412-051 1" NPT(M) x 42" - 30" 275/330 gal horizontal obround double tap			
		4412-052 1" NPT(M) x 60" - 30" 330 gal vertical obround			
		4412-049 1" NPT(M) x 32" - 30" 275 gal tote	Wall mount bracket		4411-008 Wall mount bracket for LYNX®
		4412-050 1" NPT(M) x 39" - 30" 330 gal tote	Dollies		4310-001 Band dolly, 16 gal/120 lb
	4310-003 Band dolly, 16 gal/120 lb wide track				
	4310-004 Dolly, 55 gal/400 lb HD				
Filter regulator (F/R)		3260-033 F/R mini auto drain 1/4" NPT(F) See pg. 171 for complete listing	Carts		4320-010 4 Wheel drum cart: 120 lb/16 gal
Dispense hose		8263-010 Dispense hose 10' x 3/4"			4320-013 3 Wheel drum cart: 400 lb/55 gal
		8263-016 Dispense hose 16' x 3/4"			4320-014 Heavy duty drum cart: 400 lb/55 gal, 3 wheels with rear locking caster.
Connecting hose kit		4410-054 Connecting hose kit LYNX®: 8132-005 LP Hose 5' x 3/8" 8249-005 MP Hose 5' x 1/2" 3270-003 Coupler 1/4" 3270-004 Nipple 1/4" 3270-053 Bushing 3/4" x 1/2"	Hose reel mount kit		To mount hose reel, use 2230-036 hose reel mount kit. 2230-036 Hose reel mount kit for 4320-014 Heavy duty drum cart

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

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



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

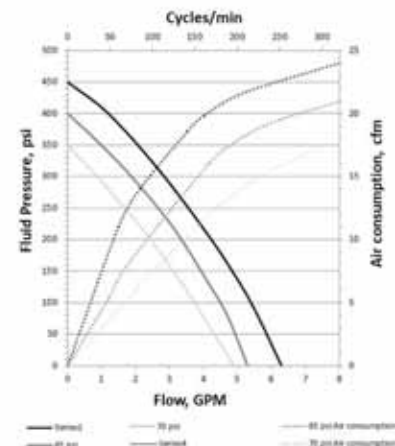
- Synthetic and mineral based lubricants
- Hydraulic fluid
- Transmission fluid

### 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® 3:1 Pump Packages



16 GAL PUMP PACKAGES	16 GAL NON METERED 1111-032	16 GAL METERED 1111-031
PUMP	1110-007	1110-007
MP FLUID HOSE 10' x 1/2"	8249-010	8249-010
SUCTION TUBE 3/4" NPT(M) X 18" - 30"	4412-035	4412-035
HANDLE W/FLEX-MEMORY & 1/4 TURN	3320-024	3330-159
F/R MINI AUTO DRAIN 1/4" NPT(F)	3260-033	3260-033
AIR COUPLER 1/4"	3270-003	3270-003
AIR NIPPLE 1/4"	3270-004	3270-004
LP HOSE 5' X 3/8"	8132-005	8132-005



55 GAL PUMP PACKAGES	55 GAL NON METERED 1111-034	55 GAL METERED 1111-033
PUMP	1110-007	1110-007
MP FLUID HOSE 10' x 1/2"	8249-010	8249-010
SUCTION TUBE 3/4" NPT(M)X 26" - 30"	4412-037	4412-037
HANDLE W/FLEX-MEMORY & 1/4 TURN	3320-024	3330-159
F/R MINI AUTO DRAIN 1/4" NPT(F)	3260-033	3260-033
AIR COUPLER 1/4"	3270-003	3270-003
AIR NIPPLE 1/4"	3270-004	3270-004
LP HOSE 5' X 3/8"	8132-005	8132-005

# Oil Piston Pumps LYNX® 3:1 Pump Components

Suction tubes		4412-035 3/4" NPT(M) x 18" - 30" 16 gal drum	Control handles		3330-159 DR, Flex-mem. ext., 1/4 turn for oil
		4412-037 3/4" NPT(M) x 26" - 30" 55 gal drum			3330-205 MO, Flex-mem. ext., 1/4 turn for oil
		4412-036 3/4" NPT(M) x 21" - 30" 165/280 gal bench tank			3330-192 MR, Qts., Flex-mem. ext., 1/4 turn for oil
		4412-039 3/4" NPT(M) x 30" - 30" 165/280 gal bench tank double tap	Wall mount kit		4410-058 Wall mount kit for LYNX® 8132-005 LP Hose 5' x 3/8" 8249-005 MP Hose 5' x 1/2" 8171-006 Suction Hose 6' x 3/4" 4412-027 Suction Tube 3/4" NPT(M) x 60" - 30" 4411-008 Wall mount bracket
		4412-038 3/4" NPT(M) x 28" - 30" 250 gal bench tank double tap			
		4412-042 3/4" NPT(M) x 42" - 30" 275/330 gal horizontal obround double tap			
		4412-043 3/4" NPT(M) x 60" - 30" 330 gal vertical obround	Wall mount bracket		4411-008 Wall mount bracket for LYNX®
		4412-040 3/4" NPT(M) x 32" - 30" 275 gal tote	Dollies		4310-001 Band dolly, 16 gal/120 lb
		4412-041 3/4" NPT(M) x 39" - 30" 330 gal tote			4310-003 Band dolly, 16 gal/120 lb wide track
Filter regulator (F/R)		3260-033 F/R mini auto drain 1/4" NPT(F)			4310-004 Dolly, 55 gal/400 lb HD
		See pg. 171 for complete listing			
Dispense hose		8263-010 Dispense hose 10' x 3/4"	Carts		4320-010 4 Wheel drum cart: 120 lb/16 gal
		8263-016 Dispense hose 16' x 3/4"			4320-013 3 Wheel drum cart: 400 lb/55 gal
Connecting hose kit		4410-054 Connecting hose kit LYNX®: 8132-005 LP Hose 5' x 3/8" 8249-005 MP Hose 5' x 1/2" 3270-003 Coupler 1/4" 3270-004 Nipple 1/4" 3270-053 Bushing 3/4" x 1/2"	Hose reel mount kit		4320-014 Heavy duty drum cart: 400 lb/55 gal, 3 wheels with rear locking caster. To mount hose reel, use 2230-036 hose reel mount kit.
		2230-036 Hose reel mount kit for 4320-014 Heavy duty drum cart			

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.

## LYNX® 5:1 HD Pump Drum Package

MODEL AVAILABLE	DESCRIPTION
1131-069	5:1 LYNX HD Portable Pump Package
PUMP	1110-012
CLASSIC HOSE REEL MP 50' x 1/2"	2120-013
SUCTION TUBE 1" NPT(M) X 26" - 30"	4412-046
HANDLE W/FLEX-MEMORY & 1/4 TURN	3330-159
F/R MINI AUTO DRAIN 1/4" NPT(F)	3260-033
NIPPLE 1/4"	3270-041
LP HOSE 5' X 1/2"	8249-005
DRUM CART	4320-014

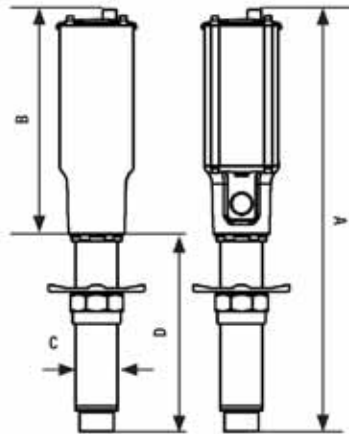


Drum not included



# 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 <sup>®</sup> , Zamak, steel, and polyurethane
Service Bulletin	SB 1126

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

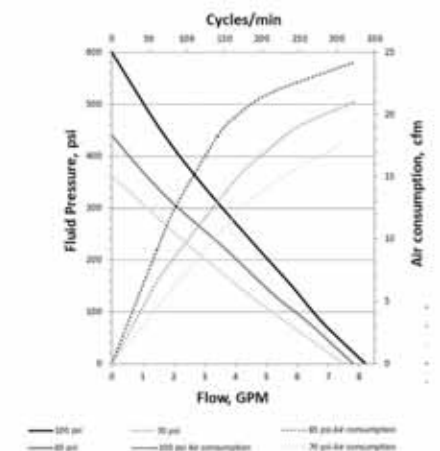
- Synthetic and mineral based lubricants
- Hydraulic fluid
- Transmission fluid
- Gear oil

### Applications

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

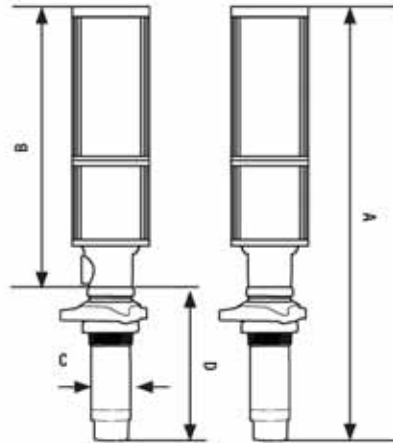
Pressure relief valve kit included with this pump.

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



# Oil Piston Pumps PANTHER® HP 3:1 Pumps

The Panther® HP 3:1 ratio double acting pump is engineered for outstanding performance and reliability for dispensing 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 1/8" (54 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)



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)
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)
Effective air piston diameter	2.5" (63.5 mm)
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 inlet	1/4" NPT(F)
Fluid inlet	1" NPT(F); 1 1/2" NPT(M)
Fluid outlet	3/4" NPT(F)
Wetted materials	Steel, Nickel Plated Steel, Stainless Steel, Aluminum, Ultrathane, Buna-N <sup>®</sup> , 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.

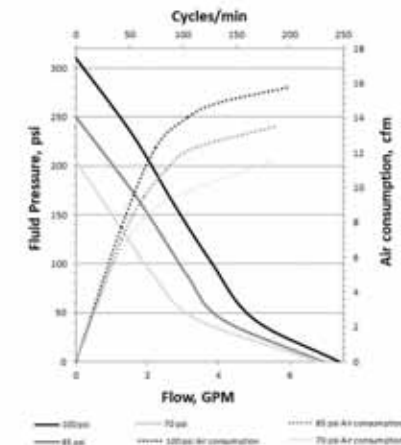
(1) Ensure that all hose fittings and piping are rated for fluid outlet pressures. Balcrank recommends a minimum of 3 x safety factor.

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

Verify fluid compatibility with MSDS sheets.

Contact Balcrank for specific system design performance and technical data.

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



# Oil Piston Pumps PANTHER® HP 3:1 Pump Packages














16 GAL PUMP PACKAGES	16 GAL NON-METERED 1131-060	16 GAL METERED 1131-059
PUMP	1130-015	1130-015
MP FLUID HOSE 10' x 1/2"	8249-010	8249-010
LP HOSE 5' X 3/8"	8132-005	8132-005
SUCTION TUBE 1" NPT(M) X 18" - 30"	4412-044	4412-044
HANDLE W/FLEX-MEMORY EXT & 1/4 TURN	3320-024	3330-159
F/R MINI AUTO DRAIN 1/4" NPT(F)	3260-033	3260-033
AIR COUPLER 1/4"	3270-003	3270-003
AIR NIPPLE 1/4"	3270-004	3270-004
BUNG ADAPTER	4411-009N	4411-009N



55 GAL PUMP PACKAGES	55 GAL NON-METERED 1131-062	55 GAL METERED 1131-061
PUMP	1130-015	1130-015
MP FLUID HOSE 10' x 1/2"	8249-010	8249-010
LP HOSE 5' X 3/8"	8132-005	8132-005
SUCTION TUBE 1" NPT(M) X 26" - 30"	4412-046	4412-046
HANDLE W/FLEX-MEMORY EXT & 1/4 TURN	3320-024	3330-159
F/R MINI AUTO DRAIN 1/4" NPT(F)	3260-033	3260-033
AIR COUPLER 1/4"	3270-003	3270-003
AIR NIPPLE 1/4"	3270-004	3270-004
BUNG ADAPTER	4411-009N	4411-009N

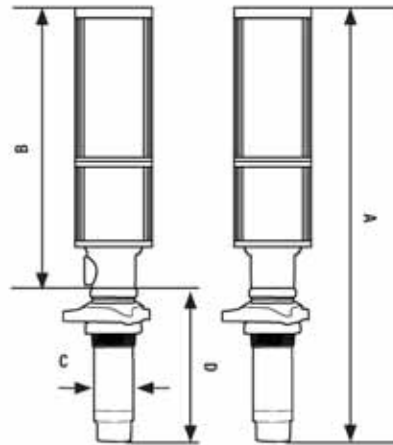
# Oil Piston Pumps PANTHER® HP 3:1 & LYNX® 5:1 HD Pump Components

Suction tubes		4412-044 1" NPT(M) x 18" - 30" 16 gal drum	Control handles		3330-159 DR, Flex-mem. ext., 1/4 turn for oil
		4412-046 1" NPT(M) x 26" - 30" 55 gal drum			3330-205 MO, Flex-mem. ext., 1/4 turn for oil
		4412-045 1" NPT(M) x 21" - 30" 165/280 gal bench tank			3330-192 MR, Qts., Flex-mem. ext., 1/4 turn for oil
		4412-048 1" NPT(M) x 30" - 30" 165/280 gal bench tank double tap	Wall mount kit		4410-022 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" 4412-015 Suction Tube 1" NPT(M) x 48" - 30" 4411-009N Bung Adapter 4411-008 Wall mount bracket
		4412-047 1" NPT(M) x 28" - 30" 250 gal bench tank double tap			
		4412-051 1" NPT(M) x 42" - 30" 275/330 gal horizontal obround double tap			
		4412-052 1" NPT(M) x 60" - 30" 330 gal vertical obround			
		4412-049 1" NPT(M) x 32" - 30" 275 gal tote			
		4412-050 1" NPT(M) x 39" - 30" 330 gal tote	Wall mount bracket		4411-008 Wall mount bracket for LYNX® and Panther® HP
Bung adapter		4411-018N Double tap bushing, nickel plated stainless steel; for use with Panther® HP W/ pressure relief	Dollies		4310-001 Band dolly, 16 gal/120 lb
Filter regulator (F/R)		3260-033 F/R mini auto drain 1/4" NPT(F) See pg. 171 for complete listing			4310-003 Band dolly, 16 gal/120 lb wide track
Dispense hose		8249-005 Dispense hose 5' x 1/2"	Carts		4310-004 Dolly, 55 gal/400 lb HD
		8263-010 Dispense hose 10' x 3/4"			4320-010 4 Wheel drum cart: 120 lb/16 gal
		8263-016 Dispense hose 16' x 3/4"			4320-013 3 Wheel drum cart: 400 lb/55 gal
Connecting hose kit		4410-054 Connecting hose kit PANTHER®: 8132-005 LP Hose 5' x 3/8" 8249-005 MP Hose 5' x 1/2" 3270-003 Coupler 1/4" 3270-004 Nipple 1/4" 3270-053 Bushing 3/4" x 1/2"	Hose reel mount kit		4320-014 Heavy duty drum cart: 400 lb/55 gal, 3 wheels with rear locking caster. To mount hose reel, use 2230-036 hose reel mount kit.
		2230-036 Hose reel mount kit for 4320-014 Heavy duty drum cart			

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 5:1 Pumps

The Panther® HP 5:1 ratio double acting pump is engineered for outstanding performance and reliability for dispensing 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)
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)
Effective air piston diameter	2.5" (63.5 mm)
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 inlet	1/4" NPT(F)
Fluid inlet	1" NPT(F); 1 1/2" NPT(M)
Fluid outlet	1/2" NPT(F)
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 Pride 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

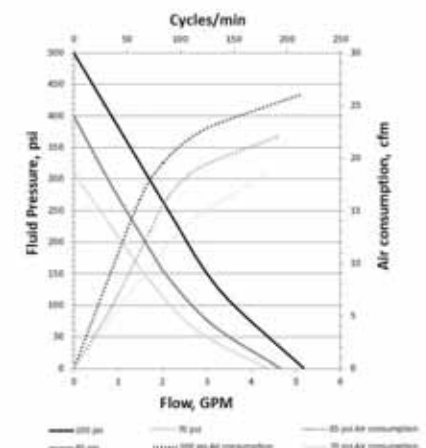
- Synthetic and mineral based lubricants
- Hydraulic fluid
- Transmission fluid
- Gear oil

### 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 PANTHER® HP 5:1 Pump Packages














16 GAL PUMP PACKAGES	16 GAL NON-METERED 1131-064	16 GAL METERED 1131-063
PUMP	1130-016	1130-016
MP FLUID HOSE 10' x 1/2"	8249-010	8249-010
LP HOSE 5' X 3/8"	8132-005	8132-005
SUCTION TUBE 1" NPT(M) X 18" - 30"	4412-044	4412-044
HANDLE W/FLEX-MEMORY EXT & 1/4 TURN	3320-024	3330-159
F/R MINI AUTO DRAIN 1/4" NPT(F)	3260-033	3260-033
AIR COUPLER 1/4"	3270-003	3270-003
AIR NIPPLE 1/4"	3270-004	3270-004
BUNG ADAPTER	4411-009N	4411-009N



55 GAL PUMP PACKAGES	55 GAL NON-METERED 1131-066	55 GAL METERED 1131-065
PUMP	1130-016	1130-016
MP FLUID HOSE 10' x 1/2"	8249-010	8249-010
LP HOSE 5' X 3/8"	8132-005	8132-005
SUCTION TUBE 1" NPT(M) X 26" - 30"	4412-046	4412-046
HANDLE W/FLEX-MEMORY EXT & 1/4 TURN	3320-024	3330-159
F/R MINI AUTO DRAIN 1/4" NPT(F)	3260-033	3260-033
AIR COUPLER 1/4"	3270-003	3270-003
AIR NIPPLE 1/4"	3270-004	3270-004
BUNG ADAPTER	4411-009N	4411-009N

# Oil Piston Pumps

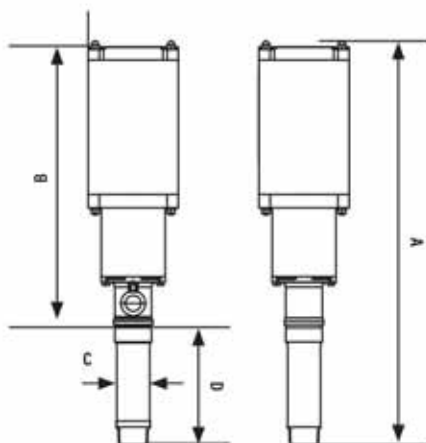
## PANTHER® HP 5:1 Pump Components

Suction tubes		4412-044 1" NPT(M) x 18" - 30" 16 gal drum	Control handles		3330-159 DR, Flex-mem. ext., 1/4 turn for oil
		4412-046 1" NPT(M) x 26" - 30" 55 gal drum			3330-205 MQ, Flex-mem. ext., 1/4 turn for oil
		4412-045 1" NPT(M) x 21" - 30" 165/280 gal bench tank			3330-192 MR, Qts., Flex-mem. ext., 1/4 turn for oil
		4412-048 1" NPT(M) x 30" - 30" 165/280 gal bench tank double tap	Wall mount kit		4410-022 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" 4412-015 Suction Tube 1" NPT(M) x 48" - 30" 4411-009N Bung Adapter 4411-008 Wall mount bracket
		4412-047 1" NPT(M) x 28" - 30" 250 gal bench tank double tap			
		4412-051 1" NPT(M) x 42" - 30" 275/330 gal horizontal obround double tap			
		4412-052 1" NPT(M) x 60" - 30" 330 gal vertical obround			
		4412-049 1" NPT(M) x 32" - 30" 275 gal tote			
		4412-050 1" NPT(M) x 39" - 30" 330 gal tote	Wall mount bracket		4411-008 Wall mount bracket for Panther® HP
Bung adapter		4411-018N Double tap bushing, nickel plated stainless steel; for use with Panther® HP W/ pressure relief	Dollies		4310-001 Band dolly, 16 gal/120 lb
Filter regulator (F/R)		3260-033 F/R mini auto drain 1/4" NPT(F)  See pg. 171 for complete listing			4310-003 Band dolly, 16 gal/120 lb wide track
Dispense hose		8249-005 Dispense hose 5' x 1/2"	Carts		4320-010 4 Wheel drum cart: 120 lb/16 gal
		8263-010 Dispense hose 10' x 3/4"			4320-013 3 Wheel drum cart: 400 lb/55 gal
		8263-016 Dispense hose 16' x 3/4"			4320-014 Heavy duty drum cart: 400 lb/55 gal, 3 wheels with rear locking caster. To mount hose reel, use 2230-036 hose reel mount kit.
Connecting hose kit		4410-054 Connecting hose kit Panther®: 8132-005 LP Hose 5' x 3/8" 8249-005 MP Hose 5' x 1/2" 3270-003 Coupler 1/4" 3270-004 Nipple 1/4" 3270-053 Bushing 3/4" x 1/2"	Hose reel mount kit		2230-036 Hose reel mount kit for 4320-014 Heavy duty drum cart

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 for dispensing 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 1/8" (54 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 of 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

TECHNICAL DATA	
Operating air pressure	40-150 psi (3-30 bar)
Cycles per gallon	31 cyc/gal (8.2 cyc/liter)
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)
Effective Air Piston Diameter	3.2" (81 mm)
Free flow pump delivery with SAE 10W30 oil, 68° F (20° C), 100 psi (7 bar) air pressure	16 gal/min (61 l/min)
Air inlet	3/8" NPT(F)
Fluid inlet	1" NPT(F); 1 1/2" NPT(M)
Fluid outlet	3/4" NPT(F)
Wetted materials 1130-019 - 1130-025 - 1130-026 1160-007	Carbon steel, Buna-N <sup>®</sup> , Stainless steel, Ultrathane <sup>®</sup> and Aluminum. Stainless Steel and Viton <sup>®</sup>
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.

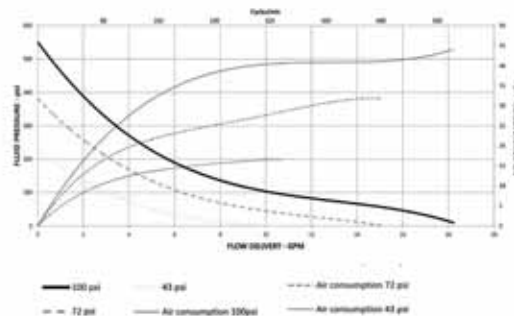
**Warning!** Do not use any Pride series products with flammable fluids.

Verify fluid compatibility with MSDS sheets.

Contact Balcrank for specific system design performance and technical data.

Windshield wash fluid & water based fluids for use with 1160-007 stainless steel model only. **Pressure relief valve kit included with this pump.**

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





# Oil Piston Pumps TIGER® HP 6:1 Pump Packages














TIGER® 6:1 PUMP PACKAGE	55 GAL NON-METERED 1131-068
PUMP	1130-026
MP FLUID HOSE 10' x 1/2"	8249-010
LP HOSE 5' X 3/8"	8134-005
SUCTION TUBE 1" NPT(M) X 26" - 30"	4412-046
HANDLE W/FLEX-MEMORY EXT & 1/4 TURN	3320-024
F/R MINI AUTO DRAIN 3/8" NPT(F)	3260-035
AIR COUPLER 3/8"	3270-121
AIR NIPPLE 3/8"	3270-122



TIGER® 6:1 PUMP PACKAGE	55 GAL METERED 1131-067
PUMP	1130-026
MP FLUID HOSE 10' x 1/2"	8249-010
LP HOSE 5' X 3/8"	8134-005
SUCTION TUBE 1" NPT(M) X 26" - 30"	4412-046
HANDLE W/FLEX-MEMORY EXT & 1/4 TURN	3330-159
F/R MINI AUTO DRAIN 3/8" NPT(F)	3260-035
AIR COUPLER 3/8"	3270-121
AIR NIPPLE 3/8"	3270-122

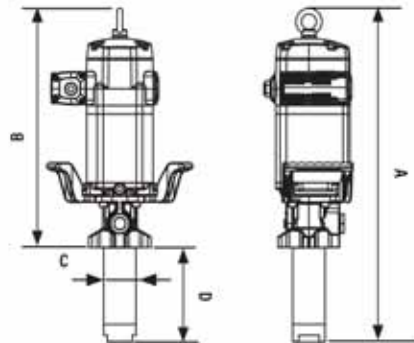
# Oil Piston Pumps

## TIGER® HP 6:1 Pump Components

Suction tubes		4412-044	1" NPT(M) x 18" - 30"	16 gal drum	Control handles		3330-159	DR, Flex-mem. ext., 1/4 turn for oil
		4412-046	1" NPT(M) x 26" - 30"	55 gal drum			3330-205	MQ, Flex-mem. ext., 1/4 turn for oil
		4412-045	1" NPT(M) x 21" - 30"	165/280 gal bench tank			3330-192	MR, Qts., Flex-mem. ext., 1/4 turn for oil
		4412-048	1" NPT(M) x 30" - 30"	165/280 gal bench tank double tap	Wall mount kit		4410-065 Wall mount kit 8134-005 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	
		4412-047	1" NPT(M) x 28" - 30"	250 gal bench tank double tap				
		4412-051	1" NPT(M) x 42" - 30"	275/330 gal horizontal obround double tap				
		4412-052	1" NPT(M) x 60" - 30"	330 gal vertical obround				
		4412-049	1" NPT(M) x 32" - 30"	275 gal tote	Wall mount bracket		4411-008 Wall mount bracket for LYNX®, Panther® HP and Tiger®	
		4412-050	1" NPT(M) x 39" - 30"	330 gal tote	Dollies		4310-001	Band dolly, 16 gal/120 lb
			4310-003	Band dolly, 16 gal/120 lb wide track				
Bung adapter		4411-018N	Double tap bushing, nickel plated stainless steel; for use with Panther® HP W/ pressure relief		4310-004	Dolly, 55 gal/400 lb HD		
Filer regulator (F/R)		3260-035	F/R auto drain 3/8" NPT(F) See pg. 171 for complete listing		Carts		4320-010	4 Wheel drum cart: 120 lb/16 gal
Dispense hose		8249-005	Dispense hose 5' x 1/2"				4320-013	3 Wheel drum cart: 400 lb/55 gal
		8263-010	Dispense hose 10' x 3/4"				4320-014	4320-014 Heavy duty drum cart: 400 lb/55 gal, 3 wheels with rear locking caster. To mount hose reel, use 2230-036 hose reel mount kit.
		8263-016	Dispense hose 16' x 3/4"					
Connecting hose kit		4410-066	Connecting hose kit: 8134-005 LP Hose 5' x 3/8" 8249-005 MP Hose 5' x 1/2" 3270-003 Coupler 1/4" 3270-004 Nipple 1/4" 3270-053 Bushing 3/4" x 1/2"		Hose reel mount kit		2230-036	Hose reel mount kit for 4320-014 Heavy duty drum cart

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 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)

## Fluids & Applications

Medium pressure pump for oil systems where high volume dispensing using simultaneous dispense points is required. This pump is recommended for medium 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.

Wall or floor mount only. Pump OD does not fit 2" bung adapter. See pg. 29 for mounting bracket.

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>(2)</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 <sup>®</sup> , Bronze Filled PTFE
Noise level <sup>(3)</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.

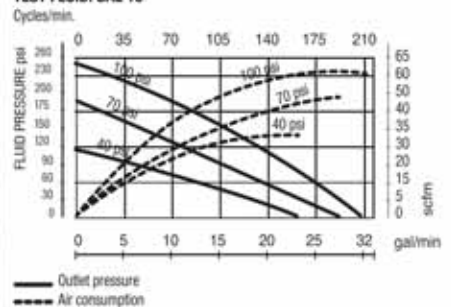
**Warning!** Do not use any Lion™ 450/600 series products with flammable fluids.

Verify fluid compatibility with MSDS sheets.

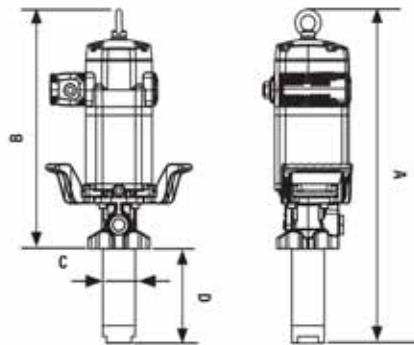
Contact Balcrank for specific system design performance and technical data.

MODELS AVAILABLE	DESCRIPTION
1430-001	Lion™ 450 3:1 stub pump

### TEST FLUID: SAE 10



# 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.**

**Wall or floor mount only. Pump OD does not fit 2" bung adapter. See pg. 31 for mounting bracket.**

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>(2)</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 <sup>®</sup> and zinc
Noise level <sup>(3)</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.

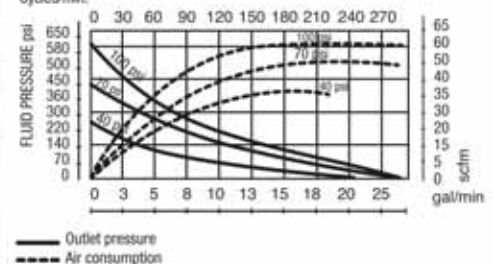
**Warning!** Do not use any Lion™ 450/600 series products with flammable fluids.

Verify fluid compatibility with MSDS sheets.

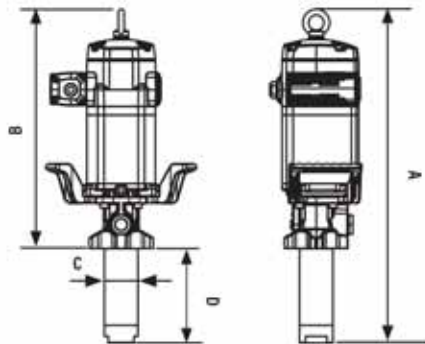
Contact Balcrank for specific system design performance and technical data.

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

### TEST FLUID: SAE 10 Cycles/min.



# 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" (1,430 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>(2)</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>(3)</sup>	80 dB
Service Bulletin	SB 1136

(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

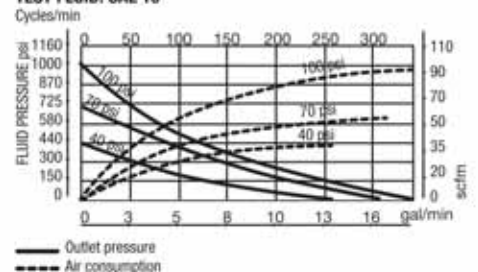
- Heavy duty truck/fleet
- Railroad/mass transit vehicle maintenance
- In-plant high volume transfer
- Marine
- Mining vehicle maintenance
- Large automotive dealerships

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

**Pump bung is mountable using 4411-032**

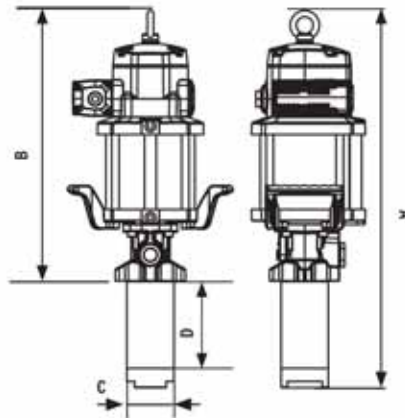
MODELS AVAILABLE	DESCRIPTION
<b>1430-003</b>	Lion™ 450 10:1 stub pump
<b>1430-004</b>	Lion™ 450 10:1 drum pump

### 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)

### 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>(2)</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>(3)</sup>	80 dB
Service Bulletin	SB 1137

- (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/high pressure pump for oil systems where high volume dispensing using simultaneous dispense points is required. This pump operates at slow cycle rates for high volume applications. Medium/high pressure pump is recommended for longer pumping distances.

### Fluids

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

### Applications

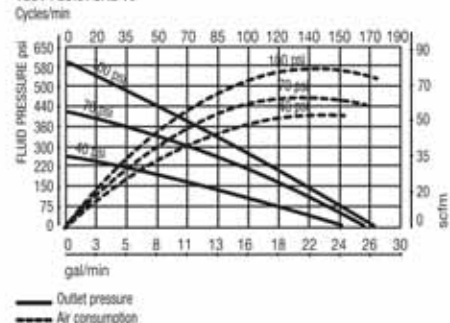
- Heavy duty truck/fleet
- Railroad/mass transit vehicle maintenance
- In-plant high volume transfer
- Marine
- Mining vehicle maintenance
- Large automotive dealerships

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

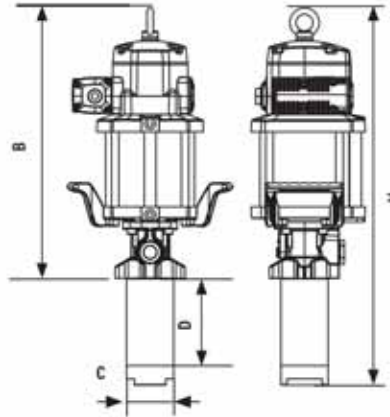
**Wall or floor mount only. Pump OD does not fit 2" bung adapter. See pg. 31 for mounting bracket.**

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

### TEST FLUID: SAE 10



# 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 (1150 NL/min)
Max fluid outlet pressure <sup>(2)</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>(3)</sup>	80 dB
Service Bulletin	SB 1138

- (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 and high-volume, can be used with simultaneous dispense points. This pump operates at slow cycle rates for large shops requiring long pumping distances applications or when cold weather or low air pressure could limit pump performance.

### Fluids

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

### Applications

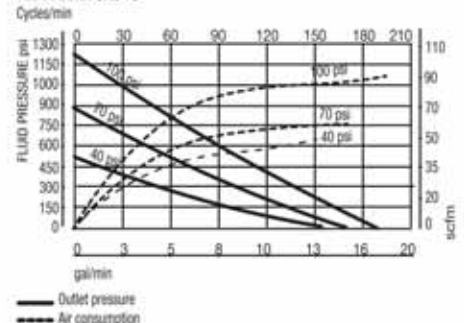
- Heavy duty truck/fleet
- Railroad/mass transit vehicle maintenance
- In-plant high volume transfer
- Marine
- Mining vehicle maintenance
- Large automotive dealerships

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

**Wall or floor mount only. Pump OD does not fit 2" bung adapter. See pg. 31 for mounting bracket.**

MODELS AVAILABLE	DESCRIPTION
1430-006	Lion™ 600 12:1 stub pump

### TEST FLUID: SAE 10



## Oil Piston Pumps Accessories Mobile Oil Packages



	7120-018 Panther® HP 3:1	7120-019 Panther® HP 5:1	7120-017 TIGER® HP 6:1
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
FLANGE MOUNT KIT FOR DRUM COVER	7120-026	7120-026	7120-026
HOLD DOWN KIT 400 LB	7120-024	7120-024	7120-024
AIR COUPLER 1/4"	3270-003	3270-003	-
AIR COUPLER 3/8"	-	-	3270-121
AIR NIPPLE 1/4"	3270-004	3270-004	-
AIR NIPPLE 3/8"	-	-	3270-122

### Mobile drum covers



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

### Hold down rod kit



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








### 4-Way reversing valve



















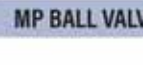






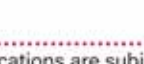


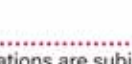
MODEL #	DESCRIPTION
3230-014	4-Way reversing valve 1" NPT(F) Pressure 200 psi (13.8 bar)



# Oil Piston Pumps Lion™ 450 - 600 Accessories

Suction tubes		<b>4412-031</b> 1 1/2" NPT(M) x 38" - 30" 55 gal drum & bench tank	Control handles		<b>3330-159</b> DR Flex-mem. ext., 1/4 turn for oil
		<b>4412-032</b> 1 1/2" NPT(M) x 47" - 30" horizontal obround tank			<b>3330-205</b> MO, 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>3330-192</b> MR, Qts. Flex-mem. ext., 1/4 turn for oil
		<b>4412-034</b> 1 1/2" NPT(M) x 75" - 30" 330 gal vertical obround tank			<b>3320-051</b> Hi-flow, non-metered, rigid ext., 3/4" inlet
Connecting hose kit		<b>4410-062</b> Connecting hose kit Lion™ 450/600 8149-005 LP Hose 5x1/2" 8264-005 MP Hose 5x3/4" 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>3320-052</b> Hi-flow, non-metered, flex ext., 3/4" inlet
		<b>4410-064</b> Suction hose kit Lion™ 450/600 4411-021 Bung Adapter for suction tubes 8191-005 Suction Hose 5x1 1/2" 833595 Elbow 1 1/2" 3270-160 Hex Nipple 1 1/2" *Select Suction Tube from above			<b>3320-053</b> Hi-flow, non-metered, rigid ext., 1" inlet
Filter/regulator (F/R)		<b>3260-036</b> F/R auto drain 1/2" NPT(F) See pg. 171 for complete listing	Control handles		<b>3320-054</b> Hi-flow, non-metered, flex ext., 1" 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>3330-198</b> Hi-flow, metered, flex ext., 3/4" inlet		
					<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

PISTON PUMP ACCESSORIES					
Bung adapters		<b>4411-009N</b> Bung adapter: Panther® HP & Tiger® W/ pressure relief port	Air eliminator		<b>4411-005</b> Air eliminator 3/4" NPT(F) / 1 1/2" NPT(M) adapter
		<b>4411-009QX</b> Bung adapter: Panther® HP W/ pressure relief port - 10 pieces			<b>4411-010</b> Air eliminator 1/4" NPT(F) / 1" NPT(M) adapter
		<b>4411-007N</b> Bung adapter, steel: Lion™ HP (old style) 5:1 W/ pressure relief port	Pump runaway control prevents runaway condition when out of oil		<b>3241-001</b> Pump runaway control 1/2" NPT(F)
		<b>4411-018N</b> Double tap bushing, zinc plated stainless steel: for use with Panther® HP W/ pressure relief			<b>3241-002</b> Pump runaway control 1/4" NPT(F)
		<b>4411-022</b> Bung adapter: LYNX® 3:1 & LYNX® 5:1	Inlet Check Valve Aluminum		<b>4411-014</b> Inlet Check Valve 3/4" NPT(F)
		<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>4411-015</b> Inlet Check Valve 1" NPT(F)
		<b>4411-012</b> Bung Adapter: Lion™ 450 10:1			<b>4411-038</b> Inlet Check Valve 1 1/2" NPT(F)
	<b>4411-024</b> Bung adapter kit: for use with 1" OD suction tube	<b>HP BALL VALVE</b>			
	<b>4411-024</b> PVC adapter w/ pressure relief port-2" for use when no additional ports are not available on the tank for pressure relief discharge tube.	Ball valve fully ported		<b>3230-023</b> Ball valve, 3/8", 7,250 psi (500 bar)	
				<b>3230-015</b> Ball valve, 1/2", 7,250 psi (500 bar)	
				<b>3230-016</b> Ball valve, 3/4", 5,800 psi (400 bar)	
				<b>3230-017</b> Ball valve, 1", 5,075 psi (350 bar)	
			<b>MP BALL VALVES WITH OIL/AIR</b>		
			Ball valve fully ported no bleed		<b>3230-006</b> Ball valve, 3/8", 2,000 psi (138 bar)
					<b>3230-002</b> Ball valve, 1/2", 2,000 psi (138 bar)
				<b>3230-007</b> Ball valve, 3/4", 2,000 psi (138 bar)	
				<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>LP AIR BLEED TYPE</b>			
		Shut-off valve bleed type for air		<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)	

Couplers, strainers  
Y-Strainer - For filtering debris at the pump - 580 psi (40 bar) - all strainers have 40 mesh.

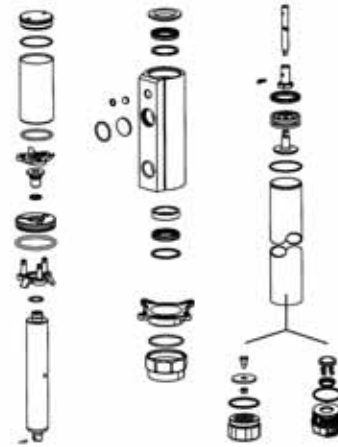
Ensure that all hose fittings and piping are rated for fluid outlet pressures. Balcrank recommends a minimum of 3 x safety factor.

# Oil Piston Pumps Accessories

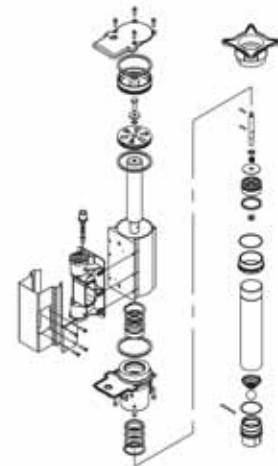
COUPLERS & NIPPLES		COVERS & CARTS					
Balcrank Series		3270-003 Coupler, 1/4" NPT(F)	Covers for 25-35 lb / 5 gal pail		4420-010 25-35 lb/5 gal (for use with 2" bung stub pumps)		
		3270-120 Coupler, 3/8" NPT(F)		Covers for 120 lb / 16 gal drum		4420-011 120 lb/16 gal (LYNX® for use with 2" bung stub pumps)	
		3270-119 Coupler, 1/4" NPT(M)	Covers for 400 lb / 55 gal drum			4420-005 120 lb/16 gal (Panther® HP, Tiger®)	
		3270-121 Coupler, 3/8" NPT(M)			Dollies		4420-014 120 lb/16 gal (Lion™ 450/600). Ask for flange mount kit 7120-026
		3270-005 Nipple, 1/4" NPT(F)	Covers for 400 lb / 55 gal drum			4420-013 400 lb/55 gal (Lion™ 450/600). Ask for flange mount kit 7120-026	
		3270-122 Nipple, 3/8" NPT(F)		Dollies			4310-001 Band dolly, 16 gal/120 lb
		3270-004 Nipple, 1/4" NPT(M)	Dollies				4310-003 Band dolly, 16 gal/120 lb wide track
		3270-123 Nipple, 3/8" NPT(M)				Dollies	
<b>INDUSTRIAL INTERCHANGE SERIES</b>							
Industrial Interchange Series		3270-132 Coupler, air 3/8" body, 1/2" NPT(F)	Carts		4320-010 4 Wheel drum cart: 120 lb/16 gal		
		3270-133 Coupler, air 3/8" body, 1/2" NPT(M)		Carts		4320-013 3 Wheel drum cart: 400 lb/55 gal	
		3270-142 Nipple, air 3/8" body, 1/2" NPT(F)			Carts		4320-014 Heavy duty drum cart: 400 lb/55 gal, 3 wheels with rear locking caster (to mount hose reel, use 2230-036 hose reel mount kit)
		3270-143 Nipple, air 3/8" body, 1/2" NPT(M)		Carts			2230-036 Hose reel mount kit for 4320-014 Heavy duty drum cart
<b>MOUNTING BRACKETS</b>							
Mounting brackets		4411-008 Wall mount bracket for LYNX®, Panther® HP, and Tiger®	Hose reel mount kit				
		4411-030 Wall mount for new style Lion™ 450/600					
<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 26" - 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

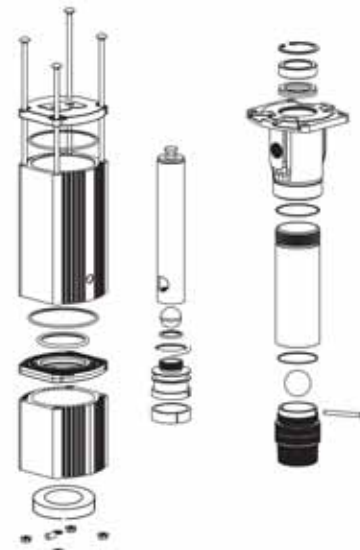
LYNX® 1:1 & 3:1		
PUMP MODELS	KIT NUMBER	DESCRIPTION
<b>LYNX® SERIES PUMPS 1:1 - 1110-010, 1110-009, 1160-008</b>		
1110-009 & 1110-010 Fluid	<b>833109</b>	Fluid seal kit
1110-009, 1110-010, 1110-007	<b>833110</b>	Air valve kit
1160-008	<b>833525</b>	Fluid seal kit
<b>LYNX® SERIES PUMP 2:1 - 1111-035</b>		
1111-035	<b>833346</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>	Fluid seal 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

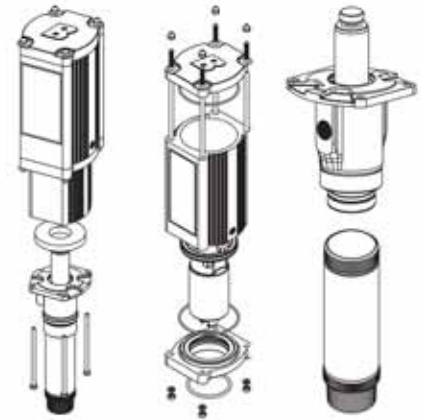


PANTHER® HP 3:1 & 5:1		
PUMP MODELS	KIT NUMBER	DESCRIPTION
<b>PANTHER® HP SERIES PUMPS 3:1 - 1130-015, 1130-017, 1130-020 &amp; 5:1 - 1130-016, 1130-018, 1130-021</b>		
Panther® HP Series Pumps - All	<b>900019</b>	Air motor kit - Trip Rod Assembly
Panther® HP Series Pumps - All	<b>900031</b>	Air motor 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

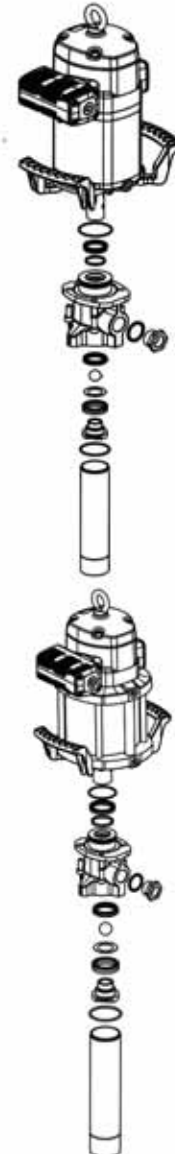


## Piston Pump Repair Kits for Oil

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>	Inlet Check Valve - Poly kit 3:1
1430-002	<b>833510</b>	Inlet Check Valve - Poly 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>	Inlet Check Valve - Poly 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>	Inlet Check Valve - Poly kit 6:1
1430-006	<b>833510</b>	Inlet Check Valve - Poly 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™ 350 60:1</b>					
1-2	250' (75 m)	4.4lb/min (2 kg/min)	3/8" NPT	3/8" 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 use of double post RAM on pg. 51. Contact Balcrank for product recommendations.



LYNX® SERIES

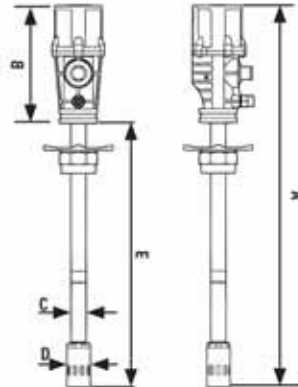


PANTHER® SERIES



LION™ SERIES

# Grease Piston Pumps LYNX® 55:1 Pumps



DIMENSIONS INCHES (MM)				
<b>1150-022</b>				
A	B	C	D	E
24.40" (620 mm)	8" (202 mm)	1" (26 mm)	1.56" (40 mm)	16.5" (418 mm)
<b>1150-023</b>				
36.62" (930 mm)	8" (202 mm)	1" (26 mm)	1.56" (40 mm)	28.65" (728 mm)
<b>1150-024</b>				
44.12" (1120 mm)	8" (202 mm)	1" (26 mm)	1.56" (40 mm)	36.14" (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. (.54 kg) 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

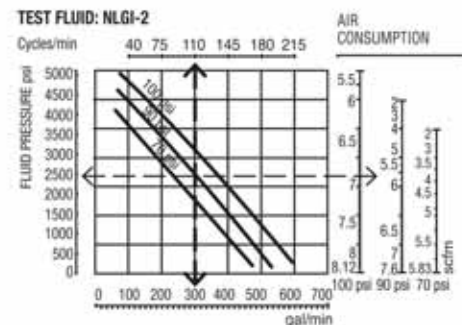
TECHNICAL DATA	
Pump ratio	55:1
Continuous duty free flow	7 lbs/min
Cycles per lb @ 100 psi (7 bar) free flow	318
Pump delivery, 100 psi (7 bar) air pressure and free flow	0.70 lb/min (0.32 kg/min)
Operating air pressure range	20-140 psi (1.5-10 bar)
Max fluid stall pressure @ 140 psi (10 bar) air	7,700 psi (550 bar)
Effective Air Piston Diameter	2.75" (70 mm)
Air motor stroke	1.5" (38 mm)
Air consumption 90 psi (6 bar) & 110 cycles per minute	5.8 SCFM
Air inlet	1/4" NPT(F)
Fluid outlet	1/4" NPT(F)
Wetted materials	Steel, Zinc, Aluminum, Buna-N®, PTFE (Teflon®)
Noise	92 dB
Service Bulletin	SB 1116

**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>	LYNX® 55:1 Grease 25-35 lbs
<b>1150-023</b>	LYNX® 55:1 Grease 120 lbs
<b>1150-024</b>	LYNX® 55:1 Grease 400 lbs





# Grease Piston Pumps LYNX® 55:1 Pump Packages



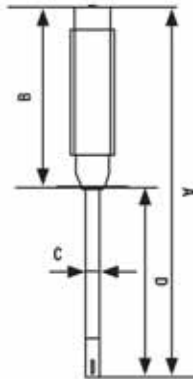
LYNX® 55:1 PACKAGES	25-35 LB STATIONARY 1151-034	120 LB PORTABLE 1151-035
BARE PUMP	1150-022	1150-023
BUNG ADAPTER	4411-023	4411-023
FLUID HOSE 10' X 3/8"	8331-010	8331-010
F/R AUTO DRAIN 1/4" NPT(F)	3260-033	3260-033
COMFORT GRIP GREASE HANDLE	3310-030	3310-030
DRUM COVER	4420-010 (1)	4420-011
FOLLOWER PLATE	4440-013	4440-014
CART	Optional	4320-012

(1) includes carrying handle



LYNX® 55:1 PACKAGES	400 LB PORTABLE 1151-036
BARE PUMP	1150-024
BUNG ADAPTER	4411-023
FLUID HOSE 10' X 3/8"	8331-010
F/R AUTO DRAIN 1/4" NPT(F)	3260-033
COMFORT GRIP GREASE HANDLE	3310-030
DRUM COVER	4420-015
FOLLOWER PLATE	4440-018
CART	4320-013

# Grease Piston Pumps Panther® HP 50:1 Pumps



DIMENSIONS INCHES (MM)			
1150-009			
A	B	C	D
36.75" (933 mm)	18.75" (476 mm)	1.25" (31.75 mm)	18" (457 mm)
1150-010			
46.75" (1187 mm)	18.75" (476 mm)	1.25" (31.75 mm)	28" (711 mm)
1150-011			
52.75" (1340 mm)	18.75" (476 mm)	1.25" (31.75 mm)	34" (864 mm)



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. (1.54 kg) per minute.

**Fluids**

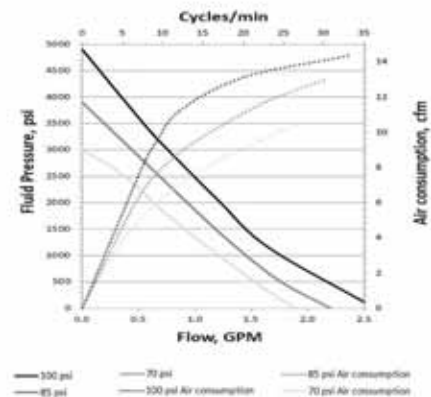
- Grease up to NLGI-2

**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
Continuous duty free flow	2 lb/min
Cycles per lb @ 100 psi (7 bar) free flow	70
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)
Operating air pressure range	40-150 psi (2.8-10 bar)
Max fluid stall pressure @ 150 psi (10 bar) air	7500 psi (517 bar)
Effective Air Piston Diameter	2 1/2" (63.5 mm)
Air motor stroke	3.25" (83 mm)
Air consumption 100 psi (7 bar) & 1.5 lb/min (.68 kg/min)	14.5 SCFM
Air inlet	1/4" NPT(F)
Fluid outlet	1/4" NPT(F)
Wetted materials	Stainless Steel, Carbon Steel, Brass, Aluminum, Delrin®, Ultrathane®, and Buna-N™
Noise	92 dB
Service Bulletin	SB 1063

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



NOTE: Pumping distance and pipe diameter will effect dispensing performance.  
**Warning!** Do not use any Pride 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.

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



PANTHER® HP 50:1 PACKAGES	25-35 LB STATIONARY 1151-003	120 LB PORTABLE 1151-005	400 LB STATIONARY 1151-006
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	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	-
AIR COUPLER 1/4"	3270-003	3270-003	3270-003
AIR NIPPLE 1/4"	3270-004	3270-004	3270-004

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










PANTHER® HP 50:1 MOBILE PACKAGES	120 LB 7120-015	400 LB 7120-016
BARE PUMP	1150-010	1150-011
FLUID HOSE	8331-010	8331-010
FLANGE MOUNT KIT	7120-026	7120-026
HOLD DOWN KIT	7120-025	7120-024
DRUM COVER	4420-014	4420-013
FOLLOWER PLATE	4440-008	4440-009

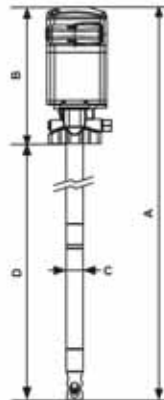
Note: Pump packages include all hoses and adapters required for connecting a grease pump to the air supply and dispense line.

# Grease Piston Pumps

## Panther® HP 50:1 Pump Components

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>4310-005</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>4310-003</b> Dolly, 16 gal/120 lb wide track <b>4310-004</b> Dolly, 55 gal/400 lb HD
		<b>3310-030</b> Comfort Grip Grease Handle	Carts		<b>4320-011</b> Drum cart: 35 lb grease, 2 wheels
		<b>3310-031</b> Comfort Grip Grease Handle with 18" Whip Hose and Z-swivel			<b>4320-012</b> Drum cart: 120 lb/16 gal grease, 2 rear wheels. Front stabilizing rubber pads.
		<b>3310-032</b> Comfort Grip Grease Handle with 36" Whip Hose and Z-swivel			<b>4320-013</b> 3 Wheel drum cart: 400 lb/55 gal
		<b>5310-024</b> Grease coupler 4-laws <b>4420-012</b> Holster, for grease gun			<b>4320-014</b> Drum cart: 400 lb/55gal heavy duty, 3 wheels with rear locking caster (to mount hose reel, use 2230-036 hose reel mount kit)
Drum Covers		<b>4420-008</b> 25-35 lb Pail Panther® HP 50:1	Hose reel mount kit		<b>2230-036</b> Hose reel mount kit for 4320-014 Heavy duty drum cart
		<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>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™ 350 60:1 Pumps



DIMENSIONS INCHES (MM)			
1450-013			
A	B	C	D
31.6" (803 mm)	11.25" (287 mm)	1.66" (35 mm)	20.3" (516 mm)
1450-012			
40" (1017 mm)	11.25" (287 mm)	1.66" (35 mm)	28.7" (730 mm)
1450-011			
42.7" (1,087 mm)	11.25" (287 mm)	1.66" (35 mm)	36.4" (925 mm)

TECHNICAL DATA	
Pump ratio	60:1
Cycles per lb/min @ 100 psi (7 bar) free flow	50
Operating air pressure range	20-145 psi (1.5-10 bar)
Max pump delivery	4.4 lb/min (2 kg/min)
Pump delivery with NLGI-2, 68° F (20° C), 70 psi (5 bar) air pressure and 80 cycles per minute	1.1 lbs/min (500 g/min)
Max fluid stall pressure	8,700 psi (600 bar)
Air inlet	3/8" NPT(F)
Fluid outlet	3/8" NPT(F)
Effective Air Piston Diameter	3.15" (80 mm)
Wetted materials	Cast iron, Hard chromed steel, Steel, UHMWPE, NBR, PTFE, Viton®
Service Bulletin	S8 1153

**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.

## Fluids & Applications

Designed for 35 lb, 120, and 400 lb. containers. Ideal for the users that need reliable grease delivery and medium length systems that have multiple dispense points. This Lion grease pump delivers up to 4.4 lb (2 kg) per minute.

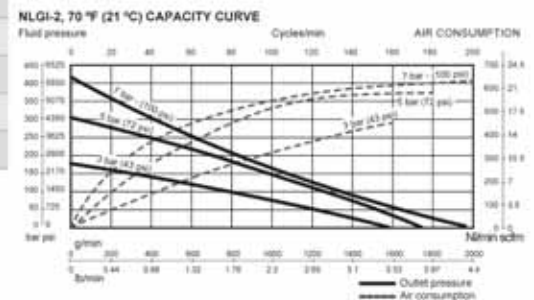
### Fluids

- Grease up to NLGI-2

### Applications

- Agriculture/farm implements
- Small auto/truck shops
- Tire & transmission shops
- In-plant medium volume use
- Mining and construction
- Truck fleets
- Railroad/Mass transit
- Lube trucks
- Marine

MODELS AVAILABLE	DESCRIPTION
1450-013	Lion™ 60:1 Grease 25-35 lbs
1450-012	Lion™ 60:1 Grease 120 lbs
1450-011	Lion™ 60:1 Grease 400 lbs



# Grease Piston Pumps

## Lion™ 350 60:1 Pump Packages

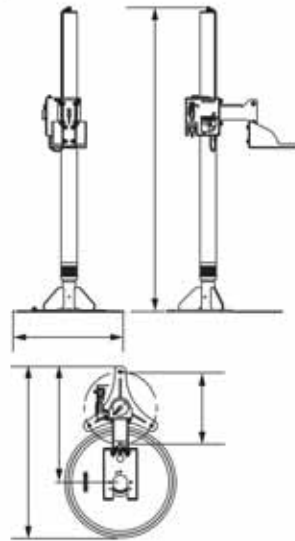


LION™ 350 60:1 PACKAGES	120 LB PORTABLE 1151-038	400 LB PORTABLE 1151-039	400 LB STATIONARY 1151-043
BARE PUMP	1450-012	1450-011	1450-011
FLUID HOSE	8321-016	8321-020	8333-010
AIR HOSE	-	-	8134-005
F/R AUTO DRAIN	3260-033	3260-035	3260-033
COMFORT GRIP GREASE HANDLE	3310-030	3310-030	-
DRUM COVER	4420-011	4420-015	4420-015
FOLLOWER PLATE	4440-014	4440-018	4440-018
COUPLER	3270-003	-	3270-120
NIPPLE	3270-004	-	3270-123
CART	-	4320-013	-
DOLLY	4310-001	-	-



LION™ 350 60:1 MOBILE PACKAGES	120 LB 1151-041	400 LB 1151-042
BARE PUMP	1450-012	1450-011
FLUID HOSE	8134-003	8134-003
HOLD DOWN KIT	7120-025	7120-024
DRUM COVER	4420-014	4420-013
FOLLOWER PLATE	4440-014	4420-018

# Grease Piston Pumps Lion™ 350 60:1 Inductor



DIMENSIONS INCHES (MM)				
A	B LOWERED/ RAISED	C	D	E
23.25" (588 mm)	58" (1470 mm) 94.5" (2400 mm)	35.75" (910 mm)	24.03" (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

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™ 350 60:1 grease pump is used with 120 and 400 lb drums. 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.

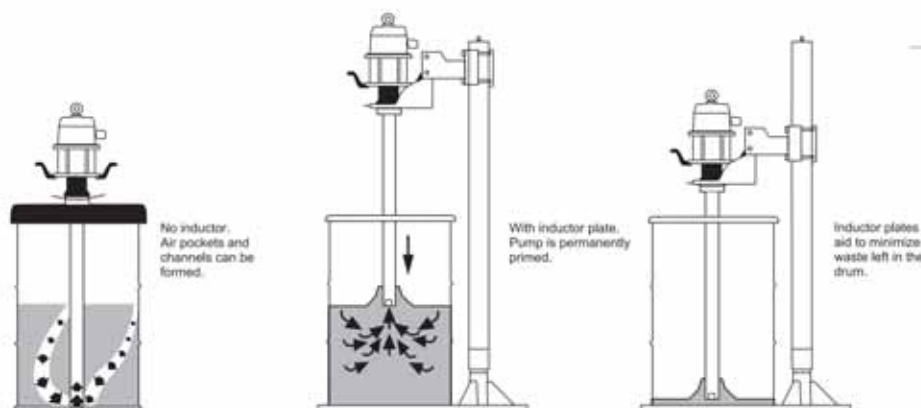
### Fluids

- Grease up to NLGI-2

### Applications



















- Agriculture/farm implements
- Small auto/truck shops
- In-plant medium volume use
- Truck fleets
- Lube trucks
- Marine

MODELS AVAILABLE	DESCRIPTION
1451-009	Package, Lion™ 350, 60:1 Inductor Includes: 1450-012 Lion™ 60:1 Grease 120 lbs 4450-003 Inductor, Gravity, Pump Lift & follower plate
1451-008	Lion™ 60:1 Grease 400 lbs Package, Lion™ 350, 60:1 Inductor Includes: 1450-011 Lion™ 60:1 Grease 400 lbs 4450-003 Inductor, Gravity, Pump Lift & follower plate
4450-005	Base plate for pump hoist & inductor



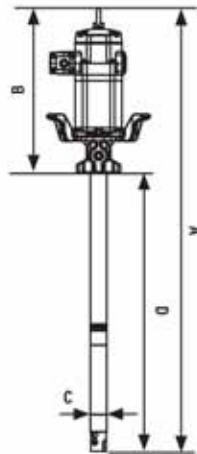
# Grease Piston Pumps

## Lion™ 350 60:1 Pump Components

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.	Connecting hose kit		<b>4410-030</b> Connecting Hose Kit for Lion™ Grease: 8144-055 LP Hose 5' x 1/2" 8343-010 HP Hose 10' x 1/2" 3270-001 Nipple 3/8" 3270-002 Coupler 3/8"
		<b>5310-018</b> Z-Swivel 1/4" NPT(F) x 1/4" NPT(M)	Dollies		<b>4310-005</b> Dolly Base, 5 gal/25 - 35 lb
		<b>3310-030</b> Comfort Grip Grease Handle			<b>4310-001</b> Band Dolly, 16 gal/120 lb
		<b>3310-031</b> Comfort Grip Grease Handle with 18" Whip Hose and Z-swivel			<b>4310-003</b> Dolly, 16 gal/120 lb wide track
		<b>3310-032</b> Comfort Grip Grease Handle with 36" Whip Hose and Z-swivel			<b>4310-004</b> Dolly, 55 gal/400 lb HD
	<b>5310-024</b> Grease coupler 4-Jaws			<b>4320-011</b> Drum cart: 35 lb grease, 2 wheels	
	<b>4420-012</b> Holster, for grease gun - mounts on pail cover 4420-010		<b>4320-012</b> Drum cart: 120 lb/16 gal grease, 2 rear wheels. Front stabilizing rubber pads.		
Drum Covers			<b>4420-010</b> 25-35 lb Pail Lion™ 350. Includes carry handle		<b>4320-013</b> 3 Wheel drum cart: 400 lb/55 gal
			<b>4420-011</b> 120 lb Lion™ 350		
			<b>4420-015</b> 400 lb for Lion™ 350		
Follower plates		<b>4440-013</b> 25-35 lb pail for Lion™ 350		<b>4320-014</b> Drum cart: 400 lb/55gal heavy duty, 3 wheels with rear locking caster (to mount hose reel, use 2230-036 hose reel mount kit)	
		<b>4440-014</b> 120 lb for Lion™ 350			
		<b>4440-018</b> 400 lb for Lion™ 350			
Filter / Regulator		<b>3260-035</b> filter/reg. auto drain 3/8"	Hose reel mount kit		<b>2230-036</b> Hose reel mount kit for 4320-014 Heavy duty drum cart
		See pg. 171 for complete listing			



# Grease Piston Pumps Lion™ 450 25:1 Pump



DIMENSIONS INCHES (MM)			
A	B	C	D
53.25" (1,357 mm)	19.75" (502 mm)	2" (50 mm)	33.5" (855 mm)

TECHNICAL DATA	
Pump ratio	25:1
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 fluid stall pressure	5,000 psi (350 bar)
Air motor effective diameter	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	SB 1139

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™ 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

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

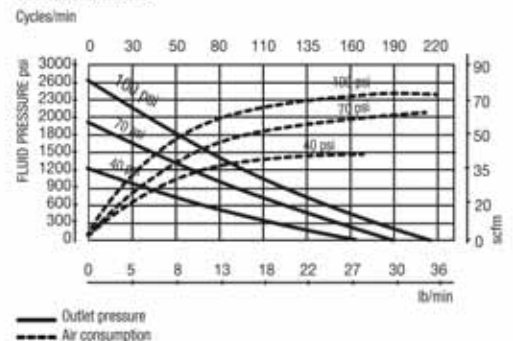
- Grease up to NLGI-2
- High viscosity oil

### Applications

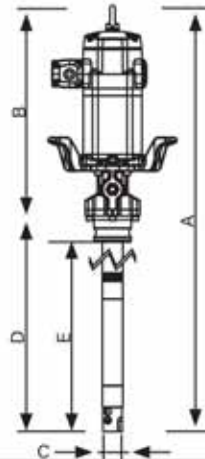
- Lube trucks bulk transfer
- Mining and construction; grease and oil transfer
- In-plant supply/maintenance

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

### TEST FLUID: NLGI-0



# Grease Piston Pumps Lion™ 450 40:1 Pumps



DIMENSIONS INCHES (MM)				
1450-002				
A	B	C	D	E
53.25" (1,357 mm)	19.75" (502 mm)	2" (50 mm)	33.5" (855 mm)	N/A
1450-003				
45.25" (1,152 mm)	19.75" (502 mm)	2" (50 mm)	25.5" (650 mm)	N/A
1450-004				
39" (992 mm)	19.75" (502 mm)	2" (50 mm)	19.25" (490 mm)	16.25" (410 mm)

TECHNICAL DATA	
Pump ratio	40:1
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 fluid stall pressure	8,000 psi (560 bar)
Air motor effective diameter	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 <sup>(2)</sup>	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™ 450/500-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 (see pg. 50 & 51).

### Fluids

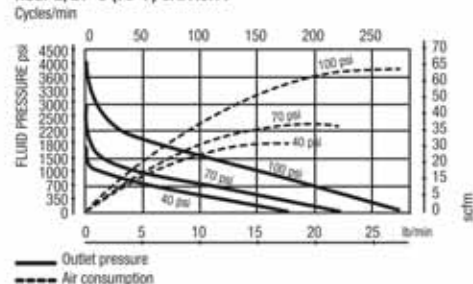
- Grease up to NLGI-2

### Applications

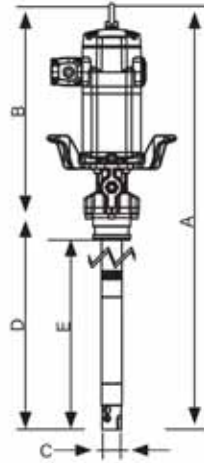
- HD truck grease dispensing needing simultaneous dispense points
- Truck fleets fifth wheel applications
- Lube trucks
- Railroad/mass transit
- In-plant medium volume usage
- Marine

MODELS AVAILABLE	DESCRIPTION
1450-003	Lion™ 450 40:1 grease 120 lb drum pump
1450-002	Lion™ 450 40:1 grease 400 lb drum pump
1450-004	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
53.25" (1,357 mm)	19.75" (502 mm)	2" (50 mm)	33.5" (855 mm)	N/A
1450-006				
45.25" (1,152 mm)	19.75" (502 mm)	2" (50 mm)	25.5" (650 mm)	N/A
1450-007				
39" (992 mm)	19.75" (502 mm)	2" (50 mm)	19.25" (490 mm)	16.25" (410 mm)

TECHNICAL DATA	
Pump ratio	70:1
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 <sup>(1)</sup>	30 - 100 psi (1.38 - 7 bar)
Maximum fluid stall pressure	7000 psi (490 bar)
Air motor effective diameter	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.  
 (3) 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.

## 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 (see pg. 50 & 51).

### Fluids

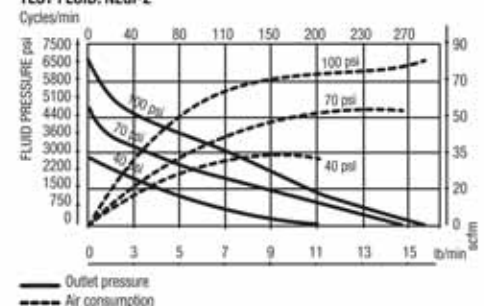
- Grease up to NLGI-2

### Applications

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

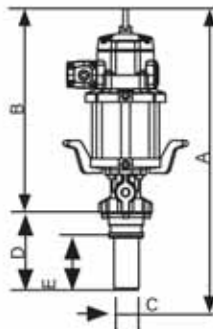
MODELS AVAILABLE	DESCRIPTION
1450-006	Lion™ 450 70:1 grease 120 lb drum pump
1450-005	Lion™ 450 70:1 grease 400 lb drum pump
1450-007	Lion™ 450 70:1 grease bulk tote pump

### 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)	2.75" (70 mm)	9" (226 mm)	5.75" (146 mm)

## 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" cam-lock for easy installation into grease totes.

### Fluids

- Grease up to NLGI-2

### Applications

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

TECHNICAL DATA	
Pump ratio	12:1
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 fluid stall pressure	1,200 psi (84 bar)
Air motor effective diameter	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.

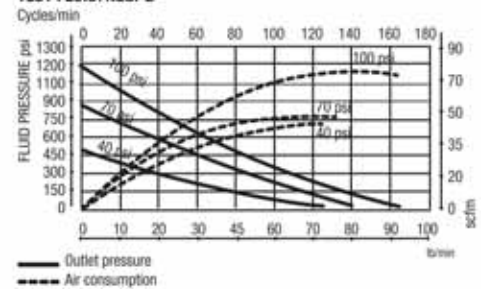
**Warning!** Do not use any Lion™ 450/600 series products with flammable fluids.

Verify fluid compatibility with MSDS sheets.

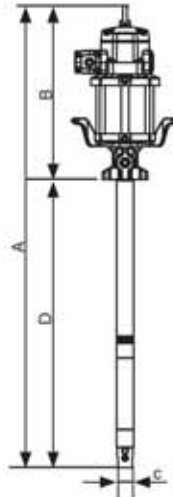
Contact Balcrank for pumping grease higher than NLGI-2 and specific system design performance technical data.

MODELS AVAILABLE	DESCRIPTION
1450-010	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
53.5" (1,371 mm)	20" (516 mm)	2" (50 mm)	33.5" (855 mm)
1450-009			
45.5" (1,166 mm)	20" (516 mm)	2" (50 mm)	25.5" (650 mm)

TECHNICAL DATA	
Pump ratio	80:1
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 <sup>(1)</sup>	30 - 100 psi (1.38 - 7 bar)
Maximum fluid stall pressure	8,000 psi (560 bar)
Air motor effective diameter	6" (150 mm)
Air motor stroke	4" (100 mm)
Air consumption <sup>(2)</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>(3)</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  
 (3) 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.

## 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 (see pg. 50 & 51). Similar to the Lion™ 450 70:1 pump but operates at lower cycle rates for severe environments

### Fluids

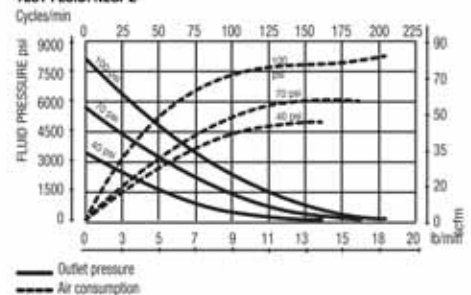
- Grease up to NLGI-2

### Applications

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

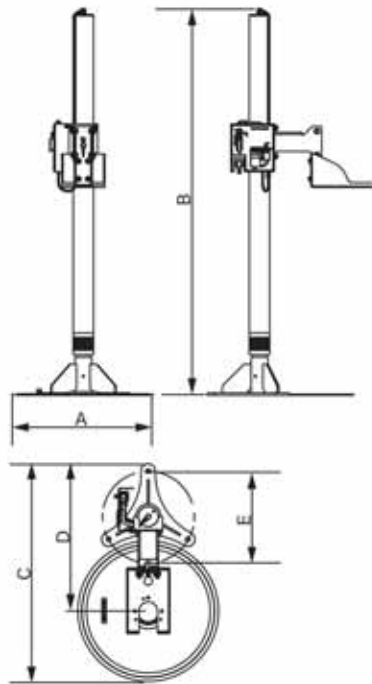
MODELS AVAILABLE	DESCRIPTION
1450-009	Lion™ 600 80:1 grease 120 lb drum pump
1450-008	Lion™ 600 80:1 grease 400 lb drum pump

### TEST FLUID: NLGI-2



# Grease Piston Pumps Lion™ Inductor

## Fluids & Applications



DIMENSIONS INCHES (MM)				
A	B LOWERED/ RAISED	C	D	E
23.25" (588 mm)	58" (1470 mm) 94.5" (2400 mm)	35.75" (910 mm)	24.03" (617 mm)	15" (381 mm)

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

- Grease NLGI-2

### Applications

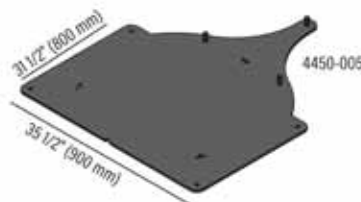
- High volume grease applications such as fifth wheel
- Medium/large volume vehicle maintenance shops
- Grease transfer
- In-plant grease supply

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	S8 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.

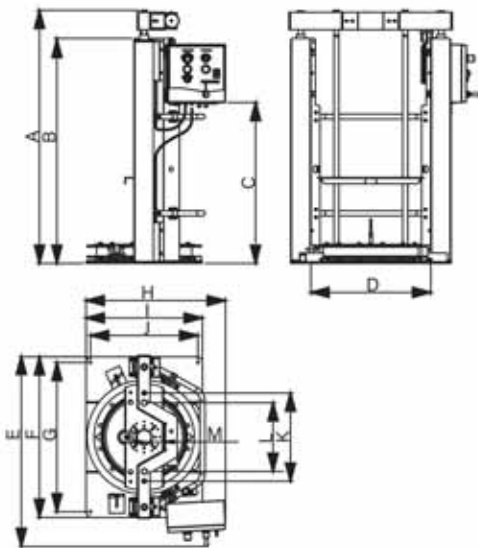


MODELS AVAILABLE	DESCRIPTION
<b>1451-004</b>	Package, Lion™ 450, 40:1 Inductor Includes: 1450-002 Lion™ 450, 40:1 pump 4450-003 Inductor, Gravity, Pump Lift & follower plate
<b>1451-005</b>	Package, Lion™ 450, 70:1 Inductor Includes: 1450-005 Lion™ 450, 70:1 pump 4450-003 Inductor, Gravity, Pump Lift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

# Grease Piston Pumps Lion™ Inductor, Double Post RAM



1451-001



MODELS AVAILABLE	DESCRIPTION
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 includes 3" Cam-lock for mounting pump to inductor plate
4450-004	Inductor, double post air operated
* When using this RAM with the 12:1, contact Balcrank customer service for additional needed components	
Service Bulletin	SB 4229

DIMENSIONS INCHES (MM)							
A LOWERED/ RAISED	B	C	D	E	F	G	H
52" (1,320 mm) 88" (2,230 mm)	45.5" (1,156 mm)	32.66" (830 mm)	24.5" (74 mm)	38.75" (554 mm)	32.66" (830 mm)	30.33" (771 mm)	28.33" (720 mm)
I	J	K	L	M			
23.66" (600 mm)	21.75" (554 mm)	18" (455 mm)	14" (355 mm)	4" (104 mm)			

## 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

- Grease NLGI-2
- Grease NLGI-3

### 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 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.

# Grease Piston Pumps Accessories

Drum cover 25-35 lb		<b>4420-010</b> 25-35 lb Pail LYNX® 55:1. Includes carry handle <b>4420-008</b> 25-35 lb Pail Panther® HP 50:1	Inlet screen mesh		<b>4430-004</b> Inlet Screen, 30-Mesh Panther® HP Grease Pump			
Holster		<b>4420-012</b> Holster, grease gun holder for LYNX® drum cover 4420-010	Grease handles		<b>3310-008</b> Pro Series Grease Handle <b>3310-010</b> Pro Series Grease Handle with Z-swivel <b>3310-025</b> Pro Series Grease Handle with 18" Whip Hose and Z-swivel <b>3310-020</b> Pro Series Grease Handle with 36" Whip Hose and Z-swivel <b>3310-007</b> Pro Series Booster Grease Handle <b>3310-009</b> Pro Series Booster Grease Handle with Z-swivel <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			
Drum cover 120 lb		<b>4420-011</b> 120 lb LYNX® 55:1 <b>4420-009</b> 120 lb Panther® HP 50:1 4420-014 Drum cover Lion™ 450/600 120 lb						
Drum cover 400 lb		<b>4420-007</b> 400 lb Off-Set <b>4420-015</b> 400 lb for LYNX® 55:1 <b>4420-004</b> 400 lb for Panther® 50:1 <b>4420-013</b> 400 lb for Lion™ 450/600 <b>4420-003</b> 400 lb for Lion™ HP 50:1 (Old Style)						
		Follower plate 25-35 lb				<b>4440-013</b> 25-35 lb pail for LYNX®/Lion™ <b>4440-007</b> 25-35 lb pail for Panther® HP 50:1	Other accessories	<b>8390-002</b> 18" Whip Hose HP <b>8390-003</b> 36" Whip Hose HP <b>8390-004</b> 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 <b>5310-018</b> Z-Swivel 1/4" NPT(F) x 1/4" NPT(M) <b>5200-017</b> Quick Lock grease coupler 1/8" NPT(F) <b>5310-024</b> Grease coupler 4-jaws <b>5400-003</b> Bearing Packer
		Follower plate 120 lb				<b>4440-014</b> 120 lb for LYNX®/ Lion™ <b>4440-008</b> 120 lb for Panther® HP 50:1 4440-017 120 lb for Lion™ 450/600		
		Follower plate 400 lb				<b>4440-018</b> 400 lb for LYNX®/ Lion™ <b>4440-009</b> 400 lb for Panther® HP 50:1 <b>4440-012</b> 400 lb for Lion™ HP (Old Style 50:1) <b>4440-015</b> , 400 lb for Lion™ 450/600		
Bung Adapters		<b>4411-023</b> Bung adapter, aluminum: LYNX® 55:1 <b>4411-021</b> Bung adapter, aluminum: Lion™ 450/600 25:1, 40:1, & 70:1			Hose		<b>8340-010</b> HP Hose 10'x1/2" <b>8340-020</b> HP Hose 20'x1/2"	
		Cam-lock				<b>4140-058</b> Male cam-lock 3" for Lion™ 450/600 for tote applications <b>4140-059</b> Female cam-lock 3" for Lion™ 450/600 for tote applications	Pump runaway control	
Filter regulator (F/R)		<b>3260-036</b> F/R auto drain 1/2" NPT(F) See pg. 171 for complete listing			Connecting hose kit		<b>4410-035</b> Connecting Hose Kit w/ Grease Handle 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" 3310-030 Grease Handle <b>4410-036</b> 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" <b>4410-030</b> Connecting Hose Kit for Lion™ Grease: 8144-005 LP Hose 5' x 1/2" 8340-010 HP Hose 10' x 1/2" 3270-001 Nipple 3/8" 3270-002 Coupler 3/8"	



## Grease Piston Pumps Accessories

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 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	Base plate		4450-002 Pump Lift, Air Operated for Lion™ 450/600
		4320-014 Drum cart: 400 lb/55gal heavy duty, 3 wheels with rear locking caster (to mount hose reel, use 2230-036 hose reel mount kit)			
Shut-off valve bleed type for air		3230-009 Shut-off valve, 3/8" NPT(F), 200 psi (13.7 bar)	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.
		3230-010 Shut-off valve, 1/2" NPT(F), 200 psi (13.7 bar)			
		3230-011 Shut-off valve, 3/4" NPT(F), 200 psi (13.7 bar)			
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)			

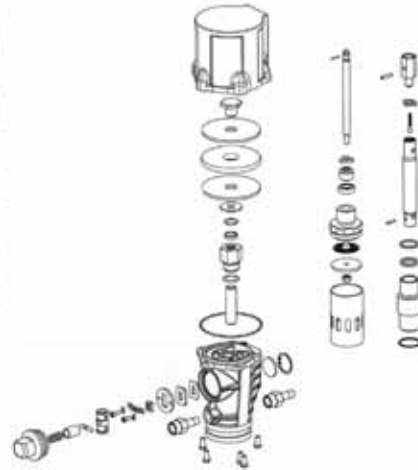
## Mobile Grease Packages



	7120-015 Panther™ HP 50:1	7120-016 PANTHER™ HP 50:1	1151-041 LION™ 350 60:1	1151-042 LION™ 350 60:1
Designed For Drum Size	120 lb / 16 gal	400 lb / 55 gal	120 lb	400 lb
Bare Pump	1150-010	1150-011	1450-012	1450-011
Air Hose	8132-005	8132-005	-	-
Fluid Hose	8331-010	8331-010	8134-003	8134-003
Follower Plate	4440-008	4440-009	4440-014	4420-018
Drum Cover	4420-014	4420-013	4420-014	4420-013
Flange Mount Kit	7120-026	7120-026	-	-
Hold Down Rod	7120-025	7120-024	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>	Inlet Check Valve - Poly Kit
1150-022, 1150-023, 1150-024	<b>833041</b>	HP Piston/cylinder & check valve
1150-022, 1150-023, 1150-024	<b>833059</b>	Inlet Filter Kit



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

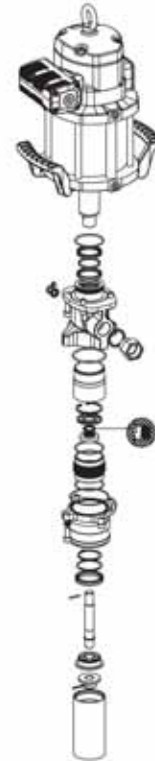


## Piston Pump Repair Kits for Grease

LION™ 350		
PUMP MODELS	KIT NUMBER	DESCRIPTION
<b>LION™ 60:1 SERIES PUMPS, 1450-013, 1450-012, 1450-011</b>		
1450-013, 1450-012, 1450-011	<b>833815</b>	Spool Kit
1450-013, 1450-012, 1450-011	<b>833812</b>	Lower seal kit
1450-013, 1450-012, 1450-011	<b>833874</b>	Lower valver kit
1450-013, 1450-012, 1450-011	<b>833875</b>	Upper valve kit
1450-013, 1450-012, 1450-011	<b>833813</b>	Air motor kit
1450-013, 1450-012, 1450-011	<b>833814</b>	Muffler kit



LION™ 450/600		
PUMP MODELS	KIT NUMBER	DESCRIPTION
<b>LION™ 450 SERIES PUMPS 25:1, 1450-001, 40:1 - 1450-002, 1450-003, 1450-004, 70:1 - 1450-005, 1450-006, 1450-007</b>		
<b>LION™ 600 SERIES PUMPS 12:1 - 1450-010, 80:1 - 1450-008, 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>	Inlet Check Valve - Poly 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>	Inlet Check Valve - Poly kit 70:1
1450-001	<b>833605</b>	Lower seals kit 25:1
1450-001	<b>833606</b>	Inlet Check Valve - Poly 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>833512</b>	Lower seals kit 12:1
1450-010	<b>833510</b>	Inlet Check Valve - Poly kit 12:1



## Diaphragm Pumps 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	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	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	Anti-freeze (Glycol) and windshield wash solution	Fluid dispensing and transfer
<b>CF15 POLYPROPYLENE/DEF</b>						
15 gal/min (50 l/min)	3/8" NPSM(F)	1/2" BSPP(F)	PTFE (Teflon)	Hytrel	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 and transfer
<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	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	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	Diesel exhaust fluid	Fluid dispensing and transfer
<b>CF30 ALUMINUM</b>						
28 gal/min (106 l/min)	3/8" NPSM(F)	1" NPT(F)	Hytrel	Buna-N™	Light viscosity fluids synthetic, mineral, oils, used oil, and diesel	Fluid dispensing and transfer
<b>CF50 POLYPROPYLENE/DEF</b>						
53 gal/min (200 l/min)	3/8" NPSM(F)	1" ANSI FLANGE	Acetal	Hytrel	Diesel exhaust fluid, Anti-freeze, (Glycol) and windshield wash solution	Fluid dispensing, transfer and evacuation
<b>CF50 ALUMINUM</b>						
53 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, transfer and evacuation



CF10 POLY

CF15 POLY

CF15 ALU

CF15 MIX

CF30 POLY

CF30 ALU

CF50 POLY

CF50 ALU

## Diaphragm Pumps Selection Matrix

MAX. FREE FLOW	AIR INLET	FLUID IN / OUT	WETTED PARTS		RECOMMENDED FLUID TYPES	RECOMMENDED APPLICATIONS
			CHECK BALLS	DIAPHRAGM		
<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 <sup>™</sup>	Buna-N <sup>™</sup>	Light viscosity fluids synthetic, mineral, oils, used oil, and diesel	Fluid dispensing, transfer, and evacuation
<b>TF170 ALUMINUM</b>						
170 gal/min (605 l/min)	3/4" NPSM(F)	2" NPT(F)	Hytrel <sup>®</sup>	Hytrel <sup>®</sup>	Light viscosity fluids synthetic, mineral, oils, used oil, and anti-freeze	Fluid dispensing, transfer, and evacuation
<b>CONVENTIONAL UL ALUMINUM</b>						
45 gal/min (170l/min)	1/2" NPT(F)	1" NPT(F)	Nitrile	Nitrile	Light viscosity fluids synthetic, mineral, oils, used oil, and diesel	Fluid dispensing, transfer, and evacuation
<b>ELECTRIC DIAPHRAGM</b>						
8.5 gal/min (32.18l/min)	-	1" BSPP(M)	-	Stainless Steel, Viton <sup>®</sup> , PPE	Anti-freeze (Glycol), windshield wash solution and DEF	Fluid dispensing, transfer, and evacuation
9.5 gal/min (34.07l/min)	-	1" BSPP(M)	-	Stainless Steel, Viton <sup>®</sup> , PPE	Anti-freeze (Glycol), windshield wash solution and DEF	Fluid dispensing, transfer, and evacuation



CF65 ALU



TF170 ALU

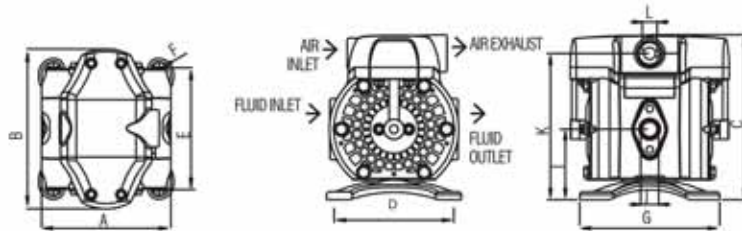


120 V AC  
ELECTRIC DIAPHRAGM



12 V DC  
ELECTRIC DIAPHRAGM

# 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	
	1120-029A	1120-034A
Air inlet	3/8" NPSM(F)	3/8" NPSM(F)
Fluid inlet port	1/2" NPT(F)	1/2" BSPP(F)
Fluid outlet port	1/2" NPT(F)	1/2" BSPP(F)
Max. free flow	10 gal/min (38 l/min)	10 gal/min (38 l/min)
Air pressure range	22 to 102 psi (1.5 to 7 bar)	22 to 102 psi (1.5 to 7 bar)
Solids in suspension	1/8" (3 mm)	1/8" (3 mm)
Wetted Materials	PTFE (Teflon), Viton, polypropylene, stainless steel, acetal, and Hytrel	PTFE (Teflon), Viton, polypropylene, stainless steel, acetal, and Hytrel
Recommended Fluids	Anti-freeze (Glycol) and windshield wash solution	Anti-freeze (Glycol) and windshield wash solution
Recommended Applications	Fluid dispensing, transfer, and DEF	Fluid dispensing, transfer, and DEF
Service Bulletin	SB 1145	SB 1145

\*\* 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 and dispensing, up to 10 gal/min. They can be used as stand-alone pumps for transfer applications.

### Fluids

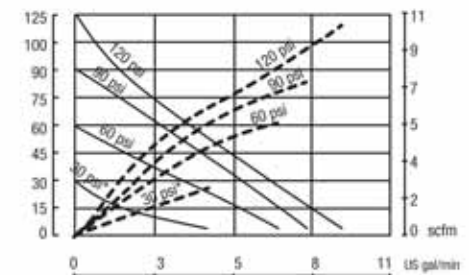
- Anti-freeze (Glycol)
- Windshield wash solution
- DEF

### Markets Served

- Car and truck dealers
- Tire shops
- In-plant transfer
- Quick lubes

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

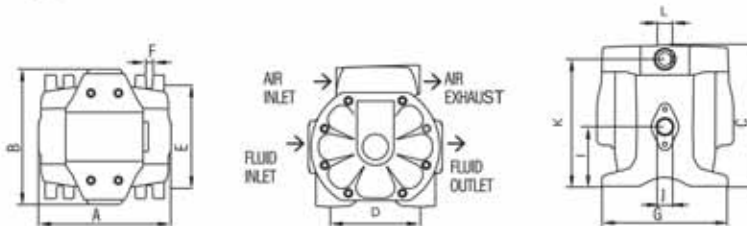
MODELS AVAILABLE	DESCRIPTION
1120-029A	CF10 Polypropylene
1120-034A	CF10 Polypropylene / DEF
3120-201	Pressure Relief for Diaphragm 1/2" NPT



FLUID PRESSURE psi  
 — Outlet pressure  
 - - - Air consumption

(\*) 2 bar test with a PTFE (Teflon) diaphragm 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			
	1120-023A	1120-025A	1120-027
Air inlet	3/8" NPSM(F)	3/8" NPSM(F)	3/8" NPSM(F)
Fluid inlet port	1/2" NPT(F) 1120-023A	1/2" BSPP(F)	1/2" NPT(F)
Fluid outlet port	1/2" NPT(F)	1/2" BSPP(F)	1/2" NPT(F)
Max. Free Flow	15 gal/min (50 l/min)	15 gal/min (50 l/min)	15 gal/min (50 l/min)
Air pressure range	22 to 102 psi (1.5 to 7 bar)	22 to 102 psi (1.5 to 7 bar)	22 to 102 psi (1.5 to 7 bar)
Solids in suspension	1/8" (3 mm)	1/8" (3 mm)	1/8" (3 mm)
Wetted Materials	PTFE (Teflon), Viton®, polypropylene, stainless steel, and Hytrel®	PTFE (Teflon), Viton®, polypropylene, stainless steel, and Hytrel®	Aluminum, PTFE, Viton®, polypropylene, Buna-N®, and stainless steel
Recommended fluids	Anti-freeze (Glycol) and windshield wash solution	Diesel exhaust fluid	Light viscosity fluids, synthetic, mineral oils, anti-freeze, and used oil
Recommended Applications	Fluid dispensing and transfer	Fluid dispensing and transfer	Fluid dispensing and transfer
Service Bulletin	SB 1145	SB 1145	SB 1145

\*\* 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 and dispensing 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

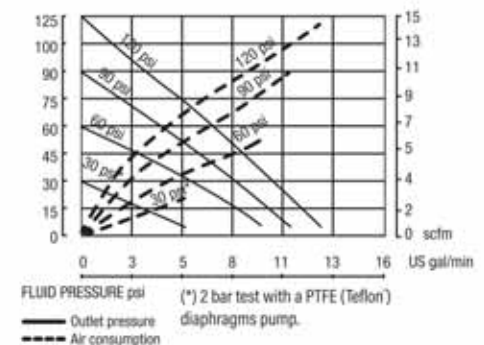
- Anti-freeze (Glycol)
- Light viscosity fluids
- Windshield wash solution
- Synthetic and mineral oils
- DEF
- Used oil & anti-freeze

### Markets Served

- Car and truck dealers
- Tire shops
- In-plant transfer
- Quick lubes

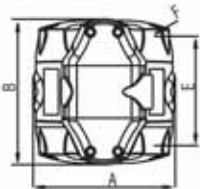
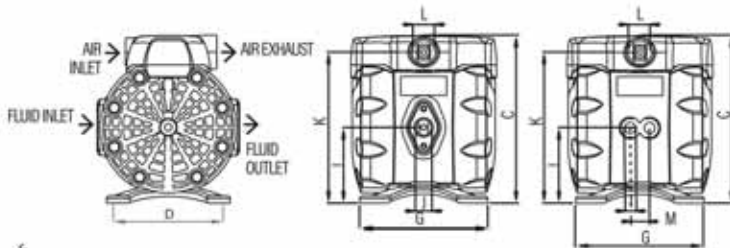
Pressure relief valve kit 3120-201 for this pump is recommended and not included.

MODELS AVAILABLE	DESCRIPTION
1120-023A	CF15 Polypropylene
1120-027	CF15 Aluminum
1120-025A	CF15 Polypropylene / DEF
3120-201	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	0.5" (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)

## 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

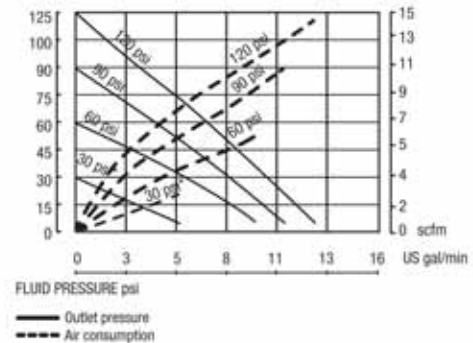
- Car and truck dealers
- Quick lubes

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

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	PTFE (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 1145

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

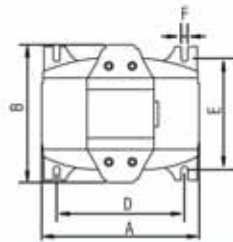
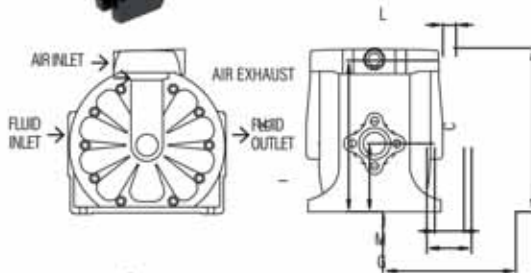
MODELS AVAILABLE	DESCRIPTION
1120-028A	CF15 Polypropylene Mixing
3120-201	Pressure Relief for Diaphragm 1/2" NPT



(\* ) 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	0.37"(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	0.37" (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		
	1120-026A	1120-031A	1120-040
Air inlet	3/8" NPSM(F)		
Fluid inlet port	1" NPT(F)	1" BSPP(F)	1" NPT(F)
Fluid outlet port	1" NPT(F)	1" BSPP(F)	1" NPT(F)
Max. free flow	28 gal/min (106 l/min)	28 gal/min (106 l/min)	28 gal/min (106 l/min)
Air pressure range	22 to 102 psi (1.5 to 7 bar)	22 to 102 psi (1.5 to 7 bar)	22 to 102 psi (1.5 to 7 bar)
Solids in suspension	3/16" (4 mm)	3/16" (4 mm)	3/16" (4 mm)
Wetted Materials	PTFE (Teflon <sup>®</sup> ), Viton <sup>®</sup> , polypropylene, stainless steel, and Hytrel <sup>®</sup>	PTFE (Teflon <sup>®</sup> ), Viton <sup>®</sup> , polypropylene, stainless steel, and Hytrel <sup>®</sup>	Aluminum, Acetal Teflon <sup>®</sup> , Buna-N, Hytrel <sup>®</sup> and stainless steel
Recommended fluids	Windshield wash solution	Diesel exhaust fluid	Light viscosity fluids, synthetic, mineral oils, and anti-freeze
Recommended applications	Fluid dispensing, transfer, and DEF	Fluid dispensing, transfer, and DEF	Fluid dispensing, transfer, and DEF
Service Bulletin	SB 1145	SB 1145	SB 1145

\*\* 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 and dispensing 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**

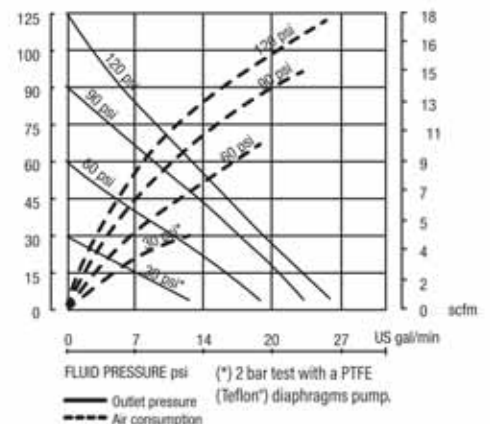
- Anti-freeze (Glycol)
- Light viscosity fluids
- Windshield wash solution
- Synthetic and mineral oils
- DEF
- Used Fluids

**Markets Served**

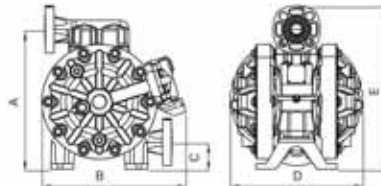
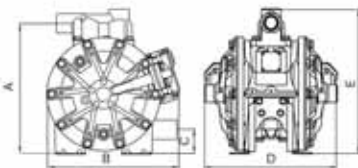
- Car and truck dealers
- In-plant transfer
- Lube trucks
- Quick lubes

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

MODELS AVAILABLE	DESCRIPTION
1120-026A	CF30 Polypropylene
1120-040	CF30 Aluminum
1120-031A	CF30 Polypropylene/DEF
3120-201	Pressure Relief for Diaphragm 1/2" NPT



# AODD CenterFlo CF50



DIMENSIONS INCHES (MM)				
A	B	C	D	E
11"	11"	2"	11"	12.13"
(278)	(280)	(52)	(281)	(308)

DIMENSIONS INCHES (MM)				
A	B	C	D	E
12.25"	12.59"	2.33"	11.66"	14.33"
(311)	(320)	(60)	(295)	(364)

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

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

## 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 53 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

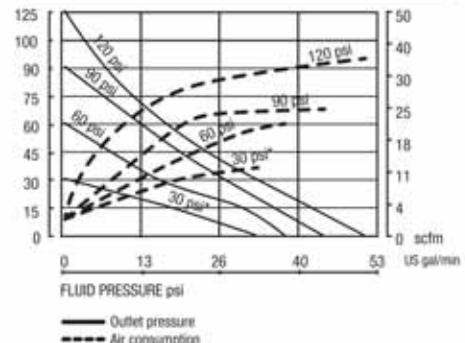
### Markets served

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

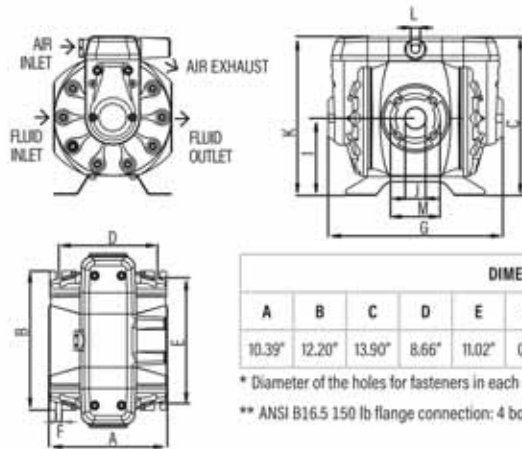
Pressure relief valve kit 3120-202 for this pump is recommended and not included.

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

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



# 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"	1.5" (F)	12.87"	0.5" (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

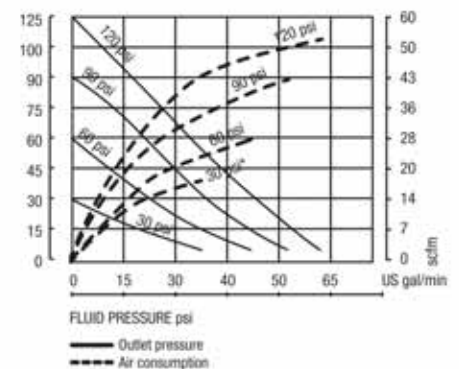
- Anti-freeze (Glycol)
- Light viscosity fluids
- Windshield wash solution
- Synthetic and mineral oil
- Used oil and anti-freeze

### Markets Served

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

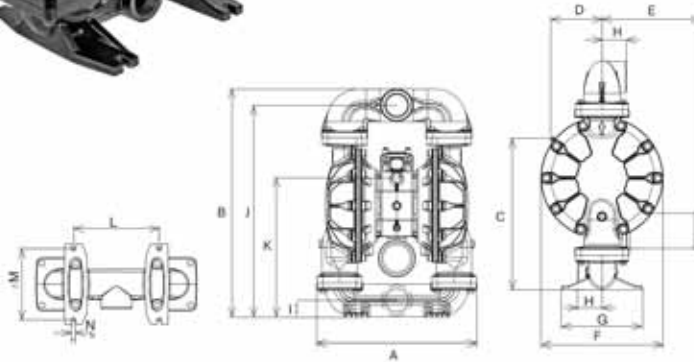
Pressure relief valve kit 3120-202 for this pump is recommended and not included.

MODELS AVAILABLE	DESCRIPTION
1120-033	CF65 Diaphragm Pump
1120-039	CF65 Diaphragm Pump Buna-N*
3120-202	Pressure Relief for Diaphragm 1" NPT



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

# AODD TF170 Universal Pump Design



DIMENSIONS INCHES													
1120-041													
A	B	C	D	E	F	G	H	I	J	K	L	M	N
18.3"	26.5"	18.9"	7.3"	13.9"	13.4"	10"	2.4"	1.9"	24.8"	12.3"	10.7"	9.7"	0.6"

TECHNICAL DATA	
1120-041	
Air inlet	3/4" NPT(F)
Fluid inlet port	2" NPT(F)
Fluid outlet port	2" NPT(F)
Max. free flow	170 gal/min (650 l/min)
Air pressure range	20-120 psi (1.5-8 bar)
Solids in suspension	1/4" (6.4 mm)
Wetted Materials	Aluminum, Hytrel®, Viton®
Recommended Fluids	Anti-freeze (Glycol), windshield wash solution, lubricants, waste oil, waste fluid, used fluid and anti-freeze, hydraulic oil
Recommended Applications	Very large volume transfer, de-waxing and fluid evacuation
Service Bulletin	SB 1206

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

## Fluids & Applications

TraditionalFlo pump is designed to handle a wide range of fluids in very large volume transfer and fluid evacuation applications.

Balcrank's TraditionalFlo 170 pump transfers fluid up to 170 gal/min. Combining conventional flow design with pivoting air valve for increased delivery and reliable performance.

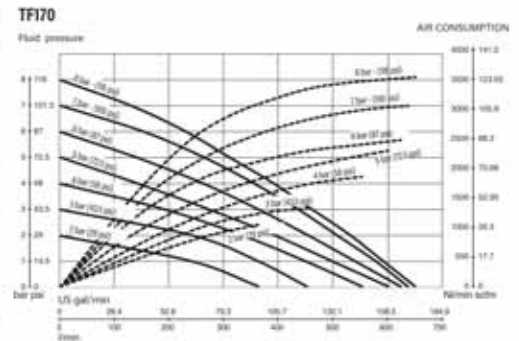
### Fluids

- Anti-freeze (Glycol)
- Windshield wash solution
- Used oil
- Synthetic and mineral oil

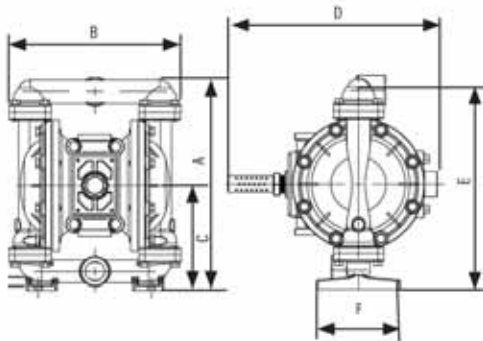
### Markets Served

- Mining and construction
- Railroad and mass transit vehicles
- In-plant transfer
- Agriculture/Farm implement
- Lube trucks

MODELS AVAILABLE	DESCRIPTION
1120-041	TF170 Aluminum



# AODD 1" UL Aluminum 45 gal/min



DIMENSIONS INCHES					
A	B	C	D	E	F
12.72"	10.25"	6.22"	12.5"	11.84"	5"

TECHNICAL DATA	
Air inlet	1/2" NPT(F)
Fluid inlet port	1" NPT(F)
Fluid outlet port	1" NPT(F)
Max. free flow	45 gal/min (170 l/min)
Air pressure range	45-100 psi (3-6.8 bar)
Solids in suspension	1/4" (6 mm)
Wetted Materials	Nitrile, neoprene, PTFE, polypropylene and polyethylene
Recommended fluids	Light viscosity fluids synthetic, mineral oils, and Diesel Fuel
Recommended applications	Fluid dispensing, transfer, and evacuation.
Service Bulletin	SB 1113

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

## Fluids & Applications

This 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.

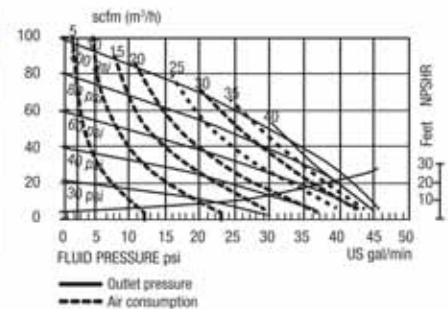
### Fluids

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

### Markets Served

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

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



# AODD Electric Pumps



1200-020



1200-021

## Fluids & Applications

Electric diaphragm pump is designed for simple and efficient transfer of anti-freeze, windshield wash solution and diesel exhaust fluid (DEF). Accommodates any system.

**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 transfer
- Lube trucks
- Quick lubes

TECHNICAL DATA		
	1200-020	1200-021
Fluid inlet port	1" BSPP(M)	1" BSPP(M)
Fluid outlet port	1" BSPP(M)	1" BSPP(M)
Flow Rate	8.5 gal/min (32.18 l/min)	9.5 gal/min (34.07 l/min)
Working Pressure	23 psi (1.6 bar)	23 psi (1.6 bar)
Power	120 V AC, UL approved	12 V DC, UL approved
Wetted Materials	Stainless Steel, Viton, PPE	Stainless Steel, Viton, PPE
Service Bulletin	SB 1129	SB 1130

MODELS AVAILABLE	DESCRIPTION
1200-020	120 V AC Diaphragm pump, UL auto shut-off
1200-021	12 V DC Diaphragm pump, UL auto shut-off

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

## AODD Dispense Packages for Anti-freeze

### CF15 Series Wall-Mount Package

Wall mount pumping system for anti-freeze (Glycol) designed for the CF15 series



#### 1121-028 CF15 WALL-MOUNT PACKAGE FOR ANTI-FREEZE

##### INCLUDES

<b>1120-027</b>	Aluminum CF15 Diaphragm Pump
<b>8134-005</b>	LP Hose Assembly 5' x 3/8"
<b>3260-035</b>	F/R Auto Drain 3/8" NPT(F)
<b>3120-201</b>	Pressure Relief Kit 1/2" NPT
<b>8249-005</b>	MP Hose Assembly 5' x 1/2"
<b>4412-019</b>	CenterFlo AODD PVC Suction Tube Kit 1/2"
<b>4411-025</b>	Mounting Bracket for AODD Pumps

### CF50 Series Wall-Mount Package

Wall mount pumping system for anti-freeze (Glycol) designed for the CF50 series



#### 1121-029 CF50 WALL-MOUNT PACKAGE FOR ANTI-FREEZE

##### INCLUDES

<b>1120-037</b>	Aluminum CF50 Diaphragm Pump
<b>8134-005</b>	LP Hose Assembly 5' x 3/8"
<b>3260-035</b>	F/R Auto Drain 3/8" NPT(F)
<b>3120-202</b>	Pressure Relief Kit 1" NPT
<b>8264-005</b>	MP Suction Rated Hose Assembly 5' x 3/4" NPT(M)
<b>4412-053</b>	CenterFlo AODD PVC Suction Tube Kit 1"
<b>4411-036</b>	Mounting Bracket for CF50 AODD Pumps

### CF15 Series 55 Gal Cart Package

For anti-freeze and windshield wash solution



#### 1121-030

##### INCLUDES

<b>1120-027</b>	Aluminum CF15 Diaphragm Pump
<b>8570-006</b>	Suction Hose with Hose Clamps 6' x 3/4"
<b>3260-060</b>	F/R Auto Drain 1/4" NPT(F)
<b>8141-030</b>	LP Hose Assembly 30' x 1/2"
<b>4530-054</b>	Drip Tray
<b>4530-065</b>	Side Mount Bracket
<b>4520-013</b>	3 wheel drum cart, 400 lb/55 gal
<b>3330-157</b>	DR Handle, Rigid 1/4" turn for oil

# AODD Dispense Packages for Windshield Washer Solution

## CF15 Series Wall-Mount Package

Wall mount pumping system for windshield washer solution, designed for the CF15 series



## CF50 Series Wall-Mount Package

Wall mount pumping system for windshield washer solution designed for the CF50 series



1121-015 CF15 WALL-MOUNT PACKAGE FOR 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)
3120-201	Pressure Relief Kit 1/2" NPT
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

1121-027 CF50 WALL-MOUNT PACKAGE FOR WINDSHIELD WASH SOLUTIONS	
INCLUDES	
1120-038	Polypropylene CF50 Diaphragm Pump
8134-005	LP Hose Assembly 5' x 3/8"
3260-035	F/R Auto Drain 3/8" NPT(F)
3120-202	Pressure Relief Kit 1" NPT
8264-005	Qty 2 - MP Suction Rated Hose Assembly 5' x 3/4" NPT(M)
833677	PVC Suction Pipe 1"
4411-036	Mounting Bracket for AODD Pumps

## CF30 Series Wall-Mount Kit














Does not include pump.



4410-063	
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

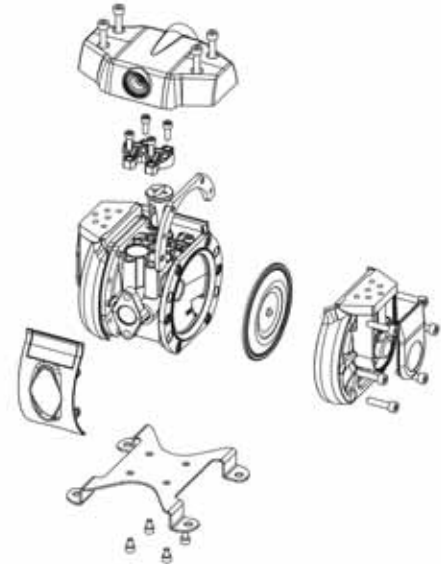


# AODD Pump Accessories

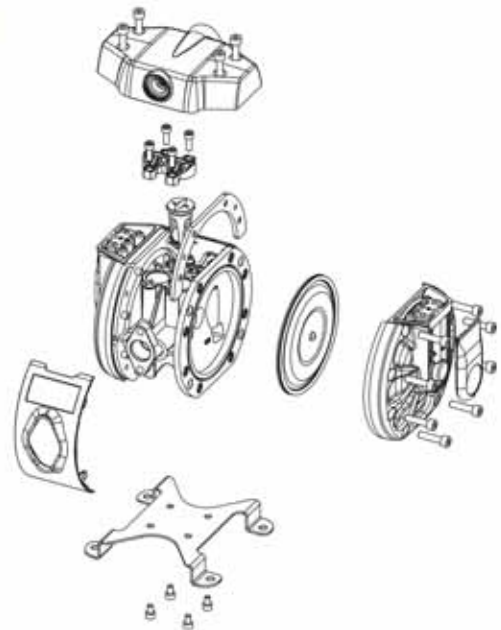
Y-STRAINER - 580 PSI (40 BAR) <small>All strainers have 40 mesh</small>		PRESSURE RELIEF KITS			
Y-Strainer		3120-211 1/2" NPT(F)	 Pressure Relief Kits 3120-201 Pressure Relief for Diaphragm 1/2" NPT 250 psi (17.2 bar) Includes: Valve, Tube 3' x 1/4" and 1/2" nipple  3120-202 Pressure Relief for Diaphragm 1" NPT 150 psi (10.3 bar) Includes: Valve, Tube 3' x 1/4" and 1" nipple		
		3120-212 3/4" NPT(F)			
		3120-213 1" NPT(F)			
SUCTION LINE-STRAINER - 150 PSI (10 BAR) <small>All strainers have 20 mesh</small>		SUCTION TUBES			
Suction Line-Strainer		 Suction Tubes	4412-044 1" NPT(M) x 18" - 30" 16 gal drum 4412-046 1" NPT(M) x 26" - 30" 55 gal drum 4412-045 1" NPT(M) x 21" - 30" 165/280 gal bench tank 4412-048 1" NPT(M) x 30" - 30" 165/280 gal bench tank double tap 4412-047 1" NPT(M) x 28" - 30" 250 gal bench tank double tap 4412-051 1" NPT(M) x 42" - 30" 275/330 gal horizontal obround double tap 4412-052 1" NPT(M) x 60" - 30" 330 gal vertical obround 4412-049 1" NPT(M) x 32" - 30" 275 gal tote 4412-050 1" NPT(M) x 39" - 30" 330 gal tote		
Dry Break Coupler & Nipple Rated <small>For vacuum or up to 3,000 psi (207 bar)</small>			4140-016 Coupler 3/4" NPT(F)		
			4140-050 Coupler 1" NPT(F)		
		4140-023 Nipple 3/4" NPT(F)			
		4140-051 Nipple 1" NPT(F)			
CAM-LOCK COUPLER & NIPPLE RATED <small>For 250 psi (17 bar)</small>		SUCTION TUBE KITS			
Cam-Lock Coupler & Nipple	        	4140-044 Coupler 3/4" NPT(F)	PVC Suction Kits for Anti-freeze  4412-019 CenterFlo AODD PVC Suction Tube Kit 1/2" 4412-053 CenterFlo AODD PVC Suction Tube Kit 1"		
		4140-017 Coupler 1" NPT(F)			
		4140-054 Nipple 3/4" NPT(F)	BRACKETS		
		4140-055 Nipple 1" NPT(F)	Wall-mount bracket 	4411-016 Wall Mount Bracket for conventional diaphragm pumps	
		4140-045 Nipple 3/4" NPT(M)		4411-025 Wall Mount Bracket for CF10, 15, & 30 diaphragm pumps	
		4140-018 Nipple 1" NPT(M)		4411-036 Mounting Bracket for CF50 AODD Pumps	
				VALVES	
				Ball valve fully ported no bleed 	3230-018 Ball valve, 1/4", 580 psi (40 bar)
					3230-019 Ball valve, 3/8", 580 psi (40 bar)
					3230-020 Ball valve, 1/2", 580 psi (40 bar)
3230-021 Ball valve, 3/4", 580 psi (40 bar)					
3230-022 Ball valve, 1", 580 psi (40 bar)					
		Shut-off valve bleed type for air 	3230-009 Shut-off valve, 3/8" NPT(F), 200 psi (13.7 bar)		
			3230-010 Shut-off valve, 1/2" NPT(F), 200 psi (13.7 bar)		
			3230-011 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, 1120-034A</b>		
1120-029A, 1120-034A	<b>833732</b>	Air valve kit
1120-029A, 1120-034A	<b>833207</b>	Stroke sensor kit
1120-029A, 1120-034A	<b>833208</b>	Check Ball kit
1120-029A	<b>833735</b>	Ball Seats, O-rings, ball guides
1120-029A, 1120-034A	<b>833209</b>	Ball Seats, O-rings, ball guides
1120-029A, 1120-034A	<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, 1120-034A	<b>833336</b>	Bushing, seal, push rod (After to 2/1/2013)

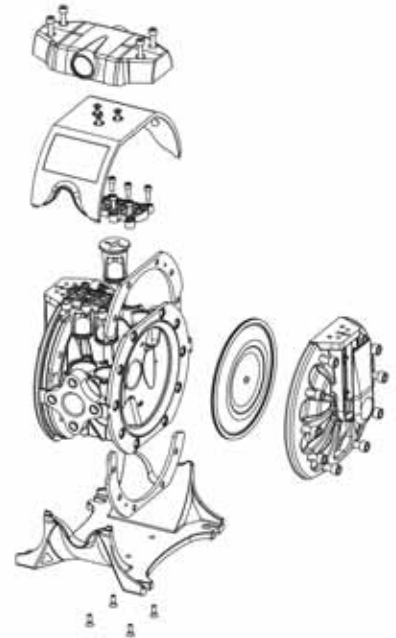


CF15		
PUMP MODELS	KIT NUMBER	DESCRIPTION
<b>CF15 AODD PUMPS - 1120-023A, 1120-025A, 1120-027, 1120-028A</b>		
1120-023A, 1120-025A, 1120-027, 1120-028A	<b>833732</b>	Air valve kit
1120-023A, 1120-025A, 1120-027, 1120-028A	<b>833207</b>	Stroke sensor kit
1120-023A, 1120-025A	<b>833208</b>	Check Ball kit
1120-027, 1120-028A	<b>833236</b>	Check Ball kit
1120-023A, 1120-025A, 1120-028A	<b>833735</b>	Ball Seats, O-rings, ball guides
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>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)

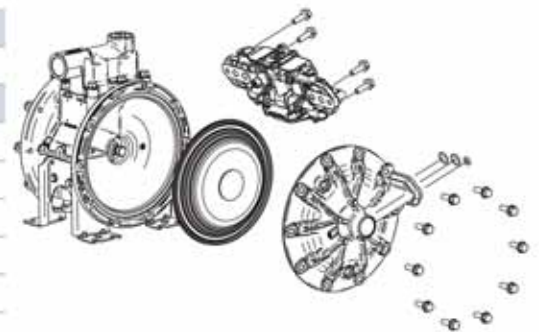


## AODD Pumps Repair Kits (CenterFlo)

CF30		
PUMP MODELS	KIT NUMBER	DESCRIPTION
<b>CF30 AODD PUMPS 1120-024, 1120-026A, 1120-031A, 1120-040</b>		
1120-040, 1120-024, 1120-026A, 1120-031A	<b>833212</b>	Air valve kit
1120-040, 1120-024, 1120-026A, 1120-031A	<b>833207</b>	Stroke sensor kit
1120-026A, 1120-031A	<b>833233</b>	Check Ball kit
1120-040, 1120-024	<b>833213</b>	Check Ball kit
1120-026A, 1120-031A	<b>833234</b>	Ball Seats, O-rings, ball guides
1120-040, 1120-024	<b>833214</b>	Ball Seats, O-rings, ball guides
1120-026A, 1120-031A	<b>833335</b>	Bushing, seal, push rod (After to 2/1/2013)
1120-040, 1120-024	<b>833334</b>	Bushing, seal, push rod (After to 2/1/2013)
1120-040, 1120-024, 1120-026A, 1120-031A	<b>833339</b>	Diaphragms kit (After to 2/1/2013)
1120-040, 1120-024, 1120-026A, 1120-031A	<b>833342</b>	Retrofit Kit (Updates pumps prior to 2/1/2013)

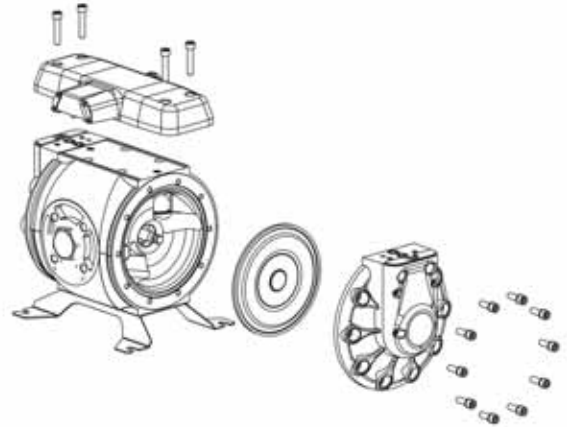


CF50		
PUMP MODELS	KIT NUMBER	DESCRIPTION
<b>CF50 AODD PUMPS 1120-037, 1120-038</b>		
1120-037	<b>833692</b>	Air Valve Kit
1120-038	<b>833693</b>	Stroke sensor kit
1120-037	<b>833698</b>	Bushing, seal, push rod (Acetal/Buna-N/SS)
1120-038	<b>833699</b>	Bushing, seal, push rod (PTFE/Viton/SS)
1120-037	<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)

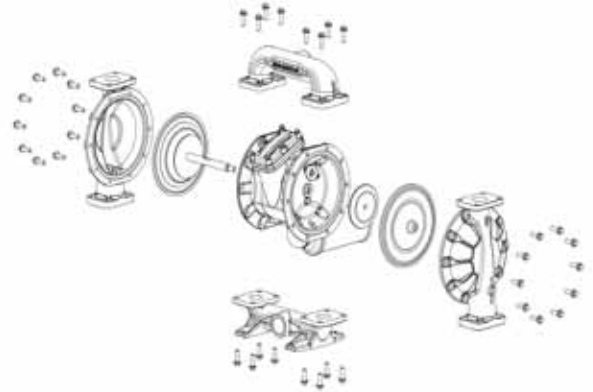


## AODD Pumps Repair Kits (CenterFlo and TraditionalFlo)

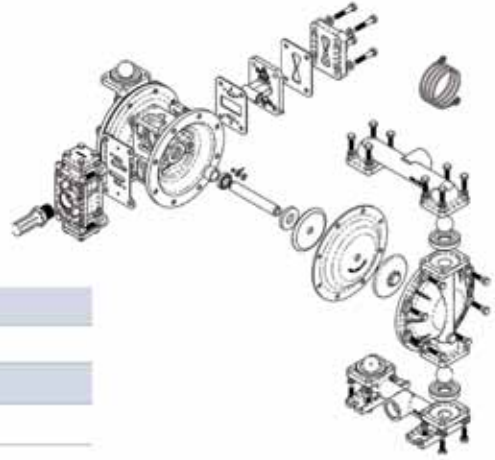
CF65		
PUMP MODELS	KIT NUMBER	DESCRIPTION
<b>CF65 AODD PUMPS - 1120-033, 1120-039</b>		
1120-033	<b>833431</b>	Air valve kit
1120-033	<b>833432</b>	Stroke sensor kit
1120-033	<b>833433</b>	Check Ball kit
1120-033	<b>833434</b>	Ball Seats, O-rings, ball guides
1120-033	<b>833435</b>	Bushing, seal, push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



TRADITIONALFLO TF170 AODD PUMPS		
PUMP MODELS	KIT NUMBER	DESCRIPTION
<b>1120-041</b>		
1120-041	<b>833886</b>	Air valve kit
1120-041	<b>833888</b>	Air sensors
1120-041	<b>833889</b>	Air motor, central body
1120-041	<b>833890</b>	Air motor, lateral body
1120-041	<b>833891</b>	Air exhaust
1120-041	<b>833892</b>	Push rod
1120-041	<b>833893</b>	Diaphragm Cover
1120-041	<b>833894</b>	Inlet manifold
1120-041	<b>833895</b>	Outlet manifold
1120-041	<b>833896</b>	Kit, Ball seat, Hytrel
1120-041	<b>833897</b>	Kit, Ball, Hytrel
1120-041	<b>833898</b>	Kit, Diaphragm kit, Hytrel



## AODD Pumps Repair Kits (TraditionalFlo and Conventional)



CONVENTIONAL AODD PUMP		
PUMP MODELS	KIT NUMBER	DESCRIPTION
ALUMINUM AODD PUMPS - 1120-015S		
1120-015S	832973	Air seal kit
1120-015S	832973	Air assembly kit
1120-015S	832974	Fluid seal kit





# **Balcrank**

Fluid Dispensing Systems

## **Balcrank Corporation**

90 Monticello Road  
Weaverville, NC 28787, USA  
Tel.: (800) 747-5300 or (828) 645-4261  
Fax: (800) 763-0840 or (828) 658-0840  
info@balcrank.com  
www.balcrank.com  
www.shopbalcrank.com

## **Customer Support**

Tel.: (800) 747-5300 or (828) 645-4261  
(Monday to Friday, 8:00 AM - 5:00 PM ET)

- Order entry
- Product availability and information
- Pricing
- Shipping dates and delivery information
- Return Merchandise Authorization

## **Technical Support**

Tel.: (800) 747-5300 or (828) 645-4261  
(Monday to Friday, 8:00 AM - 5:00 PM ET)

- Repair advice
- Product application recommendations
- Warranty claims and returns
- Service bulletins

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Fax: (800) 763-0840 or (828) 658-0840

- Fax orders day or night
- Order confirmed next business day by fax or e-mail

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