

Reciprocating Piston Pump Description

- 1.1. All reciprocating piston pumps will be designed to stand free of the bottom of the container to allow an unobstructed flow of product to the pumping tube.
- 1.2. All reciprocating piston pumps will be of self-priming design.
- 1.3. Pumps designated for use in bulk supply tanks will be equipped with a low fluid shut-off device to prevent free cycling of the pump in the event the fluid supply is exhausted.
- 1.4. All reciprocating piston pumps will have an air motor design with no metal-to-metal seals to prevent air leakage in the stalled condition.
- 1.5. The air motor cylinder will be of Aluminum construction to prevent corrosion in the presence of a contaminated air supply.
- 1.6. All reciprocating piston pumps will be of the T-slot design, for even wear distribution and minimal repair costs.
- 1.7. All reciprocating piston pumps will have mechanical style air motor valve design.
- 1.8. All reciprocating piston pumps will be equipped with mufflers to meet or exceed OSHA recommendations for noise generation.
- 1.9. All reciprocating piston pumps will be double acting to provide continuous even flow, pressure, and maximum utilization of the compressed air supply.
- 1.10. All reciprocating piston pumps will have self-lubricating fluid seals constructed of Ultrathane®.
- 1.11. All reciprocating piston pumps will have case hardened seats and ball checks for maximum service life and resistance to damage from contaminated product.
- 1.12. All reciprocating piston pumps will be individually factory tested and verified for proper function.
- 1.13. All reciprocating piston pumps will have a divorced design: allowing the air motor assembly to be field serviced independently from the fluid piston assembly.

Reciprocating Piston Pump LION 450/600 Oil Description

- 1.1. All reciprocating piston pumps will have anti-corrosive, hardened pump rod and in-line configuration that aligns the axis of the air motor with the pump rod and piston assembly.
- 1.2. All reciprocating piston pumps are designed for low-friction, to minimize wear, and maximize life.
- 1.3. All reciprocating piston pumps will have a double-valve, stub pump tube used for positive priming and pumping of all grades of oil.
- 1.4. All reciprocating piston pumps will have an aluminum die-cast air motor with hard anodized aluminum cylinder.
- 1.5. All reciprocating piston pumps will have a lightweight aluminum drive piston.
- 1.6. All reciprocating piston pumps will have a high tensile hard-chrome plated steel on the fluid piston rod.
- 1.7. All reciprocating piston pumps will have cast iron outlet body and thick-wall polished steel tube.
- 1.8. All reciprocating piston pumps will have a fluid piston and inlet valves made of hardened steel with polyurethane piston packings on all oil pumps.

Oil Piston Pumps

Product Selection Matrix

	MAX. LINE LENGTH	MAX. FREE FLOW	FLUID INLET	FLUID OUTLET	RECOMMENDED FLUID TYPES
LYNX® 1:1					
	Up to 100' (30 m)*	10.6 gal/min (40 l/min)*	1" NPT(F)	3/4" NPT(F)	Petroleum Based Oils, Synthetic Oils
LYNX® 1:1 STAINLESS STEEL					
	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
LYNX® 3:1					
	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
LYNX® 5:1 HD					
	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
PANTHER® 3:1					
	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
PANTHER® 5:1					
	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
TIGER® 6:1					
	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, Anti-freeze (Glycol), and Windshield Wash Fluids
LION™ 350 5:1					
	500' (152 m)*	8 gal/min (30 l/min)	1 1/2" NPT(F)	1/2" NPT(F)	Synthetic and Mineral Based Oils, Hydraulic Oil, Gear Oil, Transmission Fluid
LION™ 450 3:1					
	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
LION™ 450 6:1					
	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
LION™ 450 10:1					
	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
LION™ 600 6:1					
	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
LION™ 600 12:1					
	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.

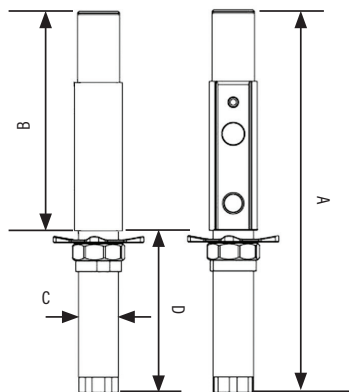
Synthetic and Mineral Based Fluid
Hydraulic Fluid
Transmission Fluid
Anti-freeze
Windshield Wash

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, taper pumps and medium to light viscosity oils pumping short distances.

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.



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) ⁽¹⁾	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 Fluid outlet 1160-008	3/4" NPT(F) 3/4" NPT(F)
Wetted materials 1110-010 & 1110-009	Steel, Brass, Aluminum, Buna-N™, and Polyurethane
1160-008	Stainless Steel, Viton®, and PTFE
Service Bulletin 1110-010, 1110-009 Service Bulletin 1160-008	SB 1102 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.

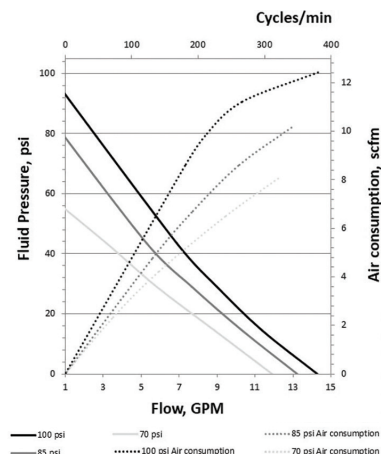
(1) Ensure that all hose fittings and piping are rated for fluid outlet pressures. Balcrank recommends a minimum of 3x safety factor.

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.

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 - 1:1 Stainless Steel Pump

LYNX 1:1 Pump Description

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. 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, taper pumps and medium to light viscosity oils pumping short distances.

LYNX 1:1 Models Available

- | | | |
|--------------------------|-----------------|--|
| <input type="checkbox"/> | 1110-010 | 1:1 Bare carbon Steel stub pump with bung adapter |
| <input type="checkbox"/> | 1110-009 | 1:1 Bare carbon Steel drum pump with bung adapter |
| <input type="checkbox"/> | 1160-008 | 1:1 Bare stainless Steel drum pump with bung adapter |

LYNX 1:1 Pump Specifications

- 3.1. Pump will have a 1:1 ratio
- 3.2. Pump will have an air inlet port of 1/4" NPT (F)
- 3.3. Pump will have a fluid inlet (stub only) port of 1" NPT (F)
- 3.4. Pump will have a fluid outlet port of 3/4" NPT (F) for 1110-010, 1110-009 & 3/4" NPT (M) for 1160-008
- 3.5. Pump will have a free flow of 10.6 gal/min (40 l/min) based on 150 psi (10 bar) air pressure for 1110-010 & 1100-009
- 3.6. Pump will have a free flow of 8.2 gal/min (30 l/min) based on 150 psi (10 bar) air pressure for 1160-008
- 3.7. Pump will have an operating air pressure of 45 -150 psi (3 -10 bar)
- 3.8. Pump will have a maximum fluid stall pressure of 145 psi (10 bar)
- 3.9. Pump will have a 1.375" (35 mm) effective diameter displacement air motor valve-in-piston design
- 3.10. Pump will have an air consumption of 3.50 scfm based on 100 psi (7 bar) & 3 gal/min (11 l/min)

Materials

The wetted materials will consist of:

- 4.1. 1110-010 & 1110-009 Steel, Brass, Aluminum, Buna-N™, and Polyurethane
- 4.2. 1160-008 Stainless Steel, Viton, and PTFE

Warranty

- 5.1. The LYNX 1:1 pump will have a 1-year standard warranty on defects in materials and workmanship only.

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.

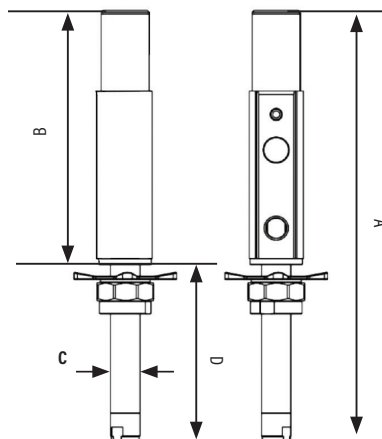
Synthetic and Mineral Based Lubricants Hydraulic Fluid Transmission Fluid

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.

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.



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) ⁽¹⁾	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.

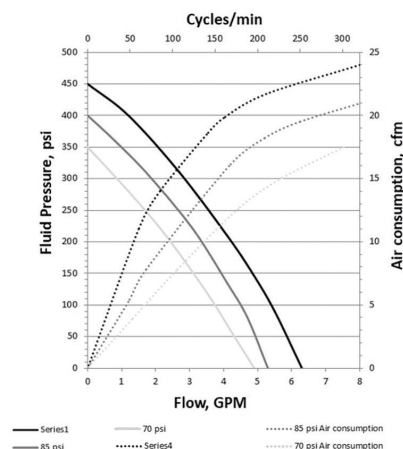
(1) Ensure that all hose fittings and piping are rated for fluid outlet pressures. Balcrank recommends a minimum of 3x safety factor.

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

Verify fluid compatibility with MSDS sheets.

Contact Balcrank for specific system design performance and technical data.

MODELS AVAILABLE	DESCRIPTION
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

LYNX 3:1 Pump Description

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

LYNX 3:1 Models Available

- ☐ **1110-007** 3:1 Bare carbon Steel stub pump with bung adapter

LYNX 3:1 Pump Specifications

- 3.1. Pump will have a 3:1 ratio
- 3.2. Pump will have an air inlet port of 1/4" NPT (F)
- 3.3. Pump will have a fluid inlet port of 3/4" NPT(F)
- 3.4. Pump will have a fluid outlet port of 3/4" NPT(F)
- 3.5. Pump will have a free flow of 6.6 gal/min (25 l/min) based on 150 psi (10 bar) air pressure
- 3.6. Pump will have an operating air pressure of 45 -150 psi (3 -10 bar)
- 3.7. Pump will have a maximum fluid stall pressure of 725 psi (50 bar)
- 3.8. Pump will have a 1.375" (35 mm) effective diameter displacement air motor valve-in-piston design
- 3.9. Pump will not exceed 98 cycles per gallon
- 3.10. Pump will have an air consumption of 18.80 scfm based on 100 psi (7 bar) & 3 gal/min (11 l/min)

Materials

- 4.0. The wetted materials will consist of Buna-N™, Steel, Brass, Aluminum, and Polyurethane

Warranty

- 5.1. The LYNX 3:1 pump will have a 1-year standard warranty on defects in materials and workmanship only.

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.

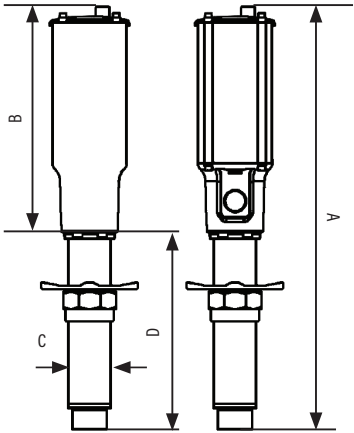
Synthetic and Mineral Based Lubricants Hydraulic Fluid Transmission Fluid Gear Oil

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.

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.



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) ⁽¹⁾	725 psi (50 bar)
Effective Air Piston Diameter	3" (80 mm)
Free flow pump delivery with SAE 10W30 oil, 68° F (20° C), 150 psi (10 bar) air pressure	24 gal/min (90.85 l/min)
Air inlet	1/4" NPT(F)
Fluid inlet	1" NPT(F)
Fluid outlet	3/4" NPT(F)
Wetted materials	Aluminum, Buna-N™, Zamak, Steel, and Polyurethane
Service Bulletin	SB 1128

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

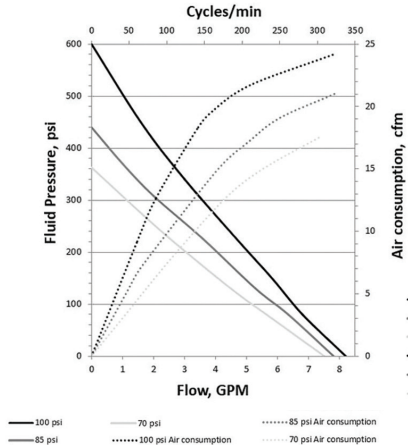
(1) Ensure that all hose fittings and piping are rated for fluid outlet pressures. Balcrank recommends a minimum of 3x safety factor.

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

Verify fluid compatibility with MSDS sheets.

Contact Balcrank for specific system design performance and technical data.

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



Oil Piston Pumps

LYNX® 5:1 HD Pump

Panther® HP 3:1 Pump Description

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

Panther® HP 3:1 Models Available

- | | | |
|--------------------------|-----------------|---|
| <input type="checkbox"/> | 1130-015 | 3:1 Bare carbon Steel stub pump |
| <input type="checkbox"/> | 1130-017 | 3:1 Bare carbon Steel stub pump, flange mount |
| <input type="checkbox"/> | 1130-020 | 3:1 Bare carbon Steel pump with bung adapter |

Panther® HP 3:1 Pump Specifications

- 3.1. Pump will have a 3:1 ratio
- 3.2. Pump will have a 2.5" (63.5 mm) effective diameter displacement air motor valve-in-piston design
- 3.3. Pump will have an air inlet port of 1/4" NPT (F)
- 3.4. Pump will have a fluid inlet port of 1" NPT (F) and 1 1/2" NPT (M)
- 3.5. Pump will have a fluid outlet port of 3/4" NPT (F)
- 3.6. Pump will have a free flow of 8 gal/m (30 l/m) based on 100 psi (7 bar)
- 3.7. Pump will have an operating air pressure of 10-150 psi (.7-10 bar)
- 3.8. Pump will have an air consumption pressure at 100 psi (7 bar) & 4 gal/m (15 l/m) of 19.70 SCFM
- 3.9. Pump will have a maximum fluid stall pressure of 490 psi (33.7 bar)
- 3.10. Pump will not exceed 34 cycles per gallon

Materials

- 4.1. Steel, Nickel Plated Steel, Stainless Steel, Aluminum, Ultrathane, Buna-N™, and Nylon.

Warranty

- 5.1. The Panther® HP 3:1 pump will have a 1-year standard warranty on defects in materials and workmanship only.

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.

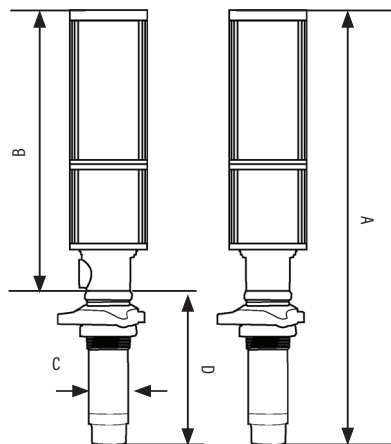
Synthetic and Mineral Based Lubricants Hydraulic Fluid Transmission Fluid

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.

Applications

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

Pressure relief valve kit included with this pump.



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)

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) ⁽¹⁾	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 [®] , and Nylon
Service Bulletin	SB 1064

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

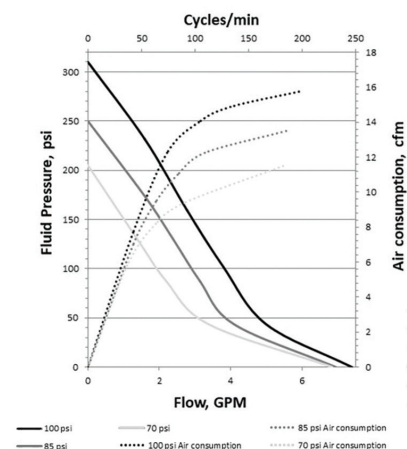
(1) Ensure that all hose fittings and piping are rated for fluid outlet pressures. Balcrank recommends a minimum of 3x safety factor.

Warning! Do not use any 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 Pumps

Panther® HP 3:1 Pump Description

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

Panther® HP 3:1 Models Available

- | | | |
|--------------------------|-----------------|---|
| <input type="checkbox"/> | 1130-015 | 3:1 Bare carbon Steel stub pump |
| <input type="checkbox"/> | 1130-017 | 3:1 Bare carbon Steel stub pump, flange mount |
| <input type="checkbox"/> | 1130-020 | 3:1 Bare carbon Steel pump with bung adapter |

Panther® HP 3:1 Pump Specifications

- 3.1. Pump will have a 3:1 ratio
- 3.2. Pump will have a 2.5" (63.5 mm) effective diameter displacement air motor valve-in-piston design
- 3.3. Pump will have an air inlet port of 1/4" NPT (F)
- 3.4. Pump will have a fluid inlet port of 1" NPT (F) and 1 1/2" NPT (M)
- 3.5. Pump will have a fluid outlet port of 3/4" NPT (F)
- 3.6. Pump will have a free flow of 8 gal/m (30 l/m) based on 100 psi (7 bar)
- 3.7. Pump will have an operating air pressure of 10-150 psi (.7-10 bar)
- 3.8. Pump will have an air consumption pressure at 100 psi (7 bar) & 4 gal/m (15 l/m) of 19.70 SCFM
- 3.9. Pump will have a maximum fluid stall pressure of 490 psi (33.7 bar)
- 3.10. Pump will not exceed 34 cycles per gallon

Materials

- 4.1. Steel, Nickel Plated Steel, Stainless Steel, Aluminum, Ultrathane, Buna-N™, and Nylon.

Warranty

- 5.1. The Panther® HP 3:1 pump will have a 1-year standard warranty on defects in materials and workmanship only.

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.

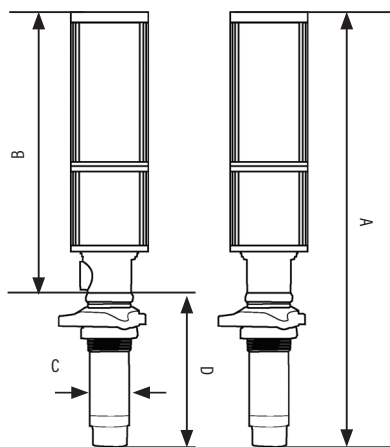
Synthetic and Mineral Based Lubricants Hydraulic Fluid Transmission Fluid Gear Oil

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.

Applications

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

Pressure relief valve kit included with this pump.



Dimensions inches (MM)			
1130-016 & 1130-021			
A	B	C	D
23.5" (593.9 mm)	14 3/8" (365 mm)	2 4/5" (63.5 mm)	6 1/2" (165.1 mm)
1130-018			
21 8/9" (555.6 mm)	14 3/8" (365 mm)	1 7/8" (47.6 mm)	7 1/2" (190.5 mm)

TECHNICAL DATA

Operating air pressure	10-150 psi (0.7-10 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) ⁽¹⁾	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.

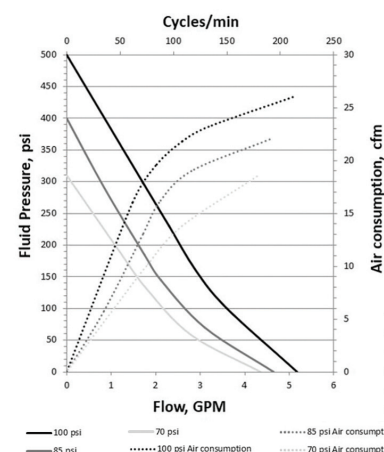
(1) Ensure that all hose fittings and piping are rated for fluid outlet pressures. Balcrank recommends a minimum of 3x safety factor.

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
1130-016	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 Pumps

Panther® HP 5:1 Pump Description

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

Panther® HP 5:1 Models Available

- ☐ **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

Panther® HP 5:1 Pump Specifications

- 3.1. Pump will have a 5:1 ratio
- 3.2. Pump will have a 2.5" (63.5 mm) effective diameter displacement air motor valve-in-piston design
- 3.3. Pump will have an air inlet port of 1/4" NPT (F)
- 3.4. Pump will have a fluid inlet port will of 1" NPT (F) and 1 1/2" NPT (M)
- 3.5. Pump will have a fluid outlet port of 1/2" NPT (F)
- 3.6. Pump will have a free flow of 6 gal/m (30 l/m) based on 100 psi (7 bar)
- 3.7. Pump will have an operating air pressure of 10-150 psi (.7-10 bar)
- 3.8. Pump will have an air consumption pressure at 100 psi (7 bar) & 3 gal/m (11 l/m) of 24.8 SCFM
- 3.9. Pump will have a maximum fluid stall pressure of 760 psi (52 bar)
- 3.10. Pump will not exceed 57 cycles per gallon

Materials

- 4.1. The wetted materials will consist of Steel, Nickel Plated Steel, Stainless Steel, Aluminum, Ultrathane, Buna-N™, and Nylon

Warranty

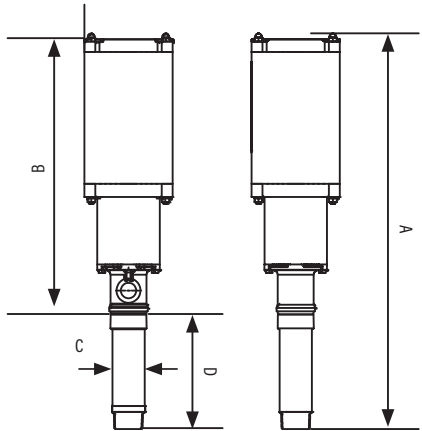
- 5.1. The Panther® HP 5:1 pump will have a 1-year standard warranty on defects in materials and workmanship only.

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.

Pumps Piston



Dimensions inches (MM)			
A	B	C	D
21 5/7" (544.5 mm)	16 1/4" (412.9 mm)	2 1/8" (54 mm)	4" (101.6 mm)

Synthetic and Mineral Based Lubricants Hydraulic Fluid Transmission Fluid Gear Oil

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.

Applications

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

Pressure relief valve kit included with this pump.

Windshield wash fluid & water based fluids for use with 1160-007 stainless steel model only.

TECHNICAL DATA	
Operating air pressure	40-150 psi (3-10 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) ⁽¹⁾	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	Carbon steel, Buna-N™, Stainless steel, Ultrathane® and Aluminum
1160-007	Stainless Steel and Viton®
Service Bulletin	SB 1065

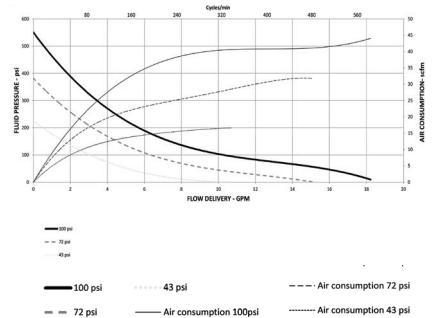
NOTE: Thermal expansion of the fluid in a distribution system can cause an increase in system pressure that can damage lubrication system components. Use pressure relief valve kit included with this pump.

(1) Ensure that all hose fittings and piping are rated for fluid outlet pressures. Balcrank recommends a minimum of 3x 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
1130-019	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 Pumps

Tiger® HP 6:1 Pump Description

The Tiger® HP 6:1 ratio double acting pump is engineered for outstanding performance and reliability to dispense lubricating oils and similar products up to SAE 90. Tiger® is the largest of the Pride series pumps. Pride series pumps are manufactured with a mechanical air valve and piston design which is more forgiving to environments with contaminated air.

The 6:1 version is a medium pressure pump for supplying higher pressures and longer pumping distances.

The larger 3.2" air motor makes this pump ideal for larger users who need higher flow rates and slower pump cycle rates.

Tiger® HP 6:1 Models Available

- ☐ **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

Tiger® HP 6:1 Pump Specifications

- 3.1. Pump will have a 6:1 ratio
- 3.2. Pump will have a 3.2" (81 mm) effective diameter displacement air motor valve-in-piston design
- 3.3. Pump will have an air inlet port will of 3/8" NPT (F)
- 3.4. Pump will have a fluid inlet port of 1" NPT (F) and 1 1/2" NPT (M)
- 3.5. Pump will have a fluid outlet port of 3/4" NPT (F)
- 3.6. Pump will have a free flow of 16 gal/m (61 l/m) based on 100 psi (7 bar)
- 3.7. Pump will have an operating air pressure of 40-150 psi (3-10 bar)
- 3.8. Pump will have an air consumption pressure at 100 psi (7 bar) & 8 gal/m (30 l/m) of 59 SCFM
- 3.9. Pump will have a maximum fluid stall pressure of 870 psi (60 bar)
- 3.10. Pump will not exceed 31 cycles per gallon

Materials

The wetted materials will consist of:

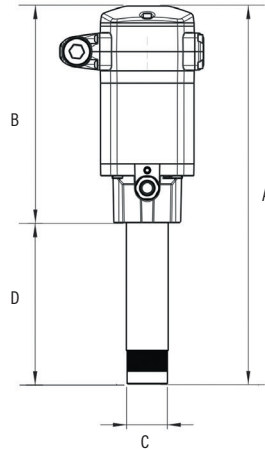
- 4.1. 1130-019, 1130-025 & 1130-026 Carbon Steel, Buna-N™, Stainless Steel, Aluminum, and Ultrathane®.
- 4.2. 1160-007 Stainless Steel and Viton®

Warranty

- 5.1. The Tiger® HP 6:1 pump will have a 1-year standard warranty on defects in materials and workmanship only.

Oil Piston Pumps

Lion™ 350 - 5:1 Pump



Dimensions inches (MM)			
1430-010			
A	B	C	D
18" (457 mm)	10" (254 mm)	1-1/2" NPT (F)	8" (200 mm)
1430-012			
47" (1194 mm)	39" (991 mm)	1-1/2" NPT (F)	36" (925 mm)

Synthetic and Mineral Based Oils Hydraulic Oil Gear Oil Transmission Fluid

Double-acting, air operated, medium pressure, heavy-duty pumps for dispensing lubricants in medium to large size installations, which may include simultaneous dispense points. Built in port for the included pressure relief valve kit. (3120-214)

Applications

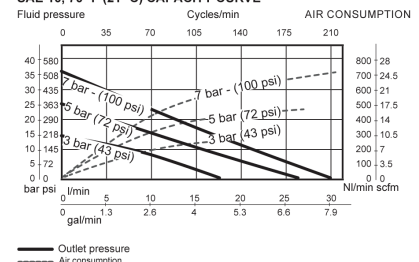
- Railroad and mass transit vehicle maintenance
- Fleet service facilities
- Marine
- Auto and truck dealerships
- Mining and construction
- Lube truck

Pressure relief valve kit included with this pump.

TECHNICAL DATA	
Pump ratio	5:1
Operating air pressure	30 to 175 psi (2 to 12 bar)
Air Consumption ⁽¹⁾	12.4 CFM (350 NI/min)
Maximum pressure	170 psi (12 bar)
Air motor effective diameter	3.25" (80 mm)
Air motor stroke	3.15" (80 mm)
Delivery at 80 cpm	3.2 gal/min at 100 psi (12 l/min at 5 bar)
Flow rate	8 gal/min (30 l/min)
Air inlet	3/8" NPT (F)
Fluid inlet (stub pump only)	1 1/2" NPT (F)
Fluid outlet	1/2" NPT (F)
Wetted materials	Steel, Hard Chromed Steel, Polyurethane, NBR, Aluminum
Service Bulletin	SB 1155

MODELS AVAILABLE	DESCRIPTION
1430-010	Lion™ 350 5:1 Stub Pump Bung
1430-012	Lion™ 350 5:1 Drum Pump

SAE 10, 70 °F (21 °C) CAPACITY CURVE



Oil Piston Pumps

Lion™ 350 - 5:1 Pump

Lion™ 350 - 5:1 Pump Description

Double-acting, air operated, medium pressure, heavy-duty pumps for dispensing lubricants in medium to large size installations, which may include simultaneous dispense points. Built in port for the included pressure relief valve kit. (3120-214)

Lion™ 350 - 5:1 Models Available

- ☐ **1430-010** Lion™ 350 5:1 Stub Pump Bung
- ☐ **1430-012** Lion™ 350 5:1 Drum Pump

Lion™ 350 - 5:1 Pump Specifications

- 3.1. Pump will have a 5:1 ratio
- 3.2. Pump will have a 3.25" (80 mm) effective diameter displacement air motor valve-in-piston design
- 3.3. Pump will have an air inlet port will of 3/8" NPT (F)
- 3.4. Pump will have a fluid inlet port of 1 1/2" NPT (F)
- 3.5. Pump will have a fluid outlet port of 1/2" NPT (F)
- 3.6. Pump will have a flow rate of 8 gal/min (30 l/min)
- 3.7. Pump will have an operating air pressure of 30 to 175 psi (2 to 12 bar)
- 3.8. Pump will have an air consumption of 12.4 CFM (350 NI/min)
- 3.9. Pump will have a maximum pressure of 170 psi 12 (bar)

Materials

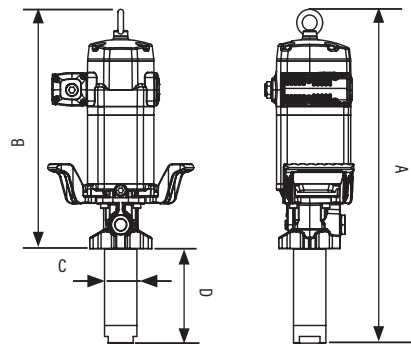
- 4.1. The wetted materials will consist of Steel, Hard Chromed Steel, Polyurethane, NBR, Aluminum

Warranty

- 5.1. The Lion™ 350 - 5:1 pump will have a 1-year standard warranty on defects in materials and workmanship only.

Oil Piston Pumps

Lion™ 450 - 3:1 Pump



Dimensions inches (MM)			
A	B	C	D
27 7/8" (707 mm)	19 7/8" (505 mm)	3 35/64" (90 mm)	8 1/32" (204 mm)

Synthetic and Mineral Based Lubricants Hydraulic Fluid Gear Oil Transmission Fluid

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

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. 32 for mounting bracket (4411-031).

TECHNICAL DATA

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

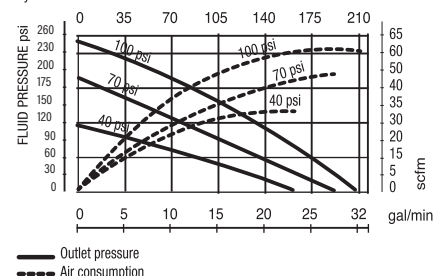
1430-001

DESCRIPTION

Lion™ 450 3:1 stub pump

TEST FLUID: SAE 10

Cycles/min.



Oil Piston Pumps

Lion™ 450 - 3:1 Pump

Lion™ 450 - 3:1 Pump Description

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

Wall or floor mount only. Pump OD does not fit 2" bung adapter.

Lion™ 450 - 3:1 Pump Models Available

- ❑ **1430-001** Lion™ 450 3:1 stub pump

Lion™ 450 - 3:1 Pump Specifications

- 3.1. Pump will have a 3:1 ratio
- 3.2. Pump will have a 4.5" (115 mm) effective diameter displacement air motor valve-in-piston design
- 3.3. Pump will have an air inlet port of 1/2" NPT (F)
- 3.4. Pump will have a fluid inlet port of 1 1/2" NPT (F)
- 3.5. Pump will have a fluid outlet port of 3/4" NPT (F)
- 3.6. Pump will have a free flow of 32 gal/min (120 l/min) based on 100 psi (7 bar)
- 3.7. Pump will have an operating air pressure of 30 to 180 psi (2 to 12.4 bar)
- 3.8. Pump will have an air consumption pressure at 100 psi (7 bar) & 28 cfm (800 NI/min)
- 3.9. Pump will not exceed 6 cycles per gallon
- 3.10. Pump will have a max fluid outlet pressure of 510 psi (36 bar)
- 3.11. Pump will have an air motor stroke of 4" (100 mm)
- 3.12. Pump will have a delivery of 12 gal/min (45 l/min) at 80 cpm

Materials

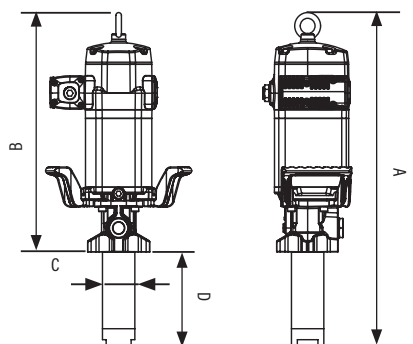
- 4.1. The wetted materials will consist of Steel, Hard Chromed Steel, Zinc Plated Steel, Stainless Steel, Cast Iron, Polyurethane, Buna-N™, Bronze Filled PTFE

Warranty

- 5.1. The Lion™ 450 3:1 pump will have a 1-year standard warranty on defects in materials and workmanship only.

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)

Synthetic and Mineral Based Lubricants Hydraulic Fluid Gear Oil Transmission Fluid

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.

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. 32 for mounting bracket (4411-031).

TECHNICAL DATA	
Operating air pressure	30 to 180 psi (2 to 12.4 bar)
Cycles per gallon	11
Air Consumption ⁽¹⁾	29 CFM (830 NL/min)
Max fluid outlet pressure ⁽³⁾	1,020 psi (72 bar)
Air motor effective diameter	4.5" (115 mm)
Air motor stroke	4" (100 mm)
Delivery at 80 cpm	7 gal/min (25 l/min)
Max free flow delivery	26 gal/min (98 l/min)
Air inlet	1/2" NPT(F)
Fluid inlet	1 1/2" NPT(F)
Fluid outlet	3/4" NPT(F)
Wetted materials	Cast Iron, Hard Chromed Steel, Steel, Polyurethane, Buna-N™, and Zinc
Noise level ⁽²⁾	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 3x 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.

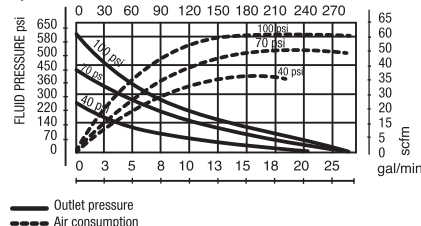
Verify fluid compatibility with MSDS sheets.

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 - 6:1 Pump

Lion™ 450 - 6:1 Pump Description

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.

Lion™ 450 - 6:1 Pump Models Available

- ❑ **1430-002** Lion™ 450 6:1 stub pump

Lion™ 450 - 6:1 Pump Specifications

- 3.1. Pump will have a 6:1 ratio
- 3.2. Pump will have a 4.5" (115 mm) effective diameter displacement air motor valve-in-piston design
- 3.3. Pump will have an air inlet port of 1/2" NPT (F)
- 3.4. Pump will have a fluid inlet port of 1 1/2" NPT (F)
- 3.5. Pump will have a fluid outlet port of 3/4" NPT (F)
- 3.6. Pump will have a free flow of 26 gal/min (98 l/min) based on 100 psi (7 bar)
- 3.7. Pump will have an operating air pressure of 30 to 180 psi (2 to 12.4 bar)
- 3.8. Pump will have an air consumption pressure at 75 psi (5 bar) & 29 cfm (830 NI/min)
- 3.9. Pump will not exceed 11 cycles per gallon
- 3.10. Pump will have a max fluid outlet pressure of 1,020 psi (72 bar)
- 3.11. Pump will have an air motor stroke of 4" (100 mm)
- 3.12. Pump will have a delivery rate of 7 gal/min (25 l/min) at 80 cpm

Materials

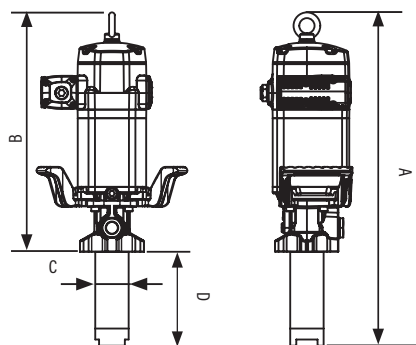
- 4.1. The wetted materials will consist of Cast Iron, Hard Chromed Steel, Steel, Polyurethane, Buna-N™ and Zinc

Warranty

- 5.1. The Lion 450 6:1 pump will have a 1-year standard warranty on defects in materials and workmanship only.

Oil Piston Pumps

Lion™ 450 - 10:1 Pumps



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

Synthetic and Mineral Based Lubricants Hydraulic Fluid Gear Oil Transmission Fluid

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.

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

TECHNICAL DATA	
Operating air pressure	30 to 180 psi (2 to 12.4 bar)
Cycles per gallon	19
Air Consumption ⁽¹⁾	30 CFM (850 NI/min)
Max fluid outlet pressure ⁽³⁾	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 ⁽²⁾	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 3x 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.

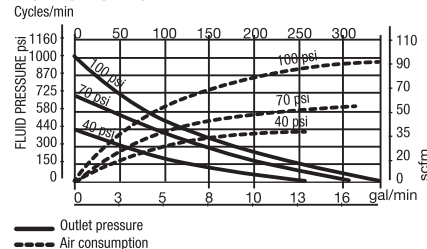
Warning! Do not use any Lion™ 450/600 series products with flammable fluids.

Verify fluid compatibility with MSDS sheets.

Contact Balcrank for specific system design performance and technical data.

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

TEST FLUID: SAE 10



Oil Piston Pumps

Lion™ 450 - 10:1 Pumps

Lion™ 450 - 10:1 Pump Description

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.

Lion™ 450 - 10:1 Pump Models Available

- ☐ **1430-003** Lion™ 450 10:1 stub pump
- ☐ **1430-004** Lion™ 450 10:1 drum pump
- ☐ **4411-032** Bung Adapter

Lion™ 450 - 10:1 Pump Specifications

- 3.1. Pump will have a 10:1 ratio
- 3.2. Pump will have a 4.5" (115 mm) effective diameter displacement air motor valve-in-piston design
- 3.3. Pump will have an air inlet port of 1/2" NPT(F)
- 3.4. Pump will have a fluid inlet port of 1 1/2" NPT(F)
- 3.5. Pump will have a fluid outlet port of 3/4" NPT(F)
- 3.6. Pump will have a free flow of 18 gal/min (68 l/min) based on 100 psi (7 bar)
- 3.7. Pump will have an operating air pressure of 30 to 180 psi (2 to 12.4 bar)
- 3.8. Pump will have an air consumption pressure at 75 psi (5 bar) & 30 cfm (850 NI/min)
- 3.9. Pump will not exceed 19 cycles per gallon
- 3.10. Pump will have a max fluid outlet pressure of 1,700 psi (120 bar)
- 3.11. Pump will have an air motor stroke of 4" (100 mm)
- 3.12. Pump will have a delivery rate of 4 gal/min (15 l/min) at 80 cpm

Materials

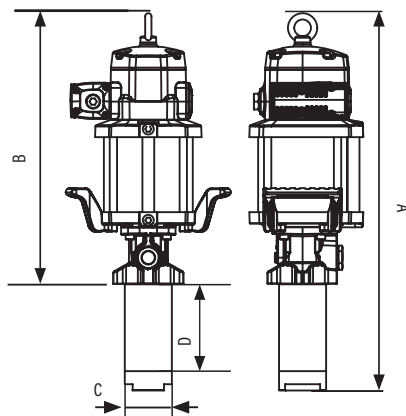
- 4.1. The wetted materials will consist of Cast Iron, Hard Chromed Steel, Steel, Polyurethane, Buna-N™ and Zinc

Warranty

- 5.1. The Lion 450 10:1 pump will have a 1-year standard warranty on defects in materials and workmanship only.

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)

Synthetic and Mineral Based Lubricants Hydraulic Fluid Gear Oil Transmission Fluid

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.

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. 32 for mounting bracket (4411-031).

TECHNICAL DATA	
Operating air pressure	30 to 175 psi (2 to 12 bar)
Cycles per gallon	6
Air Consumption ⁽¹⁾	39 CFM (1,100 NI/min)
Max fluid outlet pressure ⁽³⁾	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 ⁽²⁾	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 3x 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.

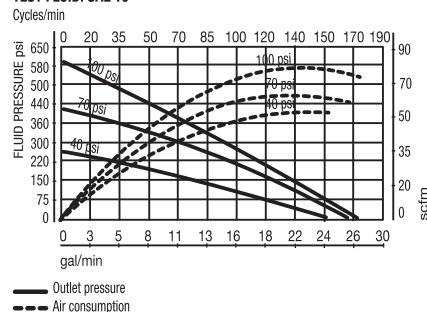
Warning! Do not use any Lion™ 450/600 series products with flammable fluids.

Verify fluid compatibility with MSDS sheets.

Contact Balcrank for specific system design performance and technical data.

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

TEST FLUID: SAE 10



Oil Piston Pumps

Lion™ 600 - 6:1 Pump

Lion™ 600 - 6:1 Pump Description

Lion™ 600 - 6:1 operates at slow cycle rates for high volume applications. Medium/high 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.

Lion™ 600 - 6:1 Pump Models Available

- ❑ **1430-005** Lion™ 600 6:1 stub pump

Lion™ 600 - 6:1 Pump Specifications

- 3.1. Pump will have a 6:1 ratio
- 3.2. Pump will have a 6" (150 mm) effective diameter displacement air motor valve-in-piston design
- 3.3. Pump will have an air inlet port of 1/2" NPT(F)
- 3.4. Pump will have a fluid inlet port of 1 1/2" NPT(F)
- 3.5. Pump will have a fluid outlet port of 3/4" NPT(F)
- 3.6. Pump will have a free flow of 26 gal/min (100 l/min) based on 100 psi (7 bar)
- 3.7. Pump will have an operating air pressure of 30 to 175 psi (2 to 12 bar)
- 3.8. Pump will have an air consumption pressure at 75 psi (5 bar) & 39 cfm (1,100 NI/min)
- 3.9. Pump will not exceed 6 cycles per gallon
- 3.10. Pump will have a max fluid outlet pressure of 1,020 psi (72 bar)
- 3.11. Pump will have an air motor stroke of 4" (100 mm)
- 3.12. Pump will have a delivery rate of 9 gal/min (35 l/min) at 60 cpm

Materials

- 4.1. The wetted materials will consist of Cast Iron, Aluminum, Nickel, Steel, Polyurethane, Buna-N™ and Zinc

Warranty

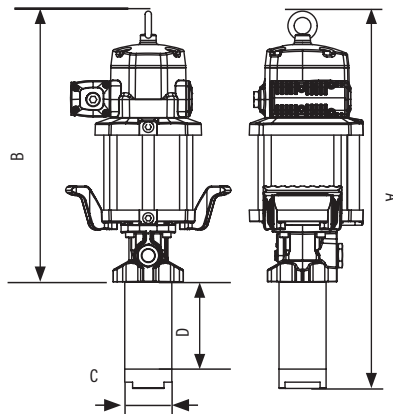
- 5.1. The Lion 600 6:1 pump will have a 1-year standard warranty on defects in materials and workmanship only.

Oil Piston Pumps

Lion™ 600 - 12:1 Pump

Balcrank
Fluid Dispensing Systems

Pumps Piston



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)

Synthetic And Mineral Based Lubricants Hydraulic Fluid Gear Oil Transmission Fluid

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.

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. 32 for mounting bracket (4411-031).

TECHNICAL DATA	
Operating air pressure	30 to 180 psi (2 to 12.4 bar)
Cycles per gallon	11
Air Consumption ⁽¹⁾	41 CFM (1,150 NI/min)
Max fluid outlet pressure ⁽³⁾	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 ⁽²⁾	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 3x 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.

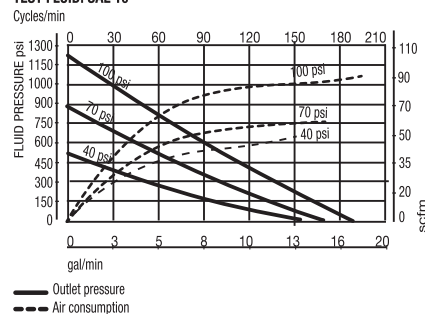
Warning! Do not use any Lion™ 450/600 series products with flammable fluids.

Verify fluid compatibility with MSDS sheets.

Contact Balcrank for specific system design performance and technical data.

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

TEST FLUID: SAE 10



Oil Piston Pumps

Lion™ 600 - 12:1 Pump

Lion™ 600 - 12:1 Pump Description

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

High pressure pump is recommended for long pumping distances and/or cold weather applications.

Lion™ 600 - 12:1 Pump Models Available

- ❑ **1430-006** Lion™ 600 12:1 stub pump

Lion™ 600 - 12:1 Pump Specifications

- 3.1. Pump will have a 12:1 ratio
- 3.2. Pump will have a 6" (150 mm) effective diameter displacement air motor valve-in-piston design
- 3.3. Pump will have an air inlet port of 1/2" NPT(F)
- 3.4. Pump will have a fluid inlet port of 1 1/2" NPT(F)
- 3.5. Pump will have a fluid outlet port of 3/4" NPT(F)
- 3.6. Pump will have a free flow of 17 gal/min (65 l/min) based on 100 psi (7 bar)
- 3.7. Pump will have an operating air pressure of 30 to 180 psi (2 to 12.4 bar)
- 3.8. Pump will have an air consumption pressure at 100 psi (7 bar) & 41 cfm (1,150 NI/min)
- 3.9. Pump will not exceed 11 cycles per gallon
- 3.10. Pump will have a max fluid outlet pressure of 2,040 psi (144 bar)
- 3.11. Pump will have an air motor stroke of 4" (100 mm)
- 3.12. Pump will have a delivery rate of 5 gal/m (20 l/min) at 60 cpm

Materials

- 4.1. The wetted materials will consist of Cast Iron, Hard Chromed Steel, Steel, Polyurethane and Buna-N™

Warranty

- 5.1. The Lion 600 12:1 pump will have a 1-year standard warranty on defects in materials and workmanship only.