



Balcrank

Fluid Dispensing Systems

Automotive | Commercial | Industrial



Balcrank Today

Balcrank is one of the oldest manufacturers of automotive lubrication products. Since its beginning, we have been providing our customers with the best products for the ever changing Automotive Commercial and Industrial markets. Our products service automotive quick lubes, dealerships, fleet, and commercial vehicle centers. Our product line has expanded, encompassing the heavy-duty market, which includes: trucking, municipalities, railroad, marine, industrial and mining. Our new line of Lion pumps, large hose reels and high volume control handles allows us to dispense oil products up to 32 gal per minute and grease up to 88 lb per minute.

We provide system solutions for all types of vehicle maintenance facilities and industrial manufacturing. Our goal is to continue our traditions and evolve in markets and applications that make sense for our continued growth.

On July 9, 2009, Balcrank Corporation was acquired by Linter North America, a subsidiary of the Linter Investments Corporation. Following the same traditions as our parent company, Balcrank's manufacturing is world-class; focused on high quality, fast delivery, and excellent service to our customers.

Balcrank History

Balcrank began in 1906 in the heart of Cincinnati, Ohio's "Machine Tool Colony" as the Cincinnati Ball Crank Company. The first products produced by Balcrank were hand wheels and cranks used by the machine tool industry. That same year Balcrank became the first mass producer of starting cranks for automobiles. In 1908, Balcrank entered the automotive industry with the manufacturing of steering drag links. The steering drag links were an immediate hit. Almost every car manufacturer adopted these drag links and for the first time, steering a car became an easy task. Always looking forward, in 1922 Balcrank entered the lubrication field. The Cincinnati Ball Crank Company got its name from the production of ball-sockets

and hand cranks and was commonly referred to as Ball Crank. In 1933, the Board of Directors voted to change the name Ball Crank to Balcrank, Inc. In 1943, Balcrank received the three-star Army-Navy "E" Award, also known as the Army-Navy Production Award. This award was presented to facilities doing outstanding war production and construction work. After the war, Balcrank returned to its roots, manufacturing aftermarket lubrication equipment. Over the next 50 years, Balcrank introduced an average of three new products a year including the Pride series pumps, fluid inventory control systems, used fluid evacuation systems, and Diesel Exhaust Fluid (DEF) dispensing systems.



Balcrank Milestones

Balcrank entered the lubrication equipment field in 1922 and since then has developed many “firsts” in the industry, thus attaining a recognized position of leadership in design and engineering progress. All Balcrank equipment is built to meet the highest standards of quality control and performance requirements.

- | | | | |
|------|---|------|---|
| 1906 | The Cincinnati Ball Crank Company is formed | 2007 | Introduced fusion wireless fluid inventory control systems |
| 1906 | First in the mass production of machine handles and cranks for the machine tool and automotive industries | 2008 | Introduced new generation of truck drain |
| 1908 | First in mass production of the ball-socket type of tie-rod and drag link steering connection | 2008 | Introduced a full range of Diesel Exhaust Fluid (DEF) dispensing systems |
| 1922 | Enters into the lubrication equipment field and invents and produces the first electric grease gun | 2009 | Balcrank Corporation was acquired by Linter North America, a subsidiary of Linter Investments Corporation |
| 1923 | First patents on hydraulic coupler and fittings now universally used today | 2009 | Introduced 3:1 LYNX® lube pump |
| 1924 | Developed first air operated high-pressure/volume grease gun. | 2009 | Introduced ILM (In-Line metered) series Control Handles in both analog and electronic display |
| 1926 | Developed first air powered lubrication pump | 2010 | Introduces 1:1, 2:1 and 5:1 LYNX® pumps |
| 1930 | Developed first enclosed hose reels | 2011 | Introduced Signature Evolution Series hose reel |
| 1933 | Company changes name to Balcrank, Inc. | 2011 | Introduced NEW Redesigned Signature Series Premium hose reel |
| 1935 | First pump with Deluxe Container covers for weathered environments | 2011 | Introduced LYNX® 55:1 LYNX® portable package |
| 1948 | Engineered and released new Jet Power air operated pump | 2012 | Introduced EV and EVX hose reels |
| 1958 | Introduced larger capacity hose reels in “deluxe” cabinet | 2012 | Introduced Synergy fluid inventory management systems |
| 1960 | Developed and introduced world’s first high pressure coolant system | 2013 | Introduced CenterFlo air operated diaphragm pumps |
| 1968 | Introduced the original Director inventory control system | 2013 | Introduced Digital Register (DR) meter |
| 1987 | Introduced the Director Jr. simplified inventory control system | 2014 | Introduced Mechanical Register (MR) meter |
| 1994 | Introduced the Dataflo electronic digital control handle | 2014 | Introduced High Flow (HF) handle |
| 1996 | Introduced the Roughneck self-evacuating drain | 2015 | Balcrank builds and relocates to a new factory & office headquarters |
| 1999 | Patents on Roughneck design | 2015 | Introduced electric diaphragm pump for DEF |
| 1999 | Introduced Panther® HP 3:1 and 5:1 air operated pumps | 2015 | Introduced Preset Mechanical Handle |
| 2002 | Introduced Panther® HP 50:1 grease pumps | 2016 | Introduced the Lion™ 450/600 pumps for the heavy duty market |
| 2003 | Introduced Tiger HP 5:1 pump | 2017 | Introduced new high performance CF50 AODD pump |
| 2005 | Introduced custom color program for hose reels | 2017 | Introduced new tote dispense packages |
| 2005 | Introduced Lion™ HP 5:1, 10:1, and 50:1 pumps | 2019 | Introduced Lion™ 800 200:1 grease pump |
| 2005 | Introduced grease inductor pump systems for Lion™ HP and Panther® HP grease pump. | 2020 | Introduced new Lion™ 350 pump and grease packages |
| 2005 | Introduced air operated oil evacuation system | 2020 | Introduced MO Meter |
| 2006 | Introduced Pump Sentinel, a pump shutoff control system | | |

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CENTERFLO AIR OPERATED DOUBLE DIAPHRAGM |

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Oil Piston Pumps Product Selection Matrix

1

MAX. SIMUL. DISPENSE POINTS	MAX. LINE LENGTH	MAX. FREE FLOW	FLUID INLET	FLUID OUTLET	RECOMMENDED FLUID TYPES
LYNX® 1:1					
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					
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
LYNX® 3:1					
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					
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
PANTHER® 3:1					
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
PANTHER® 5:1					
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
TIGER® 6:1					
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
LION™ 450 3:1					
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
LION™ 450 6:1					
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
LION™ 450 10:1					
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
LION™ 600 6:1					
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
LION™ 600 12:1					
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



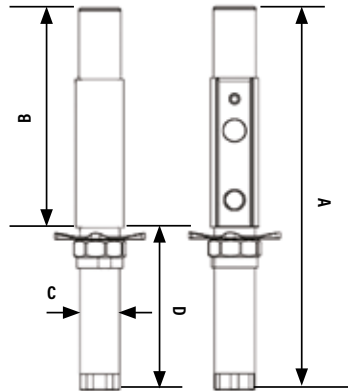
TIGER® SERIES



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			
46 1/2" (1181 mm)	11 1/4" (286 mm)	2 3/64" (52 mm)	35 1/4" (895 mm)
1160-008			
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(M)
Wetted materials 1110-010 & 1110-009	Steel, Brass, Aluminum, Buna-N™, and Polyurethane
1160-008	Stainless Steel, Viton, and PTFE
Service Bulletin 1110-010, 1110-009 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.

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

Fluids

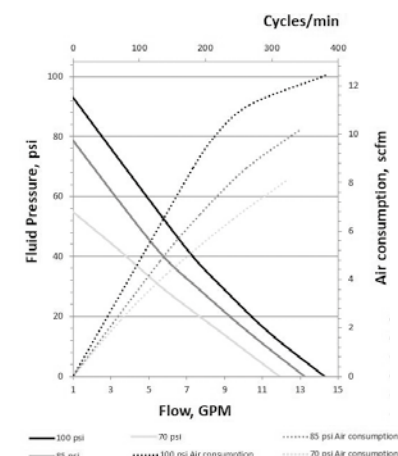
- Synthetic and mineral based lubricants
- Hydraulic fluid
- Transmission fluid
- Anti-freeze/windshield wash fluids (stainless version)

Applications

- Taper 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

1



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 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

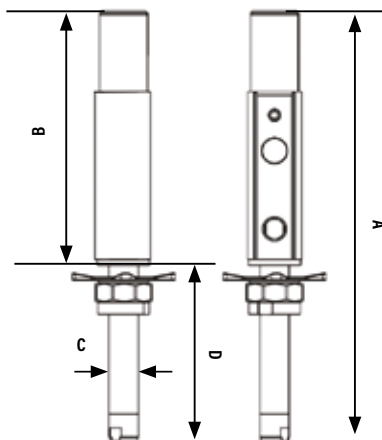
Suction tubes		4412-044 1" NPT(M) x 18" - 30° 16 gal drum	Control handles		3330-159 DR, Flex-mem. ext., 1/4 turn for oil
		4412-046 1" NPT(M) x 26" - 30° 55 gal drum			3330-205 M0, Flex-mem. ext., 1/4 turn for oil
		4412-045 1" NPT(M) x 21" - 30° 165/280 gal bench tank			3330-192 MR, Qts., Flex-mem. 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" 8261-005 MP Hose 5' x 3/4" 8171-006 Suction Hose 6' x 3/4" 4412-052 Suction Tube 1" NPT(M) x 60" - 30° 4411-008 Wall mount bracket
		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	Wall mount bracket		4411-008 Wall mount bracket for LYNX®
		4412-049 1" NPT(M) x 32" - 30° 275 gal tote	Dollies		4310-001 Band dolly, 16 gal/120 lb
4412-050 1" 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) See pg. 165 for complete listing	4310-004 Dolly, 55 gal/400 lb HD		
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"			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)
		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.

1



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 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

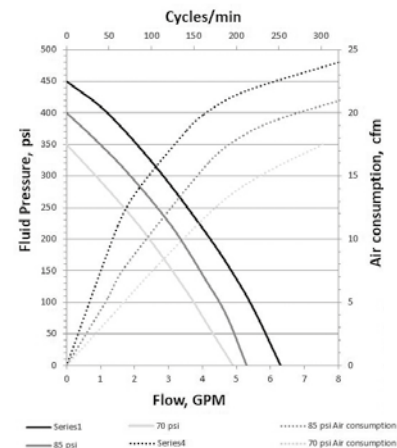
- Synthetic and mineral based lubricants
- Hydraulic fluid
- Transmission fluid

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

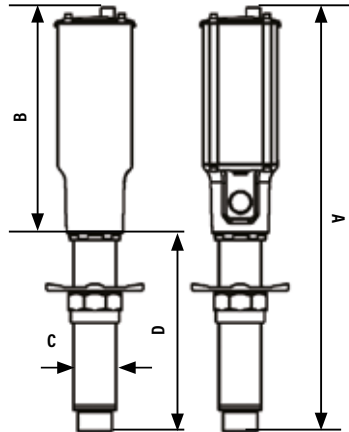
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Suction tubes		4412-035 3/4" NPT(M) x 18" - 30° 16 gal drum	Control handles		3330-159 DR, Flex-mem. ext., 1/4 turn for oil
		4412-037 3/4" NPT(M) x 26" - 30° 55 gal drum			3330-205 MO, Flex-mem. ext., 1/4 turn for oil
		4412-036 3/4" NPT(M) x 21" - 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" 8261-005 MP Hose 5' x 3/4" 8171-006 Suction Hose 6' x 3/4" 4412-043 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) See pg. 165 for complete listing	Carts		4310-004 Dolly, 55 gal/400 lb HD
Dispense hose		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 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"			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)
		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® 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) ⁽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.

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

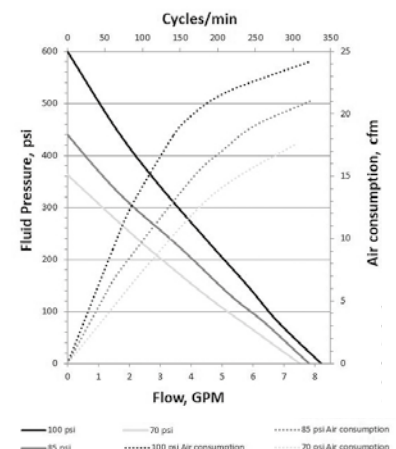
- Synthetic and mineral based lubricants
- Hydraulic fluid
- Transmission fluid
- Gear oil

Applications

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

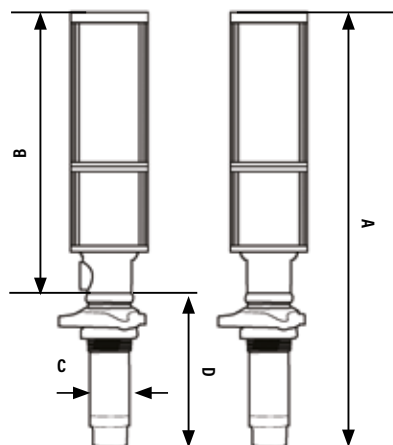
Pressure relief valve kit included with this pump.

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 4/5" (71 mm)	6 1/2" (158.7 mm)
1130-017			
21 8/9" (555.6 mm)	14 3/8" (285 mm)	2 1/8" (54 mm)	7 1/2" (190.5 mm)



Fluids & Applications

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

Fluids

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

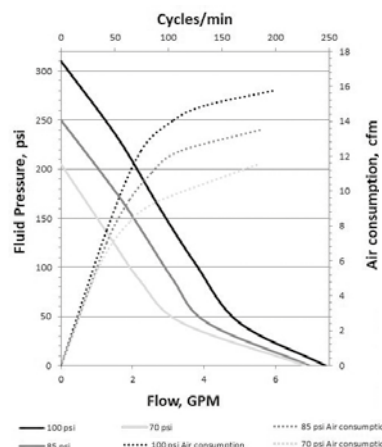
Applications

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

Pressure relief valve kit included with this pump.

TECHNICAL DATA	
Operating air pressure	10-150 psi (.7-10 bar)
Cycles per gallon	34 cyc/gal (8.98 cyc/liter)
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

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



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.

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
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
LP HOSE 5' X 3/8"	8132-005	8132-005



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
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
LP HOSE 5' X 3/8"	8132-005	8132-005

Oil Piston Pumps

PANTHER® HP 3:1 & LYNX® 5:1 HD Pump Components

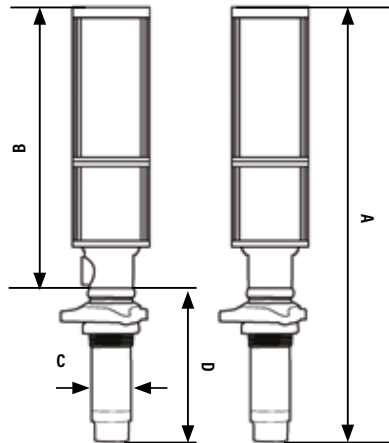
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Suction tubes		4412-044 1" NPT(M) x 18" - 30° 16 gal drum	Control handles		3330-159 DR, Flex-mem. ext., 1/4 turn for oil
		4412-046 1" NPT(M) x 26" - 30° 55 gal drum			3330-205 MO, Flex-mem. ext., 1/4 turn for oil
		4412-045 1" NPT(M) x 21" - 30° 165/280 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" 4412-052 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® and Panther® HP
		4412-050 1" NPT(M) x 39" - 30° 330 gal tote			
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. 165 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) ⁽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 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

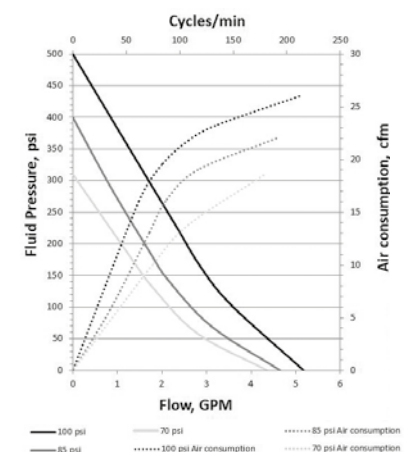
- Synthetic and mineral based lubricants
- Hydraulic fluid
- Transmission fluid
- Gear oil

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

1



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
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
LP HOSE 5' X 3/8"	8132-005	8132-005



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
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
LP HOSE 5' X 3/8"	8132-005	8132-005

Oil Piston Pumps

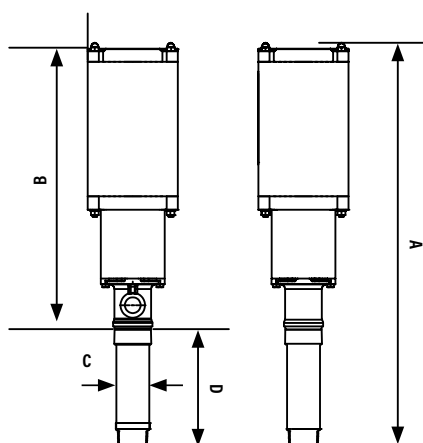
PANTHER® HP 5:1 Pump Components

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 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" 4412-052 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 Panther® HP
		4412-050 1" NPT(M) x 39" - 30° 330 gal tote			
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. 165 for complete listing			4310-003 Band dolly, 16 gal/120 lb wide track
					4310-004 Dolly, 55 gal/400 lb HD
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 5/8" (514.5 mm)	16 1/4" (412.9 mm)	2 4/5" (71 mm)	4" (101.6 mm)



Fluids & Applications

Tiger® is the largest of the Pride series pumps. Pride series pumps are manufactured with a mechanical air valve and piston design which is more forgiving 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

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

Pressure relief valve kit included with this pump.

TECHNICAL DATA	
Operating air pressure	40-150 psi (3-10 bar)
Cycles per gallon	31 cyc/gal (8.2 cyc/liter)
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 1160-007	Carbon steel, Buna-N [®] , Stainless steel, Ultrathane [®] and Aluminum. Stainless Steel and Viton [®]
Service Bulletin	SB 1065

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

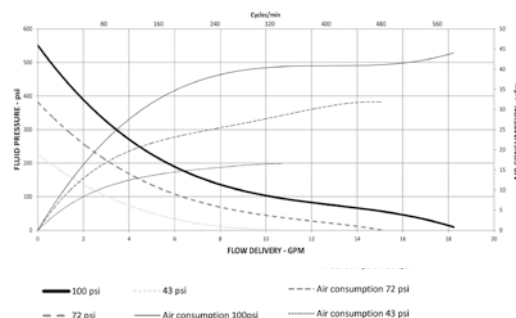
(1) Ensure that all hose fittings and piping are rated for fluid outlet pressures. Balcrank recommends a minimum of 3 x safety factor.

Warning! Do not use any 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 with bung adapter



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
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
LP HOSE 5' X 3/8"	8132-005



TIGER® 6:1 PUMP PACKAGE	55 GAL METERED 1131-067
PUMP	1130-026
MP FLUID HOSE 10' x 1/2"	8249-010
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
LP HOSE 5' X 3/8"	8132-005



Oil Piston Pumps

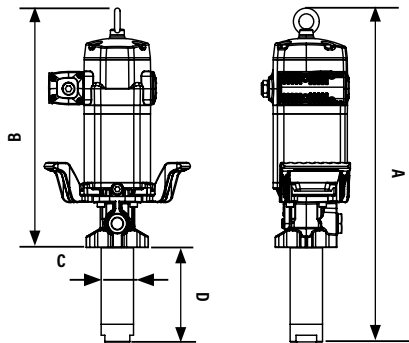
TIGER® HP 6:1 Pump Components

1

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		4410-065 Wall mount kit 8132-005 LP Hose 5' x 3/8" 8249-005 MP Hose 5' x 1/2" 8181-006 Suction Hose 6' x 1" 4412-052 Suction Tube 1" NPT(M) x 60" - 30° 4411-009N Bung Adapter 4411-008 Wall mount bracket
		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	Wall mount bracket		4411-008 Wall mount bracket for LYNX®, Panther® HP and Tiger®
		4412-049 1" NPT(M) x 32" - 30° 275 gal tote			
		4412-050 1" NPT(M) x 39" - 30° 330 gal tote	Dollies		4310-001 Band dolly, 16 gal/120 lb
Bung adapter		4411-018N Double tap bushing, nickel plated stainless steel: for use with Panther® HP W/ pressure relief			4310-003 Band dolly, 16 gal/120 lb wide track
Filer regulator (F/R)		3260-035 F/R mini auto drain 3/8" NPT(F) See pg. 165 for complete listing	Carts		4310-004 Dolly, 55 gal/400 lb HD
Dispense hose		8249-005 Dispense hose 5' x 1/2"			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		4410-066 Connecting hose kit: 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 Lion™ 450 - 3:1 Pump



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

TECHNICAL DATA	
Operating air pressure	30 to 180 psi (2 to 12.4 bar)
Cycles per gallon	6
Air Consumption ⁽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 3 x safety factor.

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

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

Verify fluid compatibility with MSDS sheets.

Contact Balcrank for specific system design performance and technical data.

Fluids & Applications

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

This pump is recommended for medium pumping distances.

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

Fluids

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

Applications

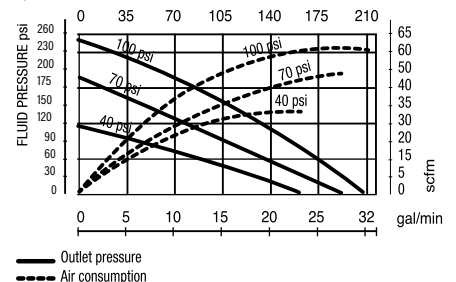
- Heavy duty truck/fleet
- Railroad/mass transit vehicle maintenance
- In-plant high volume transfer
- Marine
- Mining vehicle maintenance
- Large automotive dealerships

Pressure relief valve kit included with this pump.

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

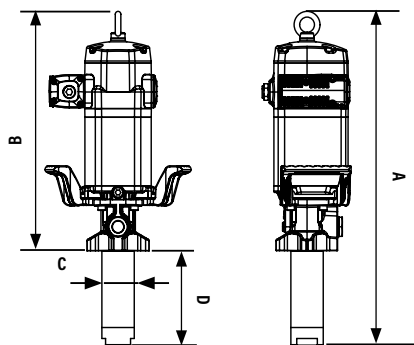
TEST FLUID: SAE 10

Cycles/min.



Oil Piston Pumps

Lion™ 450 - 6:1 Pump



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

Fluids & Applications

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

Fluids

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

Applications

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

Pressure relief valve kit included with this pump.

TECHNICAL DATA	
Operating air pressure	30 to 180 psi (2 to 12.4 bar)
Cycles per gallon	11
Air Consumption ⁽¹⁾	29 cfm (830 NI/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 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.

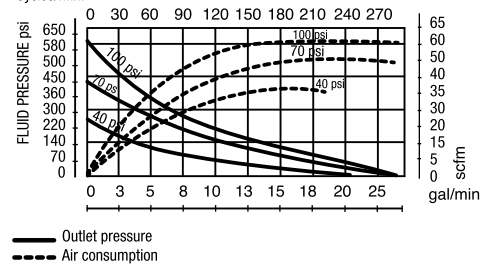
Verify fluid compatibility with MSDS sheets.

Contact Balcrank for specific system design performance and technical data.

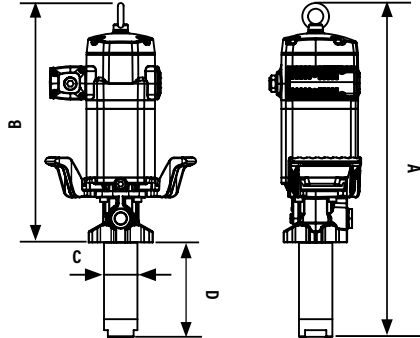
MODELS AVAILABLE	DESCRIPTION
1430-002	Lion™ 450 6:1 stub pump

TEST FLUID: SAE 10

Cycles/min.



Oil Piston Pumps Lion™ 450 - 10:1 Pumps



DIMENSIONS INCHES (MM)			
1430-003			
A	B	C	D
28" (702 mm)	20" (502 mm)	2" (54 mm)	8" (200 mm)
1430-004			
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 ⁽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 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

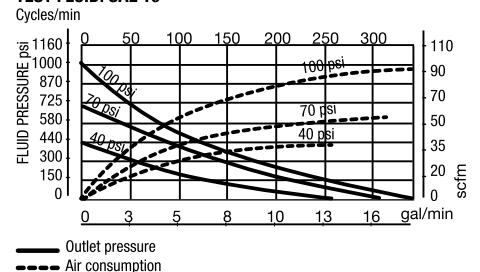
- Heavy duty truck/fleet
- Railroad/mass transit vehicle maintenance
- In-plant high volume transfer
- Marine
- Mining vehicle maintenance
- Large automotive dealerships

Pressure relief valve kit included with this pump.

Pump bung is mountable use 4411-032.

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

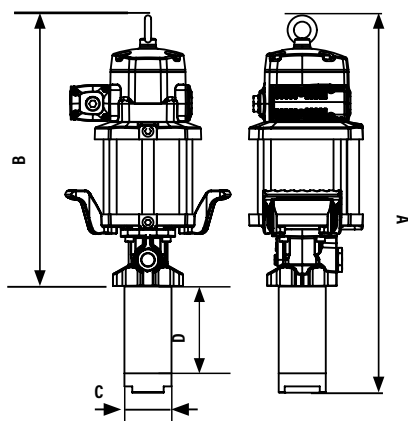
TEST FLUID: SAE 10



Oil Piston Pumps

Lion™ 600 - 6:1 Pump

1



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

Fluids & Applications

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.

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 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.

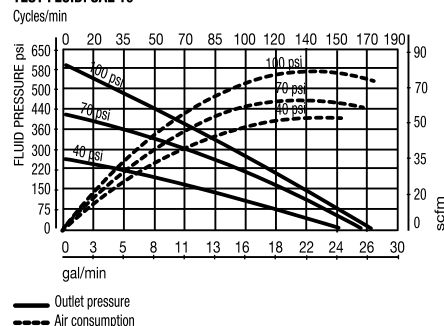
Warning! Do not use any Lion™ 450/600 series products with flammable fluids.

Verify fluid compatibility with MSDS sheets.

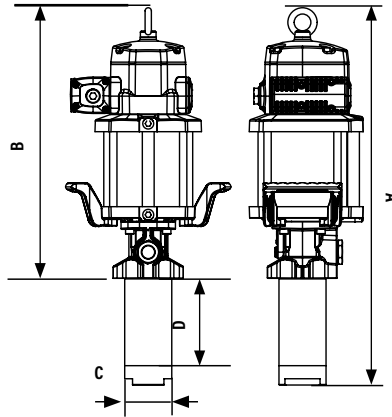
Contact Balcrank for specific system design performance and technical data.

MODELS AVAILABLE	DESCRIPTION
1430-005	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 ⁽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 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

1

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

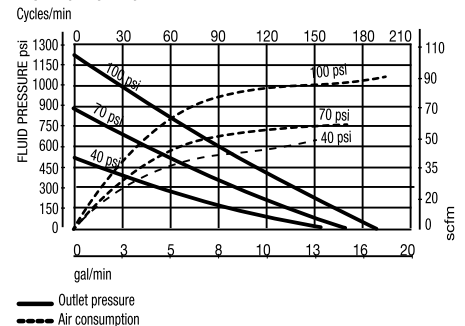
Applications

- 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.

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

TEST FLUID: SAE 10



Oil Piston Pumps Accessories Mobile Oil Packages

1



	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"	3720-003	3720-003	-
AIR COUPLER 3/8"	-	-	3720-121
AIR NIPPLE 1/4"	3720-004	3720-004	-
AIR NIPPLE 3/8"	-	-	3720-122

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		4412-031 1 1/2" NPT(M) x 38" - 30° 55 gal drum & bench tank		3330-159 DR Flex-mem. ext., 1/4 turn for oil
		4412-032 1 1/2" NPT(M) x 47" - 30° horizontal obround tank		3330-205 M0, Flex-mem. ext., 1/4 turn for oil
		4412-033 1 1/2" NPT(M) x 63" - 30° 275 gal vertical obround tank		3330-192 MR, Qts. Flex-mem. ext., 1/4 turn for oil
		4412-034 1 1/2" NPT(M) x 75" - 30° 330 gal vertical obround tank		3320-051 Hi-flow, non-metered, rigid ext., 3/4" inlet
Connecting hose kit		4410-062 Connecting hose kit Lion™ 450/600 8149-005 LP Hose 5'x1/2" 8264-005 MP Hose 5'x3/4" 3270-132 Coupler, air 3/8" body, 1/2" FPT 3270-143 Nipple, air 3/8" body, 1/2" FPT 3270-158 Elbow 1/2" 3270-057 Union Swivel 3/4"		3320-052 Hi-flow, non-metered, flex ext., 3/4" inlet
		4410-064 Suction hose kit Lion™ 450/600 4411-021 Bung Adapter for suction tubes 8191-005 Suction Hose 5'x1 1/2" 833595 Elbow 1 1/2" 3270-160 Hex Nipple 1 1/2" *Select Suction Tube from above		3320-053 Hi-flow, non-metered, rigid ext., 1" inlet
Filter/regulator (F/R)		3260-036 F/R auto drain 1/2" NPT(F) See pg. 165 for complete listing		3320-054 Hi-flow, non-metered, flex ext., 1" inlet
Mounting brackets		4411-031 Floor mount for Lion™ 450/600		3330-197 Hi-flow, metered, rigid ext., 3/4" inlet
		4411-030 Wall mount for new style Lion™ 450/600		3330-198 Hi-flow, metered, flex ext., 3/4" inlet
				3330-199 Hi-flow, metered, rigid ext., 1" inlet
				3330-200 Hi-flow, metered, flex ext., 1" inlet

Oil Piston Pumps Accessories

1

PISTON PUMP ACCESSORIES					
Bung adapters		4411-009N Bung adapter: Panther® HP & Tiger® W/ pressure relief port	Air eliminator		4411-005 Air eliminator 3/4" NPT(F) / 1 1/2" NPT(M) adapter
		4411-009QX Bung adapter: Panther® HP W/ pressure relief port - 10 pieces			4411-010 Air eliminator 1/4" NPT(F) / 1" NPT(M) adapter
		4411-007N Bung adapter, steel: Lion™ HP (old style) 5:1 W/ pressure relief port	Pump runaway control prevents runaway condition when out of oil		3241-001 Pump runaway control 1/2" NPT(F)
		4411-018N Double tap bushing, zinc plated stainless steel: for use with Panther® HP W/ pressure relief			3241-002 Pump runaway control 1/4" NPT(F)
		4411-022 Bung adapter: LYNX® 3:1 & LYNX™ 5:1	Inlet Check Valve Aluminum		4411-014 Inlet Check Valve 3/4" NPT(F)
		4411-021 Bung adapter: LYNX®: 1:1 SS, LYNX® 5:1 HD, Lion 450/600 Grease and 1 1/2" suction tube			4411-015 Inlet Check Valve 1" NPT(F)
		4411-032 Bung Adapter: Lion™ 450 10:1			4411-038 Inlet Check Valve 1 1/2" NPT(F)
		4411-012 Bung adapter kit: for use with 1" OD suction tube			HP BALL VALVE
		4411-024 Bung adapter, PVC: W/ pressure relief port-2" for use when no additional ports are not available on the tank for pressure relief discharge tube	Ball valve fully ported		3230-023 Ball valve, 3/8", 7,250 psi (500 bar)
					3230-015 Ball valve, 1/2", 7,250 psi (500 bar)
		3230-016 Ball valve, 3/4", 5,800 psi (400 bar)			
		3230-017 Ball valve, 1", 5,075 psi (350 bar)			
Couplers, strainers Y-Strainer - For filtering debris at the pump - 580 psi (40 bar) - all strainers have 40 mesh.		3120-211 1/2" NPT(F)	MP BALL VALVES WITH OIL/AIR		
		3120-212 3/4" NPT(F)	Ball valve fully ported no bleed		3230-006 Ball valve, 3/8", 2,000 psi (138 bar)
		3120-213 1" NPT(F)			3230-002 Ball valve, 1/2", 2,000 psi (138 bar)
	3230-007 Ball valve, 3/4", 2,000 psi (138 bar)				
	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)				
In-line pressure relief		3120-085 Pressure relief kit, 1/2" NPT(M) 850 psi for use with Panther® 3:1 and 5:1			
		3120-086 Pressure relief kit, 3/4" NPT(M) 850 psi for use with LYNX® 1:1, 3:1			
		3120-087 Pressure relief kit, 3/4" NPT(M) 1400 psi			
Pressure relief valves		3120-214 Kit, PR valve 1/4" NPT(M) 850 psi for use with Lion™ 450 3:1, 6:1 and Lion™ 600 6:1, kit includes return tube and 1/8" NPT(M) adapter	LP AIR BLEED TYPE		
		3120-215 Kit, PR valve 1/4" NPT(M) 1,450 psi for use with Lion™ 450 10:1 and Lion™ 600 12:1, kit includes return tube and 1/8" NPT(M) adapter	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)	

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)					4420-005 120 lb/16 gal (Panther® HP, Tiger®)
		3270-121 Coupler, 3/8" NPT(M)					
	3270-005 Nipple, 1/4" NPT(F)	Covers for 400 lb / 55 gal drum	4420-013 400 lb/55 gal (Lion™ 450/600)				
	3270-122 Nipple, 3/8" NPT(F)		Dollies	 4310-001 4310-004	4310-001 Band dolly, 16 gal/120 lb		
	3270-004 Nipple, 1/4" NPT(M)				4310-003 Band dolly, 16 gal/120 lb wide track		
	3270-123 Nipple, 3/8" NPT(M)				4310-004 Dolly, 55 gal/400 lb HD		
INDUSTRIAL INTERCHANGE SERIES					Carts	 4320-010 4320-013 4320-014	4320-010 4 Wheel drum cart: 120 lb/16 gal
Industrial interchange Series	 	3270-132 Coupler, air 3/8" body, 1/2" NPT(F)	4320-013 3 Wheel drum cart: 400 lb/55 gal				
		3270-133 Coupler, air 3/8" body, 1/2" NPT(M)		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)			
		3270-142 Nipple, air 3/8" body, 1/2" NPT(F)					
		3270-143 Nipple, air 3/8" body, 1/2" NPT(M)	Hose reel mount kit	2230-036 Hose reel mount kit for 4320-014 Heavy duty drum cart			
MOUNTING BRACKETS							
Mounting brackets		4411-008 Wall mount bracket for LYNX®, Panther® HP, and Tiger®					
		4411-030 Wall mount for new style Lion™ 450/600					
SUCTION TUBES							
LYNX® 1:1, LYNX® 5:1 HD, PANTHER® 3:1 & 5:1, TIGER 6:1 HP			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			LYNX® 3:1	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				4412-041 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			4412-035 3/4" NPT(M) x 18" - 30° 16 gal drum	LION™ 450/600			
4412-047 1" NPT(M) x 28" - 30° 250 gal bench tank double tap			4412-037 3/4" NPT(M)x 26" - 30° 55 gal drum	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			4412-036 3/4" NPT(M) x 21" - 30° 165/280 gal bench tank	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			4412-039 3/4" NPT(M) x 30" - 30° 165/280 gal bench tank double tap	4412-033 1 1/2" NPT(M) x 63" - 30° 275 gal vertical obround tank			
			4412-038 3/4" NPT(M) x 28" - 30° 250 gal bench tank double tap	4412-034 1 1/2" NPT(M) x 75" - 30° 330 gal vertical obround tank			

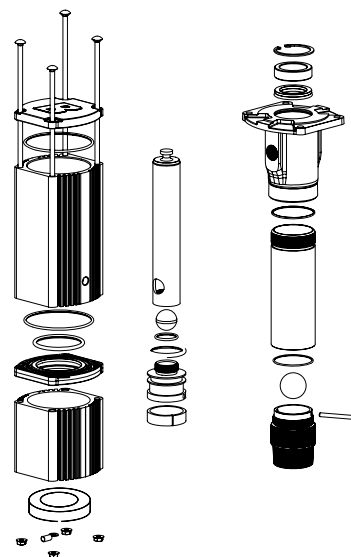
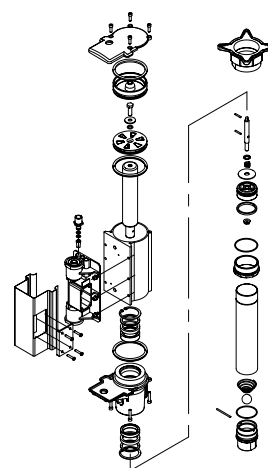
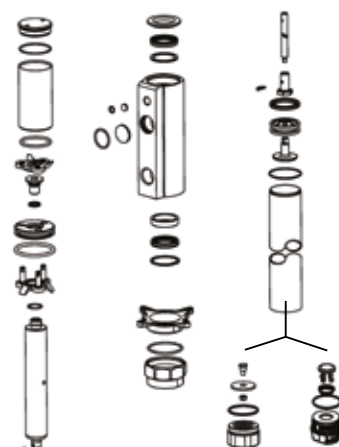
Piston Pump Repair Kits for Oil

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LYNX® 1:1 & 3:1		
PUMP MODELS	KIT NUMBER	DESCRIPTION
LYNX® SERIES PUMPS 1:1 - 1110-010, 1110-009, 1160-008		
1110-009 & 1110-010 Fluid	833109	Fluid seal kit
1110-009, 1110-010, 1110-007	833110	Air valve kit
1160-008	833525	Fluid seal kit
LYNX® SERIES PUMP 2:1 - 1111-035		
1111-035	833346	Air filter kit
	833110	Air valve kit
	833111	Fluid seal kit
LYNX® SERIES PUMPS 3:1 - 1110-007		
1110-007	833111	Fluid seal kit
1110-007	833110	Air valve kit

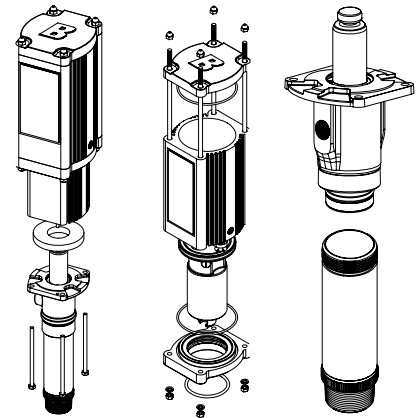
LYNX® 5:1 HD		
PUMP MODELS	KIT NUMBER	DESCRIPTION
LYNX® SERIES PUMPS 5:1 HD - 1110-012		
1110-012	833437	Fluid seal kit
1110-012	833438	Air motor, complete kit
1110-012	833439	Pump tube, repair kit
1110-012	833440	Fluid piston kit

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



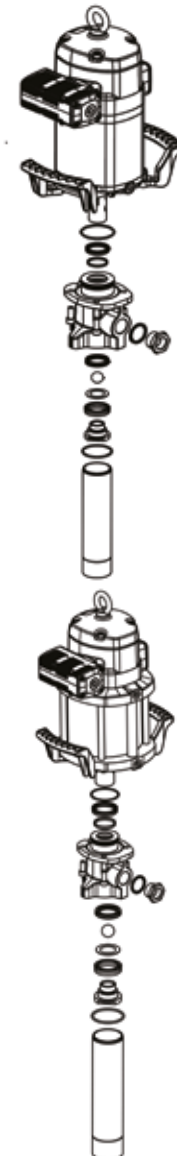
Piston Pump Repair Kits for Oil

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



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

LION™ 600		
PUMP MODELS	KIT NUMBER	DESCRIPTION
LION™ 600 SERIES PUMPS 6:1 - 1430-005, 12:1 - 1430-006		
1430-005, 1430-006	833413	Exhaust muffler kit
1430-005, 1430-006	833414	Spools & seals kit
1430-005	833509	Inlet Check Valve - Poly kit 6:1
1430-006	833510	Inlet Check Valve - Poly kit 12:1
1430-005, 1430-006	833511	Air motor seals kit
1430-005	833512	Lower seals kit 6:1 1430-006
1430-006	833513	Lower seals kit 12:1



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Grease Piston Pumps Product Selection Matrix

MAX. SIMUL. DISPENSE POINTS	MAX. LINE LENGTH	MAX. - FREE FLOW	AIR INLET	FLUID OUTLET	RECOMMENDED FLUID TYPES
LYNX® 55:1					
1	50' (50 m)	1.2 lb/min (0,5 kg/min)	1/4" NPT	1/4" NPT	Up to NLGI-2 grease
PANTHER® 50:1					
1-2*	100' (30 m)	3.4 lb/min (1.54 kg/min)	1/4" NPT	1/4" NPT	Up to NLGI-2 grease
LION™ 350 60:1					
1-2	250' (75 m)	4.4lb/min (2 kg/min)	3/8" NPT	3/8" NPT	Up to NLGI-2 grease
LION™ 450 25:1					
1	250' (75 m)	35 lb/min (16 kg/min)	1/2" NPT	1/2" NPT	Up to NLGI-2 grease High viscosity oil
LION™ 450 40:1					
4	400' (120 m)	24 lb/min (11 kg/min)	1/2" NPT	1/2" NPT	Up to NLGI-2 grease
LION™ 450 70:1					
4	600' (180 m)	16 lb/min (7.25 kg/min)	1/2" NPT	1/2" NPT	Up to NLGI-2 grease
LION™ 600 12:1					
1	30' (10 m)	88 lb/min (40 kg/min)	1/2" NPT	1" NPT	Up to NLGI-2 grease
LION™ 600 80:1					
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

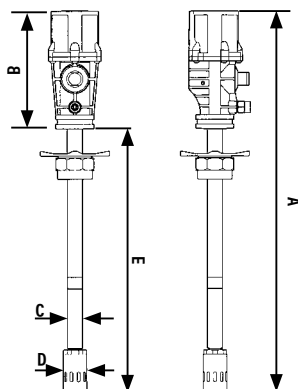
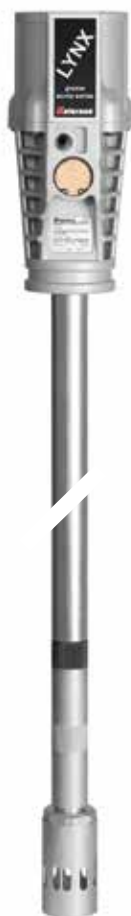


PANTHER® SERIES



LION™ SERIES

Grease Piston Pumps LYNX® 55:1 Pumps



DIMENSIONS INCHES (MM)				
1150-022				
A	B	C	D	E
24.40" (620 mm)	8" (202 mm)	1" (26 mm)	1.56" (40 mm)	16.5" (418 mm)
1150-023				
36.62" (930 mm)	8" (202 mm)	1" (26 mm)	1.56" (40 mm)	28.65" (728 mm)
1150-024				
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. 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	1.2 lb/min (0.5 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.

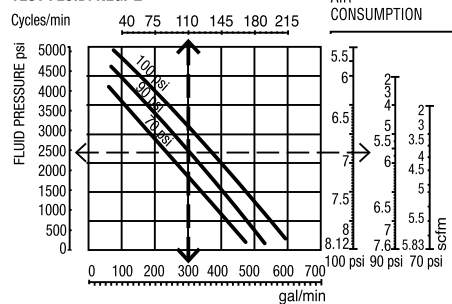
Contact Balcrank for pumping grease higher than NLGI-2 and specific system design performance technical data.

MODELS AVAILABLE

DESCRIPTION

1150-022	LYNX® 55:1 Grease 25-35 lbs
1150-023	LYNX® 55:1 Grease 120 lbs
1150-024	LYNX® 55:1 Grease 400 lbs

TEST FLUID: NLGI-2



Grease Piston Pumps LYNX® 55:1 Pump Packages



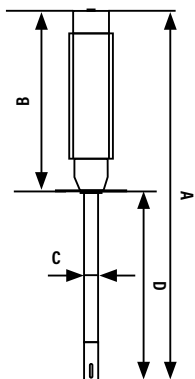
LYNX® 55:1 PACKAGES	25-35 LB STATIONARY 1151-034	120 LB PORTABLE 1151-035
BARE PUMP	1150-022	1150-023
BUNG ADAPTER	4411-023	4411-023
FLUID HOSE 10' X 3/8"	8331-010	8331-010
F/R AUTO DRAIN 1/4" NPT(F)	3260-033	3260-033
COMFORT GRIP GREASE HANDLE	3310-030	3310-030
DRUM COVER	4420-010 ⁽¹⁾	4420-011
FOLLOWER 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" (834 mm)



Fluids & Applications

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

Fluids

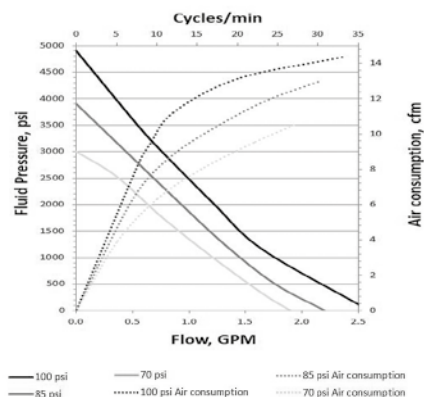
- Grease up to NLGI-2

Applications

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

TECHNICAL DATA	
Pump ratio	50:1
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



1

PANTHER® HP 50:1 PACKAGES	25-35 LB STATIONARY 1151-003	120 LB PORTABLE 1151-005
BARE PUMP	1150-009	1150-010
AIR HOSE 5' X 3/8"	8132-005	8132-005
FLUID HOSE 10' X 3/8"	8331-010	8331-010
COMFORT GRIP GREASE HANDLE	3310-030	3310-030
DRUM COVER	4420-008	4420-009
FOLLOWER PLATE	4440-007	4440-008
DOLLY BASE, 120 LB/ 16 GAL	-	4310-001
AIR COUPLER 1/4"	3720-003	3720-003
AIR NIPPLE 1/4"	3720-004	3720-004

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 PACKAGES	400 LB STATIONARY 1151-006
BARE PUMP	1150-011
AIR HOSE 5' X 3/8"	8132-005
FLUID HOSE 10' X 3/8"	8331-010
DRUM COVER	4420-004
FOLLOWER PLATE	4440-009
AIR COUPLER 1/4"	3720-003
AIR NIPPLE 1/4"	3720-004

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

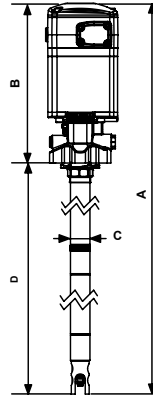
Grease Piston Pumps

Panther® HP 50:1 Pump Components

1

Grease handle accessories		8390-002 18" Whip Hose HP Flexible Extension 8390-003 36" Whip Hose HP Flexible Extension 8390-004 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		4310-005 Dolly Base, 5 gal/25 - 35 lb
		5310-018 Z-Swivel 1/4" NPT(F) x 1/4" NPT(M)			4310-001 Band Dolly, 16 gal/120 lb
	  	3310-030 Comfort Grip Grease Handle	Carts	   	4310-004 Dolly, 16 gal/120 lb wide track
		3310-031 Comfort Grip Grease Handle with 18" Whip Hose and Z-swivel			4310-003 Dolly, 55 gal/400 lb HD
		3310-032 Comfort Grip Grease Handle with 36" Whip Hose and Z-swivel			4320-011 Drum cart: 35 lb grease, 2 wheels
		5310-024 Grease coupler 4-Jaws			4320-012 Drum cart: 120 lb/16 gal grease, 2 rear wheels. Front stabilizing rubber pads.
		4420-012 Holster, for grease gun			4320-013 3 Wheel drum cart: 400 lb/55 gal
		4420-008 25-35 lb Pail Panther® HP 50:1			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)
		4420-009 120 lb Panther® HP 50:1			2230-036 Hose reel mount kit for 4320-014 Heavy duty drum cart
		4420-004 400 lb for Panther® 50:1			
Drum Covers		4440-007 25-35 lb pail for Panther® HP 50:1	Hose reel mount kit		
		4440-008 120 lb for Panther® HP 50:1			
		4440-009 400 lb for Panther® HP 50:1			

Grease Piston Pumps Lion™ 350 60:1 Pumps



DIMENSIONS INCHES (MM)			
1450-013			
A	B	C	D
31.5" (803 mm)	11.25" (287 mm)	1.66" (35 mm)	20.25" (516 mm)
1450-012			
40" (1,017 mm)	11.25" (287 mm)	1.66" (35 mm)	28.75" (730 mm)
1450-011			
47.75" (1,212 mm)	11.25" (287 mm)	1.66" (35 mm)	36.5" (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	2.6 lb/min (1,200 g/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	SB 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/min (2 kg/min).

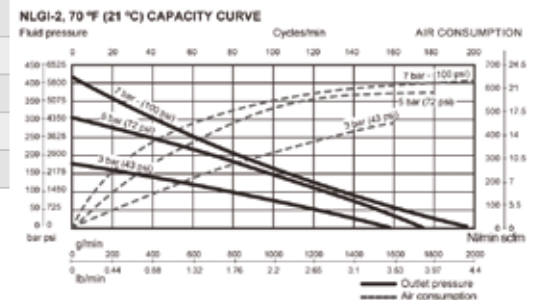
Fluids

- 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

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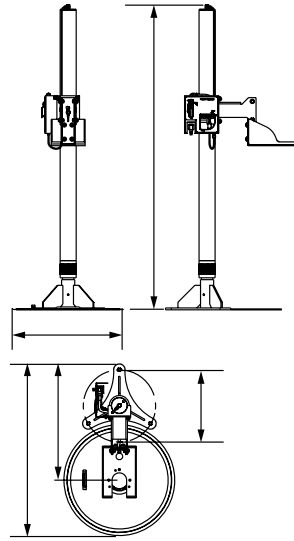


LION™ 350 60:1 PACKAGES	120 LB PORTABLE 1151-038	400 LB PORTABLE 1151-039	400 LB PORTABLE 1151-040
BARE PUMP	1450-012	1450-011	1450-011
FLUID HOSE	8321-016	8321-020	8333-005
F/R AUTO DRAIN	3260-033	3260-035	3260-033
COMFORT GRIP GREASE HANDLE	3310-030	3310-030	3310-030
DRUM COVER	4420-011	4420-015	4420-015
FOLLOWER PLATE	4440-014	4440-018	4440-018
CART	-	4320-013	4320-014
DOLLY	4310-001	-	-
HOSE REEL EVO 30' X 3/8" HP	-	-	2140-019



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	4420-017
FOLLOWER PLATE	4440-014	4420-018

Grease Piston Pumps Lion™ 350 60:1 Inductor

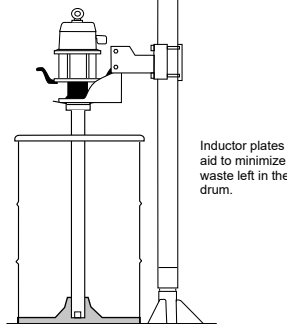
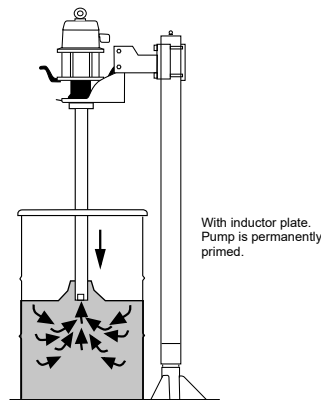
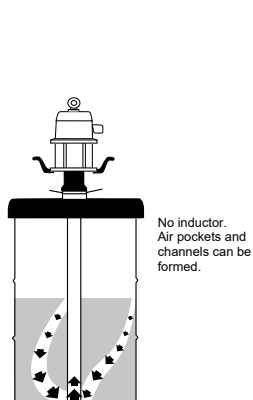


DIMENSIONS INCHES (MM)				
A	B LOWERED/ RAISED	C	D	E
23.25" (588 mm)	58" (1470 mm) 94.5" (2400 mm)	35.75" (910 mm)	24.03" (617 mm)	15" (381 mm)

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

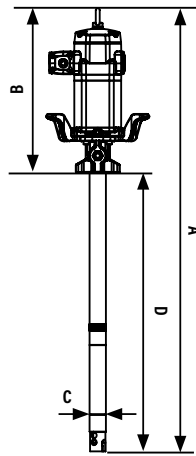
Grease Piston Pumps

Lion™ 350 60:1 Pump Components

1

Grease handle accessories		8390-002 18" Whip Hose HP Flexible Extension 8390-003 36" Whip Hose HP Flexible Extension 8390-004 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		4410-035 Connecting Hose Kit w/ Grease Handle for Lion™ Grease: 8132-005 LP Hose 5'x3/8" 8331-010 HP Hose 10'x3/4" 3270-004 Nipple 1/4" 3270-003 Coupler 1/4" 3310-030 Grease Handle
		5310-018 Z-Swivel 1/4" NPT(F) x 1/4" NPT(M)			4410-036 Connecting Hose Kit for Lion™ 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 Comfort Grip Grease Handle 3310-031 Comfort Grip Grease Handle with 18" Whip Hose and Z-swivel 3310-032 Comfort Grip Grease Handle with 36" Whip Hose and Z-swivel	Dollies		4310-005 Dolly Base, 5 gal/25 - 35 lb 4310-001 Band Dolly, 16 gal/120 lb 4310-003 Dolly, 16 gal/120 lb wide track 4310-004 Dolly, 55 gal/400 lb HD
		5310-024 Grease coupler 4-Jaws			
Drum Covers		4420-012 Holster, for grease gun - mounts on pail cover 4420-010	Carts		4320-011 Drum cart: 35 lb grease, 2 wheels
		4420-010 25-35 lb Pail Lion™ 350 4420-011 120 lb Lion™ 350 4420-015 400 lb for Lion™ 350			4320-012 Drum cart: 120 lb/16 gal grease, 2 rear wheels. Front stabilizing rubber pads.
		4440-013 25-35 lb pail for Lion™ 350 4440-014 120 lb for Lion™ 350 4440-018 400 lb for Lion™ 350			4320-013 3 Wheel drum cart: 400 lb/55 gal
Filter / Regulator		3260-035 filter/reg, auto drain 3/8" See pg. 165 for complete listing			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)
			Hose reel mount kit		2230-036 Hose reel mount kit for 4320-014 Heavy duty drum cart

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 ⁽¹⁾	47 cfm (1,340 NL/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 ⁽²⁾	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

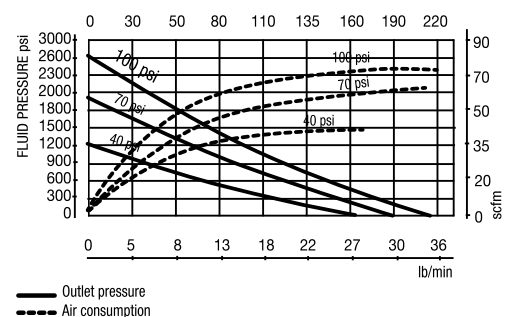
Applications

- 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

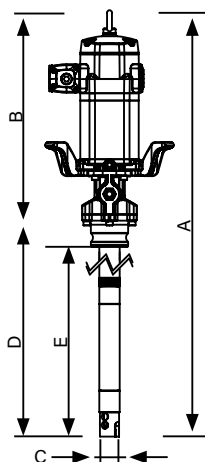
TEST FLUID: NLGI-0

Cycles/min



Grease Piston Pumps Lion™ 450 40:1 Pumps

1



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)

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

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 ⁽¹⁾	26.5 cfm (750 NI/min)
Air inlet	1/2" NPT(F)
Fluid outlet	1/2" NPT(F)
Wetted materials	Cast Iron, Steel, Hard chromed steel, UHMWPE, Buna-N™ and PTFE
Noise level ⁽²⁾	80 dB
Service Bulletin	SB 1131

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

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

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

Verify fluid compatibility with MSDS sheets.

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

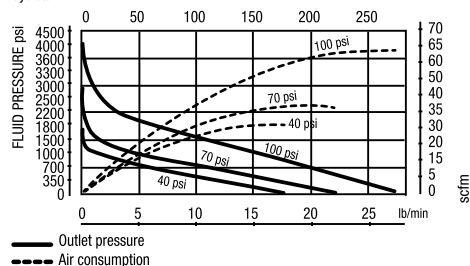
MODELS AVAILABLE

DESCRIPTION

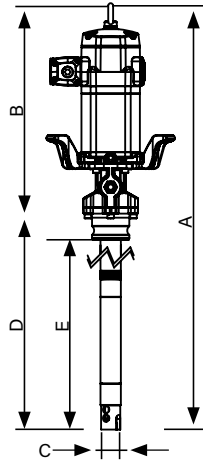
1450-003	Lion™ 450 40:1 grease 120 lb drum pump
1450-002	Lion™ 450 40:1 grease 400 lb drum pump
1450-004	Lion™ 450 40:1 grease bulk tote pump

NLGI-2, 21 °C (70 °F) CAPACITY

Cycles/min



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				
A	B	C	D	E
45.25" (1,152 mm)	19.75" (502 mm)	2" (50 mm)	25.5" (650 mm)	N/A
1450-007				
A	B	C	D	E
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 ⁽³⁾	30 - 100 psi (1.38 - 7 bar)
Maximum fluid stall pressure	7,000 psi (490 bar)
Air motor effective diameter	4.5" (115 mm)
Air motor stroke	4" (100 mm)
Air consumption ⁽¹⁾	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 ⁽²⁾	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

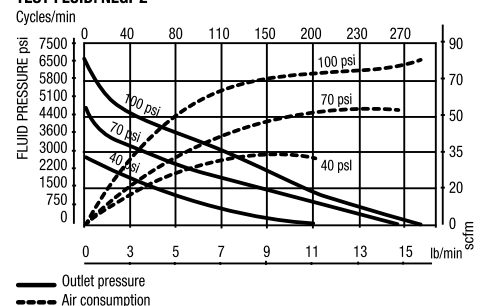
- Grease up to NLGI-2

Applications

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

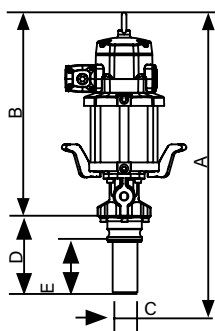
MODELS AVAILABLE	DESCRIPTION
1450-006	Lion™ 450 70:1 grease 120 lb drum pump
1450-005	Lion™ 450 70:1 grease 400 lb drum pump
1450-007	Lion™ 450 70:1 grease bulk tote pump

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 ⁽¹⁾	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 ⁽²⁾	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.

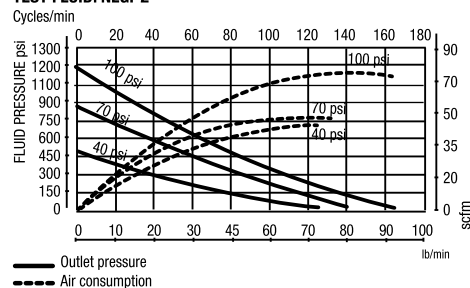
Warning! Do not use any Lion™ 450/600 series products with flammable fluids.

Verify fluid compatibility with MSDS sheets.

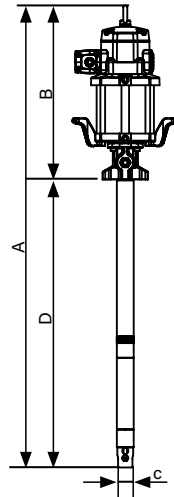
Contact Balcrank for pumping grease higher than NLGI-2 and specific system design performance technical data.

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 ⁽³⁾	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 ⁽¹⁾	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 ⁽²⁾	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

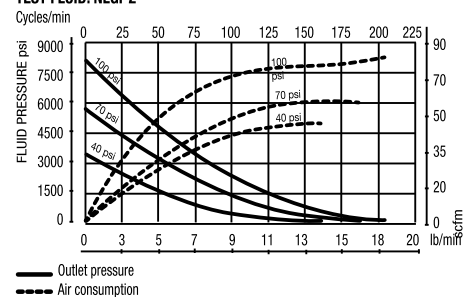
- Grease up to NLGI-2

Applications

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

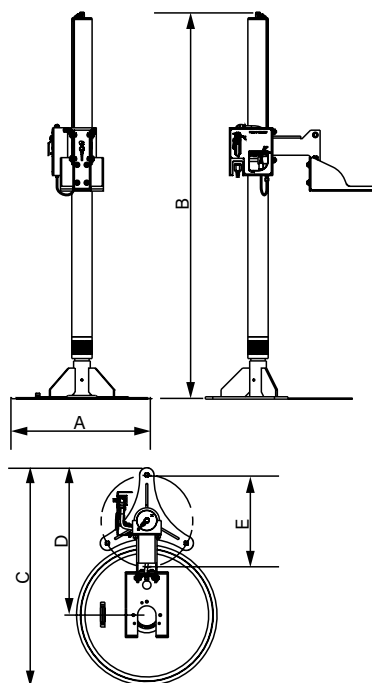
MODELS AVAILABLE	DESCRIPTION
1450-009	Lion™ 600 80:1 grease 120 lb drum pump
1450-008	Lion™ 600 80:1 grease 400 lb drum pump

TEST FLUID: NLGI-2



Grease Piston Pumps Lion™ Inductor

1



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)

Fluids & Applications

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

Fluids

- 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	SB 4228

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

Verify fluid compatibility with MSDS sheets.

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

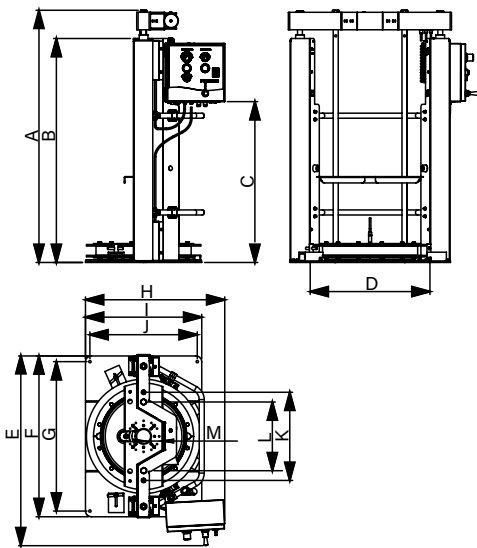
MODELS AVAILABLE	DESCRIPTION
1451-004	Package, Lion™ 450, 40:1 Inductor Includes: 1450-002 Lion™ 450, 40:1 pump 4450-003 Inductor, Gravity, Pump Lift & follower plate
1451-005	Package, Lion™ 450, 70:1 Inductor Includes: 1450-005 Lion™ 450, 70:1 pump 4450-003 Inductor, Gravity, Pump Lift & follower plate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

1

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

1

Drum cover 25-35 lb		4420-010 25-35 lb Pail LYNX® 55:1 4420-008 25-35 lb Pail Panther® HP 50:1	Inlet screen mesh		4430-004 Inlet Screen, , 30-Mesh Panther® HP Grease Pump				
Holster		4420-012 Holster, grease gun holder for LYNX® drum cover 4420-010	Grease handles		3310-008 Pro Series Grease Handle 3310-010 Pro Series Grease Handle with Z-swivel 3310-025 Pro Series Grease Handle with 18" Whip Hose and Z-swivel 3310-020 Pro Series Grease Handle with 36" Whip Hose and Z-swivel 3310-007 Pro Series Booster Grease Handle 3310-009 Pro Series Booster Grease Handle with Z-swivel 3310-030 Comfort Grip Grease Handle 3310-031 Comfort Grip Grease Handle with 18" Whip Hose and Z-swivel 3310-032 Comfort Grip Grease Handle with 36" Whip Hose and Z-swivel				
Drum cover 120 lb		4420-011 120 lb LYNX® 55:1 4420-009 120 lb Panther® HP 50:1 4420-014 Drum cover Lion™ 450/600 120 lb			Other accessories		8390-002 18" Whip Hose HP 8390-003 36" Whip Hose HP 8390-004 42" Whip hose HP Max. pressure 5,000 psi (345 bar) Hose end 1/8" NPT(M) on both ends Compatible fluid NLGI-2 Grease Flexible Extension 5310-018 Z-Swivel 1/4" NPT(F) x 1/4" NPT(M) 5200-017 Quick Lock grease coupler 1/8" NPT(F) 5310-024 Grease coupler 4-Jaws 5400-003 Bearing Packer		
Drum cover 400 lb		4420-007 400 lb Off-Set 4420-015 400 lb for LYNX® 55:1 4420-004 400 lb for Panther® 50:1 4420-013 400 lb for Lion™ 450/600 4420-003 400 lb for Lion™ HP 50:1 (Old Style)					8340-010 HP Hose 10'x1/2" 8340-020 HP Hose 20'x1/2"		
Follower plate 25-35 lb		4440-013 25-35 lb pail for LYNX®/Lion™ 4440-007 25-35 lb pail for Panther® HP 50:1			Pump runaway control		3241-002 Pump Runaway Control 1/4" NPT(F) 3241-001 Pump Runaway Control 1/2" NPT(F)		
Follower plate 120 lb		4440-014 120 lb for LYNX®/ Lion™ 4440-008 120 lb for Panther® HP 50:1 4440-017 120 lb for Lion™ 450/600					Connecting hose kit		4410-035 Connecting Hose Kit w/ Grease Handle for Panther® Grease: 8132-005 LP Hose 5' x 3/8" 8331-010 HP Hose 10' x 3/4" 3270-004 Nipple 1/4" 3270-003 Coupler 1/4" 3310-030 Grease Handle 4410-036 Connecting Hose Kit for Panther® Grease: 8132-005 LP Hose 5' x 3/8" 8331-010 HP Hose 10' x 3/8" 3270-004 Nipple 1/4" 3270-003 Coupler 1/4" 4410-030 Connecting Hose Kit for Lion™ Grease: 8144-055 LP Hose 5' x 1/2" 8343-010 HP Hose 10' x 1/2" 3270-001 Nipple 3/8" 3270-002 Coupler 3/8"
Follower plate 400 lb		4440-018 400 lb for LYNX®/ Lion™ 4440-009 400 lb for Panther® HP 50:1 4440-012 400 lb for Lion™ HP (Old Style 50:1) 4440-015 , 400 lb for Lion™ 450/600							
Bung Adapters		4411-023 Bung adapter, aluminum: LYNX® 55:1 4411-021 Bung adapter, aluminum: Lion™ 450/600 25:1, 40:1, & 70:1							
Cam-lock		4140-058 Male cam-lock 3" for Lion™ 450/600 for tote applications							
		4140-059 Female cam-lock 3" for Lion™ 450/600 for tote applications							
Filter regulator (F/R)		3260-036 F/R auto drain 1/2" NPT(F) See pg. 165 for complete listing							

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		4450-002 Pump Lift, Air Operated for Lion™ 450/600
		4320-012 Drum cart: 120 lb/16 gal grease, 2 rear wheels. Front stabilizing rubber pads.			
		4320-013 Drum cart: 400 lb/55 gal			
		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)	Base plate		4450-005 Base plate for pump hoist & inductor
		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		4420-014 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.
		3230-015 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

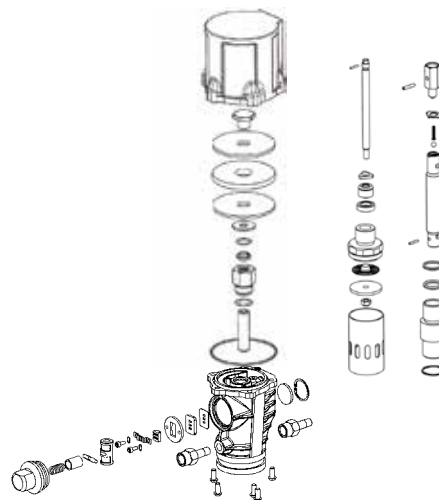


	7120-015 PANTHER® HP 50:1	7120-016 PANTHER® HP 50:1
Designed For Drum Size	120 lb / 16 gal	400 lb / 55 gal
Bare Pump	1150-010	1150-011
Air Hose 5' x 3/8"	8132-005	8132-005
Fluid Hose 10' x 3/8"	8331-010	8331-010
Follower Plate	4440-008	4440-009
Drum Cover	4420-014	4420-013
Flange Mount Kit	7120-026	7120-026
Hold Down Rod	7120-025	7120-024

Piston Pump Repair Kits for Grease

1

LYNX® 55:1 SERIES		
PUMP MODELS	KIT NUMBER	DESCRIPTION
LYNX® 55:1 SERIES PUMPS, 1150-022, 1150-023, 1150-024		
1150-022, 1150-023, 1150-024	833038	Air motor kit
1150-022, 1150-023, 1150-024	833039	Packing Seal kit
1150-022, 1150-023, 1150-024	833040	Inlet Check Valve - Poly Kit
1150-022, 1150-023, 1150-024	833041	HP Piston/cylinder & check valve
1150-022, 1150-023, 1150-024	833059	Inlet Filter Kit



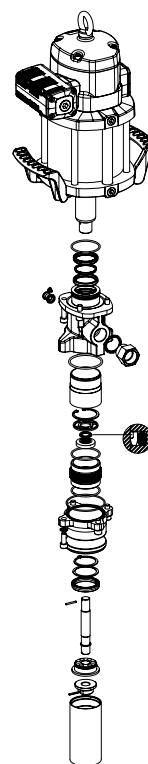
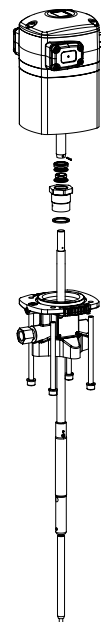
PANTHER® HP 50:1 SERIES		
PUMP MODELS	KIT NUMBER	DESCRIPTION
PANTHER® 50:1 SERIES PUMPS, 1150-009, 1150-010, 1150-011		
Panther® HP Series Pumps - All	900019	Air motor kit - Trip Rod Assembly
Panther® HP Series Pumps - All	831614	Air motor assembly kit- Includes Piston
Panther® HP Series Pumps - All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

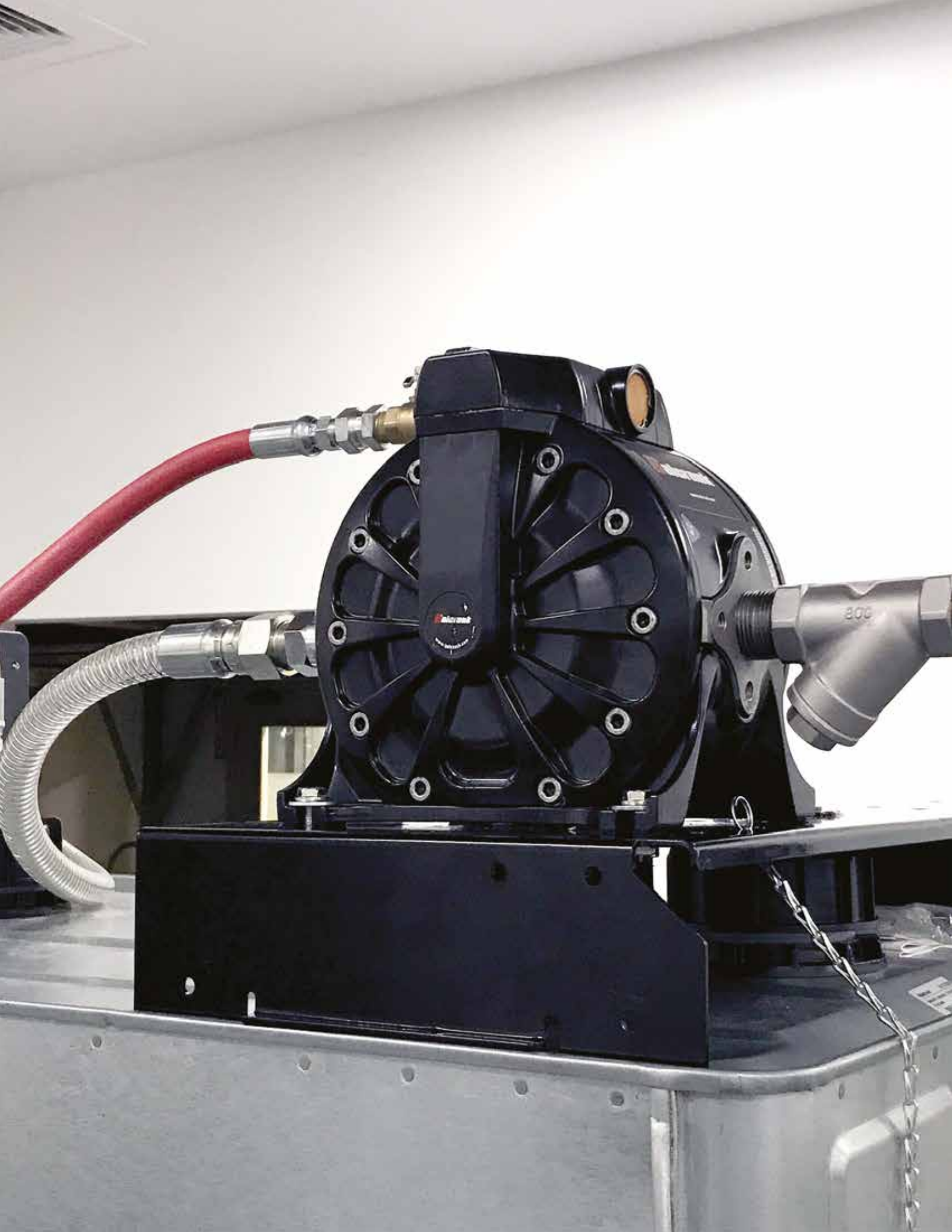


Piston Pump Repair Kits for Grease

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

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





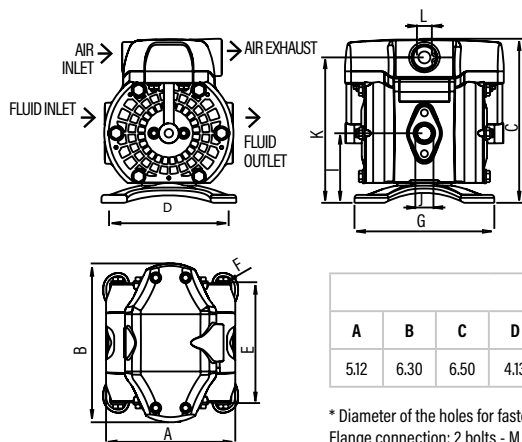
CenterFlo Air Operated Double Diaphragm Selection Matrix

MAX. FREE FLOW	AIR INLET	FLUID IN / OUT	WETTED PARTS		RECOMMENDED FLUID TYPES	RECOMMENDED APPLICATIONS
			CHECK BALLS	DIAPHRAGM		
CF10 POLYPROPYLENE						
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
CF10 POLYPROPYLENE/DEF						
10 gal/min (38 l/min)	3/8" NPSM(F)	1/2" BSPP(F)	PTFE (Teflon [®])	Hytrel [®]	Diesel exhaust fluid	Fluid dispensing and transfer
CF15 POLYPROPYLENE						
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, transfer, and evacuation
CF15 POLYPROPYLENE/DEF						
15 gal/min (50 l/min)	3/8" NPSM(F)	1/2" BSPP(F)	PTFE (Teflon [®])	Hytrel [®]	Diesel exhaust fluid	Fluid dispensing and transfer
CF15 ALUMINUM						
15 gal/min (50 l/min)	3/8" NPSM(F)	1/2"NPT(F)	Buna-N™	Buna-N™	Light viscosity fluids synthetic, mineral oils, and used oil	Fluid dispensing, transfer, and evacuation
CF15 SPECIALTY/MIXING 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
CF30 POLYPROPYLENE						
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
CF30 POLYPROPYLENE/DEF						
28 gal/min (106 l/min)	3/8" NPSM(F)	1" BSPP(F)	PTFE (Teflon [®])	Hytrel [®]	Diesel exhaust fluid	Fluid dispensing and transfer
CF30 ALUMINUM						
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, transfer, and evacuation
CF50 POLYPROPYLENE						
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 and transfer
CF50 ALUMINUM						
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 and transfer
CF65 ALUMINUM						
65 gal/min (250 l/min)	1/2" NPSM(F)	1 1/2" NPT(F)	Acetal	Hytrel [®]	Light viscosity fluids, synthetic, mineral oils, used oil, windshield wash solution, and diesel	High volume transfer, bulk fill, de-watering, and evacuation
65 gal/min (250 l/min)	1/2" NPSM(F)	1 1/2" NPT(F)	Buna-N™	Buna-N™	Light viscosity fluids synthetic, mineral, oils, used oil, and diesel	Fluid dispensing, transfer, and evacuation
TF170 ALUMINUM						
170 gal/min (605 l/min)	3/4" NPSM(F)	2" NPT(F)	Hytrel [®]	Hytrel [®]	Light viscosity fluids synthetic, mineral, oils, used oil, and anti-freeze	Fluid dispensing, transfer, and evacuation
CONVENTIONAL UL ALUMINUM						
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



AODD CenterFlo CF10

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

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

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

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

Fluids & Applications

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

Typical applications are transferring, dispensing, and evacuation, up to 10 gal/min. They can be used as stand-alone pumps for transfer applications.

Fluids

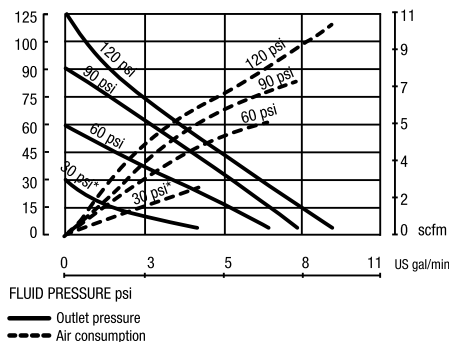
- Anti-freeze (Glycol)
- Windshield wash solution
- DEF

Markets Served

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

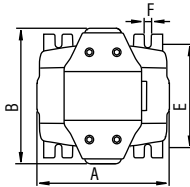
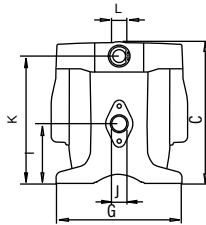
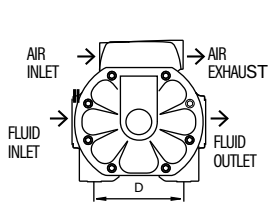
Pressure relief valve kit 3120-201 for this pump is recommended and not included.

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



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

AODD CenterFlo CF15



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

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

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

Fluids & Applications

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

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

Fluids

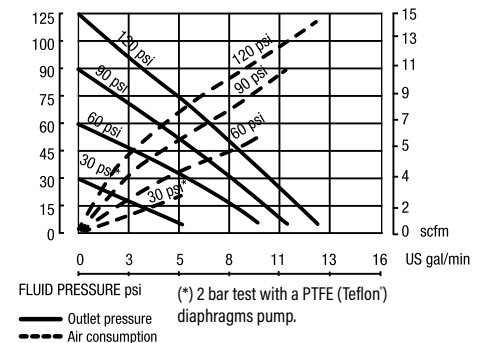
- Anti-freeze (Glycol)
- Light viscosity fluids
- Windshield wash solution
- Synthetic and mineral oils
- DEF
- Used oil & anti-freeze

Markets Served

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

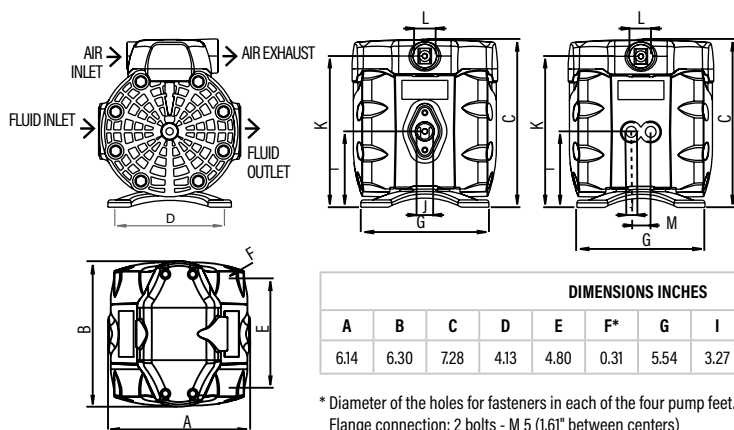
Pressure relief valve kit 3120-201 for this pump is recommended and not included.

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)

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 1123

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

Fluids & Applications

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

Fluids

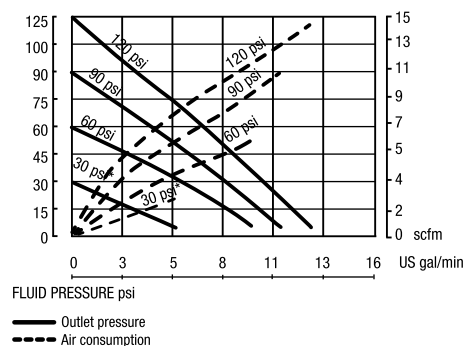
- Anti-freeze (Glycol)
- Windshield wash solution

Markets Served

- Car and truck dealers
- Quick lubes

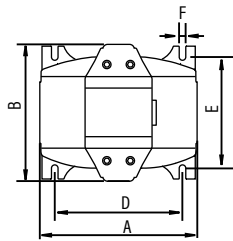
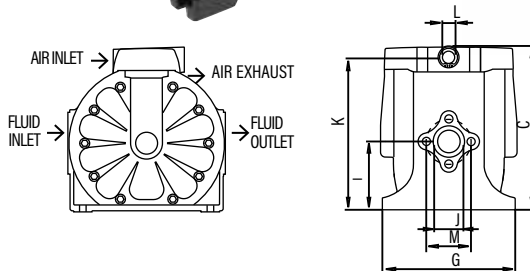
Pressure relief valve kit 3120-201 for this pump is recommended and not included.

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

Air inlet	3/8" NPSM(F)
Fluid inlet port	1" NPT(F) 1120-026A, 1120-040 1" BSPP(F) for DEF 1120-031A
Fluid outlet port	1" NPT(F) 1120-026A, 1120-040 1" BSPP(F) for DEF 1120-031A
Max. free flow	28 gal/min (106 l/min)
Air pressure range	22 to 102 psi (1.5 to 7 bar)
Solids in suspension	3/16" (4 mm)
Wetted Materials	
1120-026A and 1120-031A	PTFE (Teflon [®]), Viton [®] , polypropylene, stainless steel, and Hytrel [®]
1120-040	Aluminum, Acetal Teflon [®] , Buna-N, Hytrel [®] and stainless steel
Recommended fluids	
1120-026A	Windshield wash solution
1120-040	Light viscosity fluids, synthetic, mineral oils, anti-freeze, and used oil
1120-031A	Diesel exhaust fluid
Recommended applications	Fluid dispensing, transfer, DEF, and evacuation
Service Bulletin	SB 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, dispensing, and evacuation up to 28 gal/min. They can be used as stand-alone pumps for transfer applications or as systems pumps that include hose reels.

Fluids

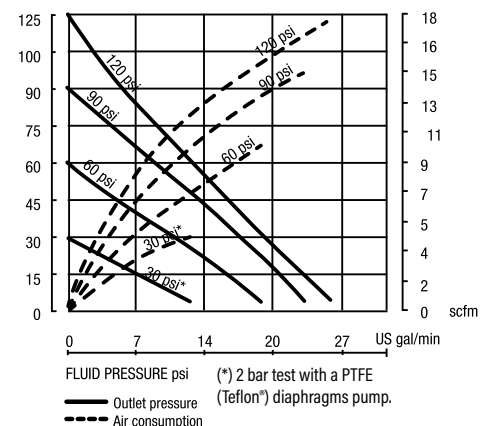
- Anti-freeze (Glycol)
- Light viscosity fluids
- Windshield wash solution
- Synthetic and mineral oils
- DEF
- Used Fluids

Markets Served

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

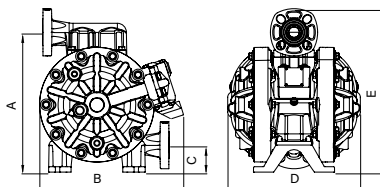
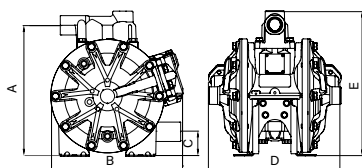
Pressure relief valve kit 3120-201 for this pump is recommended and not included.

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

1



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

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

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

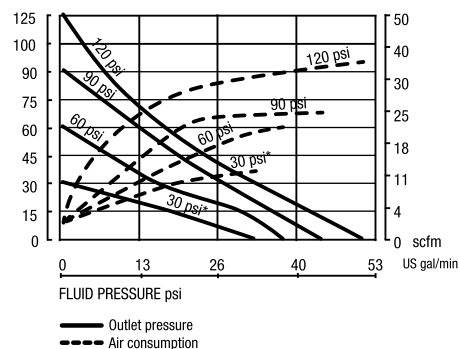
Markets served

- 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.

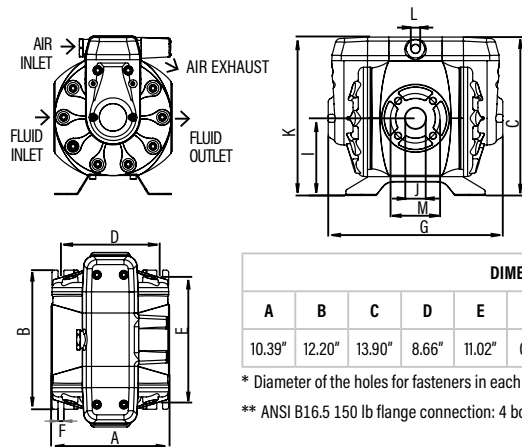
MODELS AVAILABLE	DESCRIPTION
1120-037	CF50 Aluminum
1120-038	CF50 Polypropylene
3120-202	Pressure Relief for Diaphragm 1" NPT



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

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

AODD CenterFlo CF65



DIMENSIONS INCHES											
A	B	C	D	E	F*	G	I	J	K	L	M
10.39"	12.20"	13.90"	8.66"	11.02"	0.51"	15.35"	6.77"	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

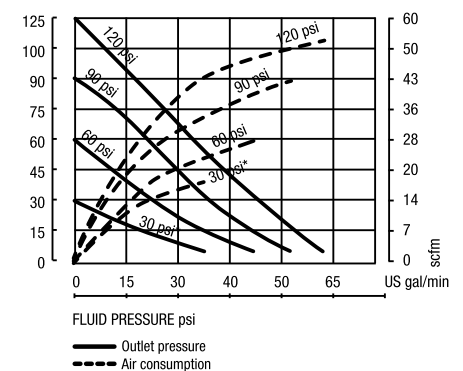
- Anti-freeze (Glycol)
- Light viscosity fluids
- Windshield wash solution
- Synthetic and mineral oil
- Used oil and anti-freeze

Markets Served

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

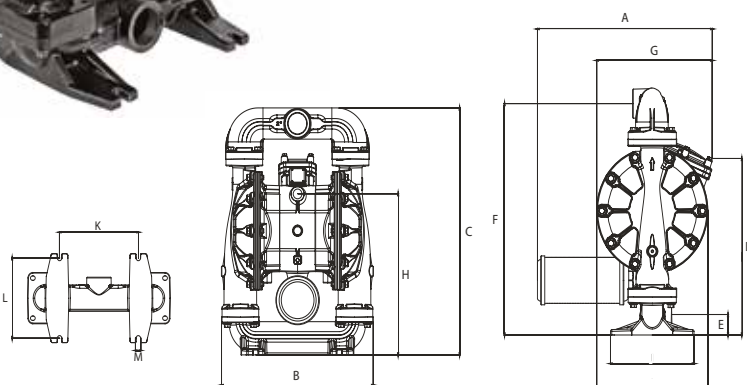
Pressure relief valve kit 3120-202 for this pump is recommended and not included.

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



AODD TraditionalFlo TF170

1



DIMENSIONS INCHES											
A	B	C	D	E	F	G	I	J	K	L	M
21.11"	18.31"	26.45"	18.89"	2 1/8"	24.79"	13.97"	13.25"	10.05"	10.08"	9.06"	0.59"

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 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

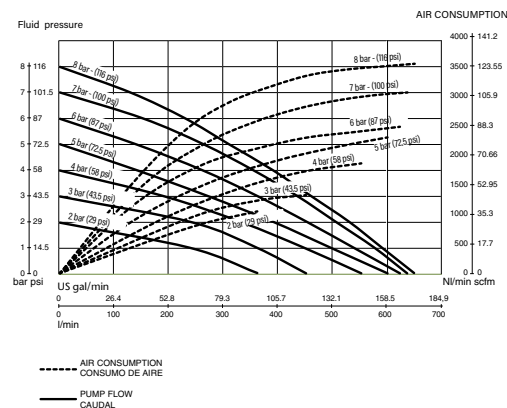
Markets Served

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

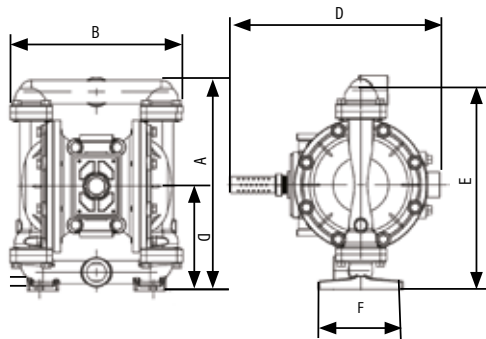
TECHNICAL DATA	
Air inlet	3/4" NPT(F)
Fluid inlet port	2" NPT(F)
Fluid outlet port	2" NPT(F)
Max. free flow	170 gal/min (605 l/min)
Air pressure range	22-115 psi (1.5-8 bar)
Solids in suspension	1/4" (6 mm)
Wetted Materials	Aluminum, Hytrel®, Viton®
Recommended Fluids	Anti-freeze (Glycol), windshield wash solution, lubricants, waste oil, waste fluid, used fluid and anti-freeze
Recommended Applications	Very large volume transfer, de-watting 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.

MODELS AVAILABLE	DESCRIPTION
1120-041	TF170 Aluminum



AODD Conventional 1" UL Aluminum



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

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

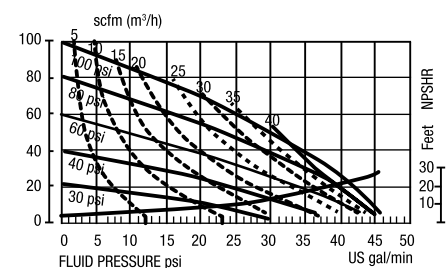
Fluids

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

Markets Served

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

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



AODD Dispense Packages

1

CF15 Series Wall-Mount Package

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



1121-015 CF15 WALL-MOUNT PACKAGE FOR ANTI-FREEZE & WINDSHIELD WASH SOLUTIONS	
INCLUDES	
1120-023A	Polypropylene CF15 Diaphragm Pump
8134-005	LP Hose Assembly 5' x 3/8"
3260-035	F/R Auto Drain 3/8" NPT(F)
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

CF15 Series Mixing Package

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



1121-016 CF15 MIXING PACKAGE FOR BLENDING ANTI-FREEZE & WINDSHIELD WASH SOLUTIONS	
INCLUDES	
1120-028A	Mixing CF15 Diaphragm Pump
8134-005	LP Hose Assembly 5' x 3/8"
3260-035	F/R Auto Drain 3/8" NPT(F)
3120-201	Pressure Relief Kit 1/2" NPT
8249-005	MP Hose Assembly 5' x 1/2"
8146-010	Qty 2 - LP Suction Rated Hose Assembly 10' x 1/2"
4412-019	Qty 2 - CenterFlo AODD Suction Tube Kit
4411-025	Mounting Bracket for AODD Pumps

CF50 Series Wall-Mount Package

Wall mount pumping system for anti-freeze (Glycol) or windshield washer solution, designed for the CF50 series



1121-027 CF50 WALL-MOUNT PACKAGE FOR ANTI-FREEZE & 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
831820	LP Suction Rated Hose Assembly 4' x 1" NPT(M)
831821	CenterFlo AODD Suction Tube Assembly 5' x 1" NPT(M)
4411-036	Mounting Bracket for AODD Pumps

CF30 Series Wall-Mount Package

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

*Pressure relief recommended. See pg. 67 for pressure relief kits.

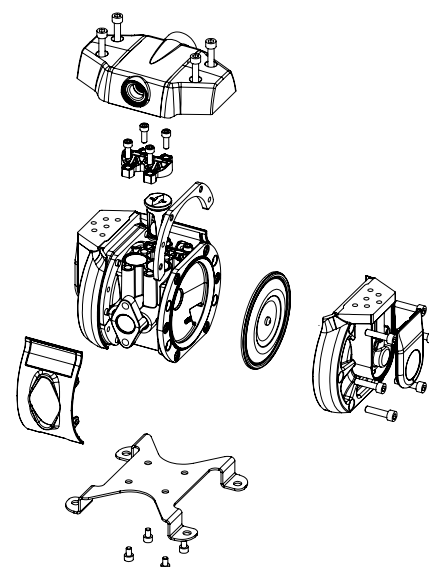
AODD Pump Accessories

Y-STRAINER - 580 PSI (40 BAR)			PRESSURE RELIEF KITS				
All strainers have 40 mesh							
Y-Strainer		3120-211 1/2" NPT(F)	Pressure Relief Kits		3120-201 Pressure Relief for Diaphragm 1/2" NPT 250 psi (172 bar) Includes: Valve, Tube 3' x 1/4" and 1/2" nipple		
		3120-212 3/4" NPT(F)					
		3120-213 1" NPT(F)					
SUCTION LINE-STRAINER - 150 PSI (10 BAR)			SUCTION TUBES				
All strainers have 20 mesh							
Suction Line-Strainer		3120-219 1" NPT(F)	Suction Tubes		4412-044 1" NPT(M) x 18" - 30° 16 gal drum		
DRY BREAK COUPLER & NIPPLE RATED					4412-046 1" NPT(M) x 26" - 30° 55 gal drum		
For vacuum or up to 3,000 psi (207 bar)					4412-045 1" NPT(M) x 21" - 30° 165/280 gal bench tank		
Dry Break Coupler & Nipple		4140-016 Coupler 3/4" NPT(F)			4412-048 1" NPT(M) x 30" - 30° 165/280 gal bench tank double tap		
		4140-050 Coupler 1" NPT(F)			4412-047 1" NPT(M) x 28" - 30° 250 gal bench tank double tap		
		4140-023 Nipple 3/4" NPT(F)			4412-051 1" NPT(M) x 42" - 30° 275/330 gal horizontal obround double tap		
		4140-051 Nipple 1" NPT(F)			4412-052 1" NPT(M) x 60" - 30° 330 gal vertical obround		
CAM-LOCK COUPLER & NIPPLE RATED					4412-049 1" NPT(M) x 32" - 30° 275 gal tote	4412-050 1" NPT(M) x 39" - 30° 330 gal tote	
For 250 psi (17 bar)					BRACKETS		
Cam-Lock Coupler & Nipple		4140-044 Coupler 3/4" NPT(F)			Wall-mount bracket		4411-016 Wall Mount Bracket for conventional diaphragm pumps
		4140-017 Coupler 1" NPT(F)	4411-025 Wall Mount Bracket for CF10, 15, & 30 diaphragm pumps				
		4140-054 Nipple 3/4" NPT(F)	4411-036 Mounting Bracket for CF50 AODD Pumps				
		4140-055 Nipple 1" NPT(F)	VALVES				
		4140-045 Nipple 3/4" NPT(M)	Ball valve fully ported no bleed		3230-018 Ball valve, 1/4", 580 psi (40 bar)		
		4140-018 Nipple 1" NPT(M)			3230-019 Ball valve, 3/8", 580 psi (40 bar)		
		4140-046 Dust Cap 3/4" NPT(F)			3230-020 Ball valve, 1/2", 580 psi (40 bar)		
		4140-019 Dust Cap 1" NPT(F)			3230-021 Ball valve, 3/4", 580 psi (40 bar)		
		4140-052 Dust Plug 3/4" NPT(M)			3230-022 Ball valve, 1", 580 psi (40 bar)		
		4140-053 Dust Plug 1" NPT(M)	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)						

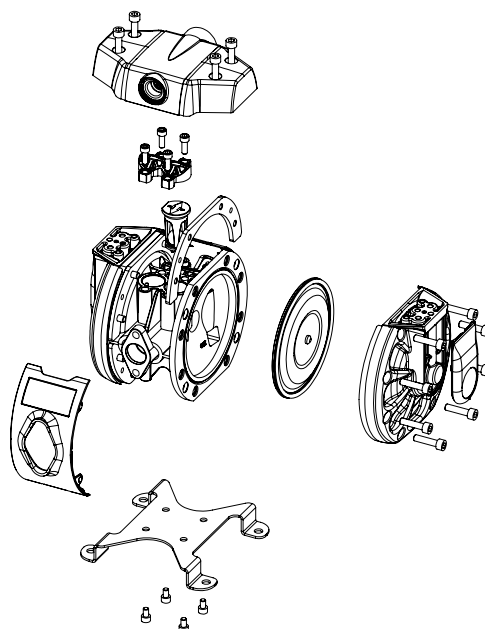
AODD Pumps Repair Kits (CenterFlo)

1

CF10		
PUMP MODELS	KIT NUMBER	DESCRIPTION
CF10 AODD PUMPS - 1120-029A, 1120-034		
1120-029A, 1120-034	833206	Air valve kit
1120-029A, 1120-034	833207	Stroke sensor kit
1120-029A, 1120-034	833208	Check Ball kit
1120-029A	833735	Ball Seats, O-rings, ball guides
1120-029A, 1120-034	833209	Ball Seats, O-rings, ball guides
1120-029A	833238	Diaphragms kit (Prior to 2/1/2013)
1120-029A, 1120-034	833337	Diaphragms kit (After to 2/1/2013)
1120-029A	833331	Bushing, seal, push rod (Prior to 2/1/2013)
1120-029A, 1120-034	833336	Bushing, seal, push rod (After to 2/1/2013)

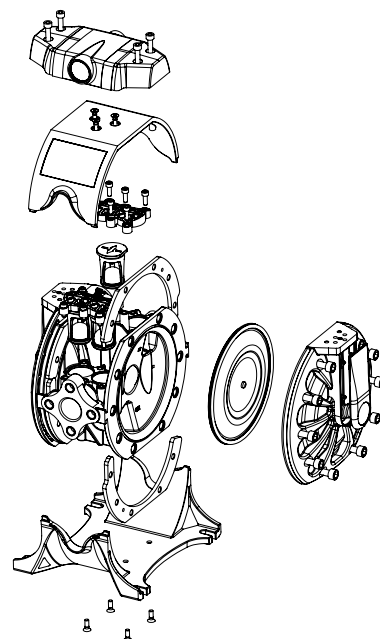


CF15		
PUMP MODELS	KIT NUMBER	DESCRIPTION
CF15 AODD PUMPS - 1120-023A, 1120-025A, 1120-027, 1120-028A		
1120-023A, 1120-025A, 1120-027, 1120-028A	833206	Air valve kit
1120-023A, 1120-025A, 1120-027, 1120-028A	833207	Stroke sensor kit
1120-023A, 1120-025A	833208	Check Ball kit
1120-027, 1120-028A	833236	Check Ball kit
1120-023A, 1120-025A, 1120-028A	833735	Ball Seats, O-rings, ball guides
1120-027, 1120-028A	833330	Ball Seats, O-rings, ball guides
1120-023, 1120-025A, 1120-027, 1120-028A	833209	Ball Seats, O-rings, ball guides
1120-023, 1120-025A, 1120-028A	833210	Bushing, seal, push rod (Prior to 2/1/2013)
1120-023, 1120-025A, 1120-028A	833332	Bushing, seal, push rod (After to 2/1/2013)
1120-027	833237	Bushing, seal, push rod
1120-027	833333	Diaphragms kit (After to 2/1/2013)
1120-023, 1120-025A, 1120-027, 1120-028A	833211	Diaphragms kit (Prior to 2/1/2013)
1120-023, 1120-025A, 1120-027, 1120-028A	833338	Diaphragms kit (After to 2/1/2013)
1120-023, 1120-025A, 1120-027, 1120-028A	833341	Retrofit Kit (Updates pumps prior to 2/1/2013)

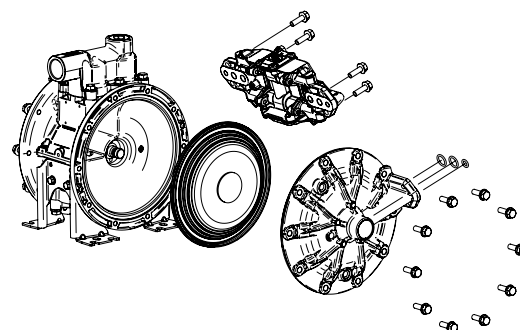


AODD Pumps Repair Kits (CenterFlo)

CF30		
PUMP MODELS	KIT NUMBER	DESCRIPTION
CF30 AODD PUMPS 1120-024, 1120-026A, 1120-031A		
1120-040, 1120-024, 1120-026A, 1120-031A	833212	Air valve kit
1120-040, 1120-024, 1120-026A, 1120-031A	833207	Stroke sensor kit
1120-026A, 1120-031A	833233	Check Ball kit
1120-040, 1120-024	833213	Check Ball kit
1120-026A, 1120-031A	833234	Ball Seats, O-rings, ball guides
1120-040, 1120-024	833214	Ball Seats, O-rings, ball guides
1120-026A, 1120-031A	833235	Bushing, seal, push rod (Prior to 2/1/2013)
1120-026A, 1120-031A	833335	Bushing, seal, push rod (After to 2/1/2013)
1120-040, 1120-024	833334	Bushing, seal, push rod (After to 2/1/2013)
1120-040, 1120-024	833215	Bushing, seal, push rod (Prior to 2/1/2013)
1120-040, 1120-024, 1120-026A, 1120-031A	833339	Diaphragms kit (After to 2/1/2013)
1120-040, 1120-024, 1120-026A, 1120-031A	833342	Retrofit Kit (Updates pumps prior to 2/1/2013)



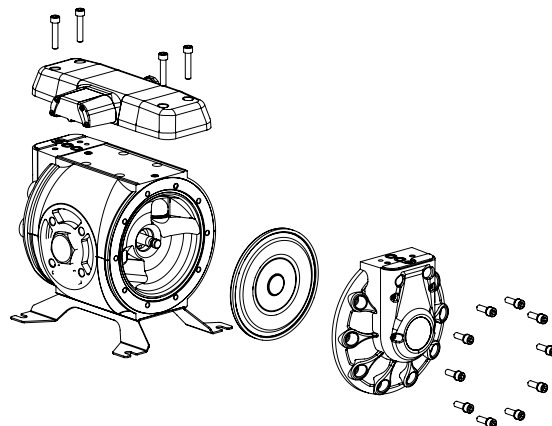
CF50		
PUMP MODELS	KIT NUMBER	DESCRIPTION
CF50 AODD PUMPS 1120-037, 1120-038		
1120-037	833692	Air Valve Kit
1120-038	833693	Stroke sensor kit
1120-037	833698	Bushing, seal, push rod (Acetal/Buna-N/SS)
1120-038	833699	Bushing, seal, push rod (PTFE/Viton/SS)
1120-037	833696	Ball Seats/Seal (Buna-N)
1120-038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



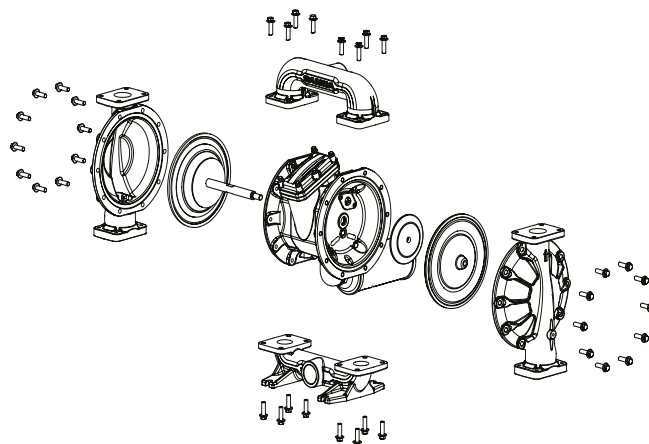
AODD Pumps Repair Kits (CenterFlo and Conventional)

1

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

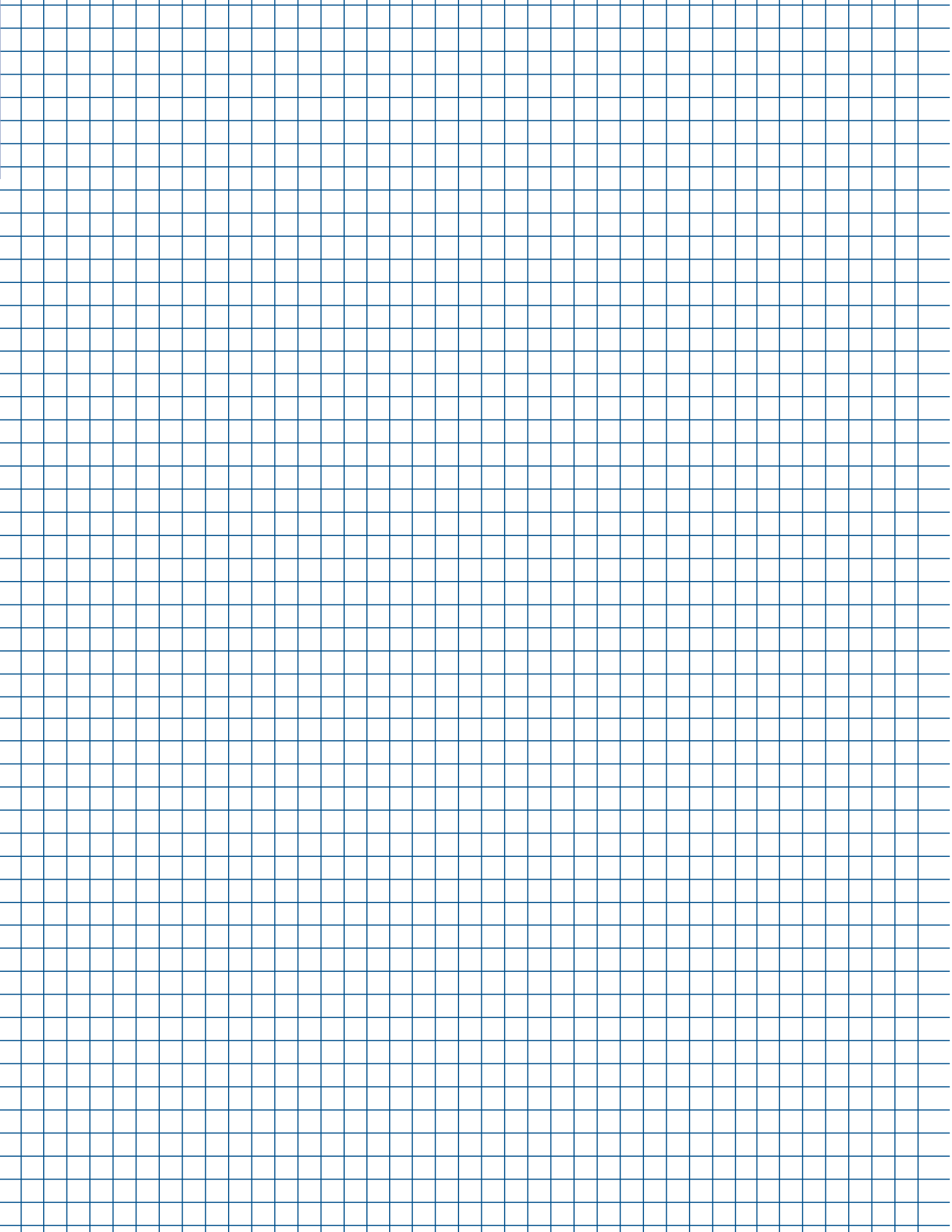


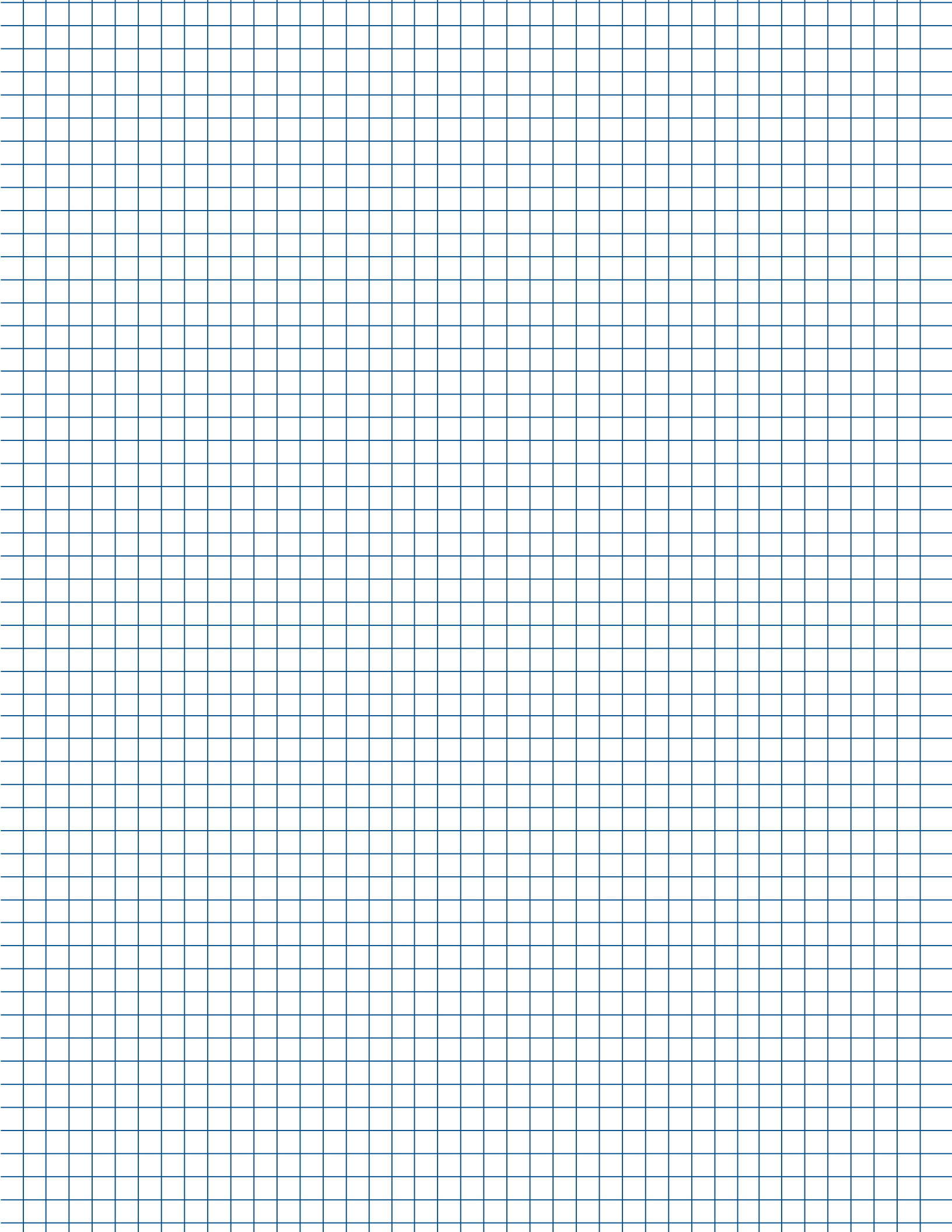
TRADITIONALFLO TF170 AODD PUMPS		
PUMP MODELS	KIT NUMBER	DESCRIPTION
1120-041		
1120-041	833886	Air valve kit
1120-041	833888	Air sensors
1120-041	833889	Air motor, central body
1120-041	833890	Air motor, lateral body
1120-041	833891	Air exhaust
1120-041	833892	Push rod
1120-041	833893	Diaphragm Cover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

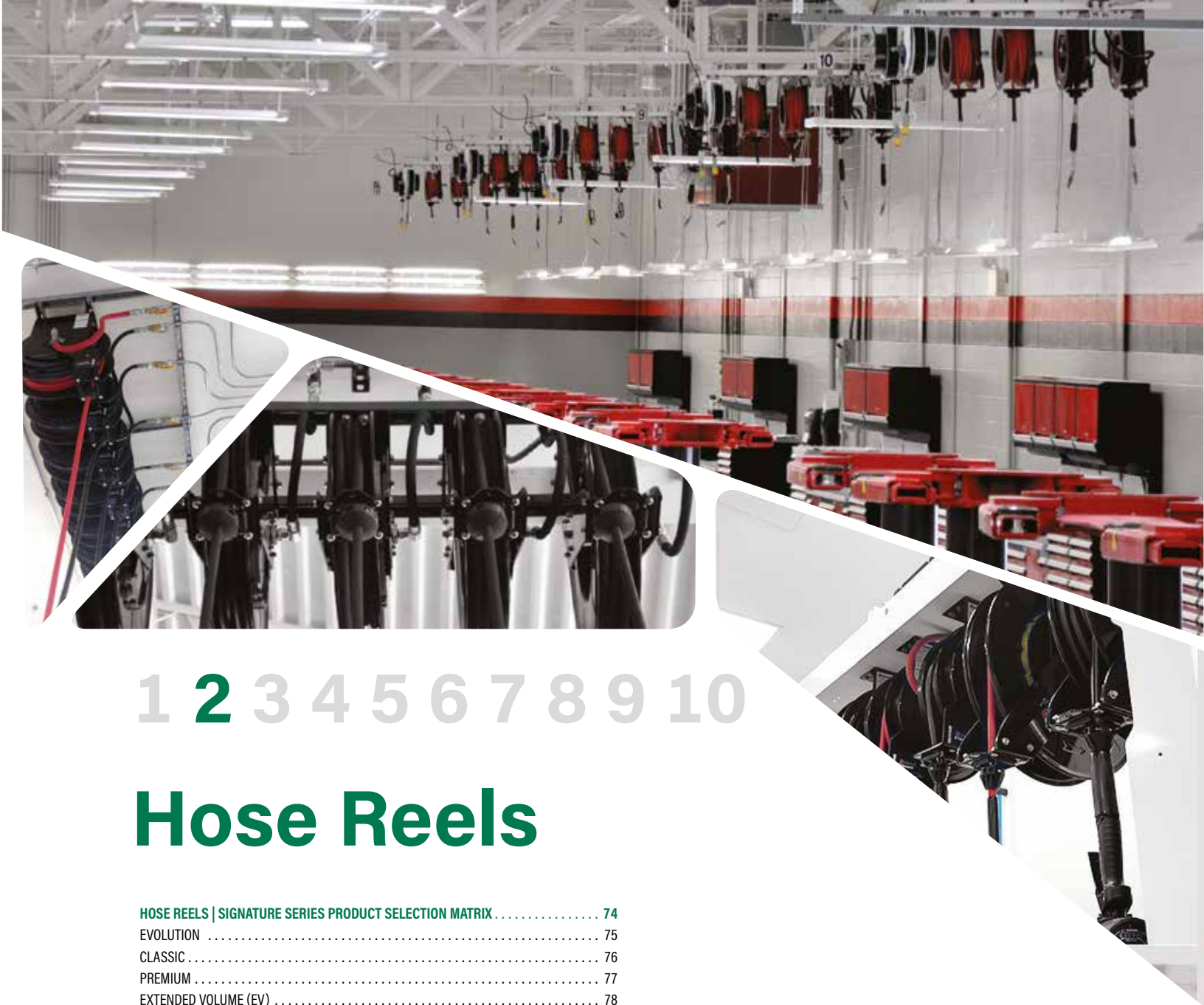


CONVENTIONAL AODD PUMP		
PUMP MODELS	KIT NUMBER	DESCRIPTION
ALUMINUM AODD PUMPS - 1120-015S		
1120-015S	833103	Air seal kit
1120-015S	832973	Air assembly kit
1120-015S	832974	Fluid seal kit









1 2 3 4 5 6 7 8 9 10

Hose Reels

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Hose Reels Product Selection Matrix

MAX. HOSE	CONSTRUCTION	RECOMMENDED MARKETS	RECOMMENDED APPLICATIONS	MOUNTING
EVOLUTION				
50' x 1/2"	Composite spool Steel pedestal Dual ball-bearings	Grease Small to medium dealerships Tire shops Transmission shops	Air/Water - low pressure Oil - medium pressure Grease - high pressure Enclosed models	Ceiling, floor, wall, truck, tank
CLASSIC				
50' x 1/2" 30' x 3/4"	All steel spool and Pedestal	Grease Auto dealerships Tire shops Transmission Shops	Air/Water - low pressure Diesel - low pressure Oil - medium pressure DEF - medium pressure Grease - high pressure Enclosed models	Ceiling, floor, wall, tank
PREMIUM				
60' x 1/2"	All steel spool and Pedestal Double arm Dual ball-bearings	Truck shops Municipalities Railroad Mining Lube trucks	Air/Water - low pressure Oil - medium pressure Grease - high pressure	Ceiling, floor, wall, truck, tank
EXTENDED VOLUME (EV)				
50' x 3/4" 65' x 3/8" 65' x 1/2"	All steel spool and Pedestal Heavy duty High capacity Double arm Dual ball-bearings	Truck shops Municipalities Railroad Mining Lube trucks	Air/Water - low pressure DEF - low pressure Diesel - low pressure Oil - medium pressure Grease - high pressure	Ceiling, floor, wall, truck, tank
EXTENDED VOLUME EXTRA (EVX)				
50' x 1" 75' x 3/4" 100' x 1/2"	All steel spool and Pedestal Heavy duty High capacity Double arm Dual ball-bearings	Truck shops Municipalities Railroad Mining Lube trucks	Air/Water - low pressure Diesel - low pressure Evacuation - low pressure Oil - medium pressure	Floor, truck, tank
EXTENDED VOLUME+ (EVX+)				
50' x 1 1/2"	All steel spool and Pedestal Heavy duty High capacity Double arm Dual ball-bearings Dual spring	Truck shops Municipalities Railroad Mining Lube trucks	Air/Water - low pressure Diesel - low pressure Oil - medium pressure	Floor, truck, tank



EVOLUTION



CLASSIC



PREMIUM



**EXTENDED
VOLUME (EV)**

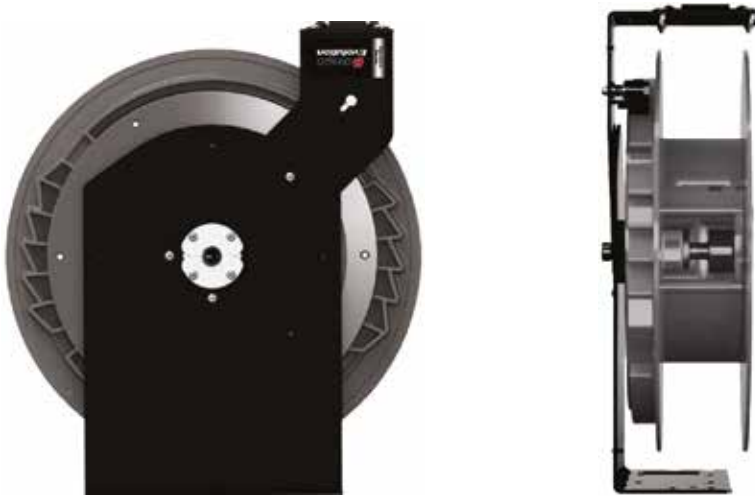


**EXTENDED
VOLUME EXTRA (EVX)**



**EXTENDED
VOLUME + (EVX+)**

Hose Reels Evolution



**Air & Water
Anti-freeze
Oil
Grease**

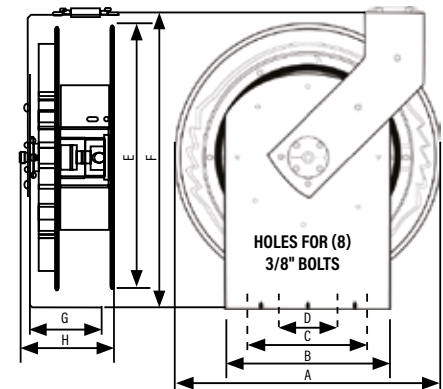
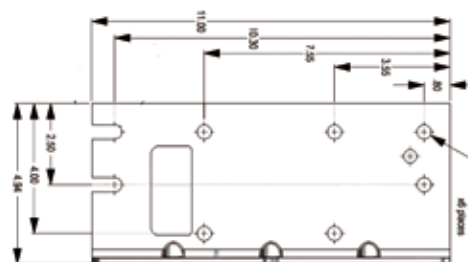
Evolution Hose Reel: an Evolution in Design and Performance

Lightweight but extremely rugged: steel pedestal and arm and dual ball-bearings. The Evolution is a solid performer. The Evolution combines design, performance and reliability with the right features and benefits for today's customers.

All Evolution series reels have a narrow and lightweight design; includes hose, hose stop and a 2.5' connecting hose.

MODELS AVAILABLE	DESCRIPTION	REPLACEMENT HOSE
Air & water low pressure 300 psi (21 bar) for delivery of air, water, windshield wash fluid, and anti-freeze		
2140-021	Bare reel - up to 50' Hose	
2140-007	30' x 3/8" ID hose	8136-030
2140-008	50' x 3/8" ID hose	8136-050
2140-010	30' x 1/2" ID hose	8141-030
2140-011	50' x 1/2" ID hose	8141-050
Oil medium pressure 2,750 psi (190 bar) for delivery of lubricants		
2140-002	Bare reel - up to 50' Hose	
2140-013	30' x 1/2" ID hose	8241-030
2140-014	50' x 1/2" ID hose	8241-050
Grease high pressure 5,000 psi (345 bar) for delivery of grease		
2140-005	Bare reel - up to 50' Hose	
2140-019	30' x 3/8" ID hose	8332-030
2140-020	50' x 3/8" ID hose	8332-050

TECHNICAL DATA	
Low & medium pressure reels	
Fluid inlet port	1/2" NPT(F) swivel
Fluid outlet port	1/2" NPT(F) swivel
Hose outlet thread	1/4" NPT(M) for 3/8" ID Hoses
	1/2" NPT(M) for 1/2" ID Hoses
Wetted materials	Low Pressure - brass, Acetal & Buna-N
	Medium pressure - Steel (plated) & Buna-N
High Pressure Reels	
Fluid inlet port	3/8" NPT(F) swivel
Fluid outlet port	3/8" NPT(F) swivel
Hose outlet thread	1/4" NPT(M) for 3/8" ID Hoses
Wetted materials	Nickel Plated Steel, Hardened steel and Polyurethane
Service bulletin	SB 2025



DIMENSIONS INCHES							
A	B	C	D	E	F	G	H
18"	11"	9.5"	4"	18"	20"	5"	6.5"

Hose Reels Classic



**Air & Water
Anti-freeze
Windshield wash
Oil
Grease
Diesel**

The Classic Hose Reel has been the standard of reliability for over a decade. This solid, all steel hose reel is preferred for general duty, automotive dealerships, and service garages. Proven performance and reliable operation.

All Classic series reels include hose, hose stop and a 2.5' connecting hose.

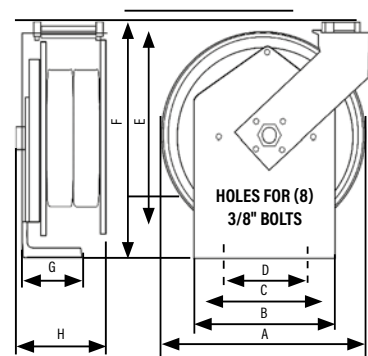
TECHNICAL DATA

Low & Medium Pressure Reels

Fluid inlet port	1/2" NPT(F) swivel
Fluid outlet port	1/2" NPT(F) swivel
Hose outlet thread	1/4" NPT(M) for 3/8" ID Hoses 1/2" NPT(M) for 1/2" ID Hoses
Wetted materials	Plated steel, Brass, bronze and Buna-N

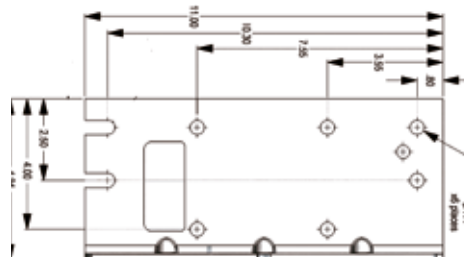
High Pressure Reels

Fluid inlet port	3/8" NPT(F) swivel
Fluid outlet port	3/8" NPT(F) swivel
Hose outlet thread	1/4" NPT(M) for 1/4" ID Hoses 1/4" NPT(M) for 3/8" ID Hoses
Wetted materials	Plated steel, hardened steel and Buna-N
Service Bulletin	SB 2002 SB 2002-A (No arm reels)



DIMENSIONS INCHES

A	B	C	D	E	F	G	H
16"	11"	9.5"	4"	16"	20"	5"	6-8"



* Classic reel less outlet arm for workbench mounting
For specific windshield wash applications contact Balcrank Engineering for recommendations.

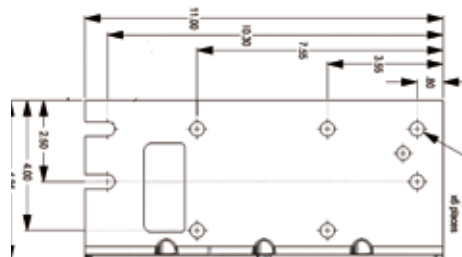
Hose Reels Premium



MODELS AVAILABLE	DESCRIPTION	REPLACEMENT HOSE
Air & Water Low Pressure 300 psi (21 bar) for delivery of air, water, anti-freeze and windshield wash**		
2111-048	Bare reel - up to 50' Hose	-
2111-049	Bare reel - up to 60' Hose	-
2111-031	30' x 3/8" ID hose	8136-030
2111-032	40' x 3/8" ID hose	8136-040
2111-033	50' x 3/8" ID hose	8136-050
2111-034	60' x 3/8" ID hose (50' + 10')*	8136-060
2111-035	40' x 1/2" ID hose	8141-040
2111-036	50' x 1/2" ID hose	8141-050
2111-037	60' x 1/2" ID hose (50' + 10')*	8141-060
Oil Medium Pressure 2,750 psi (190 bar) for delivery of lubricants		
2111-027	Bare reel - up to 50' Hose	-
2111-028	Bare reel - up to 60' Hose	-
2111-038	30' x 1/2" ID hose	8241-030
2111-039	40' x 1/2" ID hose	8241-040
2111-040	50' x 1/2" ID hose	8241-050
2111-041	60' x 1/2" ID hose (50' + 10')*	8241-060
Grease High-pressure 5,000 psi (345 bar) for delivery of grease.		
2111-029	Bare reel - up to 50' Hose	-
2111-030	Bare reel - up to 60' Hose	-
2111-045	40' x 3/8" ID hose	8332-040
2111-046	50' x 3/8" ID hose	8332-050
2111-047	60' x 3/8" ID hose (50' + 10')*	8332-060
2111-042	40' x 1/4" ID hose	8323-040
2111-043	50' x 1/4" ID hose	8323-050
2111-044	60' x 1/4" ID hose (50' + 10')*	8323-060

* 50' on spool with 10' hanging

For specific windshield wash applications contact
Balcrank Engineering for recommendations.



**Air & Water
Anti-freeze
Windshield wash
Oil
Grease**

Premium Hose Reel for the toughest shop environments

Today's heavy-duty hose reel market demands an innovative use of components that provide long life, improved serviceability and superior structural design. Our Premium reel incorporates advanced design features that ensures long life in the toughest environments while reducing overall weight.

All Premium series reels have a narrow design; includes hose, hose stop and a 2.5' connecting hose.

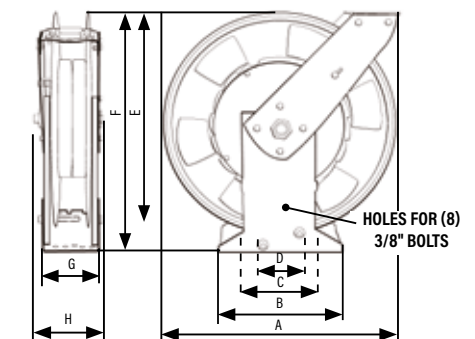
TECHNICAL DATA

Low & Medium Pressure Reels

Fluid inlet port	1/2" NPT(F) swivel
Fluid outlet port	1/2" NPT(F) swivel
Hose outlet thread	1/2" NPT(M) for 3/8" ID Hoses
	1/2" NPT(M) for 1/2" ID Hoses
Wetted Materials	Low pressure - Brass, Acetal & Buna-N Med. pressure - Steel (plated) & Buna-N

High Pressure Reels

Fluid inlet port	3/8" NPT(F) swivel
Fluid outlet port	3/8" NPT(F) swivel
Hose outlet thread	1/4" NPT(M) for 1/4" ID Hoses
	1/4" NPT(M) for 3/8" ID Hoses
Wetted Materials	Nickel plated steel, hardened steel and Polyethylene
Wetted Materials	Hardened steel and Polyurethane
Service Bulletin	SB 2027



DIMENSIONS INCHES

A	B	C	D	E	F	G	H
20.5"	11"	9 1/2"	4"	20.25"	21.5"	5.5"	6.75"

Hose Reels Extended Volume (EV)

2



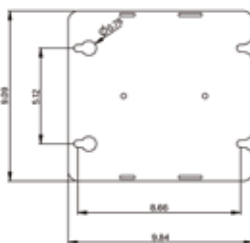
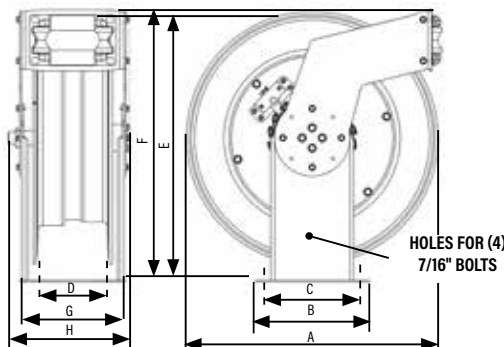
**Air & Water
Anti-freeze
Oil
Grease
Diesel
DEF**

The Extended Volume, EV Series hose reels are designed for high volume heavy-duty applications where large hose diameters are required for increased flow. The EV reels will accommodate up to 50' of 3/4" ID hose or 65' of 1/2" ID hose. Perfect for heavy-duty fleet, construction, mining and industrial applications.
All EV series reels include hose, hose stop and a 2.5' connecting hose.

MODELS AVAILABLE	DESCRIPTION	REPLACEMENT HOSE
Air & Water Low Pressure 300 psi (21 bar) for delivery of air, water and anti-freeze		
2310-033	Bare reel - up to 65' x 1/2" or 50' x 3/4"	-
2310-027	65' x 1/2" ID hose	8141-065
2310-028	50' x 3/4" ID hose	8161-050
Oil Medium Pressure for delivery of lubricants		
2310-033	Bare reel - up to 65' x 1/2" or 50' x 3/4"	-
2310-031	50' x 3/4" ID hose 1,950 psi (135 bar)	8264-050
2310-029	65' x 1/2" ID hose 2,750 psi (190 bar)	8250-065
Grease High pressure 5,000 psi (345 bar) for delivery of grease		
2310-046	65' x 3/8" ID hose	8332-065
Diesel Low Pressure 50 psi (3 bar) for delivery of diesel		
2310-033	Bare reel - up to 65' x 1/2" or 50' x 3/4"	-
2310-032	50' x 3/4" ID hose	8466-050
Diesel Exhaust Fluid Low Pressure 150 psi (10 bar) for delivery of diesel exhaust fluid		
2400-010	Bare reel - up to 65' x 1/2" or 50' x 3/4"	-
2400-011	50' x 3/4" ID hose	8569-050

For specific windshield wash applications contact Balcrank Engineering for recommendations.

TECHNICAL DATA	
Diesel, Low & Medium Pressure Reels	
Fluid inlet port	3/4" NPT(F) swivel
Fluid outlet port	3/4" NPT(F) swivel
Hose outlet thread	1/2" NPT(M) for 1/2" ID Hoses 3/4" NPT(M) for 3/4" ID Hoses
Wetted Materials	Nickel plated steel and Buna-N
Service Bulletin	SB 2028
Low Pressure DEF Reels	
Fluid inlet port	3/4" BSPP(F) swivel
Fluid outlet port	3/4" BSPP(F) swivel
Hose outlet thread	3/4" BSPP (M) for 3/4" ID Hoses
Wetted Materials	Stainless Steel, Polypropylene, & Viton
Service Bulletin	SB 2028
High Pressure Reels	
Fluid inlet port	3/8" NPT(F) swivel
Fluid outlet port	3/8" NPT(F) swivel
Hose outlet thread	3/8" NPT(M)
Wetted Materials	Nickel Plated Steel, Hardened steel and Polyurethane
Service Bulletin	SB 2028



DIMENSIONS INCHES							
A	B	C	D	E	F	G	H
22"	8.62"	5"	5.12"	22"	23.5"	9"	9.25"

Hose Reels Extended Volume Extra (EVX)



**Air & Water
Anti-freeze
Oil
Diesel
Evacuation**

The Extended Volume, EVX Series hose reels are designed for high volume heavy-duty applications where large hose diameters are required for increased flow. The EVX reels will accommodate up to 50' of 1" ID hose or 100' of 1/2" ID hose. Perfect for heavy-duty fleet, construction, mining and industrial applications.

All EVX series reels include hose, hose stop and a 2.5' connecting hose.

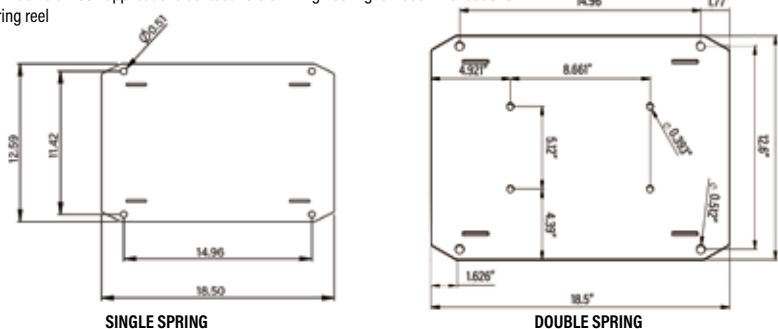
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MODELS AVAILABLE	DESCRIPTION	REPLACEMENT HOSE
Air & Water Low Pressure 300 psi (21 bar) for delivery of air, water and anti-freeze		
2310-034	Bare reel, 50' x 1" ID hose or 75' x 1/2" ID hose	-
2310-035**	Bare reel, 75' x 3/4" ID hose or 100' x 1/2" ID hose	-
2310-036**	75' x 1/2" ID hose	8141-075
2310-037**	100' x 1/2" ID hose	8141-100
2310-038**	75' x 3/4" ID hose	8161-075
2310-039	50' x 1" ID hose	8181-050
Oil Medium Pressure 1,525 psi (105 bar) & 2,320 (160 bar) for delivery of lubricants		
2310-035**	Bare reel, 75' x 3/4" ID hose or 100' x 1/2" ID hose	-
2310-045**	50' x 1" ID hose 1,500 psi	8281-050
2310-041**	75' x 3/4" ID hose 1,525 psi	8264-075
2310-040**	100' x 1/2" ID hose 2,320 psi	8250-100
Diesel & Evacuation Low Pressure 50 psi (3 bar) for delivery of diesel fuel and used oil evacuation*		
2310-034	Bare reel, 50' x 1" ID hose or 75' x 1/2" ID hose	-
2310-043	50' x 1" ID hose Diesel	8481-050
2310-042	50' x 1" ID hose Evacuation	8181-050

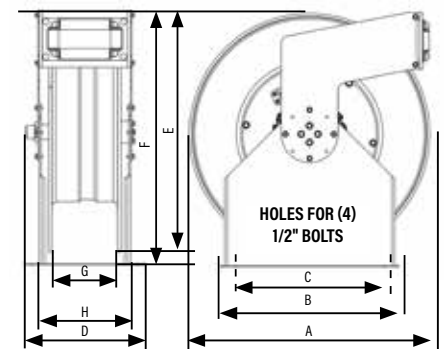
* Verify that system design supports the use of an evacuation reel.

For specific windshield wash applications contact Balcrank Engineering for recommendations.

** Double spring reel



TECHNICAL DATA	
Low & Medium Pressure Reels	
Fluid inlet port	1" NPT(F) swivel
Fluid outlet port	1" NPT(F) swivel
Hose outlet thread	1/2" NPT(M) for 1/2" ID Hoses
	3/4" NPT(M) for 3/4" ID Hoses
	1" NPT(M) for 1" ID Hoses
Wetted Materials	Nickel plated steel and Buna-N
Service Bulletin	SB 2029



SINGLE SPRING DIMENSIONS INCHES							
A	B	C	D	E	F	G	H
25"	18.5"	15"	12.6"	25"	26.5"	7"	11.4"

DOUBLE SPRING DIMENSIONS INCHES							
A	B	C	D	E	F	G	H
25"	18.5"	15"	13.9"	25"	26.5"	8.5"	12.6"

Hose Reels
Extended Volume+ (EVX+)



Air & Water
Anti-freeze
Diesel

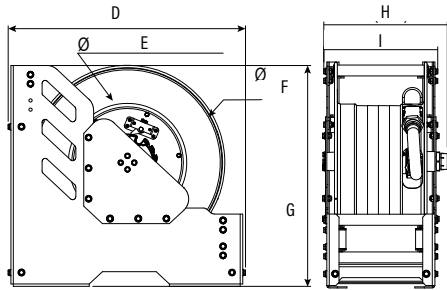
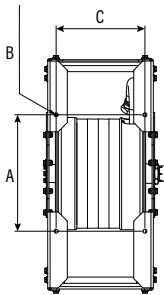
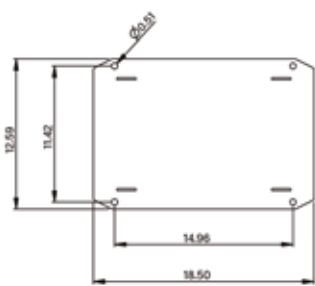
The Extended Volume+, EVX+ Series hose reel is designed for extreme heavy-duty applications where large hose diameters are required for increased flow. The dual spring EVX+ reel will accommodate up to 50' of 1 1/2" ID hose. Perfect for heavy-duty fleet, construction, mining and industrial applications.

Hose not included

MODELS AVAILABLE	DESCRIPTION	REPLACEMENT HOSE
Air, Water, Diesel & Low Pressure Oil Transfer 580 psi (21 bar) for delivery of air, water, diesel & oil transfer		
2310-047	Bare reel - up to 50' x 1 1/2"	-

For specific windshield wash applications contact Balcrank Engineering for recommendations.

TECHNICAL DATA	
Diesel, Low Pressure Reels	
Fluid inlet port	1 1/2" NPT(F) swivel
Fluid outlet port	1 1/2" NPT(F) swivel
Hose outlet thread	1 1/2" NPT(M) for 1/2" ID Hoses
Wetted Materials	Steel, nickel plated steel, Nitrile rubber, nickel plated aluminum
Service Bulletin	SB 2040



DIMENSIONS INCHES								
A	B	C	D	E	F	G	H	I
15"	0.5"	11.43"	30.5"	14.37"	25"	28.25"	15.5"	14.25"

Hose Reels Enclosed Hose Reels

All metal enclosed cabinet hose reels are designed to improve the appearance of any shop. Standard color is black and six special colors are available to match workbenches, and automotive lifts.

CHOOSE YOUR REEL	
MODELS AVAILABLE	DESCRIPTION
Air & Water Low Pressure 300 psi (21 bar) for delivery of air, water and anti-freeze	
2251-338	30' x 3/8" ID hose
2251-538	50' x 3/8" ID hose
2251-312	30' x 1/2" ID hose
2251-512	50' x 1/2" ID hose
Oil Medium Pressure 3,000 psi (207 bar) for delivery of lubricants	
2252-312	30' x 1/2" ID hose
2252-512	50' x 1/2" ID hose
Grease High-pressure 4,000 (276 bar) for delivery of grease	
2253-314	30' x 1/4" ID hose
2253-538	50' x 3/8" ID hose



ADD A LIGHT OR ELECTRIC REEL	
MODELS AVAILABLE	DESCRIPTION
2254-518	Light Cord Reel & Bracket 50' x 18 gauge
2254-518D	Dual Light - 2 Light Cord Reels & Bracket - fits 1 single enclosure 50' x 18 gauge
2254-316	Electric Cord Reel & Bracket 30' x 10 amps, 3 outlet



2254-316



2254-518D

CHOOSE YOUR SIDE ENCLOSURE	
Order 1 side enclosure kit per reel	
Side enclosure kits include: 2 side panels, 1 roller outlet assembly, 1 quick mounting plate, and hardware	
MODELS AVAILABLE	DESCRIPTION
2250-011	kit, side enclosure black semi-gloss
2250-012	kit, side enclosure white
2250-013	kit, side enclosure green
2250-014	kit, side enclosure blue
2250-015	kit, side enclosure red
2250-016	kit, side enclosure silver
2250-017	kit, side enclosure yellow



CHOOSE YOUR END PANEL KIT	
Order 1 end panel kit per reel bank	
End panel kits include: 2 end panels, 2 poly end panel inserts, 1 end bar support, and hardware	
End Panel insert standard color is black. To order a white insert add a "W" to the model number, listed below. example - 2250-003W = kit, end panels green with white end panel insert	
MODELS AVAILABLE	DESCRIPTION
2250-001	kit, end panels black semi-gloss
2250-002	kit, end panels white
2250-003	kit, end panels green
2250-004	kit, end panels blue
2250-005	kit, end panels red
2250-006	kit, end panels silver
2250-007	kit, end panels yellow



Air & Water Anti-freeze Windshield wash Oil Grease

Balcrank recommends using mounting channels or framing strut for installation of these enclosures.

- All steel cabinets have high quality, powder coated finish providing corrosion resistance
- Cabinet design provides smooth and easy operation: prevents hose pinch and reduces wear when pulling from any angle
- Simple installation and serviceability
- Cabinet design ties all reels in the bank together to form one complete rigid structure
- Aluminum end panels with removable poly inserts provides fast and easy serviceability

Channels are designed to build a bank of reels

- When mounting directly to an I-Beam, use Mounting Channel I-Beam Bracket Kit #2230-002 to mount channel to a structural I-beam.

Enclosed hose reels not recommended for wall-mounting

2230-003	Mounting Channel - 1 Reel
2230-004	Mounting Channel - 2 Reel
2230-005	Mounting Channel - 3 Reel
2230-007	Mounting Channel - 5 Reel
2230-002	Mounting Channel I-Beam Bracket Kit. Use two bracket kits for 2 or 3 reels. Use 3 brackets for 5 or 6 reels.

Hose Reels Accessories

2



Hose reel stands

Heavy duty solid steel stands offer an alternative to ceiling or wall mounting hose reels. All stands include mounting plates, gray finish and drip trays to keep unwanted oil off the floor. Available in 3, 5 and 6 reel models. Designed to fit the Evolution, Classic, and Premium Signature series hose reels.

MODELS AVAILABLE	DESCRIPTION
2230-027	3 reel hose stand. Dimensions: 47 x 15.5 x 87.5 inches.
2230-028	5 reel hose stand. Dimensions: 68.9 x 15.75 x 86.6 inches.
2230-029	6 reel hose stand. Dimensions: 78 x 30 x 103 inches.

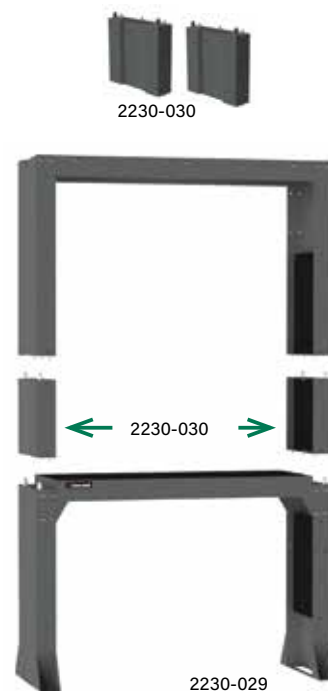
Hose reel stand options

Accessories are available for use with the six reel stand 2230-029 only.

Height extension kits increase the stand height by another 20" and expansion brackets allow for an additional 2-4 reels (2 on each side) to be mounted with a total of 10 possible hose reels. Drip tray keeps unwanted fluids off the floor.

MODELS AVAILABLE	DESCRIPTION
2230-030	Height extension kit Adds 20" additional height. Sold in pairs
2230-031	Expansion bracket Allows 2 additional reels to be mounted on each side of the hose reel stand
2230-035	Drip Tray for use with expansion bracket 2230-031. Purchase one per Expansion bracket

For large quantities check lead times with your Balcrank Representative.



Hose Reels Accessories

MOUNTING CHANNEL COMPONENTS			MOUNTING BRACKET KITS		
Channels are designed to build banks of multiple reels. • If mounting directly to an I-Beam, use Mounting Channel I-Beam Bracket Kit #2230-002 to mount channel to a structural I-beam. • Use Mounting Channel plate #2230-014 to install open reel to the channel.			Specially configured kits are designed to facilitate simple field installation of Balcrank hose reels. NOTE: These kits are not to be used with EV or EVX hose reels		
2230-003	Mounting Channel 1 Reel		2230-026	For use with single EVO, Premium and Classic. Allows the hose reel to be wall mounted to the swivel bracket and pivot horizontally	
2230-004	Mounting Channel 2 Reels				
2230-005	Mounting Channel 3 Reels		2230-024	Quick Mounting Plate For use with single EVO, Premium and Classic reel. No mounting channel required, mounts directly to unistrut. For I-beam mounting order 2230-013	
2230-007	Mounting Channel 5 Reels				
2230-002	Mounting Channel I-Beam Bracket Kit. Attaches mounting channel (2230-XXX) to facility I-beam structure. Use two bracket kits for 2, 3, or 4 reels. Use 3 brackets for 5 or 6 reels.		2230-013	I-Beam Mounting Clamps For use with single EVO, Premium and Classic. Attaches reel directly to structural beams with 4½" to 6½" flange widths or can be used with 2230-024	
2230-014	Mounting Channel Plate for use with open hose reels and a mounting channel. Easy one person installation made easy, plate is bolted to the mounting channel, providing plug & play mount of open reels. Use one per reel NOTE: Not to be used with Enclosed Hose Reels		2230-016	Mounting Adapter Plate Kit For field installation of a Balcrank Signature™ EVO, Premium, or Classic Series Hose Reels onto a previously installed Graco Series 350 mounting plate	

Hose Reels Accessories & Supplies

2

LUBE CONSOLE	LUBE CONSOLE EXTENSION
	
LUBE CONSOLE 2600-001	LUBE CONSOLE EXTENSION 2600-005
Lube Console. Includes Lower Hose Guide 2600-003. Ships with 5 console guides, and 2-3/8" accessory stops	Lube Console Extension. Installs next to 2600-001 Lube Console for added capacity Ships with 2 console guides

ACCESSORIES		
		
LUBE CONSOLE LOWER HOSE GUIDE 2600-003	LUBE CONSOLE FLOOR PLATE HOSE GUIDE 2600-006	LUBE CONSOLE BASEMENT/CEILING PLATE 2600-007
Lower Hose Guide	Floor Plate Hose Guide Use with 2230-015 console guide	Basement /ceiling plate with two hose outlets Can be used with Lube Console Extension 2600-005

ACCESSORIES			HOSE STOPS	
			Purchase hose to fit the correct hose size	
Air Chuck		3340-006 Short Stub Length, Single Chuck Ball Foot Maximum pressure 145 psi (10 bar)		
Tire Inflator		3340-009 Single Chuck Tire Inflator, Straight on single outlet chuck	2230-015 Lube Console Hose Guide	
		3340-010 Double Chuck Tire Inflator, Straight on double outlet chuck	2230-009 Hose stop for 1/4" ID Hoses. Fits Classic, Premium and EVO Hose Reels	
		Maximum pressure 360 psi (25 bar)	2230-025 Hose stop for 3/8" ID Hoses. Fits Classic, Premium and EVO Hose Reels	
Radiator Water Bibb		3340-014 Radiator Water Bibb Thumb valve, Rubber spout Maximum pressure 145 psi (10 bar)	2230-010 Hose stop for 1/2" ID Hoses. Fits Classic, Premium, EVO Hose Reels	
Coiled Hose		8137-030 30' x 3/8" Coiled Air Hose for Air/ Water Polyurethane	2230-018 Hose stop for 1/2" ID Hoses. Fits EV and EVX Hose Reels	
		8137-125 25' x 3/8" Coiled Air Hose for Anti-freeze Nylon	2230-011 Hose stop for 3/4" ID Hoses. Fits EV and EVX Hose Reels	
		300 psi (21 bar)	2230-012 Hose stop for 1" ID Hoses. Fits EVX Hose Reels	
			2230-039 Hose stop for 1 1/2" Hoses. Fits EVX+ Hose Reel	

Hose Reels Light Cord Reels



2510-011



2510-016



2510-013



2510-017**

2

MODELS	DESCRIPTION	CORD LENGTH	GAUGE	INLET CORD	PLUG	AMPS	RECEPTACLE	LAMP	SERVICE BULLETIN
2510-011	Electric Cord Reel-30' x 10 amps, 3 outlet	30' (10 m)	16/3 SJT	-	Grounded	10	3 outlets	-	-
2510-016	Light Cord Reel-50' x 18 gauge	50' (15 m)	18	-	Polarized	-	-	LED- impact resistant	SB 2016
2510-013	Outlet Reel, Duplex, 40'	40' (13 m)	12/3 SJTO	5.5' (1.67 m) 16/3 SJTO	NEMA 5-20P Grounded	20	NEMA 5-20R GFCI Duplex		SB 2030
2510-017**	Light Reel, Stubby II/Tap, 50'	50' (15 m)	16/3 SJTO	5.5' (1.67 m) 16/3 SJTO	NEMA 5-15P Grounded	12	NEMA 5-15R Locking	LED- impact resistant	SB 2030

SJTO Cord is rated to 300 volts and has a temperature range of -4 °F to 140 °F and features excellent resistance to oil.

Indoor use only - Dry Locations

** Stubby II light with in-line tool tap on retracting cord

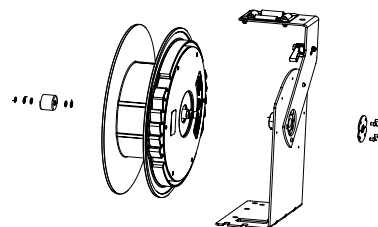


MODELS	DESCRIPTION	HOSE LENGTH	GAUGE	CONNECTING HOSE	SERVICE BULLETIN
2130-002	50' x 3/8" Economy air hose reel with solid brass swivel and inlet shaft	50' (15m)	-	3 1/2' connecting hose	-

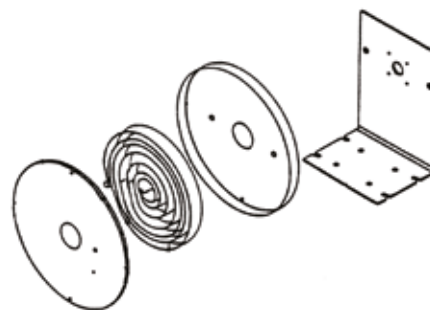
Hose Reels Repair Kits

2

EVO REELS		
REEL MODELS	KIT NUMBER	DESCRIPTION
LOW/MEDIUM PRESSURE		
All LP/MP EVO reels	833029	Swivel seal kit
All EVO reels	833031	Roller outlet
All Enclosed EVO reels	826175	Roller outlet
All EVO reels	833033	Stop Pawl
All 30' & 50' EVO reels	833032	Spool (including Power Spring - up to 50' of hose)
All Enclosed EVO reels	833292	Spool (including Power Spring - up to 50' + 10' of hose)
HIGH PRESSURE		
All HP EVO reels	833030	Swivel
All EVO reels	833031	Roller outlet
All Enclosed EVO reels	826175	Roller outlet
All EVO reels	833033	Stop Pawl
All 30' & 50' EVO reels	833032	Spool (including Power Spring - up to 50' of hose)
All Enclosed EVO reels	833292	Spool (including Power Spring - up to 50' + 10' of hose)

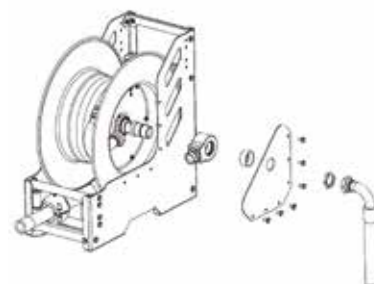
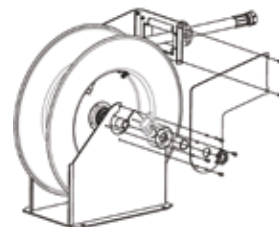
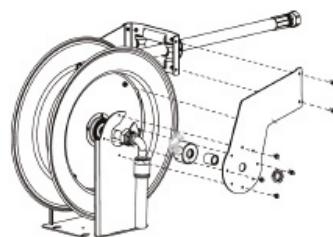
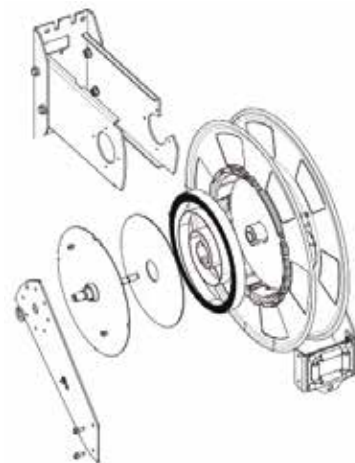


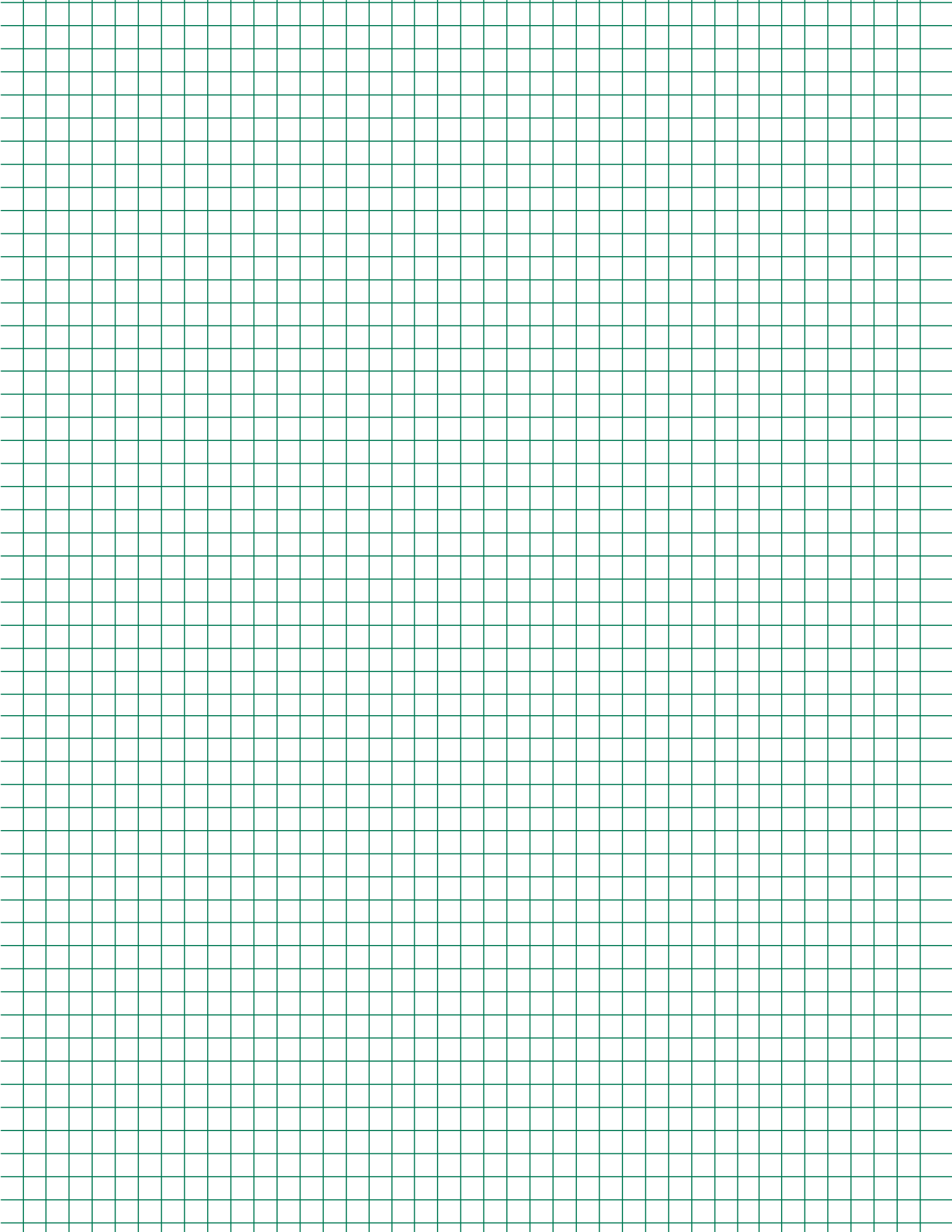
CLASSIC REELS		
REEL MODELS	KIT NUMBER	DESCRIPTION
LOW/MEDIUM PRESSURE		
All LP/MP Classic reels	833314	Swivel with seals
All 30' Classic hose reels	831315	Roller outlet - small arm
All Classic 40' & 50' hose reels; DEF reels, Diesel reel	833313	Roller outlet - large arm
All Enclosed Classic Reels	826175	Roller outlet
All LP/MP Classic reels	833312	Stop Pawl
All 30' Classic hose reels	826728	Power Spring (up to 30' of hose)
All Classic 40' & 50' hose reels; DEF reels, Diesel reel	808966	Power Spring (up to 50' of hose)
HIGH PRESSURE		
All Classic HP reels	809396	Swivel - outlet
All 30' Classic hose reels	831315	Roller outlet - small arm
All Classic 40' & 50' hose reels	833313	Roller outlet - large arm
All Enclosed Classic Reels	826175	Roller outlet
All LP/MP Classic reels	833312	Stop Pawl
All 30' hose reels	826728	Power Spring (up to 30' of hose)
All 40' & 50' hose reels	808966	Power Spring (up to 50' of hose)



Hose Reels Repair Kits

PREMIUM REELS		
REEL MODELS	KIT NUMBER	DESCRIPTION
LOW/MEDIUM PRESSURE		
All Premium Reels prior to Year 2012	826175	Roller outlet
All 30' Premium hose reels prior to Year 2012	826728	Power Spring (up to 30' of hose)
All 40' & 50' Premium hose reels prior to Year 2012	808966	Power Spring (up to 50' of hose)
All LP/MP Premium reels after Year 2012	833029	Swivel seal kit
All Premium reels after Year 2012	833031	Roller outlet
All Premium reels after Year 2012	833147	Stop Pawl
All 30', 40', & 50' Premium hose reels after Year 2012	833145	Power Spring (up to 50' of hose)
All 60' Premium hose reels after Year 2012	833146	Power Spring (up to 50' + 10' of hose)
HIGH PRESSURE		
REEL MODELS	KIT NUMBER	DESCRIPTION
All HP Premium reels prior to Year 2012	809396	Swivel - inlet
All Premium reels prior to Year 2012	826175	Roller outlet
All 30' Premium hose reels prior to Year 2012	826728	Power Spring (up to 30' of hose)
All 40' & 50' Premium hose reels prior to Year 2012	808966	Power Spring (up to 50' of hose)
All HP Premium reels after Year 2012	833030	Swivel
All Premium reels after Year 2012	833031	Roller outlet
All Premium reels after Year 2012	833147	Stop Pawl
All 30', 40', & 50' Premium hose reels after Year 2012	833145	Power Spring (up to 50' of hose)
All 60' Premium hose reels after Year 2012	833146	Power Spring (up to 50' + 10' of hose)
EV REELS		
All EV Reels prior to Year 2009	826175	Roller outlet
All EV reels (except DEF)	833267	Swivel with seals
All EV reels (except DEF)	833266	Seal kit (swivel not included)
All DEF EV reels	833315	Swivel with seals
All DEF EV reels	833316	Seal kit (swivel not included)
All EV reels	833265	Roller outlet
All EV reels	833262	Stop Pawl
EVX REELS		
All EVX reels	833264	Swivel with seals
All EVX reels	833263	Seal kit (swivel not included)
All EVX reels	833261	Roller outlet
All EVX reels	833262	Stop Pawl
EVX+ REEL		
EXV+ reel	833262	Stop Pawl
EXV+ reel	833903	Swivel with seals
EXV+ reel	833904	Swivel complete kit
EXV+ reel	833905	Roller outlet assembly (high capacity spring)







1 2 3 4 5 6 7 8 9 10

Control Handles

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Oil Control Handles

Product Selection Matrix

UNIT OF MEASURE	FLOW RANGE	MAX. PRESSURE	WEIGHT	RECOMMENDED FLUIDS
NON-METERED				
-	0.26 - 10.5 gal/min (1-40 l/min)	1,450 psi (100 bar)	3.30 lb (1.5 kg)	Oil, transmission fluid, hydraulic fluid, and anti-freeze
DR SERIES METERED				
gallon quart pint liter	0.26 - 8 gal/min (1-30 l/min)	1,450 psi (100 bar)	4 lb (1.80 kg)	Oil, transmission fluid, hydraulic fluid, and anti-freeze
MO SERIES METERED				
quart liter	0.26 - 8 gal/min (1-30 l/min)	1,000 psi (70 bar)	4 lb (1.80 kg)	Oil, transmission fluid, hydraulic fluid, and anti-freeze
MR SERIES METERED				
quart liter	0.26 - 8 gal/min (1-30 l/min)	1,450 psi (100 bar)	3.75 lb (1.7 kg)	Oil, transmission fluid, hydraulic fluid, and anti-freeze
MR SERIES PRESET METERED				
gallon quart liter	0.25 - 8 gal/min (1-30 l/min)	1,450 psi (100 bar)	4.4 lb (2 kg)	Oil, transmission fluid, hydraulic fluid, and anti-freeze
HIGHFLO NON-METERED				
-	0.26 - 24 gal/min (1-90 l/min)	1,450 psi (100 bar)	4.5 lb (2.05 kg)	Oil, transmission fluid, hydraulic fluid, and anti-freeze
HIGHFLO METERED				
gallon quart pint liter	0.52 - 19 gal/min (2-70 l/min)	1,450 psi (100 bar)	6.3 lb (2.85 kg)	Oil, transmission fluid, hydraulic fluid, and anti-freeze
CONTROL HANDLE FOR WATER BASED FLUIDS NON-METERED				
-	8 gal/min (30 l/min)	725 psi (50 bar)	1 lb (0.4 kg)	Anti-freeze, windshield wash solution, and water
CONTROL HANDLE METERED FOR WATER BASED FLUIDS METERED				
gallon quart pint liter	8 gal/min (30 l/min)	725 psi (50 bar)	2.2 lb (1kg)	Anti-freeze, windshield wash solution, and water
ELECTRONIC PRESET METERED				
gallon quart pint liter	0.25 - 10 gal/min (1- 38 l/min)	1,000 psi (70 bar)	5.5 lb (2.5 kg)	Oil, transmission fluid, hydraulic fluid, and anti-freeze



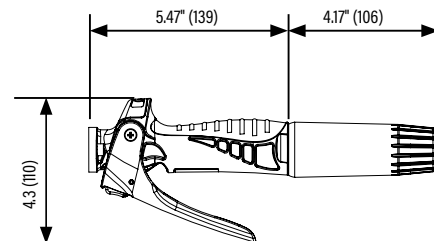
Control Handles Non-Metered



TECHNICAL DATA

Flow Rate	0.26-10.5 gal/min (1-40 l/min)
Maximum pressure	1,450 psi (100 bar)
Swivel Inlet	1/2" NPT(F) Swivel
Dispense Nozzle OD	Auto = 0.605" Manual 1/4 turn for OIL = 0.705" Manual 1/4 turn for ATF = 0.315" Verify ID of ATF fill port for compatibility
Operating Temperature	14 °F to 140 °F (-10 °C to 60 °C)
Weight	3.30 lb (1.5 kg)
Compatible Fluids	Oil, transmission fluid, hydraulic fluid, and anti-freeze
Wetted Materials	Aluminum, stainless steel, zinc alloy, Buna-N™, zinc plated steel and brass
Service Bulletin	SB 3095

Dimensions inches (mm)



833398 Multi Colored set; red, yellow, green, blue (4 pcs)

Features

- Fully ported, ball bearing, inlet swivel included
- Easy access fluid inlet screen included at swivel
- Included swivel hose-end cover, protects vehicle or machine surfaces from scratches
- Easy access for service of the rotary piston mechanism
- Trigger lock button prevents accidental control valve opening and allows the control valve to be locked in open position for large volumes dispense
- Cam & piston valve design optimized for superb control and minimal flow resistance
- Ergonomically designed grip handle for optimum comfort

Fluids

- Synthetic and mineral based lubricants
- Gear Oil
- Hydraulic oil and fluids
- ATF
- Anti-freeze (Glycol) and anti-freeze water solution

Markets Served

- Car and truck dealers
- Fast lube and maintenance shops
- Fleets
- Mining and construction
- Lube trucks
- Railroad and mass transit

MODELS AVAILABLE	EXTENSION TYPE & NOZZLE	EXTENSION CODE
Verify ID of ATF fill port for compatibility.		
3320-026	Flex Auto	3332-095
3320-022	Rigid 1/4 turn - OIL	3332-091
3320-023	Flex 90 1/4 turn - OIL	3332-092
3320-024	Flex Memory 1/4 turn - OIL	3332-093
3320-032	Flex Memory 1/4 turn - ATF	3332-104
3320-056	Bare	-

Control Handles DR Meter (Digital Register Meter)

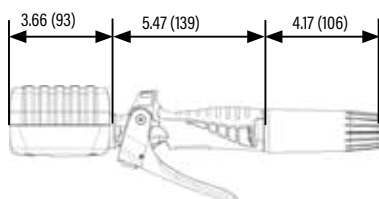


See Dispense nozzle OD for important details

TECHNICAL DATA

Units of measure	Batch: Gallons, Quarts, Pints, and Liters (in 0.01 increments)
Accuracy	+/- 0.5% of reading (lubricating oils)
Flow Range	0.26-8 gal/min (1-30 l/min)
Maximum pressure	1,450 psi (100 bar)
Swivel inlet	1/2" NPT(F)
Dispense Nozzle OD	Auto = 0.605" Manual 1/4 turn for OIL = 0.705" Manual 1/4 turn for ATF = 0.315" Verify ID of ATF fill port for compatibility
Operating temperature	14 °F to 140 °F (-10 °C to 60 °C)
Weight	4 lb (1.80 kg)
Battery	2 x 1.5 v alkaline "AAA"
Compatible Fluids	Oil, transmission fluid, hydraulic fluid, and anti-freeze
Wetted Materials	Liquid Crystal Polymer (LCP), aluminum, Buna-N™, zinc plated steel, stainless steel, neodymium, and brass
Service Bulletin	SB 3095

Dimensions inches (mm)



833398 Multi Colored set; red, yellow, green, blue (4 pcs)



Features

- Precision robotically machined aluminum die-cast fluid chamber for repeatable accuracy
- Sealed battery compartment; 2 AA batteries
- Low power consumption with auto sleep function
- Trip mode function; can operate as a simple fluid management device
- Non-resettable totalizer; maintains total volume of meter since day one
- Ergonomic comfort handle
- Unique 1/4 turn manual tip; fast, simple
- Flanged coupling; prevents leaks commonly found in competitive meters
- Swivel protective cover
- Affordable repairability

Fluids

- Synthetic and mineral based lubricants
- Gear Oil
- Hydraulic oil and fluids
- ATF
- Anti-freeze (Glycol) and anti-freeze water solution

Markets Served

- Car and truck dealers
- Fast lube and maintenance shops
- Fleets
- Mining and construction
- Lube trucks

MODELS AVAILABLE	EXTENSION TYPE & NOZZLE	EXTENSION CODE
Verify ID of ATF fill port for compatibility.		
3330-161	Flex Auto	3332-095
3330-157	Rigid 1/4 turn - OIL	3332-091
3330-158	Flex 90 1/4 turn - OIL	3332-092
3330-159	Flex-memory 1/4 turn - OIL	3332-093
3330-169	Rigid 1/4 turn - ATF	3332-101
3330-172	Flex-memory 1/4 turn - ATF	3332-104
3330-166	DR bare	-

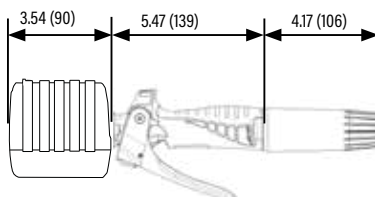
Control Handles MO Meter (Mechanical Oval Gear Meter)



See Dispense nozzle OD for important details

TECHNICAL DATA	
Units of measure	Quarts & Liters (totalizer Gallons)
Accuracy	+/- 1%
Flow Rate	0.25 - 8 gal/min (1 - 30 l/min)
Maximum pressure	1,000 psi (70 bar)
Swivel inlet	1/2" NPT(F)
Dispense Nozzle OD	Auto = 0.605" Manual 1/4 turn for OIL = 0.705" Manual 1/4 turn for ATF= 0.315" Verify ID of ATF fill port for compatibility
Operating temperature	14 °F to 140 °F (-10 °C to 60 °C)
Weight	4 lb (1.80 kg)
Compatible Fluids	Oil, transmission fluid, hydraulic fluid, and anti-freeze
Wetted Materials	Acetal, aluminum, stainless steel, NBR, Zinc plated steel, TPU, Polyamide
Service Bulletin	SB 3113

Dimensions inches (mm)



833398 Multi Colored set; red, yellow, green, blue (4 pcs)



Features

- 6-digit totalizer; keeps lifetime record of volume dispensed in gallons
- Meter with odometer display, works without batteries and performs well in all environments
- No calibration required; precision machined metering chamber assures repeatable accuracy
- Ergonomically designed grip handle for optimum comfort
- Unique 1/4 turn manual non-drip tip; fast, simple
- Included swivel hose-end cover, protects vehicle or machine surfaces from scratches

Fluids

- Synthetic and mineral based lubricants
- Gear Oil
- Hydraulic oil and fluids
- ATF
- Anti-freeze (Glycol) and anti-freeze water solution

Markets Served

- Car and truck dealers
- Fast lube and maintenance shops
- Fleets
- Mining and construction
- Lube trucks

MODELS AVAILABLE	EXTENSION TYPE & NOZZLE	EXTENSION CODE U/M	
Verify ID of ATF fill port for compatibility.			
3330-205	Flex-memory 1/4 turn - OIL	3332-093	QT
3330-206	Flex 90 1/4 turn - ATF	3332-104	QT
3330-207	Rigid 1/4 turn - OIL	3332-091	QT
3330-208	Flex 90 1/4 turn - OIL	3332-092	QT
3330-212	Flex-memory 1/4 turn - OIL	3332-093	L
3330-213	Flex 90 1/4 turn - ATF	3332-104	L
3330-214	Rigid 1/4 turn - OIL	3332-091	L
3330-215	Flex 90 1/4 turn - OIL	3332-092	L
3330-204	Bare	-	QT
3330-211	Bare	-	L

Control Handles MR Meter (Mechanical Registry Meter)



Gallons



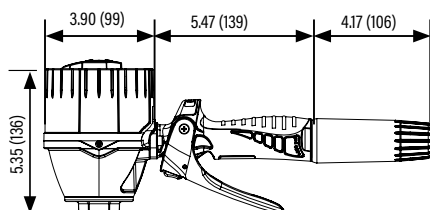
Liters

See Dispense nozzle OD for important details

TECHNICAL DATA

Units of measure	Gallons and Liters (in 0.01 increments)
Accuracy	+/- 0.65%
Flow Rate	0.26 - 8 gal/min (1 - 30 l/min)
Maximum pressure	1,450 psi (100 bar)
Swivel Inlet	1/2" NPT(F) Swivel
Dispense Nozzle OD	Auto = 0.605" Manual 1/4 turn for OIL = 0.705" Manual 1/4 turn for ATF = 0.315" Verify ID of ATF fill port for compatibility
Operating Temperature	14 °F to 140 °F (-10 °C - 60 °C)
Weight	3.75 lb (1.7 kg)
Compatible Fluids	Oil, transmission fluid, hydraulic fluid, and anti-freeze
Wetted Materials	Aluminum, stainless steel, zinc alloy, Buna-N [®] , zinc plated steel and brass
Service Bulletin	SB 3096

Dimensions inches (mm)



Features

- 1 piece molded pointer knob is resistant to impacts
- No calibration required; precision machined metering chamber assures repeatable accuracy
- Viscosity and temperature change does not effect accuracy
- 33% improved performance over competitive mechanical meters
- 5-digit totalizer; keeps lifetime record of volume dispensed
- Easy access filter in swivel at meter inlet
- Swivel protective cover
- Unique 1/4 turn manual tip; fast, simple
- Flanged coupling; prevents leaks commonly found in competitive meters
- Ergonomic comfort handle

Fluids

- Synthetic and mineral based lubricants
- Gear Oil
- Hydraulic oil and fluids
- ATF
- Anti-freeze (Glycol)

Markets Served

- Car and truck dealers
- Fast lube and maintenance shops
- Fleets
- Mining and construction
- Lube trucks
- Railroad and mass transit

MODELS AVAILABLE	EXTENSION TYPE & NOZZLE	EXTENSION CODE U/M
Verify ID of ATF fill port for compatibility.		
3330-189	Rigid 1/4 turn-OIL	3332-091 Qt
3330-192	Flex Memory 1/4 turn-OIL	3332-093 Qt
3330-196	Flex Memory 1/4 turn-ATF, Anti-freeze	3332-104 Qt
3330-177	Rigid 1/4 turn-OIL	3332-091 L
3330-180	Flex Memory 1/4 turn-OIL	3332-093 L
3330-184	Flex Memory 1/4 turn-ATF, Anti-freeze	3332-104 L
3330-202	MR Bare	- L
3330-203	MR Bare	- Qt

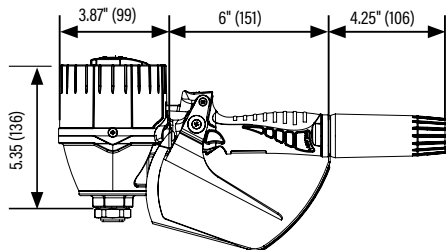
Control Handles MR Meter (Mechanical Preset Meter)



TECHNICAL DATA

Units of measure	Gallons, Quarts, and Liters
Accuracy	+/- 0.65%
Flow Rate	0.25 - 8 gal/min (1 - 30 l/min)
Maximum pressure	1,450 psi (100 bar)
Swivel inlet	1/2" NPT(F)
Operating temperature	-49 °F to 158 °F (-45 °C to 70 °C)
Weight	4.4 lb (2 kg)
Compatible Fluids	Oil, transmission fluid, hydraulic fluid, and anti-freeze
Wetted Materials	Zinc alloy, aluminum, Buna-N™, stainless steel, brass, steel, TPU and polyamide
Service Bulletin	SB 3106

Dimensions inches (mm)



Features

- MR style meter with preset function.
- Preset mode dispensing allows hands-off operation as the meter automatically shuts off once the preset volume is delivered
- Meter with analogue dial display, works without batteries and performs well in all environment. Includes inlet swivel and rigid outlet with non-drip nozzle
- 1 piece molded pointer knob is resistant to impacts
- No calibration required; precision machined metering chamber assures repeatable accuracy
- Viscosity and temperature change does not effect accuracy
- 33% improved performance over competitive mechanical meters
- 5-digit totalizer; keeps lifetime record of volume dispensed
- Easy access filter in swivel at meter inlet
- Swivel protective cover
- Flanged coupling; prevents leaks commonly found in competitive meters
- Ergonomic comfort handle

Fluids

- Synthetic and mineral based lubricants
- Gear Oil
- Hydraulic oil and fluids
- ATF
- Anti-freeze (Glycol) and anti-freeze water solution

Markets Served

- Car and truck dealers
- Fast lube and maintenance shops
- Fleets
- Mining and construction
- Lube trucks
- Railroad and mass transit

MODELS AVAILABLE	EXTENSION TYPE & NOZZLE	U/M DIAL U/M TOTALIZER
3331-024	Rigid straight Semi-auto tip	0-60 Liters
3331-023	Rigid straight Semi-auto tip	0-60 Quarts
3331-025	Rigid straight Semi-auto tip	0-60 Gallons

Control Handles HighFlo



Features

- HighFlo Control Handle is designed for service where higher volume deliveries are required
- High volume rigid or flexible outlets with non-drip tip
- 3/4" or 1" NPT inlet connection thread
- Ideal for bulk fill, transfer and high flow dispense
- Heavy duty rugged design

Fluids

- Synthetic and mineral based lubricants
- Gear Oil
- Hydraulic oil and fluids
- ATF
- Anti-freeze (Glycol)

Markets Served

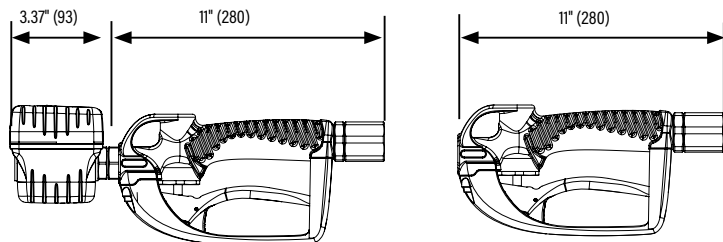
- Truck dealers
- Fleets
- Mining and construction
- Lube trucks
- Railroad and mass transit

TECHNICAL DATA

	NON-METERED	METERED
Units of measure	-	Batch: Liters, quarts, pints, gallons
Accuracy	-	+/-0.5% of reading
Flow Range	0.26-24 gal/min (1-90 l/min)	0.52-19 gal/min (2-70 l/min)
Maximum pressure	1,450 psi (100 bar)	
Swivel inlet:	3/4" or 1" NPT(F)	
Operating Temperature	14 to 140 °F (-10 to 60 °C)	
Weight	4.5 lb (2.05 kg)	6.3 lb (2.85 kg)
Compatible Fluids	Oil, transmission fluid, hydraulic fluid, and anti-freeze	
Wetted Materials	Aluminum, Buna-N™, zinc plated steel and brass	Acetal, aluminum, stainless steel, Buna-N™, zinc plated steel and brass
Service Bulletin	SB 3097	SB 3097 + SB 3098

MODELS AVAILABLE	DESCRIPTION
3330-197	Rigid - Metered 3/4" NPT(F) Inlet
3330-198	Flex - Metered 3/4" NPT(F) Inlet
3330-199	Rigid - Metered 1" NPT(F) Inlet
3330-200	Flex - Metered 1" NPT(F) Inlet
3320-051	Rigid - Non-Metered 3/4" NPT(F) Inlet
3320-052	Flex - Non-Metered 3/4" NPT(F) Inlet
3320-053	Rigid - Non-Metered 1" NPT(F) Inlet
3320-054	Flex - Non-Metered 1" NPT(F) Inlet

Dimensions inches (mm)



Control Handles Water based fluids



Features

- Reinforced polyamide body and stainless steel valve mechanism
- Ergonomic-grip
- Includes brass inlet swivel 1/2" NPT(F), flex-90 extension and a 1/4 turn manual tip

Fluids

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

Markets Served

- Car and truck dealers
- Fast lube and maintenance shops
- Fleets

3

TECHNICAL DATA		
	NON METERED	METERED
Units of measure	-	Batch: Quarts, Pints, Gallons and Liters (in 0.01 increments)
Accuracy	-	+/- 0.5% of reading (lubricating oils)
Flow Rate	8 gal/min (30 l/min)	
Maximum pressure	725 psi (50 bar)	
Swivel Inlet	1/2" NPT(F)	
Dispense Nozzle OD	Manual 1/4 turn for OIL = 0.705"	
Operating Temperature	122 °F (50 °C)	
Weight	1 lb (0.4 kg)	2.2 lb (1 kg)
Compatible Fluids	Anti-freeze, windshield wash solution, and water	
Wetted Materials	Fiberglass reinforced thermoplastic, polyurethane rubber, and brass	Fiberglass reinforced thermoplastic, polyurethane rubber, Viton®, brass, and stainless steel
Service Bulletin	SB 3105	

MODELS AVAILABLE	EXTENSION TYPE & NOZZLE	EXTENSION CODE
3320-055	Flex 90 1/4 turn - oil	3332-102
3330-201	Metered - Flex 90 1/4 turn - oil	3332-102

Control Handles EP Meter (Electronic Preset Meter)



Features

Preset dispensing allows hands-free operation as the meter automatically shuts off once the desired preset amount is reached.

- Programmable for quarts, pints, gallons, liters
- Quick recall of last preset quantity
- Operates in manual or automatic preset mode
- 2 totalizers: re-settable total & accumulated total
- Emergency override; closes the valve immediately stopping flow
- Low battery indicator
- Can be calibrated for different fluid viscosities

Fluids

- Synthetic and mineral based lubricants
- Gear oil
- Hydraulic fluids
- ATF

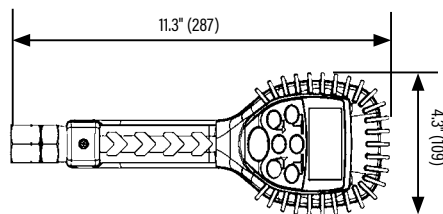
Markets Served

- Auto and truck dealerships
- Truck fast lube and maintenance shops
- Fleets
- Mining and construction
- Railroad and mass transit

TECHNICAL DATA

Units of measure	Quarts, pints, gallons, liters
Accuracy	+/- 0.5 %
Flow Range	0.25-10 gal/m (1-38 l/m)
Maximum pressure	1,000 psi (70 bar)
Swivel Inlet	1/2" NPT(F)
Battery	4 x alkaline "AA"
Weight	5.5 lb (2.5 kg)
Compatible Fluids	Oil, transmission fluid, hydraulic fluid, and anti-freeze
Wetted Materials	Acetal, stainless steel, Buna-N™, brass, polyurethane
Service Bulletin	SB 3109

Dimensions inches (mm)



MODELS AVAILABLE

DESCRIPTION

3331-029	Rigid Hi-Flow
3331-030	Flex Hi-Flow
3331-028	Bare

Accessories & Supplies Meters

DR METER							
	MODEL	MATERIAL	INLET/OUTLET THREADS	UNITS OF MEASURE	MAX PRESSURE	COMPATIBLE FLUIDS	SB
	3120-091 DIGITAL METER	Aluminum	1/2" NPT(F)	Liters, Gallons, Quarts, and pints	1450 psi (100 bar)	Oil, glycol, and coolant solutions	SB 3095
	3120-013 PULSE METER	CPVC	1/2" NPT(F)	Liters, Gallons, Quarts, and pints	1450 psi (100 bar)	Glycol, windshield wash solutions and DEF	SB 3107
MO METER							
	MODEL	MATERIAL	INLET/OUTLET THREADS	UNITS OF MEASURE	MAX PRESSURE	COMPATIBLE FLUIDS	SB
	3330-209	Aluminum	1/2" NPT(F)	Liter	1,000 psi (70 bar)	Oil, glycol, and coolant solutions	SB 3113
	3330-210	Aluminum	1/2" NPT(F)	Quarts	1,000 psi (70 bar)	Oil, glycol, and coolant solutions	SB 3113
DR METER HIGHFLO							
	MODEL	MATERIAL	INLET/OUTLET THREADS	UNITS OF MEASURE	MAX PRESSURE	COMPATIBLE FLUIDS	SB
	3120-120 DIGITAL METER	Aluminum	3/4" NPT(F)	Liters, Gallons, Quarts, and pints	1450 psi (100 bar)	Oil, glycol and coolant solutions	SB 3098
	3120-014 PULSE METER	Aluminum	3/4" NPT(F)	Liters, Gallons, Quarts, and pints	1450 psi (100 bar)	Oil, glycol and coolant solutions	SB 3108

Control Handles Meter Extensions

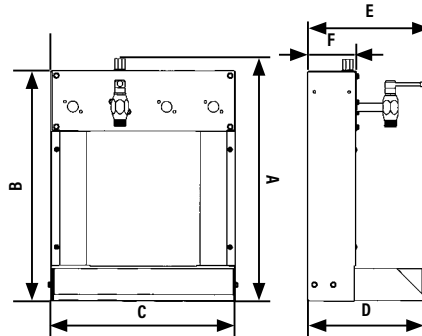
DR EXTENSIONS & NOZZLES

Verify ID of ATF fill port for compatibility



MODEL	INLET	EXT. TYPE	NOZZLE
3332-098	1/2" NPT(M)	Rigid 60	Auto Tip OD = 0.605"
3332-095	1/2" NPT(M)	Flex	Auto Tip OD = 0.605"
3332-094	1/2" NPT(M)	Flex 90	Auto Tip OD = 0.605"
3332-099	1/2" NPT(M)	Flex Memory	Auto Tip OD = 0.605"
3332-091	1/2" NPT(M)	Rigid 60	For OIL 1/4 Turn Manual Tip OD = 0.705"
3332-100	1/2" NPT(M)	Flex	For OIL 1/4 Turn Manual Tip OD = 0.705"
3332-092	1/2" NPT(M)	Flex 90	For OIL 1/4 Turn Manual Tip OD = 0.705"
3332-093	1/2" NPT(M)	Flex Memory	For OIL 1/4 Turn Manual Tip OD = 0.705"
3332-101	1/2" NPT(M)	Rigid 60	For ATF 1/4 Turn Manual Tip OD = 0.315"
3332-103	1/2" NPT(M)	Flex	For ATF 1/4 Turn Manual Tip OD = 0.315"
3332-102	1/2" NPT(M)	Flex 90	For ATF 1/4 Turn Manual Tip OD = 0.315"
3332-104	1/2" NPT(M)	Flex Memory	For ATF 1/4 Turn Manual Tip OD = 0.315"

Control Handles Oil Dispensing Equipment



DIMENSIONS INCHES (MM)					
A	B	C	D	E	F
24.4" (620)	22.8" (580)	19" (480)	11.6" (295)	9.25" (235)	5" (125)

NOTE: fluids must be compatible with wetted materials

Features

Balcrank's oil bar dispenser provides neat and convenient point-of-use dispensing for hand carried containers. This dispenser is easily incorporated into any fluid inventory control system.

- Up to four dispense points
- Heavy duty, metal body
- Drain with steel screen and 1/2" NPT hose connection

Includes:

- One spigot (4200-012) with anti-splash, anti-drip diffuser nozzle
- Additional spigots sold separately

TECHNICAL DATA	
Max. Working Pressure	1,000 psi (68.9 bar)
Spigot Inlet	1/2" NPT(F)
Recommended Fluids	Lubricants, gear oil, ATF, hydraulic fluid, and anti-freeze
Wetted Materials	Steel, aluminum, and Buna-N™
Service Bulletin	SB 4038

MODEL AVAILABLE	DESCRIPTION
4200-014	Oil Bar Dispenser -1 Spigot



MODEL AVAILABLE	DESCRIPTION
4200-011	Spigot Only

MODEL AVAILABLE	DESCRIPTION
4200-012	Straight Stem for Oil Bars

MODEL AVAILABLE	DESCRIPTION
4200-013	Goose neck (for use with taper pumps)

TECHNICAL DATA	
Max operating pressure	1,000 psi (68.9 bar)
Inlet port size	3/8" NPT(F)
Recommended Fluids	Lubricants, gear oil, ATF, Hydraulic Fluid, and anti-freeze NOTE: fluids must be compatible with wetted materials
Wetted Parts	Steel, Aluminum and Buna-N™
Service Bulletin	SB 4037

TECHNICAL DATA	
Max operating pressure	1,000 psi (68.9 bar)
Inlet port size	1/2" NPT(F)
Recommended Fluids	Lubricants, gear oil, ATF, Hydraulic Fluid, and anti-freeze NOTE: fluids must be compatible with wetted materials
Wetted Parts	Steel, Aluminum and Buna-N™
Service Bulletin	SB 4037

TECHNICAL DATA	
Max operating pressure	1,000 psi (68.9 bar)
Inlet port size	3/4" NPT(F)
Recommended Fluids	Lubricants, gear oil, ATF, Hydraulic Fluid, and anti-freeze NOTE: fluids must be compatible with wetted materials
Wetted Parts	Steel, Aluminum and Buna-N™
Service Bulletin	SB 4037

Control Handles Grease - Comfort Grip and Pro-series



Features

- Precision-machined, all steel handle and forged body provides reliable service
- Precise, proportional trigger action
- Balanced and knurled grip for less fatigue
- Easily repaired for extended life
- For use with pneumatic grease pumps
- Includes rigid lance, coupler and z-swivel. Some models include whip hoses

MODELS AVAILABLE	DESCRIPTION
3310-030	Comfort Grip Grease Handle
3310-031	Comfort Grip Grease Handle with 18" Whip Hose
3310-032	Comfort Grip Grease Handle with 36" Whip Hose

Pro Series

- Precision-machined, all steel handle and forged body provides reliable service
- Precise, proportional trigger action
- Balanced and knurled grip
- Inlet screen included
- For use with pneumatic grease pumps

MODELS AVAILABLE	DESCRIPTION
3310-008	Pro Series Grease Handle
3310-010	Pro Series Grease Handle with Z-swivel
3310-025	Pro Series Grease Handle with 18" Whip Hose and Z-swivel
3310-020	Pro Series Grease Handle with 36" Whip Hose and Z-swivel

Pro Series Booster

The Pro Series Booster high pressure control handle is designed for use as a standard control handle and as a "Booster" when extreme pressures is required up to 10,000 psi

MODELS AVAILABLE	DESCRIPTION
3310-007	Pro Series Booster Grease Handle
3310-009	Pro Series Booster Grease Handle with Z-swivel

TECHNICAL DATA

Max pressure Handle	7,250 psi (500 bar)
Whip Hose	5,000 psi (345 bar)
Z-Swivel	5,000 psi (345 bar)
Swivel inlet:	1/4" NPT(F)
Compatible Fluids	NLGI-2 Grease
Wetted Materials	Steel and Aluminum
Service Bulletin	SB 3093

Ensure that all system components are rated for the max outlet pressure, especially pumps over 60:1 ratio



TECHNICAL DATA

	3310-010	3310-009
Max pressure	5,000 psi (345 bar)	5,000 psi (345 bar) building to 10,000 psi (690 bar)
Swivel inlet	1/4" NPT(F)	1/4" NPT(F)
Compatible Fluids	NLGI-2 Grease	NLGI-2 Grease
Wetted Materials	Steel	Steel
Service Bulletin	SB 3018	SB 3006

Ensure that all system components are rated for the max outlet pressure, especially pumps over 60:1 ratio

Control Handles Accessories

	Flexible Extensions Flexible whip hose extensions with crimped ends Includes adapter to attach to grease control handle	8390-002, 18" Whip hose HP flexible extension 8390-003, 36" Whip hose HP flexible extension 8390-004, 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
	Grease Coupler Standard super grip coupler	5200-017 Quick Lock grease coupler 1/8" NPT(F) 5310-024 Grease coupler, 4-jaw. Max pressure 10,000 psi (690 bar). Threads 1/8" -27 NPT. Compatible Fluid: NLGI-2 Grease
	Z-Swivel Swivel action for better control Installed between grease handle and fluid hose for freedom of motion Low friction ball bearing swivels High pressure packing	5310-018 Z-Swivel. Max pressure 5,000 psi (345 bar). Inlets: 1/4" NPT(F) x 1/4" NPT(M). Wetted materials: Steel
	Shrouds Protects vehicle or machine surfaces from scratches.	833398 Multi Colored set; red, yellow, green, blue (4 pcs)

NOZZLES

	MODEL	INLET	TIP OD	MAX. FLOW	NOZZLE
	3332-097	1/4" NPT(F)	0.612" Verify ID of ATF fill port for compatibility	2.1 gal/min (8 l/min)	Auto
	3332-096	1/4" NPT(F)	0.710" Verify ID of ATF fill port for compatibility	3.7 gal/min (14 l/min)	1/4 Turn Manual for OIL ports
	3332-105	1/4" NPT(F)	0.312" Verify ID of ATF fill port for compatibility	3.7 gal/min (14 l/min)	1/4 Turn Manual for ATF ports
	3332-090	3/8" NPT(F)	0.548" Verify ID of ATF fill port for compatibility	5.0 gal/min (18.9 l/min)	Semi-Auto
	3332-030	1/2" NPT(F)	-	15.5 gal/min (58.79 l/min)	Semi-Auto HighFlo

Control Handle Repair Kits

3

DR METER

HANDLE MODELS	KIT NUMBER	DESCRIPTION
All DR handle	833306	Inlet Swivel
All DR handle	833307	Trigger
All DR handle	833308	Valve
All DR handle	833309	Cam kit
DR Meter	833381	O-ring
DR Meter	833310	Gears kit
DR Meter	833873	Circuit Board Kit



MO METER

HANDLE MODELS	KIT NUMBER	DESCRIPTION
All MO handle	833306	Inlet Swivel
All MO handle	833307	Trigger
All MO handle	833308	Valve
All MO handle	833309	Cam kit
MO Meter	833381	O-ring



MR HANDLE

HANDLE MODELS	KIT NUMBER	DESCRIPTION
All MR handle	833385	Kit, Knob, MR Meter
All MR handle	833386	Kit, Shroud, MR Meter, Quarts
All MR handle	833387	Kit, Shroud, MR Meter, Liters
All MR handle	833388	Kit, Gear & Inner Dial, MR Meter, Quarts
All MR handle	833389	Kit, Gear & Inner Dial, MR Meter, Liters
All MR handle	833390	Kit, Totalizer, MR Meter
All MR handle	833391	Kit, Metering Chamber, MR Meter, Quarts
All MR handle	833392	Kit, Metering Chamber, MR Meter, Liters
All MR handle	833393	Kit, Packing Gland, Housing, MR Meter
All MR handle	833306	Kit, Inlet Swivel - DR Handle
All MR handle	833307	Kit, Trigger - DR Handle
All MR handle	833308	Kit, Valve - DR Handle
All MR handle	833309	Kit, Cam - DR Handle



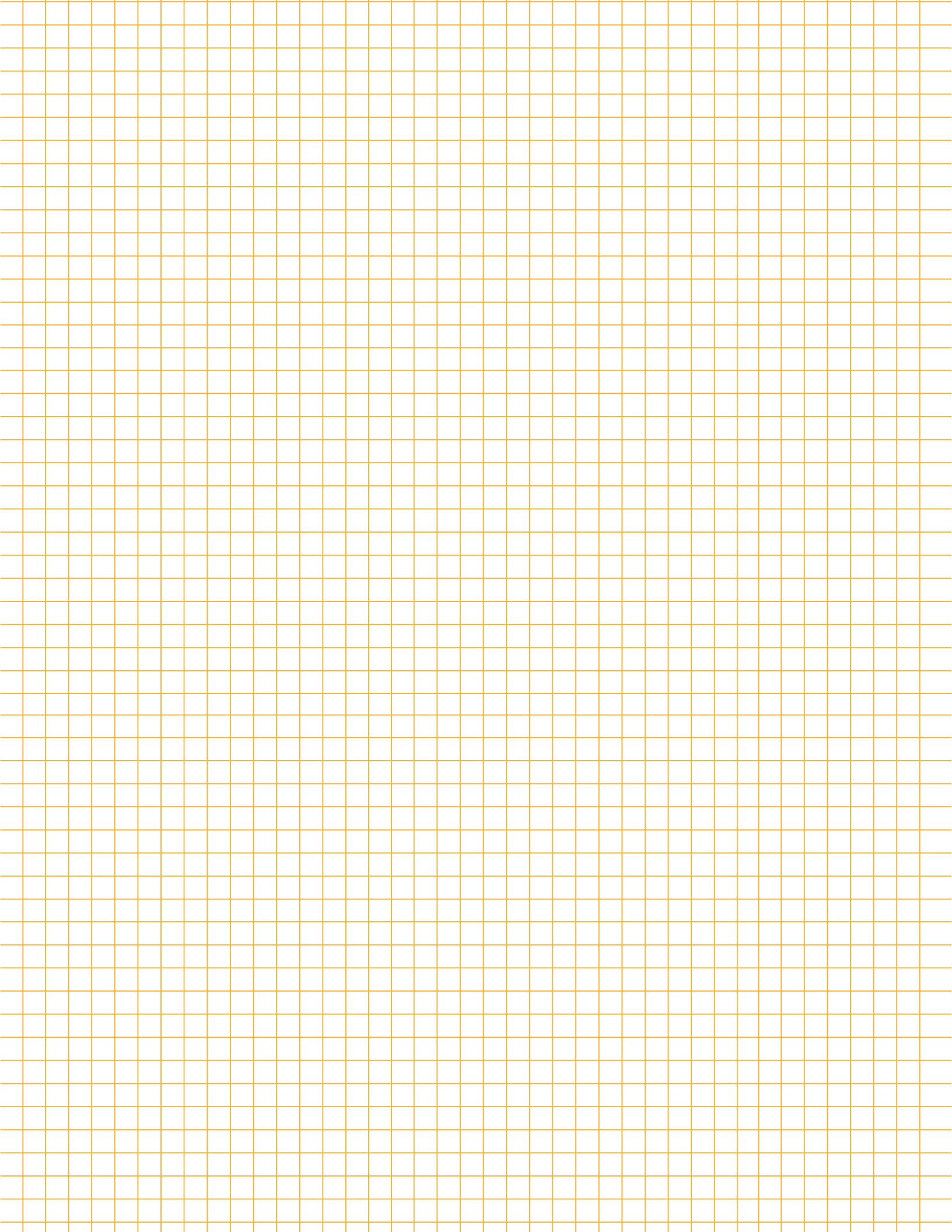
Control Handle Repair Kits

MR HANDLE PRE-SET		
HANDLE MODELS	KIT NUMBER	DESCRIPTION
All Pre-Set MR handle	833594	Kit, Inlet Swivel - DR Handle
All Pre-Set MR handle	833580	Kit, Knob, MR Preset
All Pre-Set MR handle	833581	Kit, Shroud, MR Preset, Liters
All Pre-Set MR handle	833582	Kit, Shroud, MR Preset, Quarts
All Pre-Set MR handle	833583	Kit, Shroud, MR Preset, Gallons
All Pre-Set MR handle	833584	Kit, Gears, MR Preset, Liters
All Pre-Set MR handle	833585	Kit, Gears, MR Preset, Quarts
All Pre-Set MR handle	833586	Kit, Gears, MR Preset, Gallons
All Pre-Set MR handle	833587	Kit, Totalizer, MR Preset, Liters
All Pre-Set MR handle	833588	Kit, Totalizer, MR Preset, Qts/Gal
All Pre-Set MR handle	833589	Kit, Metering Chamber, MR Preset, L
All Pre-Set MR handle	833590	Kit, Metering Chamber, MR Preset, Qts/Gal
All Pre-Set MR handle	833591	Kit, Lock Mechanism, MR Preset
All Pre-Set MR handle	833592	Kit, Handle Cam, MR Preset
All Pre-Set MR handle	833593	Kit, Handle Valve, MR Preset
All Pre-Set MR handle	833594	Kit, Swivel, MR Preset
All Pre-Set MR handle	833381	O-Ring/ Buna/24Mm Id X 2Mm Cs/Dr Meter
All Pre-Set MR handle	833393	Kit, Packing Gland, Housing, MR Meter

HIGHFLO METER		
HANDLE MODELS	KIT NUMBER	DESCRIPTION
3320-051, 052, 053, 054	833376	3/4" NPT swivel with strainer and O-ring
3320-051, 052, 053, 054	833377	Control valve body with 1" swivel
3320-051, 052, 053, 054	833380	Flex extension with Semi-Auto tip and bonded seal
3320-051, 052, 053, 054	833379	Rigid extension with Semi-Auto tip and bonded seal

PULSE METERS		
METER MODELS	KIT NUMBER	DESCRIPTION
DR FOR DEF		
3120-116	833507	DR Meter Face with Electronic Kit
DR STYLE		
3120-114	833687	Gear Kit
DR STYLE METER HIGH FLOW		
3120-120	833508	Gears Kit
3120-120	833873	Circuit Board Kit
3120-120	833376	3/4" NPT swivel with strainer and O-ring







1 2 3 **4** 5 6 7 8 9 10

Fluid Inventory Control

FLUID INVENTORY CONTROL PRODUCT SELECTION MATRIX.	108
DIRECTOR JR.	109
FUSION 2.4	111
SYNERGY	115
SENTINAL AND TANK GUARDIAN	122
TM CONTROL	123

Fluid Inventory Control Product Selection Matrix



FEATURES	DIRECTOR JR.	FUSION 2.4 CCS	FUSION 2.4 DCS	SYNERGY	TM CONTROL
Max. number of dispense points	10	30	250	255	
Max. number of fluids	1	8	16	Unlimited	4
Fluid names		✓	✓	✓	
Number of keypads	1	1	36	Unlimited	
Job number validation			✓	✓	
Job numbers		✓	✓	✓	
Simultaneous keypad operation			✓	✓	
Simultaneous dispense		✓	✓	✓	
Max. number of tanks		8	16	Unlimited	4
Calculated tank declining balance		✓	✓	✓	
Real-time tank monitoring				✓	
Tank report over e-mail			✓	✓	
PIN code validation		✓	✓	✓	
Operation PIN codes		✓	✓	✓	
Max. number of PINs		50	250	Unlimited	
Extensive user permission configuration				✓	
Preset volumes	✓	✓	✓	✓	
Hose Reel ID	✓	✓	✓	✓	
Operator names		✓	✓	✓	
Dispense from keypads	✓	✓	✓	✓	
Dispense from PC				✓	
Client / Network installer			✓	✓	
Max. number of transaction history		1,200	Unlimited	Unlimited	
Print reports		✓	✓	✓	
Print receipt		✓		Local / Network	
Custom reports			✓	✓	
Bar Code / Card reader / Dallas Key				✓	
Wireless		✓	✓		

4

Fluid Inventory Control Director Jr. 24 V DC

Director Jr. manages 1 fluid for up to 10 dispense points. Simple, easy to install and use, the Director Jr. has been in use since 1987. Typical customers include small garages, dealerships, and small equipment service.



Features

- The Director Jr. is a console designed to monitor and control fluid dispenses in a workshop from a single central location
 - The Director Jr. will also manage a solenoid valve to control the air powering the pump.
 - 1 fluid to 10 stations.
 - Fluid measurement in pints, quarts, gallons, or liters.
 - Service fluids: motor oils, synthetics, ATF, gear oils, and Anti-freeze (Glycol).
 - Totalizing feature for ease of fluid inventory record-keeping.
 - Large LED information display.
- Contact Balcrank customer service for V AC units.**

4

COMPONENT TECHNICAL DATA

Function	Monitor and control fluid dispense
Requirements & Limitations	non-shielded (for use with solenoid) shielded (for use with impulse meter) 18 gauge wire up to 400' 16 gauge wire 400'-600'
Power	Input -110 VAC - Output - 24 V DC

MODEL AVAILABLE

3110-031

Director Jr Console V DC



BOMs

- 1 - 3110-031 - Director Jr. Console V DC
- 2 - 3120-317 - Fluid Solenoid
- 1 - 3120-033 - Air Solenoid
- 1 - 3120-114 - Pulse Meter

Balcrank recommends the use of Y-Strainers for use with all FIC systems

Fluid Inventory Control

Director Jr. 24 V DC Accessories

PULSE METERS

Converts fluid movement into a pulse count signal. Order one per pump: units of measure in quarts, liters, pints, or gallons



MODEL

DESCRIPTION

COMPONENT TECHNICAL DATA

3120-114

Pulse meter
Units of measure: Quarts, liters, pints and gallons

Flow: 0.25 - 8 gpm
Max working pressure: 1,500 psi (100 bar)
Connection: 1/2" NPT(F/F) and flange
Accuracy: +/-0.5%
Pulses: 1241 PPG / 328 PPL / 310 PPQ
Service Bulletin: SB 3099

AIR SOLENOID VALVE

Air valve provides for the remote control of dispensing pumps from the fluid control console. Order one per controlled pump



3120-033

Air Solenoid Valve

Air Solenoid Provides for the remote shutdown of dispensing pumps from the fluid control console. Order one per controlled pump.

Pressure: 200 PSI (12 bar)
Connection: 3/8" NPT (F/F)
Power: 24 V DC



3120-220

Air Solenoid Valve - Normally Opened

Air Solenoid Provides for the remote shutdown of dispensing pumps from the fluid control console. Order one per controlled pump.

Pressure: 150 PSI (10.3 bar)
Connection: 1/2" NPT (F/F)
Power: 24 V AC

FLUID SOLENOID VALVES

Fluid valve opens fluid line to the dispensing station when activated by the Director Jr. Order one per dispensing reel/handle.



3120-217

Fluid Solenoid Valve

Fluid Solenoid provides for the remote shutdown of dispensing pumps from the fluid control console. Order one per controlled pump.

Fluids: Motor oils, Synthetics, ATF, Gear oils, and Anti-freeze (Glycol)
Pressure: 3045 PSI (210 bar)
Connection: 1/2" NPT(F)
Power: 24 V AC/DC

3120-218

Fluid Solenoid Valve

Fluid Solenoid provides for the remote shutdown of dispensing pumps from the fluid control console. Order one per controlled pump.

Fluids: Motor oils, Synthetics, ATF, Gear oils, and Anti-freeze (Glycol)
Pressure: 3500 PSI (241 bar)
Connection: 3/4" NPT(F)
Power: 24 V DC

Y-STRAINER

For filtering debris after the pump



3120-211

1/2" NPT(F)

3120-212

3/4" NPT(F)

3120-213

1" NPT(F)

Max working pressure: 580 psi (40 bar)
Material: Stainless steel
Includes: Plug
40 mesh

READY LIGHT

Alerts technician when fluid batch is available for dispensing.



3120-031

Ready Light
Alerts technician when fluid batch is available for dispensing.

Fluid Inventory Control fusion 2.4

fusion 2.4 Wireless Fluid Inventory Control and Management Systems

fusion 2.4 will track every drop of fluid in your facility, from the bulk tanks, hose reels to portable equipment. No dispense will be delivered without authorization.



4

Today's Challenges

- Multiple dispense points.
- The need for simultaneous dispensing
- Variety of fluids including oil, ATF, diesel fuel, coolant
- Security
- Inventory reconciliation.
- Networking
- PC Interface

The Solution

The fusion 2.4 Central Control System

- (CCS) provides precise metering and dispensing of any fluid for Mobile Lube, Quick Lube, Tire centers, Car Dealerships, and Transmission Center applications.
- ✓ Controls up to 30 dispense points.
 - ✓ Manages up to 8 fluids.
 - ✓ Secures operating levels with up to 49 user IDs.
 - ✓ Create paper ticket after every completed work order - no lost billings.
 - ✓ Manage simultaneous dispense locations - all dispenses are recorded.
 - ✓ fusion 2.4 can manage tank levels; level is reported after each dispense.

- ✓ Attach dispense handle to the hose; plug in and configure the keypad(s) - your ready to operate! It's that easy!
- ✓ Totally wireless, communicates directly between keypad and dispense valves - easily fits into any facility.
- ✓ Multi-channel operation seeks open frequency - minimizes interference from outside sources.

The Solution

The fusion 2.4 Distributed Control System

- (DCS) provides precise metering and dispensing of any compatible fluid for Maintenance Facilities, Large Dealerships, Large Fleets, and Industrial Plants.
- ✓ Controls up to 250 outlets.
 - ✓ Manages up to 16 fluids.
 - ✓ Tracks up to 24 control handles per single keypad.
 - ✓ Secures operating levels with up to 250 user IDs.
 - ✓ Manage simultaneous dispense locations - all dispenses are recorded.
 - ✓ Unlimited work order stacking allows

- mechanic to select pre-loaded work orders - turn vehicles faster per day.
- ✓ Create work order history & reports by product, vehicle, customer, WO or technician.
- ✓ fusion 2.4 can match your process: pre-authorized work order or technician dispense - manage and record all dispenses.
- ✓ Assign special work order number for dedicated oil change bays allowing monitored after-hours fluid dispensing.
- ✓ fusion 2.4 mathematically manages fluid levels.
- ✓ Mount up to 36 wireless zone keypads directly in the bays - maximizes technician productivity.
- ✓ Totally wireless, communicates directly between keypads and dispense valves - easily fits into any facility.
- ✓ Multi-channel operation seeks open frequency - Minimizes interference from outside sources.

fusion 2.4 installation must be performed by a Balcrank fusion 2.4 Certified Distributor. Contact your Balcrank representative for additional information.

Fluid Inventory Control fusion 2.4 (CCS)



Features

- Wirelessly controls and manages up to 8 fluids and 30 dispense locations
- Easy/fast entry of authorized PIN codes and job information on a Central Dispense Keypad
- Easy dispense and fast completion of work order
- Built in ticket printer produces a detailed written record for each work order dispensed.
- Allows for future expansion of fluids and/or dispense locations
- Wireless fusion 2.4 control handles are the building blocks of both the fusion 2.4 CCS & DCS systems

4

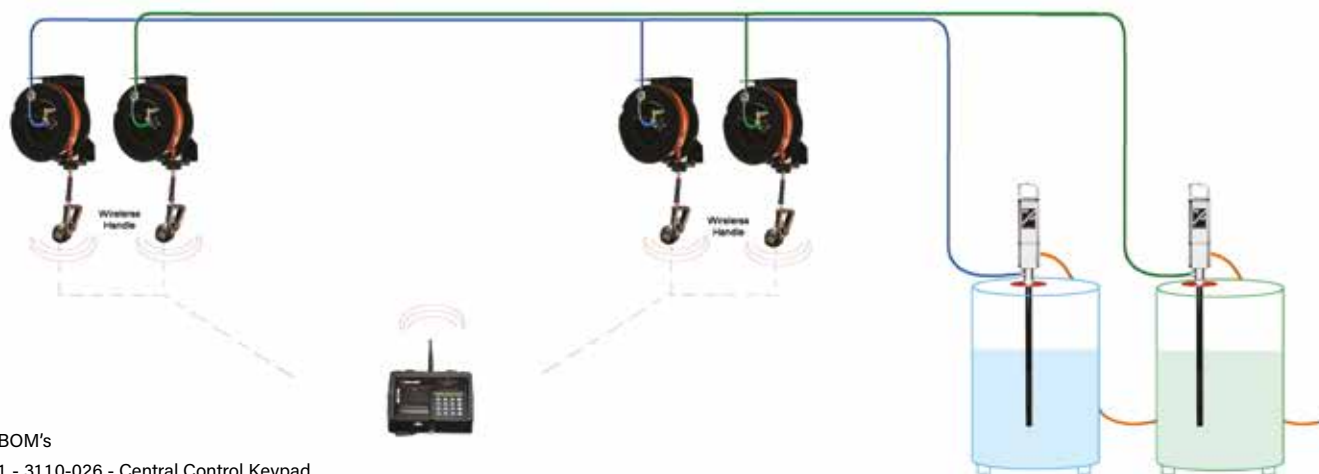
COMPONENT TECHNICAL DATA

Function	Wirelessly monitor and control fluid dispense
Requirements & Limitations	2-way 2.4 GHz radio communication Tank measurements are; quarts, liters, Pints, and gallons Operating Temp.: 14 °F to 140 °F (-10 °C to 60 °C) (Indoor usage only) fusion 2.4 systems may not work with cordless phones, or other electronic devices operating within the same frequency range
Power	Input-110 VAC, 50/60 Hz

MODEL AVAILABLE

3110-026	Central Control Keypad
-----------------	------------------------

Example of Mid-Range fusion 2.4 CCS System



BOM's

1 - 3110-026 - Central Control Keypad

4 - 3331-021 - Choose RF handles from page 114

Accessories may include:

3120-089 - 30 ft Extension Antenna

3120-090 - Antenna Splitter

Fluid Inventory Control fusion 2.4 (DCS)



Features

- Wirelessly controls and manages up to 16 fluids, 250 dispense locations, and 36 keypads
- Add fluid and/or dispense capacity at any time
- Easy/fast entry of authorized PIN codes and job information on a Wireless Dispense Keypad
- Easy dispense and fast completion of work order
- Generate reports by product, by vehicle, by work order, or by technician
- Monitor inventory levels from your PC
- Operator and manager security levels

COMPONENT TECHNICAL DATA

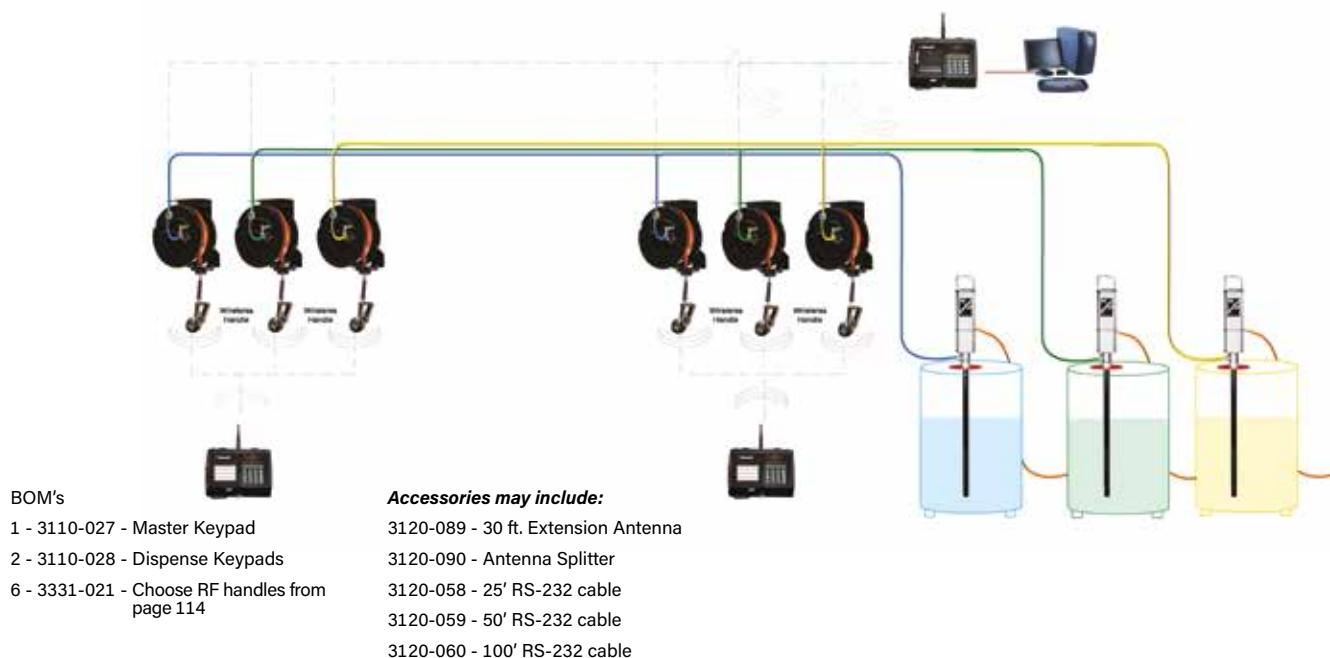
Function	Wirelessly monitor and control fluid dispense
Requirements & Limitations	2-way 2.4 Ghz radio communication Tank measurements are: quarts, liters, pints, and gallons Operating Temp.: 14 °F to 140 °F (-10 °C to 60 °C) (Indoor usage only) fusion 2.4 systems may not work with cordless phones, or other electronic devices operating within the same frequency range
Power	Input-110 VAC, 50/60 Hz

MODELS AVAILABLE

3110-027	Master Keypad
3110-028	Dispense Keypad
3110-029	Dispense Keypad w/Built in Printer

4

Example of Mid-Range fusion 2.4 DCS System



Fluid Inventory Control fusion 2.4 RF Handles



Features

- The fusion 2.4 RF Control Handle is equipped with RF (radio frequency) communications to communicate with a fluid management system keypad to get authorization and dispense information
- The meter can also be run as a standard Electronic Preset Meter (EPM). This is intended for start-up purposes or when the fluid management system is not in use

MODELS AVAILABLE

3332-083	Rigid Hi-Flow w/Semi-Auto Lock Nozzle
3332-084	Flex Hi-Flow w/Semi-Auto Lock Nozzle
3331-021	Bare

COMPONENT TECHNICAL DATA

Function	To dispense fluid
Requirements & Limitations	Min./Max. Flow 5-10 gal/min (19-38 l/min)
	Max. Operating Pressure 1,000 psi (70 bar)
	Meter Accuracy +/- 0.5% - oil +/- 1.5% Anti-freeze (Glycol)
	LCD Display 5 char; 0.40"H x 0.20"W
	Units of Measurement Quarts, Pints, Gallons, and Liters
	Inlet/Outlet 1/2" NPT
	fusion 2.4 control handles are compatible with Oil, ATF, Anti-freeze, and diesel fuel.
Power	4 - "AA" batteries

fusion 2.4 RF Accessories

REMOTE ANTENNA		Y-STRAINER		
Allows for remote mounting of the antenna		For filtering debris after the pump		
3120-089	30' remote antenna		3120-211	1/2" NPT(F)
			3120-212	3/4" NPT(F)
			3120-213	1" NPT(F)
Allows both the included antenna and a remote antenna to be connected to a single key pad			Max. pressure: 580 psi (40 bar) Material: Stainless steel Includes: Plug All strainers have 40 mesh.	
3120-090	Antenna splitter			
RS 232 Serial Cable - 9 pin				
3120-059	RS 232 Cable 50'			
3120-060	RS 232 Cable 100'			

Fluid Inventory Control Synergy

Synergy Fluid Monitoring Systems

Today, the needs of our customers are more complex, the fluids are many, and the challenges managing and accurately monitoring these fluids are difficult. Wireless has its limitations, communication problems, and risks with all electronic controls mounted in the handle. Synergy brings you real-time information with seamless communication without interruption.



4

Today's Challenges

- Multiple dispense points
- The need for simultaneous dispensing
- Variety of fluids including oil, ATF, grease, DEF, diesel fuel, windshield wash solvent and coolant
- Tank monitoring of both fresh and used oil and coolant
- PC and printer interface
- Security
- Networking
- Inventory Reconciliation

The Solution

Synergy offers ease-of-use combined with the high performance you have come to expect from Balcrank. The Synergy provides precise metering and dispensing of compatible fluids for automotive, commercial, and industrial applications.

- ✓ Controls up to 255 outlets
- ✓ Number of fluids are unlimited
- ✓ Number of keypads are unlimited
- ✓ Job number validation are unlimited
- ✓ Manage simultaneous dispense locations all dispenses are recorded

Flexibility and Performance

Synergy is simple to use and offers outstanding performance. It is very easy to customize to your unique needs for control of oil, anti-freeze (Glycol) and more. With Synergy, you will have full control of all fluid consumption for vehicle service and industrial applications.

Intelligent Modules with Easy Integration

The system uses intelligent modules, which offer a variety of adaptations in the software. Synergy can be installed in both existing and new facilities.

The system provides precise metering and dispensing of fluids and is multilingual; English, Spanish, and French.

Remote Access

The keypads are designed to be located in strategic places allowing remote entry of PIN ID, job or work order number, and amount of fluid to be dispensed at any given location. A minimum of 1 keypad is required to operate a system, but there is no limit for the total number of keypads in the system. Any dispense can be initiated from any keypad.

System Control

The Multi-Point Dispense Module (MPDM) controls the amount of fluid ordered from any keypad or PC in the entire system. One module controls up to 4 outlets and offers a keyed manual override. Every outlet port can be given unique functions:

- Volume
- Time-out
- Job number
- Group access
- Pulse per unit
- Minimum/maximum volume

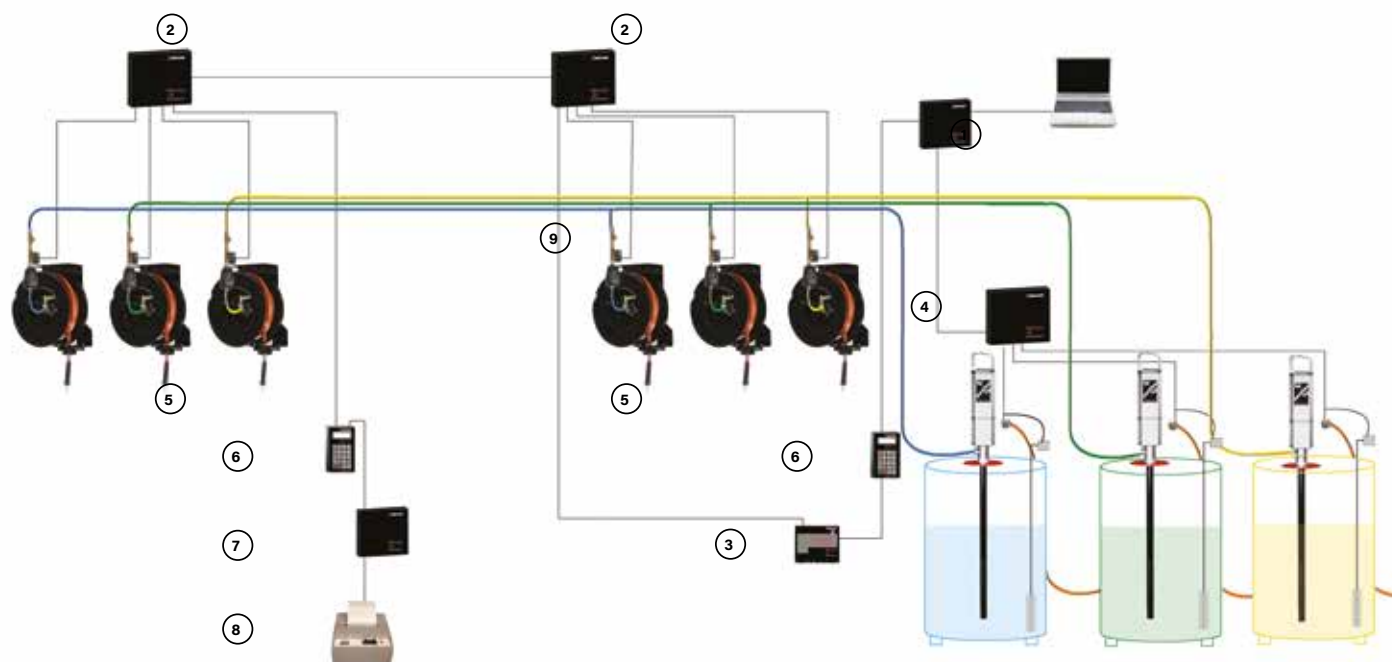
Industrial Batch Features

Synergy is the solution for increasing productivity and improving quality. Offering a number of batch dispensing solutions: it's easy to design a system to meet specific demands. Up to 7 volumes can be pre-programmed and 4 volumes can be dispensed simultaneously, with or without a PC.

Synergy installation must be performed by a Balcrank Synergy Certified Distributor. Contact your Balcrank representative for additional information.

Fluid Inventory Control Synergy

Example of Mid-Range Synergy System



BOM's

- ① 3110-019 - PC Interface Module
 - ② 3110-017 - Multi-Point Dispense Module (MPDM)
 - ③ 3120-068 - LED Display
 - ④ 3110-020 - Tank Control Module
 - ⑤ Hose Reels x 6 units
 - ⑥ 3110-016 - Standard Keypads
 - ⑦ 3110-018 - Printer Module
 - ⑧ 3120-069 - Ticket Printer
 - ⑨ 3120-033 - Air Solenoids x 3 units
- Pulse Meter/Solenoid Valve Kits x 6 units - select the meter to match the fluid type.
See page 108 for meter/valve kits.

Fluid Inventory Control Synergy Components

Multi Point Dispense Module, Keypad and LED Display



Multi Point Dispense Module



Keypad



LED Display

MULTI POINT DISPENSE MODULE TECHNICAL DATA

Function	Module controls 4 dispense points/solenoids
Requirements & Limitations	4 outlets/dispense points Limit of 30' max. distance per dispense point from MPDM to meter valve AC Power cord (not included), see part 3130-001
Power	Input-110 VAC, output - 24 V DC

KEYPAD TECHNICAL DATA

Function	Module allows remote entry of PIN, job number, qty, etc.
Requirements & Limitations	Minimum 1 keypad required to operate a remote system No limit for number of keypads in the system
Power	Input - 24 V DC, output - 24 V DC

LED DISPLAY TECHNICAL DATA

Function	Displays active dispense point & time
Requirements & Limitations	Accommodates a clock module for a non-PC system
Power	Input - 24 V DC, Output - 24 V DC

Features

Multi-Point Dispense Module

- The Multi-Point Dispense Module handles metering and fluid solenoid control from any keypad or PC in the entire system.
- One module controls up to 4 reel dispense points and offers a keyed manual override.
- Every outlet port can be given unique functions: Volume, time out, job number, group access, Pulse Per Unit, display information, min./max. volume.

Keypad

- The standard keypads are designed to be located in strategic locations to allow remote entry of reel selection, PIN, job number, etc.
- Can be equipped with optional Serial Port Kit for use with an external reader.
- No limit for number of keypads in the system.
- Any reel dispense points can be opened from any keypad.

LED Display

- Large display, easy to see from long distances.
- The active reel dispense points is shown in the lower left corner.
- When equipped with a clock module or connected with a PC LED Display unit shows the current time when the system is not in use.
- Displays the active dispense volume
- Can display tank volume when used in a system with a tank control module and an analog sensor.

NOTE: If the LED Display unit is used to display tank volume, it cannot be used to display dispenses, and can only display the volume of a single tank.

MODELS AVAILABLE

3110-017	Multi-Point Dispense Module
3130-001	AC Power Cord
3110-016	Standard Keypad, 6' 3 Prong Plus
3110-030	Keypad with Serial Port
3120-068	LED Display

Fluid Inventory Control Synergy Components

PC Interface Module and Printer Module



Printer Module

Features

PC Interface Module

- Interfaces Synergy system to the PC
- Includes basic software:
 - Allowing graphic visualization of the Synergy system components.
 - Export system data to a simple text file.
 - Synchronization of the system time with the PC
- Enhance system capabilities with Synergy Professional software, see page 121 for software upgrade, sold separately.
- Operator interface, includes powerful database manager with professional software, page 121

Printer Module

- Interfaces FIC system to the optional ticket printer
- Internal database stores user, PIN, and job information, when no PC is used
- Transaction details printed on the optional ticket printer
- Can also be used in a PC system for job tickets anywhere in a system layout

4

PC INTERFACE MODULE TECHNICAL DATA

Function	Allows PC Interface
Requirements & Limitations	PC Requirements: - Runs under Windows 7 / 2000 / XP / Vista / Windows 8, 8.1, 10 - Intel Pentium 2-333Mhz 128Mb RAM - Must have free compatible 9-pin serial port. Comes with Basic Software: - Graphically view system - Set system time, update tank levels - Simple data export
Power	Input - 24 V DC, output - 24 V DC

PRINTER MODULE TECHNICAL DATA

Function	Controls printability
Requirements & Limitations	Max. 912 transactions 32 users 8 tanks Accommodates a clock module for a non-PC system The non-PC system requires the Printer Module to create printouts of all transactions to ticket printer (3120-069)
Power	Input - 24 V DC, Output - 24 V DC

MODELS AVAILABLE

3110-019	PC Interface Module
3110-018	Printer Module

Fluid Inventory Control Synergy Components

Tank Surveillance Module and Tank Control Module



Tank Surveillance Module



Tank Control Module

TECHNICAL DATA		
	TANK SURVEILLANCE MODULE	TANK CONTROL MODULE
Function	Controls tank monitoring with LED status lights	Controls tank monitoring
Requirements & Limitations	4 tanks per module Can be used as a stand alone, in a non-PC based system, or in a PC based system	4 tanks per module Can only be used in the PC based system
Power	Input - 110 VAC, Output - 24 V DC	Input - 110 VA C, Output - 24 V DC

Features

Tank Surveillance Module

- The Tank Surveillance Module is used to monitor up to 4 fresh and/or waste oil tanks per module using either high/low level sensors or analog probes. Control pumps - automatic start and stop
- Controls up to 4 solenoids (air or fluid) and can be used for either standalone tank monitoring or integrated with a PC based system
- Equipped with key switch for normal operation, emergency override and On/Off functions
- Green, red, & yellow LED's on the front cover provide current tank status at a glance
- Used Oil - warning lights indicate ready, high level, and full
- Fresh oil - warning lights indicate ready, low level, and empty

Tank Control Module

- The Tank Control Module is used to monitor up to 4 fresh and/or used oil tanks per module using either high/low level sensors or analog probes. Control pumps - automatic start and stop
- Controls air solenoid valves
- Equipped with key switch for normal operation, emergency override and On/Off functions
- Controls waste pump/solenoid valves providing high level warning for Used Oil or low level warning and reorder point for fresh oil on PC

MODELS AVAILABLE

3110-021	Tank Surveillance Module
3110-020	Tank Control Module

Fluid Inventory Control Synergy Components

DR METER							
	MODEL	MATERIAL	INLET/OUTLET THREADS	UNIT OF MEASURE	MAX PRESSURE	COMPATIBLE FLUIDS	SB
	3120-013 PULSE METER	CPVC	1/2" NPT(F)	Liters, Gallons, Quarts, and pints	450 psi (10 bar)	Glycol, windshield wash solutions and DEF	SB 3107
DR METER HIGHFLO							
	3120-014 PULSE METER	Aluminum	3/4" NPT(F)	Liters, Gallons, Quarts, and pints	1450 psi (10 bar)	Oil, glycol and coolant solutions	SB 3108
MODEL		DESCRIPTION		COMPONENT TECHNICAL DATA			
			METER/VALVE KITS Solenoid Valve Kits - High precision meter modules include pulse meter, and solenoid valve. Balcrank recommends the use of a Y-Strainer on the dispense side of the pump, see page. 88. Order one per dispense point for use with Synergy				
			3120-117	Oil	Pressure: 1450 psi (100 bar) Connection: 1/2" NPT(M/M) Power: 24 V DC		
			3120-074	Grease	Pressure: 7250 psi (500 bar) Connection: In: 1/4" NPT(M) Out: 1/4" NPT(M) Power: 24 V DC		
			3120-075	Diesel	Pressure: 145 psi (10 bar) Connection: 3/4" NPT(M/M) Power: 24 V DC		
			3120-077	Windshield Washer Fluid	Pressure: 725 psi (50 bar) Material: 1/2" NPT(M/M) Power: 24 V DC		
			3120-078	DEF	Pressure: 725 psi (50 bar) Material: 1/2" NPT(M/M) Power: 24 V DC		
			3120-031	-	Ready Light Alerts technician when fluid batch is available for dispensing.		
			FIC ACCESSORIES Bar code, Card, and Dallas Key Reader require a Serial Port Kit				
			3120-204	Clock Module for LED or Printer Module			
			3120-205	Serial Port Kit			
			3120-208	Bar Code Reader + Serial Port Kit			
			3120-209	Card Reader + Serial Port Kit			
			3120-210	Dallas Key Reader + Serial Port Kit			

Fluid Inventory Control Synergy Components

	MODEL	DESCRIPTION	COMPONENT
	PROGRAMS & APPLICATIONS		
	3120-072	Professional Software Full-featured PC database. Easy system configuration Variety of standard & customized reports	
	3110-022	PC Keypad interface	
	3120-070	Tank Alerts via E-mail	
	3110-023	DB Dock Service. Synchronize mobile database with main database	
	COMMUNICATION & CONTROL		
	3128-050	Communication Cable 50 ft.	
	3128-100	Communication Cable 100 ft.	
	3128-150	Communication Cable 150 ft.	
	3128-250	Communication Cable 250 ft.	
	3129-050	Control Cable 50 ft.	
	3129-100	Control Cable 100 ft.	
	3129-150	Control Cable 150 ft.	
	TANK SENSORS		
	Tank sensors (switches provide low level/high level responses, depending on model. For use with Tank Control Module 3110-020 and Tank Surveillance Module 3110-021		
	3120-079	Level Sensor, Switch, Oil. Low level stop, 3.5 ft. with 17 ft. cable	
	3120-080	Level Sensor, Switch, Other Fluids. Low level stop, 3.5 ft. with 17 ft. cable	
	3120-081	2 Level Sensor, Switch, Oil. Low level alarm and stop, 3.5 ft. with 17 ft. cable	
	3120-082	2 Level Sensor, Switch, Other Fluids. Low level alarm and stop, 3.5 ft. with 17 ft. cable	
	3120-083	2 Level Sensor, Switch, Used Oil. High level alarm and stop, 11.75" warning and 6" off/stop	
	3120-084	Level Sensor, Analog, Oil. Provides low level/high level actual volume, for tanks up to 13 ft. tall with 23 ft. cable	
	3120-092	1 Level Sensor, Switch, Single Probe, 5.6 ft. with 33 ft. cable	
	3120-093	2 Level Sensor, Switch, Double Probe, 3 ft. & 5.5 ft. with 33 ft. cable	
	3120-094	1 Level Sensor, Switch, Flex Adjustable Single Probe, 16 ft. cable	
	TICKET PRINTER		
	3120-069	Optional ticket printer for use with Printer Module 3110-018	
	Y-STRAINER - 580 PSI (40 BAR) ALL STRAINERS HAVE 40 MESH		
	3120-211	1/2" NPT(F)	
	3120-212	3/4" NPT(F)	
	3120-213	1" NPT(F)	

Fluid Inventory Control Pump Sentinel & Tank Guardian



Features

Pump Sentinel

- Prevents theft by disabling up to six pumps.
- Safety shut-off at the end of the day; in-case of component failure resulting in leaks and spills.
- Master key needed to turn system on
- 6' cable to run to junction box
- Small Console footprint:
6.5" L x 5" W x 3" H.

Prevents fluid spills during non-working hours by using a built-in timer to turn off air supply to all pumps at a predetermined time each day.

Tank Guardian

Monitors the fluid level of tanks by detecting the static pressure generated by the fluid height. A tube is inserted in the tank and the fluid level or volume is displayed on the Tank Guardian screen. Displays in gallons or liters. Tank Guardian can be used as a stand alone monitoring system or with any of Balcrank's FIC systems.

Tank Guardian level gauges saves historical tank level records according to time interval, level change, and volume change. With the recorded data, a diagram can be displayed showing the historical tank level records. High and low level prompts are included in the display.

PUMP SENTINEL TECHNICAL DATA

Function	Prevents fluid spills during non-working hours by using a built-in timer to turn off air supply to all pumps at a predetermined time each day
Requirements & Limitations	No. 18 AWG wire is recommended for all runs less than 400 feet. For runs from 400 to 625 feet, use wire no. 16 AWG or larger. Normally the 24V DC wiring can be run around the overhead structure of the building without using conduit.
Power	120 VAC, 60/50 Hz, 50 Watts-output 24 V DC
Solenoid	3120-033 Air Solenoid Valve
Service Bulletin	SB 3048

TANK GUARDIAN TECHNICAL DATA

Function	Monitors the fluid level of tanks by detecting the static pressure generated by the fluid height.
Requirements & Limitations	Order one Tank Guardian per tank Tank Guardian Multi-tank software is required for 4 or 8 tanks
Power	110 VAC
Service Bulletin	SB 3094

MODELS AVAILABLE

3110-009	Pump Sentinel Console
4520-010	Tank Guardian
4520-011	Tank Guardian Multi-tank software, 4 PC interface
4520-012	Tank Guardian Multi-tank software, 8 PC interface



Fluid Inventory Control TM Control



Features

TM Control

Standalone tank controller with 4 channels capable of controlling up to 4 different tanks or fluids. Each channel can connect to a solenoid valve, remote alarm or strobe light.

The TM Control can be used as a high or low-level control to prevent overflow, or as a pump shutoff to prevent the pump from running dry, and allowing air to enter the system.

TECHNICAL DATA

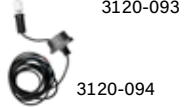
Function	Stand alone tank controller
Requirements & Limitations	4 tanks or 4 fluids
Power	Input - 110-230 V AC Required Voltage - 110/60 Hz 240/50 Hz V AC

RECOMMENDED ACCESSORIES

MODEL	DESCRIPTION	COMPONENT TECHNICAL DATA
 3120-029	Tank alert strobe alarm	Power: 24 V DC
 3120-033	Air Solenoid Valve	Air Solenoid Provides for the remote shutdown of dispensing pumps from the fluid control console. Order one per controlled pump. Pressure: 200 PSI (12 bar) Connection: 3/8" NPT (F/F) Power: 24 V DC

TANK SENSORS

Tank sensors (switches provide low level/high level responses, depending on model)

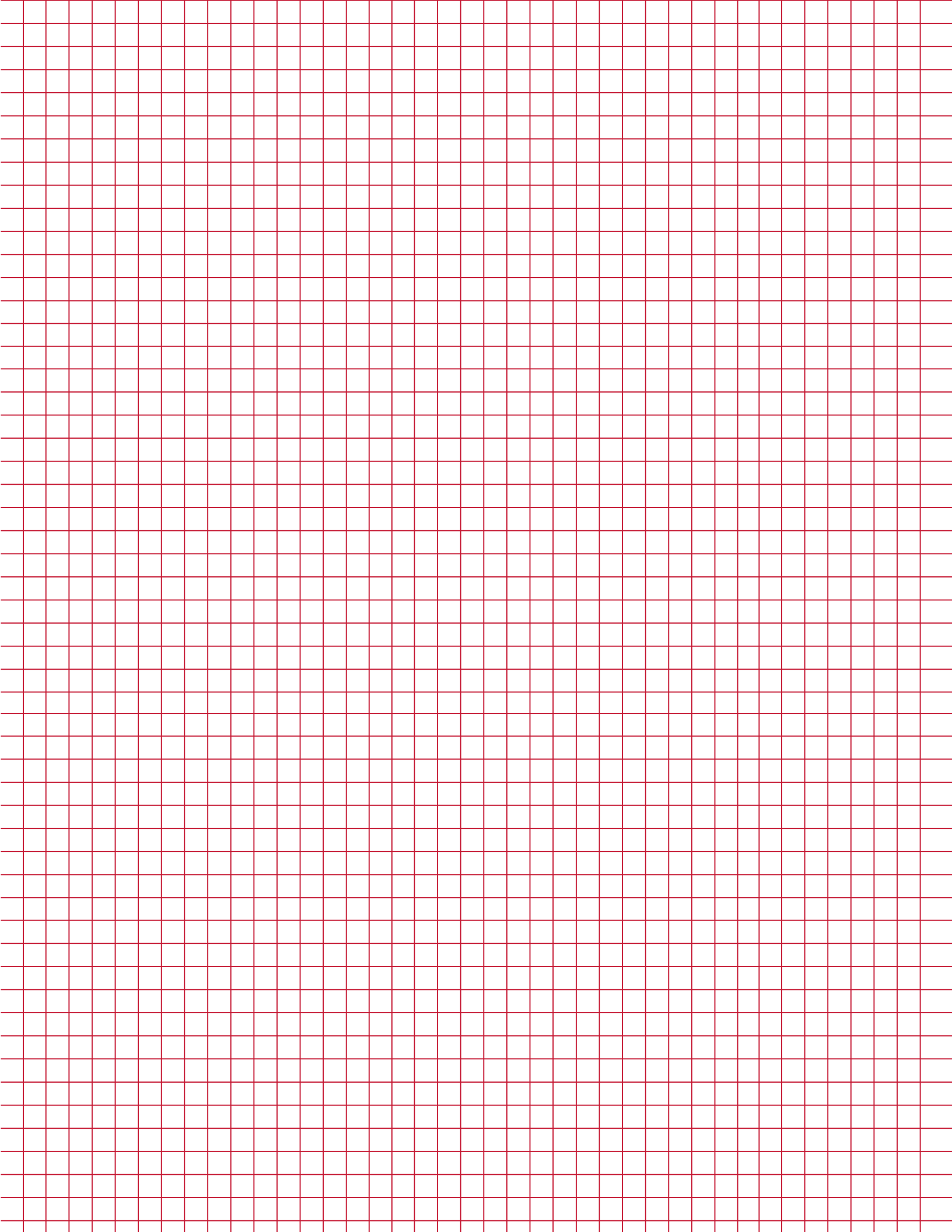
 3120-092	3120-092	1 Level Sensor, Switch, Single Probe, 5.6 ft. with 33 ft. cable
 3120-093	3120-093	2 Level Sensor, Switch, Double Probe, 3 ft. & 5.5 ft. with 33 ft. cable
 3120-094	3120-094	1 Level Sensor, Switch, Flex Adjustable Single Probe, 16 ft. cable

Main Features

- Controls up to four channels. Each channel can be assigned to a different tank, or multiple channels can be assigned to a single tank
- Each channel controls solenoid valves, relays, external alarms, etc.
- This unit can be a standalone unit; no need to connect to auxiliary software or systems
- TM Control works with Tank alert strobe light and alarm 3120-029
- One button for setup, resetting alarms, and system test
- Use the key switch for bypass mode control, setup access, or rebooting the system
- Status LEDs: yellow indicates bypass mode and white on indicates system status; on
- Input LED for each channel; red blinking LED indicates level warning
- Outputs can be configured to "normally-open" or "normally closed"

MODELS AVAILABLE

3110-033	TM Control
----------	------------





1 2 3 4 5 6 7 8 9 10

Fluid Dispense Packages

FLUID DISPENSE PACKAGES	125
TANK PACKAGES	126
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PISTON PUMP LIGHTWEIGHT DOUBLE WALL OIL DISPENSE TANK PACKAGES	128
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Tank Packages

Shipped fully assembled.

Package includes:

- UL 142 Tanks (Single and Double Wall)*
- DR Handle w/Flex Ext & Auto Tip
- Choice of:
 - LYNX® or Panther® 3:1 Pump
 - 50' x 1/2" ID Classic or Evolution Hose Reel

Features

- Tanks have 2" lockable fill cap and gauge
- Select packages come fully assembled with everything you need for immediate use
- Available in additional sizes. Contact Balcrank for more information



Workbench Tank Packages

Workbench style tanks are the best choice when work space is at a premium. The flat top and 30-33" height make workbench style tanks the perfect choice for crowded shops that need additional workspace.

MODELS AVAILABLE	DESCRIPTION
1134-007	250 gal 30" H x 32" W x 60" L Single Wall Construction (Ships Fully Assembled), Evolution Hose Reel & LYNX® 3:1 Pump
1134-015	280 gal 33" H x 33" W x 60" L Single Wall Construction (Ships Fully Assembled), Evolution Hose Reel & LYNX® 3:1 Pump

* Check local codes for venting and installation equipment.

5



Vertical Obround Tank Packages

Choose vertical Obround tanks when floor space is limited. Vertical Obround tanks have the smallest footprint per gallon of oil. Assembly required for 330 gallon vertical packages: equipment ships separately.

MODELS AVAILABLE	DESCRIPTION
1134-017	275 gal 60" H x 44" W x 27" L dimensions. Single Wall Construction. (Ships Fully Assembled) Classic Hose Reel & Panther® HP 3:1 Pump
1134-018	275 gal 60" H x 44" W x 27" L dimensions. Double Wall Construction. (Ships Fully Assembled) Classic Hose Reel & Panther® HP 3:1 Pump
1134-028	330 gal 72" H x 44" W x 27" L dimensions. Double Wall Construction. (Assembly Required) Evolution Hose Reel & LYNX® 3:1 Pump



Horizontal Obround Tank Packages

Horizontal Obround tanks have a small overall footprint with a narrow width dimension of 27". The fill cap and hose reel are located a convenient 44" from the floor.

MODELS AVAILABLE	DESCRIPTION
1134-030	275 gal 44" H x 27" W x 60" L dimensions. Single Wall Construction. (Ships Fully Assembled) Evolution Hose Reel & LYNX® 3:1 Pump, DR Flex-memory 1/2 turn manual oil
1134-009	275 gal 44" H x 27" W x 60" L Single Wall Construction (Ships Fully Assembled) Classic Hose Reel & Panther® HP 3:1 Pump

Tailgate delivery and advance notification available.

Piston Pump Tankless Packages

For use with steel single and double wall tanks

All packages include:

- DR Handle w/flex-m ext. & 1/4 turn manual tip for oil
- F/R auto drain 1/4" NPT(F)
- 2.5' reel inlet hose
- Evolution series hose reel, 1/2" x 30' or 50' or Classic series hose reel 1/2" x 30' or 50' (only for medium and heavy duty)
- Pump connecting hose kit
- Piston pump - choice of LYNX® 3:1, LYNX® HD 5:1, or Panther® 3:1

Light Duty Applications

- Tank packages
- Low volume, small service centers



Medium Duty Applications

- Tank packages
- Low to medium volume, small service centers



Medium/Heavy Duty Applications

- Tank packages
- Medium volume service centers



Features

Suitable for dispensing of all petroleum based and synthetic oils and similar products up to SAE 90. Packages may be mounted to a variety of tanks including Balcrank's UL 142 single and double wall tanks. Available in workbench, vertical obround, and horizontal obround styles.

MODELS AVAILABLE	DESCRIPTION		
1132-016	Tankless Package, LYNX®/30', DR-Flex-M	4410-054	Pump Hose Kit
	1110-007 LYNX® 3:1 Bare Pump	3330-159	DR Handle w/flex-m ext.
	2140-013 Evo Reel 30' x 1/2" for Oil	3260-065	F/R manual 1/4" NPT(F)
1132-017	Tankless Package, LYNX®/50', DR-Flex-M	4410-054	Pump Hose Kit
	1110-007 LYNX® 3:1 Bare Pump	3330-159	DR Handle w/flex-m ext.
	2140-014 Evo Reel 50' x 1/2" for Oil	3260-065	F/R manual 1/4" NPT(F)

MODELS AVAILABLE	DESCRIPTION		
1132-020	Tankless Package, LYNX® HD/30', DR-Flex-M	4410-054	Pump Hose Kit
	1110-012 LYNX® HD 5:1 Bare Pump	3330-159	DR Handle w/flex-m ext.
	2140-013 Evo Reel 30' x 1/2" for Oil	3260-065	F/R manual 1/4" NPT(F)
1132-021	Tankless Package, LYNX®/50', DR-Flex-M	4410-054	Pump Hose Kit
	1110-012 LYNX® HD 5:1 Bare Pump	3330-159	DR Handle w/flex-m ext.
	2140-014 Evo Reel 50' x 1/2" for Oil	3260-065	F/R manual 1/4" NPT(F)

MODELS AVAILABLE	DESCRIPTION		
1132-018	Tankless Package, Panther®/30', DR-Flex-M	4410-055	Pump Hose Kit
	1130-020 Panther® 3:1 Bare Pump	3330-159	DR Handle w/flex-m ext.
	2140-013 Evo Reel 30' x 1/2" for Oil	3260-065	F/R manual 1/4" NPT(F)
1132-019	Tankless Package, Panther®/50', DR-Flex-M	4410-055	Pump Kit
	1130-020 Panther® 3:1 Bare Pump	3330-159	DR Handle w/flex-m ext.
	2140-014 Evo Reel 50' x 1/2" for Oil	3260-065	F/R manual 1/4" NPT(F)

Piston Pump Lightweight Double Wall Oil Dispense Tank Packages

Package includes

- Double wall tank - choice of 165 gal (L 29" x W 28" x H 61"), 275 gal (L 43" x W 28" x H 61"), or 400 gal (L 64" x W 30" x H 68")
- Hose reel - choice of Evolution or Classic series hose reel, 30' or 50' x 1/2"
- Piston pump - choice of LYNX® 3:1, LYNX® 5:1 HD, or Panther® 3:1
- DR handle w/flex-m ext. & 1/4 turn manual tip for oil
- F/R auto drain 1/4" NPT(F)
- 2.5' reel inlet hose
- 5' air connecting hose
- Air quick connect coupler & nipple
- Sight gauge
- Vented fill cap
- Pump & reel bracket

(See additional tank accessories on pg. 132)

*As with all tanks, be sure to follow local and state guidelines for tank placement and installation. Some cities and counties have not approved the UL 2258 certification, as it is different that the familiar UL142 that pertains to steel tanks, so be sure to check with your local Fire Marshal and/or city and county regulations before ordering.

These double wall tanks feature:

- Inner tank made of blow-molded, high-density, seamless polyethylene that is leak-proof and will never corrode
- Outer tank is made of weld-free galvanized steel and roll seamed with an oil and fire-resistant seal
- Outer tank holds 110 percent of inner tank for maximum protection
- Extremely light, up to 50 percent lighter than conventional steel tanks
- Can be used for DEF, diesel and bio fuels, motor oil and ATF
- Compact, economical design (8 sq. ft. for 1000 l)
- Wide handles on each end allow for easy handling and transportation
- UL 2258 certified*
- 4 x 2" bung openings
- All Tanks ship assembled



Light Duty Applications

- Low volume, small service centers

MODELS AVAILABLE	DESCRIPTION
1135-001	30' EVO Reel, LYNX® 3:1 pump, 165 gal
1135-004	50' EVO Reel, LYNX® 3:1 pump, 165 gal
1135-007	30' Classic Reel, LYNX® 3:1 pump, 165 gal
1135-010	50' Classic Reel, LYNX® 3:1 pump, 165 gal
1135-013	30' EVO Reel, LYNX® 3:1 pump, 275 gal
1135-016	50' EVO Reel, LYNX® 3:1 pump, 275 gal
1135-019	30' Classic Reel, LYNX® 3:1 pump, 275 gal
1135-022	50' Classic Reel, LYNX® 3:1 pump, 275 gal
1135-025*	30' EVO Reel, LYNX® 3:1 pump, 400 gal
1135-028*	50' EVO Reel, LYNX® 3:1 pump, 400 gal
1135-031*	30' Classic Reel, LYNX® 3:1 pump, 400 gal
1135-034*	50' Classic Reel, LYNX® 3:1 pump, 400 gal

Medium Duty Applications

- Low to medium volume, small service centers

MODELS AVAILABLE	DESCRIPTION
1135-002	30' EVO Reel, LYNX® 5:1 HD pump, 165 gal
1135-005	50' EVO Reel, LYNX® 5:1 HD pump, 165 gal
1135-008	30' Classic Reel, LYNX® 5:1 HD pump, 165 gal
1135-011	50' Classic Reel, LYNX® 5:1 HD pump, 165 gal
1135-014	30' EVO Reel, LYNX® 5:1 HD pump, 275 gal
1135-017	50' EVO Reel, LYNX® 5:1 HD pump, 275 gal
1135-020	30' Classic Reel, LYNX® 5:1 HD pump, 275 gal
1135-023	50' Classic Reel, LYNX® 5:1 HD pump, 275 gal
1135-026*	30' EVO Reel, LYNX® 5:1 HD pump, 400 gal
1135-029*	50' EVO Reel, LYNX® 5:1 HD pump, 400 gal
1135-032*	30' Classic Reel, LYNX® 5:1 HD pump, 400 gal
1135-035*	50' Classic Reel, LYNX® 5:1 HD pump, 400 gal

Medium/Heavy Duty Applications

- Medium volume service centers

MODELS AVAILABLE	DESCRIPTION
1135-003	30' EVO Reel, Panther® 3:1 pump, 165 gal
1135-006	50' EVO Reel, Panther® 3:1 pump, 165 gal
1135-009	30' Classic Reel, Panther® 3:1 pump, 165 gal
1135-012	50' Classic Reel, Panther® 3:1 pump, 165 gal
1135-015	30' EVO Reel, Panther® 3:1 pump, 275 gal
1135-018	50' EVO Reel, Panther® 3:1 pump, 275 gal
1135-021	30' Classic Reel, Panther® 3:1 pump, 275 gal
1135-024	50' Classic Reel, Panther® 3:1 pump, 275 gal
1135-027*	30' EVO Reel, Panther® 3:1 pump, 400 gal
1135-030*	50' EVO Reel, Panther® 3:1 pump, 400 gal
1135-033*	30' Classic Reel, Panther® 3:1 pump, 400 gal
1135-036*	50' Classic Reel, Panther® 3:1 pump, 400 gal

*Assembly required for the 400 gallon applications: equipment ships separately.

AODD Pump Anti-freeze & Windshield Wash Fluid



Package includes*

- Double wall tank - choice of 165 gal (L 29" x W 28" x H 61") or 275 gal (L 43" x W 28" x H 61")
 - CF30 polypropylene AODD pump rated at 30 GPM
 - Pump bracket
 - F/R auto drain 1/4" NPT(F)
 - Tank sight gauge
 - Vented 2" evac cap/port
 - Air supply hose with quick coupler
 - Evolution hose reels 30' or 50' reels
 - Shipped completely assembled and ready for use
- (See additional accessories on pg. 132)

*Control handle not included. Select the appropriate control handle based on the material being dispensed, anti-freeze or windshield wash fluids.

Lightweight Double Wall Package Waste Fluid



Package includes

- Double wall tank - choice of 275 gal (L 43" x W 28" x H 61") , or 400 gal (L 64" x W 30" x H 68")
- CF30 aluminum AODD pump rated at 30 GPM
- Pump bracket
- F/R auto drain 1/4" NPT(F)
- Y-strainer, on oil models
- 1" evacuation hose with 1" cam-lock connector (3/4" for anti-freeze)
- High level pump shut-off
- Tank site gauge
- Vented 2" evac cap/port
- Air supply hose with quick coupler
- Shipped completely assembled and ready for use

Features

Our lightweight double wall used oil and anti-freeze evacuation packages come completely assembled and ready for use; simply connect the pump air supply hose and fill with oil.

The used oil package includes a high-level pump shut-off, site gauge, Y-strainer and a 1" cam-lock connector. The used anti-freeze packages come with a 3/4" cam lock to prevent accidental contamination of fluids.

The A/F and WW packages include a 1" poly AODD pump, hose reel and all hoses and fittings.

Select your control handle separately based on the fluid you are dispensing

MODELS AVAILABLE	DESCRIPTION
ANTI-FREEZE & WINDSHIELD WASH FLUID	
1135-037	CF30 Polypropylene, 165 gal, EVO 30', A/F & WWS
1135-038	CF30 Polypropylene, 165 gal, EVO 50', A/F & WWS
1135-039	CF30 Polypropylene, 275 gal, EVO 30', A/F & WWS
1135-040	CF30 Polypropylene, 275 gal, EVO 50', A/F & WWS
USED FLUID	
4140-065	CF30, 400 gal, EVAC for oil
4140-066	CF30, 275 gal, EVAC for oil
4140-068	CF30, 400 gal, EVAC for A/F
4140-069	CF30, 275 gal, EVAC for A/F

*As with all tanks, be sure to follow local and state guidelines for tank placement and installation. Some cities and counties have not approved the UL 2258 certification, as it is different than the familiar UL142 that pertains to steel tanks, so be sure to check with your local Fire Marshal and/or city and county regulations before ordering.

Piston Pump Lightweight Double Wall Tankless Packages

Packages includes

- Hose reel - choice of Evolution or Classic series hose reel, 30' or 50' x 1/2"
- Piston pump - choice of LYNX® 3:1, LYNX® 5:1 HD, or Panther® 3:1
- DR handle w/flex-m ext. & 1/4 turn manual tip for oil
- F/R auto drain 1/4" NPT(F)
- 2.5' reel inlet hose
- 5' air connecting hose
- Air quick connect coupler & nipple
- Sight gauge
- Vented fill cap
- Pump & reel bracket



Light Duty Applications

- Tank packages
- Low volume, small service centers



Medium Duty Applications

- Tank packages
- Low to medium volume, small service centers



Medium/Heavy Duty Applications

- Tank packages
- Medium volume service centers

Features

Suitable for storage and dispensing of all petroleum based and synthetic oils and similar products up to SAE 90. Packages are designed for lightweight double wall tanks, which are available in 165 gal, 275 gal, and 400 gal.

5

MODELS AVAILABLE	PACKAGE
1135-001T	30' EVO Reel, LYNX® 3:1 pump, 165 gal
1135-004T	50' EVO Reel, LYNX® 3:1 pump, 165 gal
1135-007T	30' Classic Reel, LYNX® 3:1 pump, 165 gal
1135-010T	50' Classic Reel, LYNX® 3:1 pump, 165 gal
1135-013T	30' EVO Reel, LYNX® 3:1 pump, 275 gal
1135-016T	50' EVO Reel, LYNX® 3:1 pump, 275 gal
1135-019T	30' Classic Reel, LYNX® 3:1 pump, 275 gal
1135-022T	50' Classic Reel, LYNX® 3:1 pump, 275 gal
1135-025T	30' EVO Reel, LYNX® 3:1 pump, 400 gal
1135-028T	50' EVO Reel, LYNX® 3:1 pump, 400 gal
1135-031T	30' Classic Reel, LYNX® 3:1 pump, 400 gal
1135-034T	50' Classic Reel, LYNX® 3:1 pump, 400 gal

MODELS AVAILABLE	PACKAGE
1135-002T	30' EVO Reel, LYNX® 5:1 HD pump, 165 gal
1135-005T	50' EVO Reel, LYNX® 5:1 HD pump, 165 gal
1135-008T	30' Classic Reel, LYNX® 5:1 HD pump, 165 gal
1135-011T	50' Classic Reel, LYNX® 5:1 HD pump, 165 gal
1135-014T	30' EVO Reel, LYNX® 5:1 HD pump, 275 gal
1135-017T	50' EVO Reel, LYNX® 5:1 HD pump, 275 gal
1135-020T	30' Classic Reel, LYNX® 5:1 HD pump, 275 gal
1135-023T	50' Classic Reel, LYNX® 5:1 HD pump, 275 gal
1135-026T	30' EVO Reel, LYNX® 5:1 HD pump, 400 gal
1135-029T	50' EVO Reel, LYNX® 5:1 HD pump, 400 gal
1135-032T	30' Classic Reel, LYNX® 5:1 HD pump, 400 gal
1135-035T	50' Classic Reel, LYNX® 5:1 HD pump, 400 gal

MODELS AVAILABLE	PACKAGE
1135-003T	30' EVO Reel, Panther® 3:1 pump, 165 gal
1135-006T	50' EVO Reel, Panther® 3:1 pump, 165 gal
1135-009T	30' Classic Reel, Panther® 3:1 pump, 165 gal
1135-012T	50' Classic Reel, Panther® 3:1 pump, 165 gal
1135-015T	30' EVO Reel, Panther® 3:1 pump, 275 gal
1135-018T	50' EVO Reel, Panther® 3:1 pump, 275 gal
1135-021T	30' Classic Reel, Panther® 3:1 pump, 275 gal
1135-024T	50' Classic Reel, Panther® 3:1 pump, 275 gal
1135-027T	30' EVO Reel, Panther® 3:1 pump, 400 gal
1135-030T	50' EVO Reel, Panther® 3:1 pump, 400 gal
1135-033T	30' Classic Reel, Panther® 3:1 pump, 400 gal
1135-036T	50' Classic Reel, Panther® 3:1 pump, 400 gal

Tote Packages

Top Mount Packages include

- Hose reel (see options below)
- Pump (see options below)
- Filter/regulator with auto drain
- 2.5' reel connecting hose
- 5' air connecting hose
- Air quick coupler & nipple
- Top mount pump & reel bracket
- Pump direct immersion suction tube & dust shroud
- Top tote suction tube and hose (CenterFlo packages)



*control handle not included

Side Mount Packages include

- Hose reel (see options below)
- Pump (see options below)
- Filter/regulator with auto drain
- 2.5' reel connecting hose
- 5' air connecting hose
- Air quick coupler & nipple
- Side mount pump & reel swivel bracket
- 6" vented cap with dual 2" ports & pressure relief port
- Vented fill cap
- Top tote suction tube and hose



*control handle not included

Features



*control handle not included

Top Mount

MODELS AVAILABLE	LIGHT DUTY
1136-213	275 Gal LYNX® 3:1 & EVO 30'
1136-215	275 Gal LYNX® 3:1 & EVO 50'
1136-313	330 Gal LYNX® 3:1 & EVO 30'
1136-315	330 Gal LYNX® 3:1 & EVO 50'
MODELS AVAILABLE	MEDIUM/HEAVY DUTY
1136-223	275 Gal LYNX® 5:1 HD & EVO 30'
1136-225	275 Gal LYNX® 5:1 HD & EVO 50'
1136-323	330 Gal LYNX® 5:1 HD & EVO 30'
1136-325	330 Gal LYNX® 5:1 HD & EVO 50'
1136-233	275 Gal Panther 3:1 & EVO 30'
1136-235	275 Gal Panther 3:1 & EVO 50'
1136-333	330 Gal Panther 3:1 & EVO 30'
1136-335	330 Gal Panther 3:1 & EVO 50'

Side Mount

MODELS AVAILABLE	LIGHT DUTY
1137-213	275 Gal LYNX® 3:1 & EVO 30'
1137-215	275 Gal LYNX® 3:1 & EVO 50'
1137-313	330 Gal LYNX® 3:1 & EVO 30'
1137-315	330 Gal LYNX® 3:1 & EVO 50'

* Control handles sold separately, see page 90

MODELS AVAILABLE	MEDIUM/HEAVY DUTY
1137-223	275 Gal LYNX® 5:1 HD & EVO 30'
1137-225	275 Gal LYNX® 5:1 HD & EVO 50'
1137-323	330 Gal LYNX® 5:1 HD & EVO 30'
1137-325	330 Gal LYNX® 5:1 HD & EVO 50'
1137-233	275 Gal Panther 3:1 & EVO 30'
1137-235	275 Gal Panther 3:1 & EVO 50'
1137-333	330 Gal Panther 3:1 & EVO 30'
1137-335	330 Gal Panther 3:1 & EVO 50'

CenterFlo

MODELS AVAILABLE	A/F & OIL PACKAGE
1136-243	275 Gal CF15 Alum & EVO 30'
1136-245	275 Gal CF15 Alum & EVO 50'
1136-253	275 Gal CF30 Alum & EVO 30'
1136-255	275 Gal CF30 & EVO 50'
1136-343	330 Gal CF15 Alum & EVO 30'
1136-345	330 Gal CF15 Alum & EVO 50'
1136-353	330 Gal CF30 & EVO 30'
1136-355	330 Gal CF30 & EVO 50'

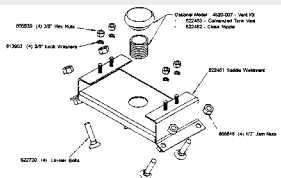
MODELS AVAILABLE	WWS PACKAGE
1136-263	275 Gal CF15 Poly & EVO 30'
1136-265	275 Gal CF15 Poly & EVO 50'
1136-273	275 Gal CF30 Poly & EVO 30'
1136-275	275 Gal CF30 Poly & EVO 50'
1136-363	330 Gal CF15 Poly & EVO 30'
1136-365	330 Gal CF15 Poly & EVO 50'
1136-373	330 Gal CF30 Poly & EVO 30'
1136-375	330 Gal CF30 Poly & EVO 50'

* Order control handle separately

Tank Package Accessories

5

BUNG ADAPTERS		
Bung Adapter		4411-009N Aluminum Panther® HP, Tiger W/ Pressure Relief
		4411-009QX Aluminum Panther® HP, Tiger W/ Pressure Relief 10 pk
		4411-022 Bung Adapter LYNX®: 3:1, 5:1
		4411-021 Bung Adapter LYNX®: 1:1 & 2:1
		4411-018N Double Tap Bushing for Panther® W/ Pressure Relief
TANK LEVEL GAUGE		
Tank level gauge		4520-014 Black Knight Gauge Display dial shows the remaining fluid depth in inches as the attached float level changes. Mount on tank bung fitting. (For stationary tanks only. Not recommended for mobile lubbers.)
BRACKETS & TRAYS		
Drip tray		4520-020 Control Handle Drip Tray. Fits Lightweight Double Wall tanks and IBC totes
Swivel bracket for mounting hose reels		2230-026 Swivel Bracket for use with single EVO, Premium and Classic. Allows the hose reel to be wall mounted to the swivel bracket and pivot horizontally
Side mount bracket for IBC totes		4411-035 Pump Mount Bracket, for bung mounted pumps to side tote bracket 4411-035 Side Mount Bracket for IBC Totes
Top mount bracket for IBC totes		4411-034 Top Mount Bracket for IBC Totes
Lightweight double wall tank brackets		1136-003 Top Mount Bracket for 165/275 gal, 26" 1136-004 Top Mount Bracket for 400 gal, 28"
Lightweight double wall tank tie down kit		1136-001 Tie Down Anchor Kit for 165/275 gal 1136-002 Tie Down Anchor Kit for 400 gal

TOTE CAPS		
Tote caps		4530-066 Center cap, 6" diameter x 2.5" ID ABUT (American Buttress)
		4530-067 Center cap, vented, 6" diameter x 2.5" ID ABUT (American Buttress)
		4530-068 Center cap with filter vent, 6" diameter x 2.5" ID ABUT (American Buttress)
		4530-069 Center cap, 6" diameter with (2) 2" NPT
VENTS		
Vents		4520-007 Tank Vent Cap 2" NPT(F)
		4520-018 Emergency vent 4" NPT(M)
		4520-019 Vented fill cap 2" NPT(M)
		4411-024 Bung Adapter NPT(M), PVC: W/ 2" Pressure Relief Port. For use when additional 2" ports are not available for use with pressure relief.
		4520-067 Vent Cap Mounting Kit (for attaching 4520-006 to vent outlet of obround tanks)
TANK SADDLE		
Tank saddle		4520-006 Tank Saddle. Use our exclusive saddle bracket to quickly attach Balcrank hose reels to any 275 gal or 330 gal horizontal obround tank. One step attachment, no welding or tank modifications required. Order separate vent kit, Model 4520-067, to attach the saddle to standard oval tanks at the vent cap location.
		

Poly Stackable Tankless Packages

Packages includes

- Hose reel - choice of Evolution or Classic series hose reel, 30' or 50'
- Pump - choice of LYNX® 3:1, CF15 or CF30
- DR handle w/flex-m ext. & 1/4 turn manual tip or non-metered composite handle
- F/R auto drain 1/4" NPT(F)
- 2.5' reel inlet hose
- Pump & reel bracket



Pump Side Mount**



Pump Top Mount**



Reel Wall Mount**

**Example images only



Synthetic & Mineral Oils



Windshield Wash Pump Side Mount



Anti-freeze Pump Side Mount

MODELS AVAILABLE	DESCRIPTION
EVOLUTION 30'	
1138-SM3	30' EVO Reel, LYNX® 3:1 pump, Side mount
1138-TM3	30' EVO Reel, LYNX® 3:1 pump, Top mount
1138-WM3	30' EVO Reel, LYNX® 3:1 pump, Wall mount
EVOLUTION 50'	
1138-SM5	50' EVO Reel, LYNX® 3:1 pump, Side mount
1138-TM5	50' EVO Reel, LYNX® 3:1 pump, Top mount
1138-WM5	50' EVO Reel, LYNX® 3:1 pump, Wall mount

MODELS AVAILABLE	DESCRIPTION
EVOLUTION	
1138-063	30' EVO Reel, CF15 Poly pump, WWS
1138-073	30' EVO Reel, CF30 Poly pump, WWS
CLASSIC	
1138-062	30' Classic Reel, CF15 Poly pump, WWS
1138-072	30' Classic Reel, CF30 Poly pump, WWS

MODELS AVAILABLE	DESCRIPTION
EVOLUTION	
1138-043	30' EVO Reel, CF15 Alum pump, A/F
1138-053	30' EVO Reel, CF30 Alum pump, A/F
CLASSIC	
1138-042	30' Classic Reel, CF15 Alum pump, A/F
1138-052	30' Classic Reel, CF30 Alum pump, A/F

* Tanks should not be stacked higher than 82" or less from the stand base to the top of the tank. As with all tanks, be sure to follow local and state guidelines for tank placement and installation. Tanks not included. See pg. 134 for poly tank options.

Features

Suitable for direct dispense of fluids.

Packages are designed for use with poly stackable tanks. Choose side, top, or wall mount configurations.

Poly Stackable Tanks

Poly stackable tanks are an excellent choice when floor space is limited. These stackable tanks are available in 5 sizes and may be stacked in any combination.



60 & 80 gallon

MODELS AVAILABLE	DESCRIPTION
1138-001	L 36" x W 36" x H 18", 60 gal
1138-002	L 36" x W 36" x H 22", 80 gal



120 gallon

MODELS AVAILABLE	DESCRIPTION
1138-003	L 36" x W 36" x H 31", 120 gal



180 gallon

MODELS AVAILABLE	DESCRIPTION
1138-004	L 36" x W 36" x H 40", 180 gal



260 gallon

MODELS AVAILABLE	DESCRIPTION
1138-005	L 36" x W 36" x H 58", 260 gal

Features

- Poly stackable tanks are constructed from high density polyethylene resin
- All tanks have the same foot print; tank any size in any combination
- Graduated inked and stamped gallon measurement on tank front for easy-to-read fluid levels
- Optional pallet for portability
- Optional secondary containment tubs available

Fluids

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

Applications

- Auto maintenance shops
- Car dealerships
- Quick lubes
- Fleet maintenance shops
- Agriculture/Farm implements

* As with all tanks, be sure to follow local and state guidelines for tank placement and installation. Tanks should not be stacked higher than 82" or less from the stand base to the top of the tank.

Gravity System Poly Stackable Tank Packages

Package Includes

- Poly stackable tank - choice of 60 gal (L 36" x W 36" x H 18"), 80 gal (L 36" x W 36" x H 22"), 120 gal (L 36" x W 36" x H 31"), 180 gal (L 36" x W 36" x H 40"), or 260 gal (L 36" x W 36" x H 58")
- Frame with drip tray
- Connecting hose with release valve



Features

Gravity systems are available in a variety of configurations. Add additional poly tanks to customize a system to meet your shop needs.

Fluids

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

Applications

- Auto maintenance shops
- Car dealerships
- Quick Lubes
- Fleet maintenance shops
- Agriculture/Farm implements

60, 120 & 180 gallon

MODELS AVAILABLE	DESCRIPTION
1138-012	Gravity system package, 60/60/120 gal
1138-016	Gravity system package, 60/60/180 gal
1138-007	Gravity system package, 60/60/60 gal
1138-006	Gravity system package, 60/60/60/60 gal

80 & 120 gallon

MODELS AVAILABLE	DESCRIPTION
1138-013	Gravity system package, 80/120 gal
1138-008	Gravity system package, 80/80 gal
1138-011	Gravity system package, 80/80/120 gal
1138-009	Gravity system package, 80/80/80 gal
1138-010	Gravity system package, 80/80/80/80 gal

120 & 180 gallon

MODELS AVAILABLE	DESCRIPTION
1138-017	Gravity system package, 120/180 gal
1138-019	Gravity system package, 120 gal
1138-014	Gravity system package, 120/120 gal
1138-015	Gravity system package, 120/120/120 gal

180 gallon

MODELS AVAILABLE	DESCRIPTION
1138-020	Gravity system package, 180 gal
1138-018	Gravity system package, 180/180 gal

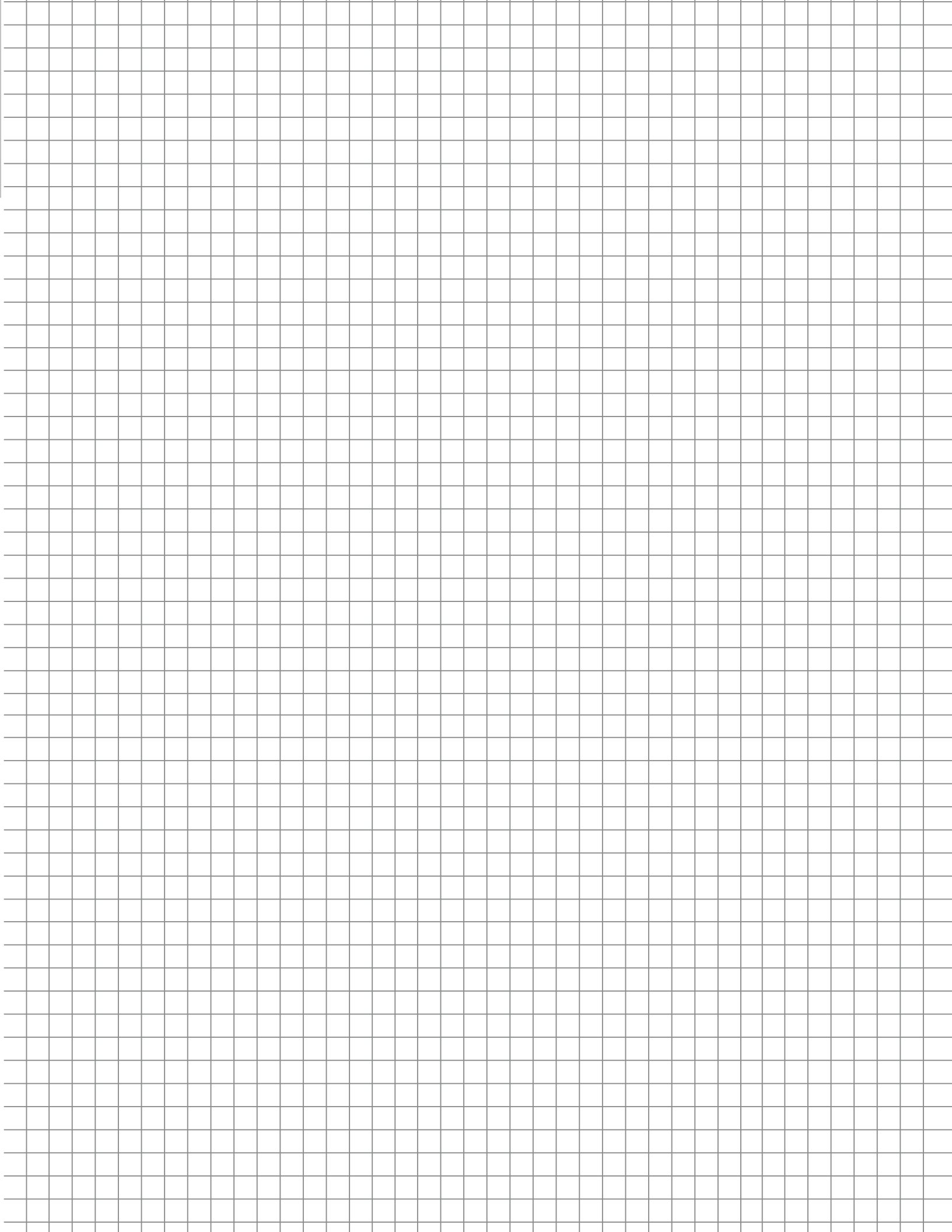
260 gallon

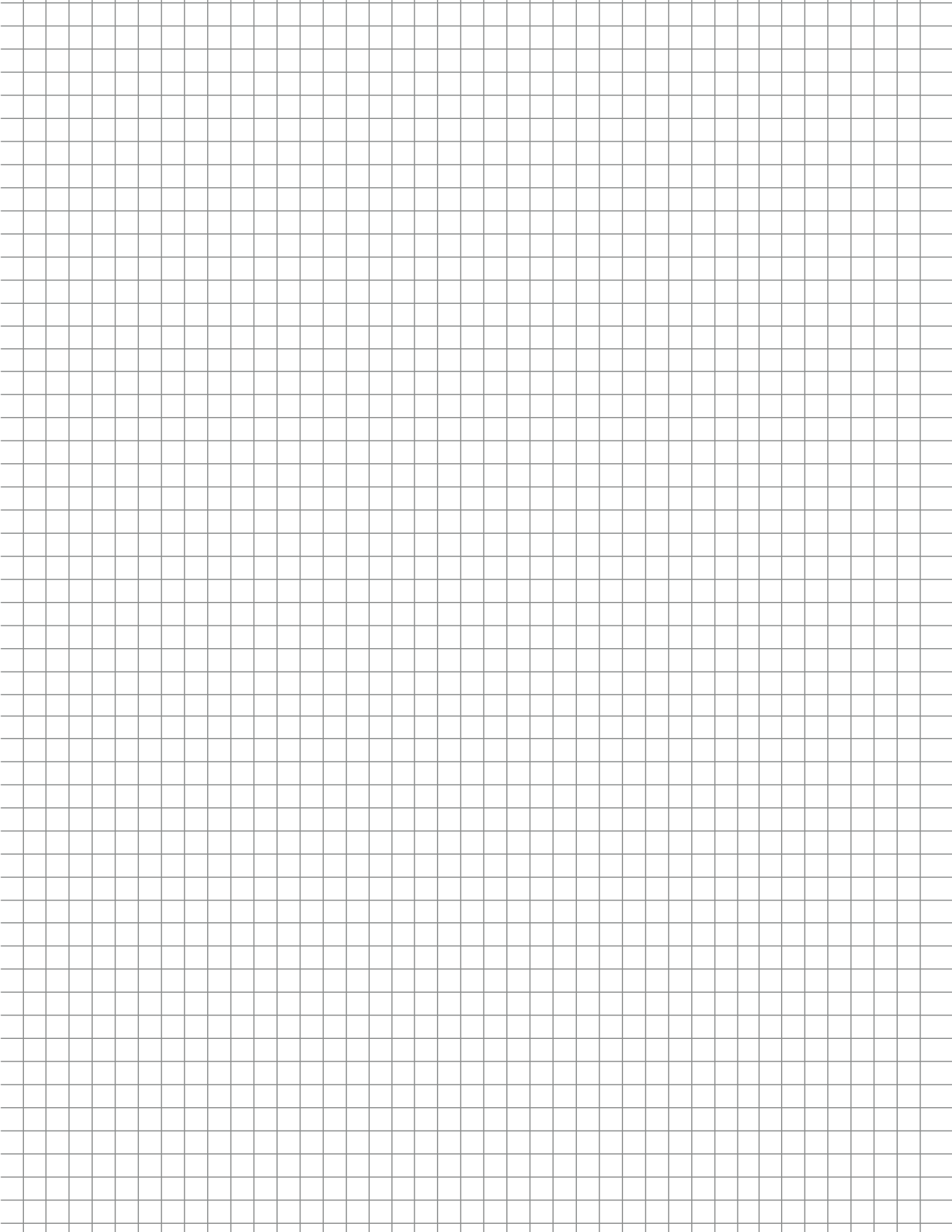
MODELS AVAILABLE	DESCRIPTION
1138-021	Gravity system package, 260 gal

* Tanks should not be stacked higher than 82" or less from the stand base to the top of the tank. As with all tanks, be sure to follow local and state guidelines for tank placement and installation.

Poly Stackable Tank Accessories

SECONDARY CONTAINMENT			DRIP TRAY		
Containment		1138-022 Containment tank bottom, 203 gal	Drip tray		1138-032 Drip tray frame
		1138-024 Containment tank bottom, 288 gal			1138-033 Drip tray with screen
		1138-023 Containment tank bottom, 390 gal			1138-034 Drip tray frame with trays and screens
PALLET			GRAVITY FEED CONNECTOR		
Lube pallet		1138-025 Lube pallet	Gravity feed connector		1138-035 Connector kit for gravity feed system for 2 tanks
STRAP					1138-036 Connector kit for gravity feed system for 3 tanks
Cargo Strap		1138-041 Ratchet strap 16' x 1" with S hook. Prevents accidental tip over			1138-037 Connector kit for gravity feed system for 4 tanks
STEEL STAND			SPRING RELEASE VALVE		
Steel stand		1138-026 Steel stand, 4"	Spring release valve		1138-038 Brass spring release valve
		1138-027 Steel stand, 10"			
		1138-028 Steel stand, 14"	AIR BREATHER		
		1138-029 Steel stand, 24"	Air breather		1138-039 Desiccant air breather
	1138-030 Steel stand, 36"				
		1138-031 Steel stand, base only			







1 2 3 4 5 **6** 7 8 9 10

Diesel Exhaust Fluid (DEF)

DIESEL EXHAUST FLUID (DEF)	139
CLOSED SYSTEMS DRUM PACKAGES ELECTRIC DIAPHRAGM PUMP	140
CLOSED SYSTEMS TOTE PACKAGES ELECTRIC DIAPHRAGM PUMP	141
CLOSED SYSTEMS DRUM PACKAGES CF DIAPHRAGM PUMP	142
CLOSED SYSTEMS TOTE PACKAGES CF DIAPHRAGM PUMP	143
SYSTEM COMPONENTS ELECTRIC AND AODD PUMPS	144
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SYSTEM COMPONENTS METERS AND NOZZLES	146
COUPLER COMPONENTS AND KITS	147
SYSTEM COMPONENTS STICK PUMPS, HOSES, AND HOSE ACCESSORIES	148
SYSTEM ACCESSORIES	149
REPAIR KITS FOR DEF PUMPS	150

Closed Systems Drum Packages Electric Diaphragm Pump



Features

- Compact design mounting bracket
- Heavy-duty cart - easily holds and rolls up to 55 gallon drum
- Large semi-pneumatic tires - allow for easy maneuvering of cart
- Large non-marking rear caster - built in break for safe and secure dispensing

Includes:

- 8570-006 6' x 3/4" Suction hose
- 8561-012 12' x 3/4" Discharge hose
- 4530-054 Drip tray
- 4320-014 Drum cart 55 gal for DEF
- 4530-065 Side mount bracket

Options:

- 3120-116 Meter DR style for DEF
- 1200-020 120 V AC Electric diaphragm pump
- 1200-021 12 V DC Electric diaphragm pump
- 3340-012 Auto nozzle, stainless steel
- 3340-015 Manual nozzle, polyethylene

Pump includes automatic shutoff.

Pump is UL approved

TECHNICAL DATA

	DATA 120 V AC (1200-020)	DATA 12 V DC (1200-021)
Max. Free Flow	8.5 GPM	9.5 GPM
Working Pressure	23 psi (1.6 bar)	23 psi (1.6 bar)
Power	120 V AC	12 V DC
Wetted Materials (pump)	Stainless Steel, Viton, PPE	Stainless Steel, Viton, PPE
Service Bulletin	SB 1129	SB 1130

MODELS AVAILABLE	DESCRIPTION
1210-046P	120 V AC Non-metered, Manual Nozzle
1210-048P	120 V AC Non-metered, Auto Nozzle
1210-049P	120 V AC Metered, Auto Nozzle
1210-053P	12 V DC Metered, Auto Nozzle

CLOSED system containers have a valve coupling system that seals the container opening on drums and totes (IBC) to prevent dirt, debris, bugs, etc., from entering the container and contaminating the diesel exhaust fluid. Liquid in container system is sealed and secure, throughout container life cycle.

DEF Packages do not include coupler systems. Order Separately.

You must choose a coupler kit to create a complete system for your distribution needs.

For closed systems, use Reusable Poly Valve (RPV) or Reusable Stainless Valve (RSV) systems accessories. RSV and RPV components are interchangeable.

Closed Systems Tote Packages Electric Diaphragm Pump



Features

- Compact design mounting bracket

Includes

- 8570-006 6' x 3/4" Suction hose
- 8561-020 20' x 3/4" Discharge hose
- 4530-054 Drip tray
- 4530-065 Side mount bracket

Options

- 3120-116 Meter DR style for DEF
- 1200-020 120 V AC Electric diaphragm pump
- 1200-021 12 V DC Electric diaphragm pump
- 3340-012 Auto nozzle, stainless steel
- 3340-015 Manual nozzle, polyethylene

Pump includes automatic shutoff.

Pump is UL approved

TECHNICAL DATA		
	DATA 120 V AC (1200-020)	DATA 12 V DC (1200-021)
Max. Free Flow	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	12 V DC
Wetted Materials (pump)	Stainless Steel, Viton, PPE	Stainless Steel, Viton, PPE
Service Bulletin	SB 1129	SB 1130

MODELS AVAILABLE	DESCRIPTION
1210-046	120 V AC Non-metered, Manual Nozzle
1210-047	120 V AC Metered, Manual Nozzle
1210-048	120 V AC Non-metered, Auto Nozzle
1210-049	120 V AC Metered, Auto Nozzle
1210-050	12 V DC Non-metered, Manual Nozzle
1210-052	12 V DC Non-metered, Auto Nozzle
1210-053	12 V DC Metered, Auto Nozzle

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CLOSED system containers have a valve coupling system that seals the container opening on drums and totes (IBC) to prevent dirt, debris, bugs, etc., from entering the container and contaminating the diesel exhaust fluid. Liquid in container system is sealed and secure, throughout container life cycle.

DEF Packages do not include coupler systems. Order Separately.

You must choose a coupler kit to create a complete system for your distribution needs.

For closed systems, use Reusable Poly Valve (RPV) or Reusable Stainless Valve (RSV) systems accessories. RSV and RPV components are interchangeable.

Closed Systems Drum Packages CF Diaphragm Pump



Features

- Compact design mounting bracket
- Heavy-duty cart - easily holds and rolls up to 55 gallon drum
- Large semi-pneumatic tires - allows for easy maneuvering of cart
- Large non-marking rear caster - built in break for safe and secure dispensing

Includes

- 1120-025A CF15 AODD Pump for DEF
- 8570-006 6' x 3/4" suction hose
- 8561-012 12' x 3/4" discharge hose
- 4530-054 Drip tray
- 4320-014 Drum cart 55 Gal for DEF
- 4530-065 Side mount bracket
- 3260-060 Filter Reg 1/4" auto drain, mini

Options

- 3120-116 Meter DR style for DEF
- 3340-012 Auto nozzle, stainless steel

MODELS AVAILABLE	DESCRIPTION
1210-054P	CF15 Non-metered, Manual Nozzle
1210-055P	CF15 Metered, Manual Nozzle
1210-056P	CF15 Non-metered, Auto Nozzle
1210-057P	CF15 Metered, Auto Nozzle

TECHNICAL DATA

Air inlet	3/8" NPSM(F)
Fluid inlet port	1/2" BSPP(F) DEF
Fluid outlet port	1/2" BSPP(F) DEF
Max. Free Flow	14 gal/min (50 l/min)
Air pressure range	45-100 psi (3-7 bar)
Solids in suspension	1/8" (3 mm)
Wetted Materials	PTFE (Teflon®), Viton®, Polypropylene, Stainless Steel, Hytrel®
Recommended fluids	Diesel exhaust fluid
Recommended Applications	Fluid dispensing, transfer, evacuation and distribution systems
Service Bulletin	SB 1122

CLOSED system containers have a valve coupling system that seals the container opening on drums and totes (IBC) to prevent dirt, debris, bugs, etc., from entering the container and contaminating the diesel exhaust fluid. Liquid in container system is sealed and secure, throughout container life cycle.

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

DEF Packages do not include coupler systems.

You must choose a coupler kit to create a complete system for your distribution needs.

For closed systems, use Reusable Poly Valve (RPV) or Reusable Stainless Valve (RSV) systems accessories. RSV and RPV components are interchangeable.

Closed Systems Tote Packages CF Diaphragm Pump



Features

- Compact design mounting bracket
- Includes**
 - 1120-025A CF15 AODD Pump for DEF
 - 8570-006 6' x 3/4" Suction hose
 - 8561-020 20' x 3/4" Discharge hose
 - 4530-054 Drip tray
 - 4530-065 Side mount bracket
 - 3260-060 Reg 1/4" auto drain, mini
- Options**
 - 3120-116 Meter DR style for DEF
 - 3340-018 Manual nozzle, polyethylene- BSPP

Pump includes automatic shutoff.
Pump is UL approved

MODELS AVAILABLE	DESCRIPTION
1210-054	CF15 Non-metered, Manual Nozzle
1210-055	CF15 Metered, Manual Nozzle
1210-056	CF15 Non-metered, Auto Nozzle
1210-057	CF15 Metered, Auto Nozzle

TECHNICAL DATA

Air inlet	3/8" NPSM(F)
Fluid inlet port	1/2" BSPP(F) DEF
Fluid outlet port	1/2" BSPP(F) DEF
Max. Free Flow	14 gal/min (50 l/min)
Air pressure range	45-100 psi (3-7 bar)
Solids in suspension	1/8" (3 mm)
Wetted Materials	PTFE (Teflon) [®] , Viton [®] , Polypropylene, Stainless Steel, Hytrel [®]
Recommended fluids	Diesel exhaust fluid
Recommended Applications	Fluid dispensing, transfer, evacuation and distribution systems
Service Bulletin	SB 1122

CLOSED system containers have a valve coupling system that seals the container opening on drums and totes (IBC) to prevent dirt, debris, bugs, etc., from entering the container and contaminating the diesel exhaust fluid. Liquid in container system is sealed and secure, throughout container life cycle.

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

DEF Packages do not include coupler systems.

You must choose a coupler kit to create a complete system for your fluid distribution needs.

For closed systems, use Reusable Poly Valve (RPV) or Reusable Stainless Valve (RSV) systems accessories. RSV and RPV components are interchangeable.

System Components Electric and AODD Pumps



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



MODELS AVAILABLE	DESCRIPTION
1120-034	CF10 Diaphragm pump
1120-025A	CF15 Diaphragm pump
1120-031A	CF30 Diaphragm pump

TECHNICAL DATA 120 V AC 1200-020 120 V AC Diaphragm pump

Fluid inlet port	3/4" BSPP(M)
Fluid outlet port	3/4" BSPP(M)
Flow Rate	8.5 gal/min (32.18 l/min)
Working Pressure	23 psi (1.6 bar)
Power	120 V AC, UL approved
Wetted Materials	Stainless Steel, Viton®, PPE
Service Bulletin	SB 1129

TECHNICAL DATA 12 V DC 1200-021 12 V DC Diaphragm pump

Fluid inlet port	3/4" BSPP(M)
Fluid outlet port	3/4" BSPP(M)
Flow Rate	9.5 gal/min (34.07 l/min)
Working Pressure	23 psi (1.6 bar)
Power	12 V DC, UL approved
Wetted Materials	Stainless Steel, Viton®, PPE
Service Bulletin	SB 1130

TECHNICAL DATA CF10 - CF15 Diaphragm pump

	1120-034 CF10	1120-025A CF15
Air inlet	3/8" NPSM (F)	1/2" BSPP(F)
Fluid inlet port	1/2" BSPP(F) DEF	1/2" BSPP(F) DEF
Fluid outlet port	1/2" BSPP(F) DEF	1/2" BSPP(F) DEF
Max. Free Flow	10 gal/min (38 l/min)	14 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)
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, Hytrel®
Service Bulletin	SB 1121	SB 1122

TECHNICAL DATA CF30 Diaphragm pump

	1120-031A CF30
Air inlet	3/8" NPSM(F)
Fluid inlet port	1" BSPP(F) DEF
Fluid outlet port	1" BSPP(F) DEF
Max. Free Flow	28 gal/min (100 l/min)
Air pressure range	22 to 102 psi (1.5 to 7 bar)
Solids in suspension	3/16" (4 mm)
Wetted Materials	PTFE (Teflon®), Viton®, Polypropylene, Stainless Steel, and Hytrel®
Service Bulletin	SB 1124

Hose Reels Extended Volume (EV)

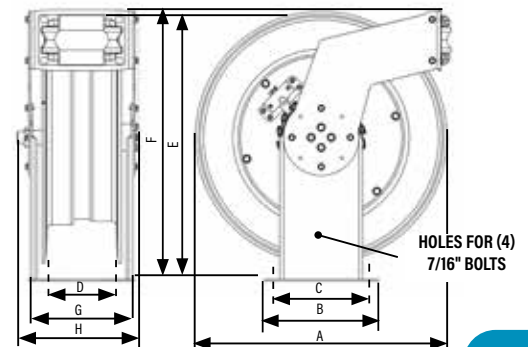


DEF

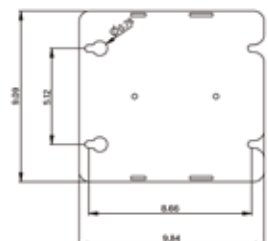
The EV reel is for longer hose lengths and higher flow requirements. Includes hose, hose stop and a 2.5' connecting hose.

MODELS AVAILABLE	DESCRIPTION	REPLACEMENT HOSE
EXTENDED VOLUME (EV) DEF (Diesel Exhaust Fluid) Low pressure 150 psi (10 bar) for delivery of DEF		
2400-010	Bare reel, up to 50' x 3/4" ID hose BSPP	-
2400-011	50' x 3/4" ID BSPP includes 3' inlet hose	8569-050

TECHNICAL DATA	
Fluid inlet port	3/4" BSPP cone seal bare
Fluid outlet port	3/4" BSPP bare
Inlet/Outlet thread	3/4" BSPP for 3/4" hoses
Wetted Materials	Stainless steel, Polypropylene and Viton®
Service Bulletin	SB 2028



DIMENSIONS SERIES (INCHES)							
A	B	C	D	E	F	G	H
22"	85/8"	5"	51/8"	22"	23/2"	9"	91/4"

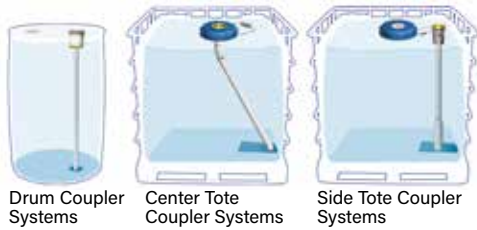


System Components

Meters and Nozzles

METERS AND SOLENOIDS						
	MODEL	DESCRIPTION	INLET/OUTLET PORT	FLOW RATE	OPERATING PRESSURE	POWER
	3120-116	DR Style Meter for DEF	1/2" BSPP(F/F) & flange	0.25 - 13.2 gal/min (1 - 50 l/min)	435 psi (30 bar)	2 x 1.5 V alkaline batteries size "AAA"
	3120-119	DEF Turbine Meter	1" BSPP(M/M)	1.3-26.4 gal/min (4.92-99.94 l/min)	145 psi (10 bar)	2 x 1.5 V alkaline batteries size "AAA"
	3120-206	Turbine Meter, pulse-out	1" BSPP(F/F)	83 PPQ	145 psi (10 bar)	24 V AC
	3120-207	Solenoid	3/4" NPT(F/F)	8.4 gal/min (32.71 l/min)	150 psi (10 bar)	24 V AC
NOZZLES						
	MODEL	DESCRIPTION				
	3340-011	Nozzle, manual Polyethylene 3/4" barb (M)				
	3340-018	Nozzle, manual Polyethylene 3/4" BSPP(F)				
	3340-015	Nozzle, manual Polyethylene 1" barb (M)				
	3340-012	Nozzle, automatic shut-off Stainless steel, 3/4" BSPP(F)				
	3340-017	Nozzle, Magnetic, 3/4" BSPP(F)				
	4530-054	Nozzle holder, drip tray				

Coupler Components and Kits



NOTE: When ordering suction kits ensure you have selected the correct dip tube orientation for your system. DEF Packages do not include coupler systems. You must choose a coupler kit to create a complete system for your fluid distribution needs.

OPEN SYSTEMS COMPONENTS

For open systems, use Drum Quick Pro (DQP) accessories.

DRUM QUICK PRO (DQP)

	4530-001	Coupler, polyethylene 3/4" barb
	3250-002	Replacement filter, air - used on 4530-001
	4530-002	Insert, polyethylene, 2" ABUT (American Buttress)
	4530-003	Key - DQP series
	4530-006	Dip tube, 55 gal drum mount length
	4530-005	Dip tube, 275 gal tote mount length
	4530-004	Dip tube, 330 gal tote mount length

SUCTION KITS

	4530-007	Suction Kit, DQP series Includes: coupler, insert, key and 55 gal drum mount length dip tube
	4530-008	Suction Kit, DQP series Includes: coupler, insert, key and 275 gal tote mount length dip tube
	4530-009	Suction Kit, DQP series Includes: coupler, insert, key and 330 gal tote mount length dip tube

CLOSED SYSTEMS

For closed systems, use Reusable Poly Valve (RPV) or Reusable Stainless Valve (RSV) systems accessories. RSV and RPV components are interchangeable

REUSABLE STAINLESS VALVE (RSV)

4 Prong, Green Seal - Preferred and Balcrank recommended

	4530-036	Coupler, Stainless Steel 3/4" barb. For use with 4530-037 only
	4530-048	Coupler, Fill head 1" NPT(M) For use with 4530-037 only
	4530-037	Insert, stainless steel, 2" ABUT (American Buttress)
	4530-038	Key, stainless steel, RSV/RPV

REUSABLE POLY VALVE (RPV)

	4530-057	Coupler, RSV/RPV, Poly - 3/4" barb
	4530-063	Insert, polyethylene, 2" ABUT (American Buttress) (M)
	4530-058	Key - Poly, RSV/RPV

RSV/RPV DIP TUBES

	4530-041	Dip tube, 55 gal drum mount length
	4530-044	Dip tube, 275 gal tote - center mount length
	4530-040	Dip tube, 275 gal tote - side mount length
	4530-043	Dip tube, 330 gal tote - center mount length
	4530-039	Dip tube, 330 gal tote - side mount length

SUCTION KITS

	4530-042	Suction Kit, RSV series - includes: coupler 4530-036, insert and 55 gal drum mount length dip tube
	4530-045	Suction Kit, RSV series - includes: coupler 4530-036, insert and 275 gal tote mount length dip tube
	4530-046	Suction Kit, RSV series - includes: coupler 4530-036, insert and 275 gal tote mount length dip tube
	4610-001	Suction Kit, RSV/RPV SS series - includes: coupler 4530-036, DEF Hose 6" x 3/4" ID, Fitting 1" BSP(F) x 3/4" barb
	4530-059	Suction Kit, RPV Poly series - includes: coupler 4530-057, insert and 55 gal drum dip mount length tube
	4530-060	Suction Kit, RPV Poly series - includes: coupler 4530-057, insert and 275 gal tote mount length dip tube
	4530-061	Suction Kit, RPV Poly series - includes: coupler 4530-057, insert and 275 gal tote mount length dip tube
	4610-003	Suction Kit, RPV Poly series - includes: coupler 4530-057, DEF Hose 6" x 3/4" ID, Fitting 1" BSP(F) x 3/4" barb

COUPLER KIT ACCESSORIES

	4530-066	Center cap, tote 6" diameter x 2.5" ID ABUT (American Buttress)
	6210-001	Funnel with spout. 1 pt. 1/2" spout

System Components

Hand Pump, Hoses, and Hose Accessories



MODELS AVAILABLE	DESCRIPTION
1300-028	Hand Pump, Manual lever

TECHNICAL DATA	
All polypropylene construction, includes a 2" bung adaptor	
Delivery Volume	1 pint per stroke (500 cc)
Temp Range	23 °F to 113 °F (-5 °C to 45 °C)
Wetted Materials	Polypropylene, EPDM
Service Bulletin	SB 1117

HOSE - SUCTION - BEFORE PUMP



- 8570-003 3' x 3/4" ID Cut-end
- 8570-006 6' x 3/4" ID Cut-end
- 8572-006 6' x 1" ID Cut-end w/ hose clamps

HOSE - DISPENSE - AFTER PUMP

All hoses are specially formulated polyurethane unless otherwise stated



- 8551-006 6' x 1" ID w/hose clamps and simple spout
- 8560-003 3' x 3/4" ID w/hose clamps
- 8560-012 12' x 3/4" ID w/hose clamps
- 8562-003 3' x 3/4" ID Swivel 3/4" BSPP(M) - Straight 3/4" BSPP(M)
- 8569-016 16' x 3/4" ID Swivel 3/4" BSPP(M/M)
- 8569-020 20' x 3/4" ID Swivel 3/4" BSPP(M/M)
- 8569-030 30' x 3/4" ID Swivel 3/4" BSPP(M/M)
- 8569-050 50' x 3/4" ID Swivel 3/4" BSPP(M/M)

HOSE - DISPENSE - AFTER PUMP - CLAMP NOT INCLUDED

All hoses are specially formulated polyurethane unless otherwise stated



- 8561-003 3' x 3/4" ID Swivel 3/4" BSPP(M) cut end requires a hose clamp NOT included Order 2230-032
- 8561-006 6' x 3/4" ID Swivel 3/4" BSPP(M) cut end requires a hose clamp NOT included Order 2230-032
- 8561-012 12' x 3/4" ID Swivel 3/4" BSPP(M) cut end requires a hose clamp NOT included Order 2230-032
- 8561-016 16' x 3/4" ID Swivel 3/4" BSPP(M) cut end requires a hose clamp NOT included Order 2230-032
- 8561-020 20' x 3/4" ID Swivel 3/4" BSPP(M) cut end requires a hose clamp NOT included Order 2230-032
- 8561-030 30' x 3/4" ID Swivel 3/4" BSPP(M) cut end requires a hose clamp NOT included Order 2230-032

HOSE ACCESSORIES



- 2230-033 Hose bend restrictors - 12" black poly



- 2230-032 Stainless steel hose clamp 3/4"

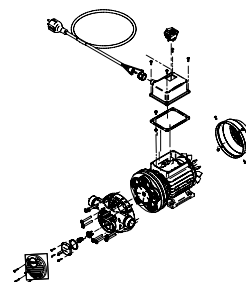
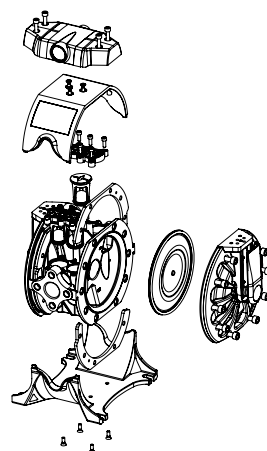
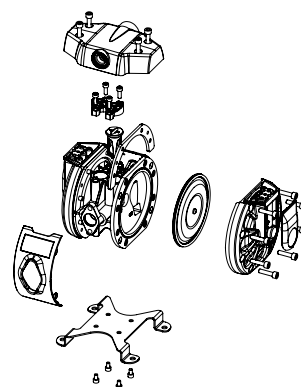
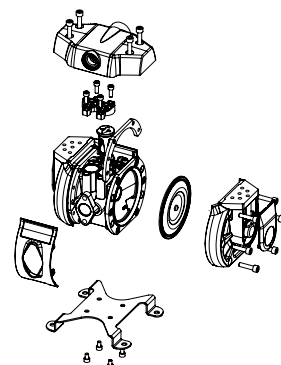
System Accessories

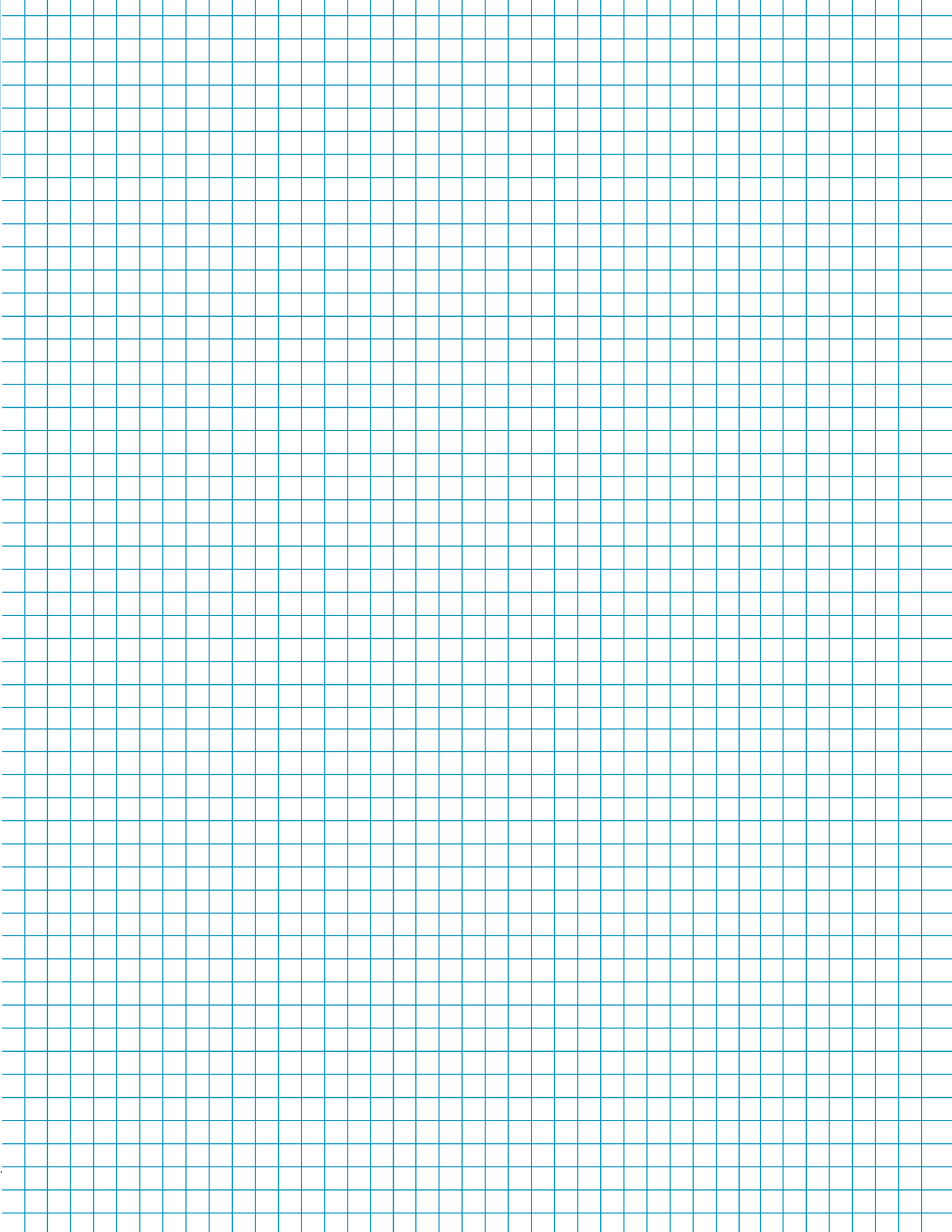
ADAPTERS-ELBOW			SEALS		
	3270-162	Poly Hose elbow, 1" BSPP(M) to 3/4" barb		3270-171	3/4" Stainless steel /Viton bonded seal
	3270-176	Poly Hose elbow, 1" NPT(M) to 3/4" barb		3270-169	1" Stainless steel /Viton bonded seal
	3270-175	Stainless steel elbow, 1" BSPP(M) X 3/4" BSPP(F) 90 DEG			
ADAPTERS - HOSE BARB			FILTERS		
 	3270-163	Poly Hose barb, 1" BSPP(M) to 3/4" barb		3250-001	Filter, in-line 10 micron - 3/4" NPT (filter included). For replacement filter use 832796
	3270-165	Poly Hose barb, 1" NPT(M) to 3/4" barb		3250-002	Replacement filter for 4530-001 in-line filter, 10 micron
	3270-166	Poly Hose barb, 3/4" NPT(M) to 3/4" barb			
	3270-177	Poly Hose barb, 1/2" NPT(M) to 3/4" barb			
	3270-164	Stainless steel swivel 3/4" BSPP(M) to 3/4" barb			
ADAPTERS - COUPLERS (F/F)			BRACKETS		
	3270-173	Poly coupler, 1" NPT(F) to 1" BSPP(F)		4530-064	CF AODD Pump Shelf For use with the 4530-065 side mount bracket. Use CF AODD pump shelf to attach the CF15 pump to the side mount bracket
	3270-167	Stainless steel coupler, 1" BSPP(F) to 1" BSPP(F)			
	3270-168	Poly coupler, reducer - 1" BSPP(F) to 3/4" BSPP(F)		4411-016	Conventional AODD Wall Mount Bracket
ADAPTERS - HEX NIPPLE					
	3270-172	Stainless steel Adapter, 1" BSPP(M) x 3/4" NPT(M)			
ADAPTERS - SWIVEL UNION			DOLLY BASES AND DRUM CARTS		
	3270-174	Stainless steel swivel, 1" BSPP(F) to 3/4" BSPP(M)		4320-014	Drum Cart, 55-gal heavy duty • Heavy-duty cart - easily holds and rolls up to 55 gallon drum • Large semi-pneumatic tires - Allows for easy maneuvering of cart • Large non-marking rear caster - built in break for safe and secure dispensing
	3270-161	Poly swivel, 1" BSPP(M) x 1" BSPP(F)			

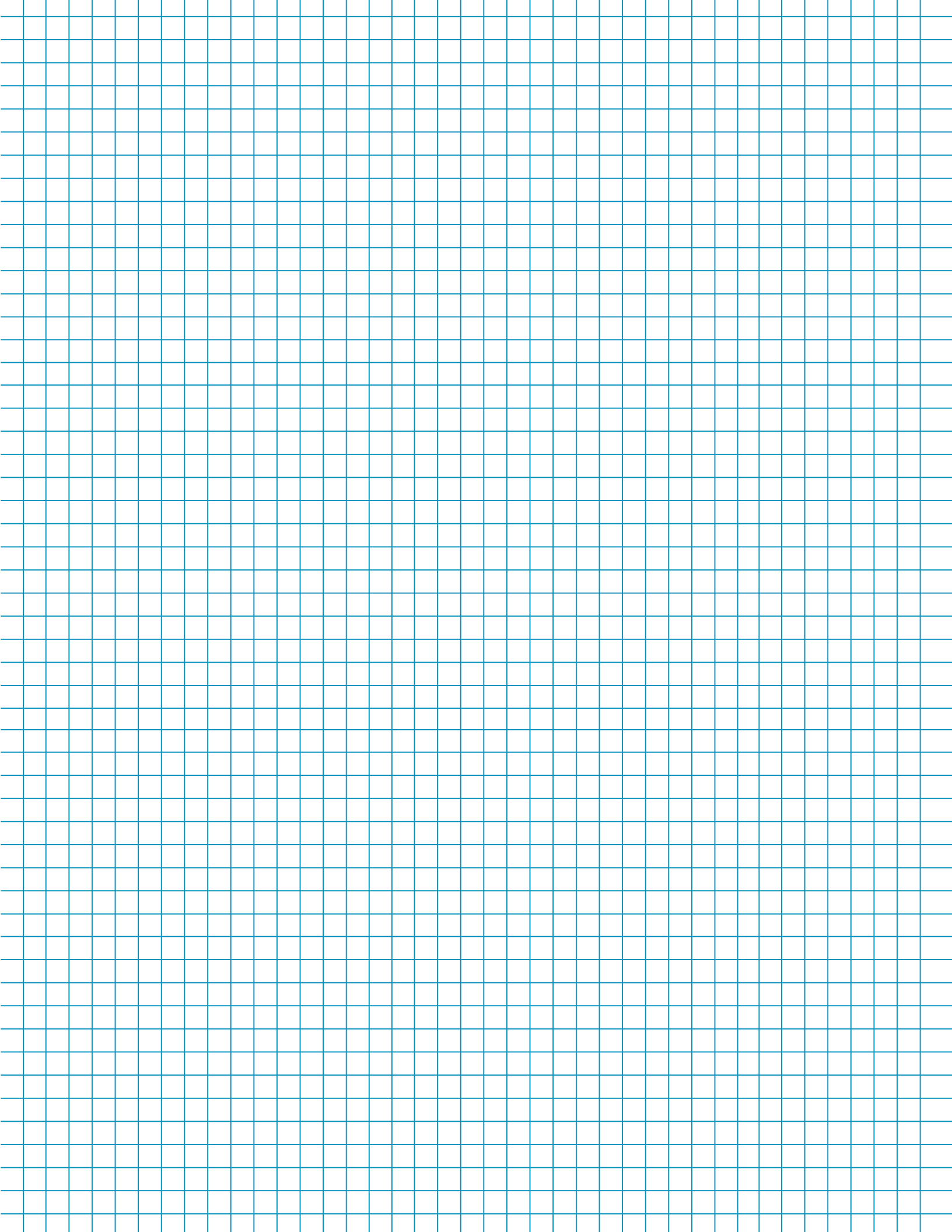
Repair Kits for DEF Pumps

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CF10		
PUMP MODELS	KIT NUMBER	DESCRIPTION
CF10 AODD PUMPS - 1120-034		
1120-034	833732	Air valve kit
1120-034	833207	Stroke sensor kit
1120-034	833208	Check Ball kit
1120-034	833735	Ball Seats, O-rings, ball guides
1120-034	833338	Diaphragms kit
1120-034	833332	Bushing, seal, push rod
CF15		
PUMP MODELS	KIT NUMBER	DESCRIPTION
CF15 AODD PUMPS - 1120-025A		
1120-025A	833372	Air valve kit
1120-025A	833207	Stroke sensor kit
1120-025A	833208	Check Ball kit
1120-025A	833735	Ball Seats, O-rings, ball guides
1120-025A	833210	Bushing, seal, push rod (Prior to 2/1/2013)
1120-025A	833332	Bushing, seal, push rod (After to 2/1/2013)
1120-025A	833211	Diaphragms kit (Prior to 2/1/2013)
1120-025A	833338	Diaphragms kit (After to 2/1/2013)
1120-025A	833341	Retrofit Kit (Updates pumps prior to 2/1/2013)
CF30		
PUMP MODELS	KIT NUMBER	DESCRIPTION
CF30 AODD PUMPS - 1120-031A		
1120-031A	833733	Air valve kit
1120-031A	833207	Stroke sensor kit
1120-031A	833233	Check Ball kit
1120-031A	833738	Ball Seats, O-rings, ball guides
1120-031A	833235	Bushing, seal, push rod (Prior to 2/1/2013)
1120-031A	833335	Bushing, seal, push rod (After to 2/1/2013)
1120-031A	833339	Diaphragms kit (After to 2/1/2013)
1120-031A	833342	Retrofit Kit (Updates pumps prior to 2/1/2013)
ELECTRIC DIAPHRAGM PUMPS		
PUMP MODELS	KIT NUMBER	DESCRIPTION
ALUMINUM AODD PUMPS - 1200-020 120V AC, 1200-021 120V DC		
1200-020, 1200-021	833415	Bypass valve kit
1200-020, 1200-021	833416	Pump head kit
1200-020, 1200-021	833417	Fan cover kit
1200-020	833418	Electric connection kit
1200-021	833419	Electric connection kit for 12V pump









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Used Fluid Equipment

USED FLUID EQUIPMENT	153
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Used Fluid Equipment Roughneck II™

The Roughneck II™ drain captures used fluids and transfers them to any bulk storage tank. The unit uses regular shop air and can be pressurized to allow for self-evacuating.



TECHNICAL DATA

Air Pressure Operating Range	5-25 psi (.34-1.72 bar)
Tank Capacity	23 gal (87 l)
Telescoping Range	45"-72" (1.14-1.83 m)
Maximum Pressure	25 psi (1.72 bar)
Pressure Relief Valve	30 psi (2.07 bar)
Air Inlet Size (quick connect)	1/4" NPT
Fluid Outlet Nozzle	1" OD
Estimated Evacuation Time	3 - 4 min.
Wetted Materials	Zinc Plated Steel, Steel, Viton®, HDPE, and PVC
Service Bulletin	SB 4027

Features

- Patented automatic fluid evacuation valve eliminates gravity draining, pouring, or the need for an evacuation pump.
- 23 gallon storage tank; fewer drain intervals
- A low pressure safety valve prevents over pressurization of tank.
- Clear evacuation hose; provides fast fluid evacuation and shows fluid levels in tank.

Includes:

- 19.25" diameter catch basin that features an inlet strainer and s-hooks for tools.
- Splashguard bowl design prevents splattering, speeds drainage.
- Fully adjustable bowl height from 45" to 72".
- One hand operation. No ball valves required for evacuation of fluid.
- Roughneck outlet tube mounts securely into bulk used fluid reservoir.
- 7' evacuation tube provides sight gauge for fluid level.
- Tank handle makes maneuvering easy.
- Heavy gauge, all-steel construction guarantees long life.
- Tip-resistant balanced design.
- Large diameter rear rubber wheels and non-marking wide front casters maneuver the toughest shop floors.

MODELS AVAILABLE	DESCRIPTION
4110-022	Roughneck II™ Used Oil Drain
4110-023	Roughneck II™ Used Anti-freeze Drain
4140-064	Replacement Drain Bowl

Used Fluid Equipment Premium Duty

Premium drains capture used fluids and transfers them to any bulk storage tank using a cam-lock kit and evacuation system.



TECHNICAL DATA

Tank Capacity	23 gal (87 l)
Telescoping Range	45" - 72" (1.14 - 1.83 m)
Air Inlet Size (quick connect)	1/4" NPT
Fluid Outlet	Used oil 1" cam-lock nipple Used anti-freeze 3/4" cam-lock nipple
Wetted Materials	Zinc Plated Steel, Steel, Viton®, HDPE, and PVC
Service Bulletin	SB 4226

Features

- All steel tank and base design made from heavy gauge steel, guaranteeing long life
- Non-marking rubber wheels and 4" casters for easy maneuvering on any floor surface
- Drainage bowl made from high strength poly to provide collapsible safety feature
- Tip resistant balanced design
- Prevents splattering and include strainer to keep debris from entering tank and speed drainage
- High quality powder coating for corrosion resistance. Drains are offered in black for used fluid and green for used Anti-freeze (Glycol)
- Used oil drains will come with a 1" cam-lock nipple and dust cap
- Used anti-freeze drains will come with a 3/4" cam-lock nipple and dust cap

MODELS AVAILABLE

DESCRIPTION

4110-024	Premium Duty Used Oil Drain
4110-025	Premium Duty Used Anti-freeze (Glycol) Drain

CAM-LOCK COUPLER & NIPPLE RATED FOR 250 PSI (17 BAR)

Cam-Lock Coupler & Nipple		4140-044 Coupler 3/4" NPT(F)
		4140-017 Coupler 1" NPT(F)
		4140-054 Nipple 3/4" NPT(F)
		4140-055 Nipple 1" NPT(F)
		4140-045 Nipple 3/4" NPT(M)
		4140-018 Nipple 1" NPT(M)
		4140-046 Dust Cap 3/4" NPT(F)
		4140-019 Dust Cap 1" NPT(F)
		4140-052 Dust Plug 3/4" NPT(M)
		4140-053 Dust Plug 1" NPT(M)

DRY BREAK COUPLER & NIPPLE RATED FOR VACUUM OR UP TO 3,000 PSI (207 BAR)

Dry Break Coupler & Nipple		4140-016 Coupler 3/4" NPT(F)
		4140-050 Coupler 1" NPT(F)
		4140-023 Nipple 3/4" NPT(F)
		4140-051 Nipple 1" NPT(F)
Drain Bowl		4140-064 Replacement Drain Bowl
OLD STYLE DRAIN CONVERSION Conversion of old style drains with dry break couplers use		
For Used Oil	3270-054 Bushing 1" x 3/4"	
	4140-018 Nipple 1" NPT(M)	
For Anti-freeze	4140-045 Nipple 3/4" NPT(M)	

Used Fluid Equipment Spillguard

Spillguard drains capture used fluids and transfer to any bulk storage tank using a cam-lock kit and evacuation system



Features

- Balcrank "wide track" 4" caster dolly set for easy maneuvering on any floor surface
- All steel cover, container, and base design
- Drainage bowl made from high strength poly to provide collapsible safety feature and to assist in preventing container failure when an object is lowered onto drainage bowl
- Drain bowl prevents splattering and includes strainer to keep debris from entering container and speed drainage
- Tip resistant balanced design
- High quality powder coating for corrosion resistance. Drains are offered in black for used fluid and green for used Anti-freeze (Glycol)
- Used oil drains will come with a 1" cam-lock nipple and dust cap
- Used anti-freeze drains will come with a 3/4" cam-lock nipple and dust cap

TECHNICAL DATA

Tank Capacity	16 gal (60.5 l)
Telescoping Range	0-27 in. (0-69 cm)
Air Inlet (quick connect)	1/4" NPT
Fluid Outlet	Used oil 1" cam-lock nipple Used anti-freeze 3/4" cam-lock nipple
Wetted Materials	Zinc Plated Steel, Steel, Viton®, HDPE, and PVC
Service Bulletin	SB 4225

MODELS AVAILABLE

DESCRIPTION

4110-026	Spillguard used oil drain
4110-027	Spillguard used oil drain drumless
4110-028	Spillguard used anti-freeze (Glycol) drain
4110-029	Spillguard used anti-freeze (Glycol) drain drumless

CAM-LOCK COUPLER & NIPPLE RATED FOR 250 PSI (17 BAR)

Cam-Lock Coupler & Nipple		4140-044 Coupler 3/4" NPT(F)
		4140-017 Coupler 1" NPT(F)
		4140-054 Nipple 3/4" NPT(F)
		4140-055 Nipple 1" NPT(F)
		4140-045 Nipple 3/4" NPT(M)
		4140-018 Nipple 1" NPT(M)
		4140-046 Dust Cap 3/4" NPT(F)
		4140-019 Dust Cap 1" NPT(F)
		4140-052 Dust Plug 3/4" NPT(M)
		4140-053 Dust Plug 1" NPT(M)

DRY BREAK COUPLER & NIPPLE RATED FOR VACUUM OR UP TO 3,000 PSI (207 BAR)

Dry Break Coupler & Nipple		4140-016 Coupler 3/4" NPT(F)
		4140-050 Coupler 1" NPT(F)
		4140-023 Nipple 3/4" NPT(F)
		4140-051 Nipple 1" NPT(F)
Drain Bowl		4140-064 Replacement Drain Bowl
OLD STYLE DRAIN CONVERSION Conversion of old style drains with drybreak couplers use		
For Used Oil	3270-054 Bushing 1" x 3/4"	
	4140-018 Nipple 1" NPT(M)	
For Anti-freeze	4140-045 Nipple 3/4" NPT(M)	

Used Fluid Equipment Evacuator



Features

- Extract used oil and other fluids from any vehicle - safer, cleaner
- No more stripped drain plugs
- Great for cars, boats, motorcycles, and small engines
- Easily remove overfills
- Vacuum-charged unit is completely portable and easy to use
- Includes six suction probes (metal and flexible)
- Suction probes equipped with quick disconnect couplers
- Adapters for BMW and Volkswagen included
- Self-evacuating feature makes emptying clean and easy.
- Available version with clear bowl
Capacity: 2 gal (7.5 l)

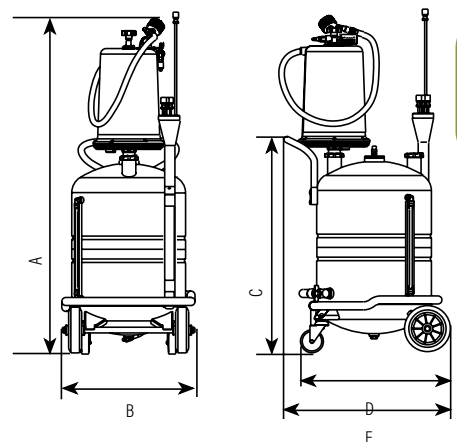
TECHNICAL DATA

	4140-056	4140-057
Tank capacity	18.5 gal (64.35 l)	18.5 gal (64.35 l)
Max. draining capacity	70%	80%
Air pressure for vacuum	100 psi (7 bar)	100 psi (7 bar)
Depressurization time	2' 15"	2' 15"
Suction hose	6 1/2" (2m)	6 1/2" (2m)
Draining hose	5' (1.5 m)	5' (1.5 m)
Service Bulletin	SB 4081	SB 4082

Warning! Not to be used with flammable fluids.

EXTRACTOR WANDS

	All	Wand Kit	Wand Kit Includes
833458	All		
833462	Flex	.27 X .19 X 39.37 (7 X 5 X 1000)	✓
833465	Flex	.23 X .15 X 27.55 (6 X 4 X 700)	✓
833466	Flex	.31 X .23 X 27.55 (8 X 6 X 700)	✓
833463	Rigid Copper	.19 X .15 X 27.55 (5 X 4 X 700)	✓
833464	Rigid Copper	.23 X .19 X 27.55 (6 X 5 X 700)	✓
833460	Adapter	Volkswagen, Audi Group	✓
833461	Adapter	Peugeot Group	✓



DIMENSIONS INCHES (MM)

A	B	C	D	E
46.06" (1,170)	18.5" (470)	29.5" (750)	18.70" (475)	22.84" (580)

Used Fluid Equipment Truck Drain and Drain-Pit Boss

The truck drain comes pre-assembled allowing for immediate use. Includes "used oil only" and "used anti-freeze only" decals for fluid identification. Connects to a used oil evacuation system using a cam-lock kit and evacuation system.

The Pit Boss rolling pit drain captures used fluids. Specifically designed to easily roll on guide tracks in the user's pit and connect to a used fluid evacuation system.

The low volume truck drain comes pre-assembled allowing for immediate use. Connects to a used oil evacuation system using a 3/4" cam-lock kit for anti-freeze or a 1" cam-lock kit for used fluid.



TECHNICAL DATA

MODELS	4120-003 4120-004	4120-006	4140-060 4140-020
Tank Capacity	5.2 gal (20 l)	26 gal (98.4 l)	34 gal (128.7 l)
Fluid Outlet	4120-003 3/4" for anti-freeze 4120-004 1" for used oil	1"	4140-060 1" cam-lock nipple 4140-020 1" NPT(F) bare
Measurements	9" H x 15" W x 32" L	9" H x 24" W x 36" L	16.72" H x 28.4" W x 34" L, 2" adjustable unit height
Wetted Materials	Zinc Plated Steel, Steel, Viton [®] , HDPE, and PVC	Zinc Plated Steel, Steel, Viton [®] , HDPE, and PVC	Zinc Plated Steel, Steel, Viton [®] , HDPE, and PVC
Service Bulletin	SB 4234	SB 4051	SB 4018

Warning! Not to be used with flammable fluids.

Features

Truck Drain

- Two fixed 8" wheels and one swivel caster
- Double baffles with upper screen and a catch lip help prevent fluid from splashing out
- Tubular U-handle design for excellent maneuvering
- All steel design

Low Profile Truck Drain

- Two anti-splash baffles, side splash guards and a metal catch screen. Select a 3/4" cam-lock kit for anti-freeze or a 1" cam-lock kit for used fluid

Pit Boss

- Two anti-splash baffles, side splash guards and a metal catch screen
- Front and rear drain ports
- 3" diameter wheels which are mounted to accommodate a pit track width of 34" to 53"
- Tool shelf below the tank for pit service tool
- All steel design

MODELS AVAILABLE	DESCRIPTION
4120-003	Low Profile Truck Drain for anti-freeze
4120-004	Low Profile Truck Drain for oil
4120-006	Low Profile Truck Drain Bare
4140-060	Drain - Pit Boss with Quick Connect Kit 4140-061
4140-020	Drain - Pit Boss Bare

CAM-LOCK COUPLER & NIPPLE RATED FOR 250 PSI (17 BAR)

Cam-Lock Coupler & Nipple		4140-044 Coupler 3/4" NPT(F)
		4140-017 Coupler 1" NPT(F)
		4140-054 Nipple 3/4" NPT(F)
		4140-055 Nipple 1" NPT(F)
		4140-045 Nipple 3/4" NPT(M)
		4140-018 Nipple 1" NPT(M)
		4140-046 Dust Cap 3/4" NPT(F)
		4140-019 Dust Cap 1" NPT(F)
		4140-052 Dust Plug 3/4" NPT(M)
		4140-053 Dust Plug 1" NPT(M)

CAM-LOCK COUPLER & NIPPLE RATED FOR VACUUM OR UP TO 3,000 PSI (207 BAR)

Cam-Lock Kits		4140-061 Cam-Lock Kit 1" for used oil for use with Pit Boss Bare 4140-020 Includes: Fluid Ball Valve, Cam-Lock nipple, Cap, and Hex nipple
		4140-067 Cam-Lock Kit 3/4" for anti-freeze for use with Pit Boss Bare 4140-020 Includes: Fluid Ball Valve, Cam-Lock nipple, Cap, and Hex nipple
Hose Kit for waste oil evacuation		4140-013 Hose Kit for waste oil evacuation Includes: 4140-017 - Cam-lock coupler 1", 8181-002X - Hose low pressure 2.5' x 1"

AODD Used Fluid Equipment for Oil

CF30 Series Evacuation Package

Evacuation system for used oil or anti-freeze disposal



1121-022 CF30 EVACUATION PACKAGE FOR USED OIL	
INCLUDES	
1120-024	Aluminum CF30 Diaphragm Pump
8134-005	LP Hose Assembly Suction Rated 5' x 3/8"
8264-005	MP Hose Assembly 5' x 3/4"
8181-006	LP Hose Assembly 6' x 1"
4140-017	Cam-lock Coupler 1"
4140-053	Cam-lock Dust Plug 1"
3230-019	LP Air Ball Valve 3/8" NPT(F) no bleed
3230-022	LP Air Ball Valve 1" NPT(F) no bleed
3260-035	F/R Auto Drain 3/8" NPT(F)
4411-025	Mounting Bracket for AODD Pumps
3120-219	Y-Strainer 1" NPT(F)

Warning! Not to be used with flammable fluids.

CF50 Series Evacuation Package

Evacuation system for used oil or anti-freeze disposal



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

Warning! Not to be used with flammable fluids.

Conventional 1" UL Evacuation Package

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



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

Warning! Not to be used with flammable fluids.

AODD Used Fluid Equipment for Anti-freeze

CF30 Series Evacuation Package

Evacuation system for anti-freeze disposal



1121-023 CF30 EVACUATION PACKAGE FOR USED ANTI-FREEZE	
INCLUDES	
1120-020	Aluminum CF30 Diaphragm Pump
8134-005	LP Hose Assembly 5' x 3/8"
8264-005	Qty 2 - MP Hose Assembly Suction Rated 5' x 3/4"
4140-044	Cam-lock Coupler 3/4"
4140-052	Cam-lock Dust Plug 3/4"
3230-019	LP Air Ball Valve 3/8" NPT(F) no bleed
3230-021	LP Air Ball Valve 3/4" NPT(F) no bleed
3260-035	F/R Auto Drain 3/8" NPT(F)
4411-025	Mounting Bracket for AODD Pumps

Warning! Not to be used with flammable fluids.

CF50 Series Evacuation Package

Evacuation system for anti-freeze disposal



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

Warning! Not to be used with flammable fluids.

Accessory Evacuation Packages for Oil & Anti-freeze

Does not include pump.



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

Warning! Not to be used with flammable fluids.

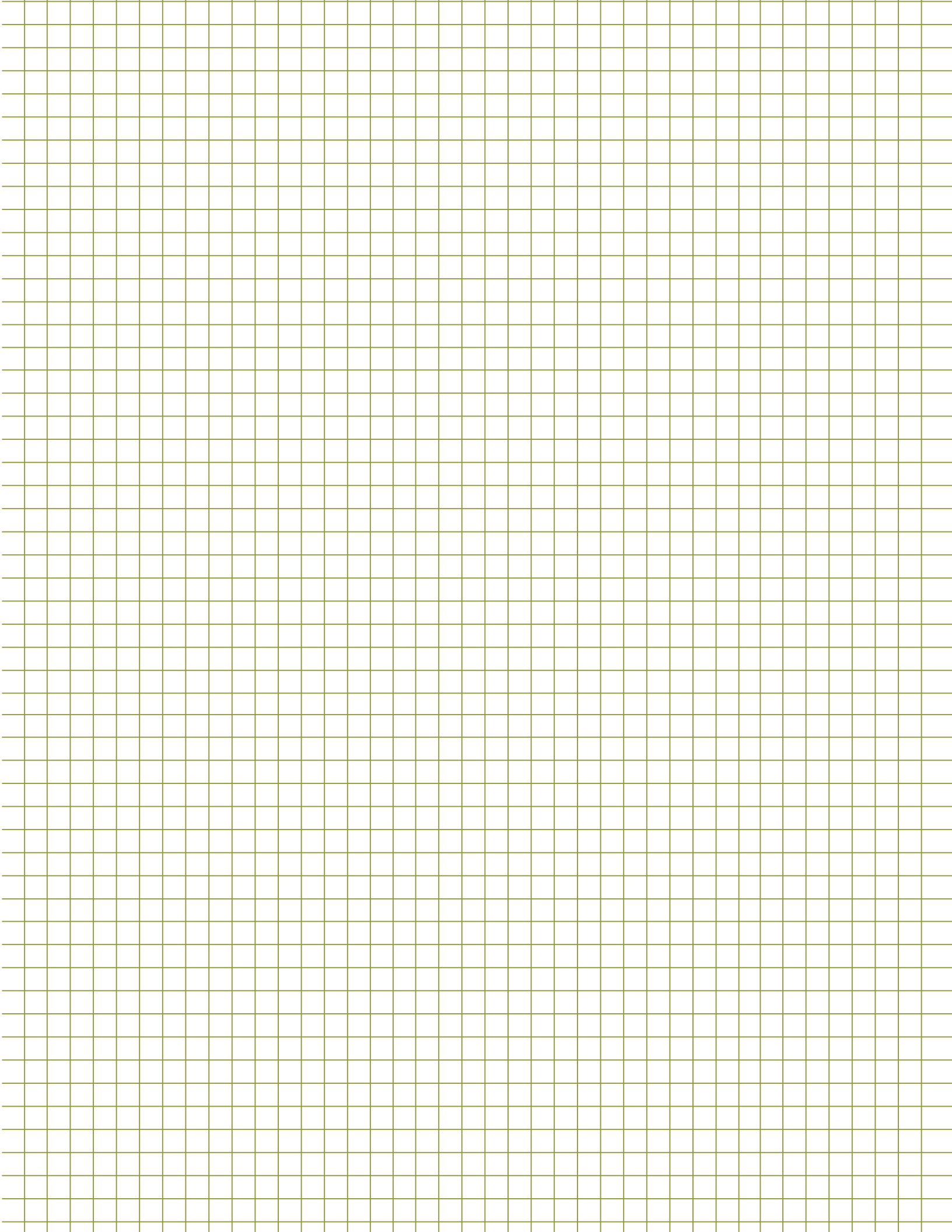
4140-063* EVACUATION PACKAGE FOR ANTI-FREEZE DESIGNED FOR THE CF30	
INCLUDES	
8134-005	LP Hose Assembly 5' x 3/8"
8264-005	Qty 2 - MP Hose Assembly Suction Rated 5' x 3/4"
4140-044	Cam-lock Coupler 3/4"
3230-019	LP Air Ball Valve 3/8" NPT(F) no bleed
3230-021	LP Air Ball Valve 3/4" NPT(F) no bleed
3260-035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

*Pressure relief recommended. See pg. 67 for pressure relief kits.

Warning! Not to be used with flammable fluids.

AODD Pump Accessories

Y-STRAINER - 580 PSI (40 BAR)			CAM-LOCK COUPLER & NIPPLE RATED					
All strainers have 40 mesh			for 250 psi (17 bar)					
Y-Strainer		3120-211 1/2" NPT(F)	Auto Shut-off Controls (SB 4222)		4520-001 Overfill pump control, auto shut-off, non-electric, sensing tube, pump controller			
		3120-212 3/4" NPT(F)						
		3120-213 1" NPT(F)						
SUCTION LINE-STRAINER - 150 PSI (10 BAR)								
All strainers have 20 mesh								
Suction Line-Strainer		3120-219 1" NPT(F)	PRESSURE RELIEF KITS					
			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			
DRY BREAK COUPLER & NIPPLE RATED								
For vacuum or up to 3,000 psi (207 bar)								
Dry Break Coupler & Nipple		4140-016 Coupler 3/4" NPT(F)						
		4140-050 Coupler 1" NPT(F)						
		4140-023 Nipple 3/4" NPT(F)						
		4140-051 Nipple 1" NPT(F)						
CAM-LOCK COUPLER & NIPPLE RATED			SUCTION TUBES					
For 250 psi (17 bar)								
Cam-Lock Coupler & Nipple		4140-044 Coupler 3/4" NPT(F)		4412-044 1" NPT(M) x 18" - 30°	16 gal drum			
		4140-017 Coupler 1" NPT(F)		4412-046 1" NPT(M) x 26" - 30°	55 gal drum			
		4140-054 Nipple 3/4" NPT(F)		4412-045 1" NPT(M) x 21" - 30°	165/280 gal bench tank			
		4140-055 Nipple 1" NPT(F)		4412-048 1" NPT(M) x 30" - 30°	165/280 gal bench tank double tap			
		4140-045 Nipple 3/4" NPT(M)		4412-047 1" NPT(M) x 28" - 30°	250 gal bench tank double tap			
		4140-018 Nipple 1" NPT(M)		4412-051 1" NPT(M) x 42" - 30°	275/330 gal horizontal obround double tap			
		4140-046 Dust Cap 3/4" NPT(F)		4412-052 1" NPT(M) x 60" - 30°	330 gal vertical obround			
		4140-019 Dust Cap 1" NPT(F)		4412-049 1" NPT(M) x 32" - 30°	275 gal tote			
		4140-052 Dust Plug 3/4" NPT(M)		4412-050 1" NPT(M) x 39" - 30°	330 gal tote			
		4140-053 Dust Plug 1" NPT(M)						
					BRACKETS			
		Wall-mount bracket				4411-016 Wall Mount Bracket for conventional diaphragm pumps		
						4411-025 Wall Mount Bracket for CF10, 15, & 30 diaphragm pumps		
	4411-036 Mounting Bracket for CF50 AODD Pumps							





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Air Accessories & Supplies

Filter Regulators

Filter Regulators

Compressed Air Preparation Means Better System

Performance

Mini-series for low volume air applications

- Small, compact size
- In-line mounting using standard piping and nipples
- Effective filtration with automatic drain
- Accurate pressure regulation, precise lubrication
- Ideal for control of pumps for oil bars, spigot dispensers and reduced flow transfer pumps
- For pressures up to 150 psi (10 bar) and flows of 15 SCFM

Standard Series for Heavy Duty Lube Systems

- Heavy duty metal body and bowls
- Sight glasses standard on metal bowls for visible liquid levels
- Rated for air system pressures up to 250 psi (17.24 bar)
- Optional automatic drains available for filters
- Available as individual units or assembled
- In-line mounting using standard piping and nipples

Standard Series

Filters

- Excellent water removal with 40-micron filter, large filter element surface
- Heavy duty zinc die cast body metal bowl with sight glass

Regulators

- Heavy duty zinc die cast body
- Pressure gauge standard

Lubricators

- Heavy duty zinc die cast body
- Metal bowl with sight glass
- Proportional oil delivery
- Precision needle valve
- Bowl can be filled while airline is under pressure
- Transparent sight dome for 360° visibility

1-Piece Combo Units

- Excellent water removal efficiency, 40-micron filter
- Heavy duty zinc die cast body
- Metal bowl with sight glass
- Pressure gauge standard

Mini Series

Filters

- Excellent water removal with 5-micron filter element
- Heavy duty zinc die cast body
- 0-250 psi (0-17.24 bar) Zinc die cast bowl

Regulators

- Heavy duty zinc die cast body
- Pressure gauge standard

Lubricators

- Heavy duty zinc die cast body
- Proportional oil delivery
- Precision needle valve
- Transparent sight dome for 360° visibility
- High strength polycarbonate bowl

FRL ACCESSORIES

MODEL #	DESCRIPTION
3260-058	Auto Drain Kit
3261-005	Air Gauge 0 -300 1/4" NPT(M)
3261-006	Air Gauge 0 -160 1/8" NPT mini models only
3261-007	Mounting Bracket 1/4" mini models only
3261-008	Mounting Bracket - Filter Regulators or Lubricators 1/4", 1/2", 3/8"
3261-009	Mounting Bracket - Filter, Regulators, or Lubricators 3/8", 1/2", 3/4"
3261-010	Mounting Bracket - 2 or 3 Unit Combos 1/4", 3/8", 1/2"
3261-011	Mounting Bracket - 2 or 3 Unit Combos 3/8", 1/2", 3/4"
3261-013	Mounting Bracket 1/2" Water Separator
3261-014	Mounting Bracket 3/4" Water Separator

RECOMMENDED FRL SIZING

MAX. SCFM	CHOOSE SERIES
15	1/4" NPT(F) (mini)
40	1/4" NPT(F)
60	3/8" NPT(F)
90	1/2" NPT(F)
100	3/4" NPT(F)



Liquid Separator

Liquid Separator removes bulk liquid at all points within the compressed air system. Protecting filters by providing high liquid removal efficiencies under all flow conditions.

MODEL #	TECHNICAL DATA	DRAIN	MOUNTING BRACKET
3260-067	1/2" NPT(F) 85 SCFM	Auto	3261-013
3260-068	3/4" NPT(F) 233 SCFM	Auto	3261-014
3260-069	1" NPT(F) 233 SCFM	Auto	3261-014

Accessories & Supplies

Filters Regulators, and Lubricators (FRL)



1-piece Piggy Back Filter / Regulator

Best choice for pump air control. Filter prolongs wear life of pump, automatic drain removes moisture, regulator adjusts pump air supply pressure for best performance.



2-piece Piggy Back FRL Units

Air line filter and regulator with gauge allow for maximum air flow. Provides efficient water and particle removal and features an easy to read water level indicator.



3-piece FRL Units

Full air line control and conditioning for pump operation. Select from 1/4" through 3/4" and miniature sizes. Manual drain. (Automatic or mini).

F/R Minis For pressures up to 150 psi (10 bar) and flows of 15 SCFM

F/R standard For pressures up to 250 psi (17.24 bar) and flows of 25 SCFM

MODEL #	TECHNICAL DATA	DRAIN	MOUNTING BRACKET
3260-060	1/4" NPT(F) mini, poly bowl	Auto	3261-007
3260-033	1/4" NPT(F) mini, zinc bowl	Auto	3261-007
3260-065	1/4" NPT(F) mini, zinc bowl	Manual	3261-007
3260-066	1/4" NPT(F) mini, poly bowl	Manual	3261-007
3260-034	1/4" NPT(F)	Auto	3261-010
3260-035	3/8" NPT(F)	Auto	3261-010
3260-036	1/2" NPT(F)	Auto	3261-010
3260-037	3/4" NPT(F)	Auto	3261-011

MODEL #	TECHNICAL DATA	DRAIN	MOUNTING BRACKET
3260-059	1/4" NPT(F) mini, poly bowl	Auto	3261-007
3260-048	1/4" NPT(F) mini, zinc bowl	Auto	3261-007
3260-049	1/4" NPT(F)	Auto	3261-010 or 3261-008
3260-050	3/8" NPT(F)	Auto	3261-010 or 3261-008
3260-051	1/2" NPT(F)	Auto	3261-010 or 3261-008
3260-052	3/4" NPT(F)	Auto	3261-011 or 3261-009

MODEL #	TECHNICAL DATA	DRAIN	MOUNTING BRACKET
3260-053	1/4" NPT(F) mini	Auto	3261-007
3260-054	1/4" NPT(F)	Manual	3261-010 or 3261-008
3260-055	3/8" NPT(F)	Manual	3261-010 or 3261-008
3260-056	1/2" NPT(F)	Manual	3261-010 or 3261-008
3260-057	3/4" NPT(F)	Manual	3261-011 or 3261-009



Air Line Filter

Use air filters to remove moisture and particulate solids from air supply lines. Manual drain. (Automatic or mini).

MODEL #	TECHNICAL DATA	DRAIN	MOUNTING BRACKET
3260-038	1/4" NPT(F) mini	Auto	3261-008
3260-039	1/4" NPT(F)	Manual	3261-008
3260-040	3/8" NPT(F)	Manual	3261-008
3260-041	1/2" NPT(F)	Manual	3261-008
3260-042	3/4" NPT(F)	Manual	3261-008
3260-061	1" NPT(F)	Manual	-
3260-062	1 1/2" NPT(F)	Manual	-



Air Regulators

Use air regulators to individually adjust supply pressure to air-operated pumps. Includes gauge.

MODEL #	TECHNICAL DATA	DRAIN	MOUNTING BRACKET
3260-028	1/4" NPT(F) mini	-	3261-007
3260-029	1/4" NPT(F)	-	3261-010
3260-030	3/8" NPT(F)	-	3261-010
3260-031	1/2" NPT(F)	-	3261-010
3260-032	3/4" NPT(F)	-	3261-011
3260-063	1" NPT(F)	-	-
3260-064	1 1/2" NPT(F)	-	-



Air Line Lubricators

Full air line control and conditioning for pump operation. Select from 1/4" through 3/4" and miniature sizes. Manual drain. (Automatic or mini).

MODEL #	TECHNICAL DATA	DRAIN	MOUNTING BRACKET
3260-043	1/4" NPT(F) mini, poly bowl	-	N/A
3260-044	1/4" NPT(F)	-	3261-008
3260-045	3/8" NPT(F)	-	3261-008
3260-046	1/2" NPT(F)	-	3261-008
3260-047	3/4" NPT(F)	-	3261-009

Accessories & Supplies

Fillers, Measures, and Funnels

		MODEL #	DESCRIPTION	FEATURES
Fillers and bottles		6110-017	Battery Filler	2 1/4" capacity Bronze plastic finish
		6111-002	Replacement Spout for Battery Filler	Black plastic
		6110-010	Radiator Filler	12 qt. capacity Black plastic
		6420-008	Oil Bottle Kit	1 qt. capacity per bottle 8 bottles with spouts and dust caps Metal basket
		6420-009	Metal Basket	Holds 8-1 qt. bottles
		6420-006	Plastic Bottle	1 qt. capacity
		6420-007	Spout and Dust Cap	1 spout and dust cap for 1 qt. bottles
Funnels and measures		6110-025	Measure with spout	1 qt. (1 l), plastic Molded in high density polyethylene with flexible spout
		6110-026	Measure with spout	2 qt. (2 l), plastic Molded in high density polyethylene with flexible spout
		6110-027	Measure with spout	3 qt. (3 l), plastic Molded in high density polyethylene with flexible spout
		6110-028	Measure with spout	5 qt. (5 l), plastic Molded in high density polyethylene with flexible spout
		6111-003	Spout, small	For use with measures 6110-025, 6110-026, 6110-028, and funnel 6210-027, plastic
		6111-004	Spout, large	For use with measures 6110-028 and funnel 6210-028
		6111-007	Cap, small	Cover for measure 6110-025, plastic
		6111-008	Cap, medium	Cover for measure 6110-026 and 6110-027, plastic
		6111-009	Cap, large	Cover for measure 6110-028, plastic
		6111-005	Filter, oil	Filter for use with funnel 6210-029
		6111-006	Filter, diesel	Filter for use with funnel 6210-029
		6210-027	Funnel w/ spout	Plastic 7.5" (190 mm) diameter. 0.5 gal capacity
		6210-028	Funnel w/ spout	Plastic 9" (230 mm) diameter. 0.9 gal capacity
		6210-029	Garage funnel	w/o filter
		6330-005	Drain Pan	3.25 gal capacity 16" Dia x 4" deep Galvanized metal

Accessories & Supplies Valves

Pump Runaway Control



MODEL #	TECHNICAL DATA	
3241-002	1/4" NPT(F)	Pump Runaway Control
3241-001	1/2" NPT(F)	Pump Runaway Control

4-Way Reversing Valve



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

Inlet Check Valve - Poly



MODEL #	DESCRIPTION
4411-029	Inlet Check Valve - Poly 3/4" NPT. Not for petroleum based products
4411-026	Inlet Check Valve - Poly 1" NPT. Not for petroleum based products

Inlet Check Valve - Alum



MODEL #	DESCRIPTION
4411-014	Inlet Check Valve 3/4" NPT(F)
4411-015	Inlet Check Valve 1" NPT(F)
4411-038	Inlet Check Valve 1 1/2" NPT(F)

Shut-off Valve Bleed Type for Air



MODEL #	DESCRIPTION
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)

Ball Valve - Fully Ported for Grease



MODEL #	DESCRIPTION
3230-023	Ball Valve, 3/8" 7250 psi (500 bar)
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)

Ball Valve - Fully Ported for Air/Oil



MODEL #	DESCRIPTION
3230-006	Ball valve, 3/8", 2,000 psi (138 bar)
3230-002	Ball valve, 1/2", 2,000 psi (138 bar)
3230-007	Ball valve, 3/4", 2,000 psi (138 bar)
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 Needle Fully Ported for Grease



MODEL #	DESCRIPTION
3230-012	Shut-off Valve, 3/4" NPT(F) 10,000 psi (689 bar)
3230-001	Shut-off Valve, 1/2" NPT(F) Both ends, 10,000 psi (689 bar)
3230-013	Shut-off Valve, 1" NPT(F) 10,000 psi (689 bar)

Accessories & Supplies Hand Pumps



MODEL #	DESCRIPTION
1300-017	Mobile Hand pump Non-metered Lube for 16 gal
Includes	Dispense hose 6' Dolly base 4310-001
TECHNICAL DATA	
Pressure	600 psi (41.4 bar)
Stroke per lb	6
Wetted Materials	Steel, Brass, and Buna-N™
SB 1016	



MODEL #	DESCRIPTION
1300-018	Mobile Hand pump Metered Lube for 16 gal
Includes	Dispense hose 6' In-line meter 3120-091 Dolly base 4310-001
TECHNICAL DATA	
Pressure	600 psi (41.4 bar)
Stroke per lb	6
Wetted Materials	Steel, Brass, and Buna-N™
SB 1016	



MODEL #	DESCRIPTION
1300-001	Hand pump, Heavy Duty for 16 and 55 gal
TECHNICAL DATA	
Pressure	6,000 psi (417 bar)
Stroke per gal	16 (1 per lb)
Wetted Materials	Steel, Brass
SB 1054	



MODEL #	DESCRIPTION
1300-010	Hand pump Non-metered Lube for 16 gal
Includes	Dispense hose 6'
TECHNICAL DATA	
Pressure	600 psi (41.4 bar)
Stroke per lb	6
Wetted Materials	Steel, Brass, and Buna-N™
SB 1016	



MODEL #	DESCRIPTION
1300-011	Hand pump Metered Lube for 16 gal
Includes	Dispense hose 6' In-line meter 3120-091
TECHNICAL DATA	
Pressure	600 psi (41.4 bar)
Stroke per lb	6
Wetted Materials	Steel, Brass, and Buna-N™
SB 1016	



MODEL #	DESCRIPTION
1300-021	Piston Hand Pump for 5 gal pails
Includes	Dispense hose 4'
TECHNICAL DATA	
Pressure	Check Ball kit
Stroke per lb	6
Wetted Materials	Steel, Aluminum, and Buna-N™
SB 1083	

Accessories & Supplies

Hand Pumps



MODEL #	DESCRIPTION
1300-019	Piston Hand pump 5 & 55 gal drums or tanks
Includes	Bung Adaptor 2"
TECHNICAL DATA	
Pressure	Hand operated
Stroke per gal	12
Fluids	For diesel, Lubricants, hydraulic oils, gear oils, anti-freeze, degreasers, and windshield washer fluid
Wetted Materials	Polypropylene and Viton™
SB 1149	



MODEL #	DESCRIPTION
1300-022	Hand pump High Flow Rotary for 16 & 55 gal drums or tanks
Includes	Bung Adaptor 2"
TECHNICAL DATA	
Pressure	Hand operated
Stroke per gal	1 per revolution
Fluids	For non-corrosive lubricants, solvents, agricultural, industrial chemicals, diesel, lubricants, hydraulic oils, gear oils, anti-freeze, degreasers, and windshield washer fluid
Wetted Materials	Cast iron, Steel, and Buna-N™
SB 1100	



MODEL #	DESCRIPTION
1300-033	Hand pump High Flow Rotary PVC action drum pump
Includes	Bung Adaptor 2"
TECHNICAL DATA	
Pressure	Hand operated
Stroke per gal	.7 per revolution
Fluids	For acid-based corrosive fluids and water based fluids from 16, 55 gal drums
Wetted Materials	PVC and Steel
SB 1150	



MODEL #	DESCRIPTION
1300-030	Hand Pump, siphon, drums
1300-029	Hand Pump, siphon, pails
TECHNICAL DATA	
Pressure	Hand operated
Fluids	For solvents, acetate, toluene, xylene, acids, chlorinated fluids
Wetted Materials	Polyethylene, PVC



MODEL #	DESCRIPTION
1300-037	Hand Pump, 5-16 gal drums. Poly lift pump for solvents and chemicals
1300-038	Hand Pump, 55 gal drums. Poly lift pump for solvents and chemicals
TECHNICAL DATA	
Pressure	Hand operated
Fluids	For solvents and chemicals
Wetted Materials	Nylon and PTFE



MODEL #	DESCRIPTION
1300-039	Hand Pump, 55 gal drums. 316 stainless steel lift pump for solvents and chemicals
TECHNICAL DATA	
Pressure	Hand operated
Stroke per qt	0.86
Fluids	For solvents and chemicals
Wetted Materials	Stainless Steel and PTFE

Accessories & Supplies

Grease Guns



MODEL #	DESCRIPTION
---------	-------------

5200-016 Professional Series Grease Gun

FEATURES & TECHNICAL DATA

- 14 oz capacity
- Variable stroke operation
- Filler nipple and bleeder valve
- Up to 10,000 psi max. pressure
- Includes outlet pipe and coupler



MODEL #	DESCRIPTION
---------	-------------

5200-006 Lever Style Grease Gun

FEATURES & TECHNICAL DATA

- 14 oz capacity
- Filler nipple
- Up to 10,000 psi max. pressure
- Includes outlet pipe and coupler



MODEL #	DESCRIPTION
---------	-------------

5200-014 Pistol Style Grease Gun

FEATURES & TECHNICAL DATA

- 14 oz capacity
- Filler nipple
- One hand operation
- Up to 5,000 psi max. pressure
- Includes outlet pipe and coupler



MODEL #	DESCRIPTION
---------	-------------

5200-013 Mini Grease Gun

FEATURES & TECHNICAL DATA

- Short stroke grip action for easy use
- Heavy duty professional grade construction
- Three way filling

Includes air vent and filler plug
• 9" Whip hose, hose and straight spout with coupler



MODEL #	DESCRIPTION
---------	-------------

1300-026 Suction Gun

FEATURES & TECHNICAL DATA

- For all purpose draining and filling
- No need for priming
- 11" flexible hose included



MODEL #	DESCRIPTION
---------	-------------

5200-010 Air Operated, Continuous Feed, Grease Gun

FEATURES & TECHNICAL DATA

- Patented 360° rotating cartridge barrel.
- Heavy Duty professional grade construction
- Three-way filling
- With air vent and filler plug
- 2,400 – 6,000 psi Max WP

Accessories & Supplies

Cordless Grease Gun Bucket and Filler Pumps



MODEL #	DESCRIPTION
5200-015	Battery Operated Grease Gun
8390-004	42" Hose Whip for 5200-011

FEATURES & TECHNICAL DATA

Includes:

- Carrying case with shoulder strap
- 42" whip hose with coupler
- Bend restrictors on hose
- Two 18 V Li-Ion batteries
- 1 hour quick charger

Specifications:

- Pump has the capability of developing 9,500 psi maximum fluid pressure.



MODEL #	DESCRIPTION
1300-031	Grease Bucket Pump

FEATURES & TECHNICAL DATA

- 35 lb oval shape steel bucket with carrying handle and foot rest
- Delivery per stroke: 0.7, 0.5 or 0.35 oz., depending on the lever selected.
- Up to 5,000 psi maximum fluid pressure.
- Includes 7' grease hose with coupler

SB 1146



MODEL #	DESCRIPTION
1300-034	Filler Pump for 35 lb pails
1300-035	Filler Pump for 120 lb kegs

FEATURES & TECHNICAL DATA

For fast, clean and efficient filling of side lever, one hand, air operated and cordless grease guns equipped with a filler nipple.

- Includes pump with filler valve, cover and follower plate for 35 lb grease pails

- Includes pump with filler valve, cover and follower plate for 120 lb kegs



MODEL #	DESCRIPTION
1300-009	Grease Hand pump Non-metered for 25-35 lb/5 gal
Includes	Dispense hose 5'

TECHNICAL DATA

Pressure	5,500 psi (379 bar)
Stroke per lb	6
Wetted Materials	Steel, Brass, and Buna-N™
SB 1018	



MODEL #	DESCRIPTION
1300-036	Gear Oil Bucket Pump

FEATURES & TECHNICAL DATA

- 4 gal. oval shape steel bucket with carrying handle and foot rest
- 5' rubber delivery hose with angled nozzle
- Lever action pump, delivers 100 cc per stroke

SB 1148



MODEL #	DESCRIPTION
1300-032	High Pressure Grease Pump

FEATURES & TECHNICAL DATA

- For use with 35 lb grease pails
- Includes follower disc and cover with height adjustable bung adaptor
- 5' high pressure grease hose with coupler
- All metal high pressure grease pump, up to 5,000 psi maximum fluid pressure

Accessories & Supplies Whip Hoses & Connectors

Filler fittings, couplers and adaptors



5310-033
Filler fitting standard
1/8"NPT(M)



5310-030
Needle nose adaptor, 1/8"
NPT(F)



5310-024
Grease coupler 4-Jaws,
1/8" NPT(F)



5310-027
Lock sleeve, 1/8"NPT(M)



5310-037
Rubber tip seal-off
with lock sleeve 1/8"
NPT(F)



5310-026
Giant button-head
coupler,
1/8" NPT(F)



5310-029
Threaded swivel
adaptor, 1/8" NPT(F)



5310-031
Needle nose adaptor with
lock sleeve, 1/8" NPT(F)



5200-017
Quick Lock grease coupler
1/8" NPT(F)



5310-035
Lock sleeve,
1/8"NPT(F)



5310-028
Rubber tip seal-off
adaptor, 1/8" NPT(F)



5310-025
Standard buttonhead
coupler, 1/8" NPT(F)



5310-036
90° adaptor, coupler and
lock sleeve, 1/8"NPT(F)



5310-034
Air bleeder valve
1/8"NPT(M)



5400-003
Bearing Packer



5310-018
Z-Swivel 1/4" NPT(F)
x 1/4" NPT(M)



5310-032
Rigid flex adaptor with hydraulic coupler, 1/8" NPT(F)

Grease outlet hoses for hand and air operated equipment



8390-002 18" Whip Hose HP
8390-003 36" Whip Hose HP
8390-004 42" Whip hose HP

Max. pressure 5,000 psi (345 bar)
Hose end 1/8" NPT(M) on both ends
Compatible fluid NLGI-2 Grease
Flexible Extension



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Fittings

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FITTINGS	174

Fittings

ADAPTERS			
	MODEL	NPT(M X M)	TECHNICAL DATA
	3270-033	1/2" x 1/2"	Brass 3,400 psi (234.4 bar)
	MODEL	NPT(F X M)	TECHNICAL DATA
	3270-007	1/8" x 1/2"	Brass 1,000 psi (68.9 bar)
	3270-078	3/8" x 1/4"	Steel 3,000 psi (207 bar)
	3270-082	3/8" x 3/8"	Steel 3,000 psi (207 bar)
	3270-021	1/2" x 1/4"	Steel 3,000 psi (207 bar)
	3270-081	1/2" x 3/4"	Steel 3,000 psi (207 bar)
BUSHINGS - STANDARD & REDUCING			
	MODEL	NPT(M X F)	TECHNICAL DATA
	3270-076	1/4" x 1/2"	Steel 3,000 psi (207 bar)
	3270-071	3/8" x 1/4"	Steel 3,000 psi (207 bar)
	3270-077	3/8" x 3/8"	Steel 3,000 psi (207 bar)
	3270-016	1/2" x 1/4"	Steel 3,000 psi (207 bar)
	3270-052	1/2" x 3/8"	Steel 3,000 psi (207 bar)
	3270-075	1/2" x 1/2"	Steel 3,000 psi (207 bar)
	3270-070	1/2" x 3/4"	Steel 3,000 psi (207 bar)
	3270-072	3/4" x 1/4"	Steel 3,000 psi (207 bar)
	3270-074	3/4" x 3/8"	Steel 3,000 psi (207 bar)
	3270-053	3/4" x 1/2"	Steel 3,000 psi (207 bar)
	3270-073	1" x 1/2"	Steel 3,000 psi (207 bar)
	3270-054	1" x 3/4"	Steel 3,000 psi (207 bar)
COUPLERS - STANDARD			
	MODEL	NPT(M X F)	TECHNICAL DATA
	3270-084	1/4" x 1/4"	Steel 3,000 psi (207 bar)
	3270-085	3/8" x 3/8"	Steel 3,000 psi (207 bar)
	3270-086	1/2" x 1/2"	Steel 3,000 psi (207 bar)
	3270-087	3/4" x 3/4"	Steel 3,000 psi (207 bar)
	3270-088	1" x 1"	Steel 3,000 psi (207 bar)
HEX NIPPLES STANDARD & REDUCING			
	MODEL	NPT(M X M)	TECHNICAL DATA
	3270-009	1/8" JIC 37° x 1/8"	Steel 4,000 psi (275.6 bar)
	3270-089	1/4" x 1/8"	Steel 3,000 psi (207 bar)
	3270-041	1/4" x 1/4"	Brass 1,200 psi (82.3 bar)
	3270-093	3/8" x 1/8"	Steel 3,000 psi (207 bar)
	3270-090	3/8" x 1/4"	Steel 3,000 psi (207 bar)
	3270-042	3/8" x 3/8"	Brass 1,000 psi (68.9 bar)
	3270-094	1/2" x 1/4"	Steel 3,000 psi (207 bar)

Fittings

HEX NIPPLES STANDARD & REDUCING			
	MODEL	NPT(M X M)	TECHNICAL DATA
	3270-091	1/2" x 3/8"	Steel 3,000 psi (207 bar)
	3270-043	1/2" x 1/2"	Brass 1,000 psi (68.9 bar)
	3270-095	3/4" x 3/8"	Steel 3,000 psi (207 bar)
	3270-092	3/4" x 1/2"	Steel 3,000 psi (207 bar)
	3270-044	3/4" x 3/4"	Brass 1,000 psi (68.9 bar)
	3270-096	1" x 3/4"	Steel 3,000 psi (207 bar)
	3270-045	1" x 1"	Steel 3,000 psi (207 bar)
SQUARE HEADED PLUG			
	MODEL	NPT(M)	TECHNICAL DATA
	3270-150	1/8"	Black Iron 2,000 psi (137.8 bar)
	3270-151	1/4"	Steel 3,000 psi (207 bar)
	3270-152	3/8"	Steel 3,000 psi (207 bar)
	3270-153	1/2"	Steel 3,000 psi (207 bar)
	3270-154	3/4"	Steel 3,000 psi (207 bar)
	3270-155	1"	Steel 3,000 psi (207 bar)
	3270-156	2"	Steel 3,000 psi (207 bar)
STREET ELBOW			
	MODEL	NPT(F X M)	TECHNICAL DATA
	3270-157	1/4" x 1/4"	Steel 3,000 psi (207 bar)
	3270-083	3/8" x 3/8"	Steel 3,000 psi (207 bar)
	3270-158	1/2" x 1/2"	Steel 3,000 psi (207 bar)
	3270-159	3/4" x 3/4"	Steel 3,000 psi (207 bar)
SWIVEL UNIONS 45°			
	MODEL	NPT(M) X NPS(F)	TECHNICAL DATA
	3270-066	1/2" x 1/2"	Steel 3,500 psi (241.13 bar)
	3270-062	3/4" x 3/4"	Steel 2,000 psi (137.8 bar)
	3270-061	1" x 1"	Steel 2,000 psi (137.8 bar)
SWIVEL UNIONS RIGID			
	MODEL	NPT(M) X NPS(F)	TECHNICAL DATA
	3270-097	1/8" x 1/4"	Steel 3,000 psi (207 bar)
	3270-025	1/4" x 1/4"	Steel 5,000 psi (344.7 bar)
	3270-098	1/4" x 3/8"	Steel 3,000 psi (207 bar)
	3270-050	3/8" x 3/8"	Steel 3,000 psi (207 bar)
	3270-046	3/8" x 1/2"	Steel 3,000 psi (207 bar)
	3270-028	1/2" x 3/8"	Steel 3,000 psi (207 bar)

Fittings



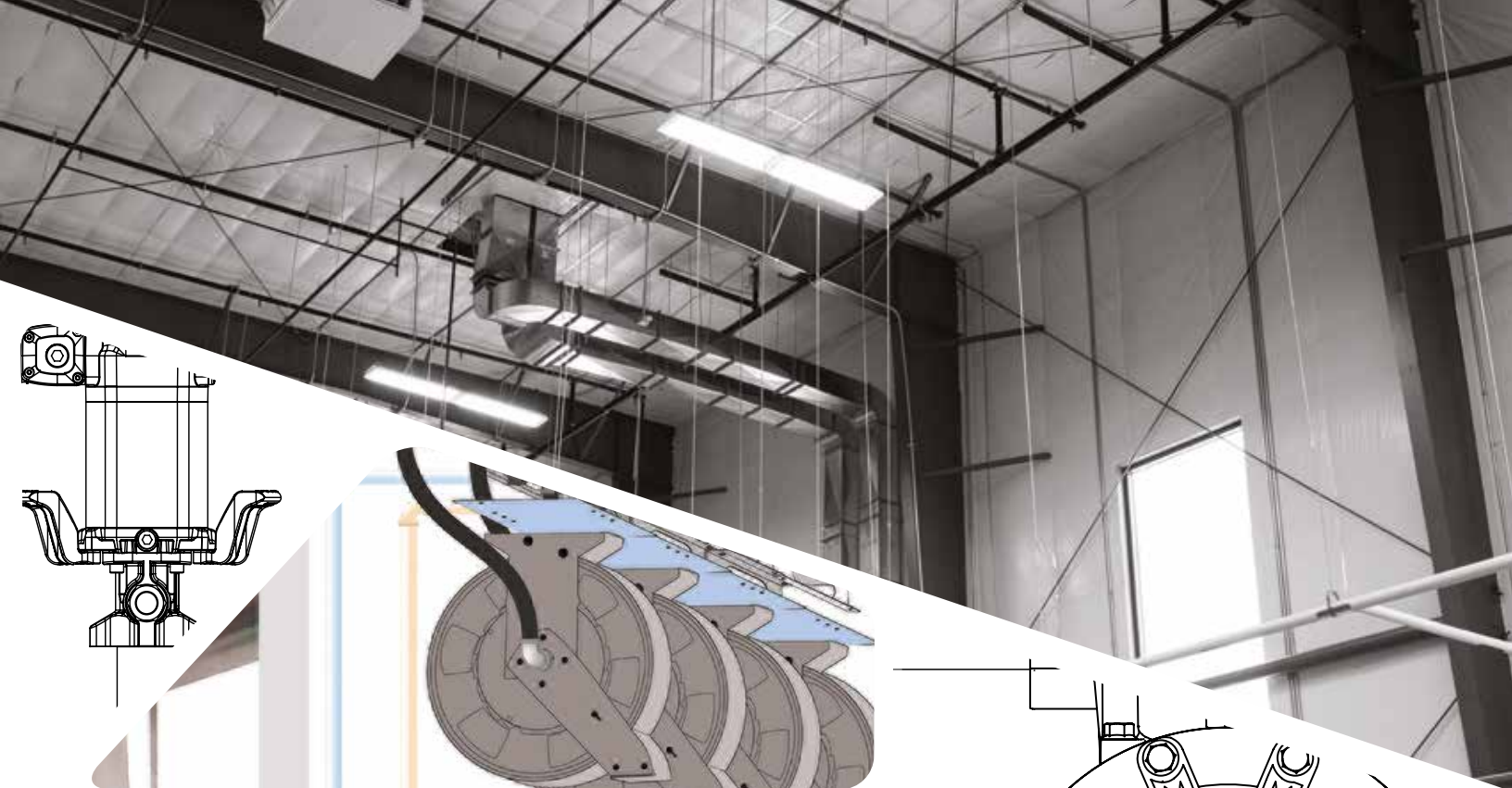
SWIVEL UNIONS RIGID

MODEL	NPT(M) X NPS(F)	TECHNICAL DATA
3270-027	1/2" x 1/2"	Steel 3,000 psi (207 bar)
3270-047	1/2" x 3/4"	Steel 2,250 psi (172.4 bar)
3270-099	3/4" x 3/4"	Steel 3,000 psi (207 bar)
3270-100	3/4" x 1/2"	Steel 3,000 psi (207 bar)
3270-101	3/4" x 1"	Steel 3,000 psi (207 bar)
3270-048	1" x 3/4"	Steel 2,000 psi (137.8 bar)
3270-102	1" x 1"	Steel 3,000 psi (207 bar)
MODEL	NPT(F) X NPS(F)	TECHNICAL DATA
3270-103	1/4" x 1/4"	Steel 3,000 psi (207 bar)
3270-106	3/8" x 1/4"	Steel 3,000 psi (207 bar)
3270-109	3/8" x 3/8"	Steel 3,000 psi (207 bar)
3270-104	1/2" x 1/4"	Steel 3,000 psi (207 bar)
3270-107	1/2" x 3/8"	Steel 3,000 psi (207 bar)
3270-110	1/2" x 1/2"	Steel 3,000 psi (207 bar)
3270-105	3/4" x 3/4"	Steel 3,000 psi (207 bar)
3270-108	1" x 1"	Steel 3,000 psi (207 bar)



SWIVEL UNIONS 90°

MODEL	NPT(F) X NPS(F)	TECHNICAL DATA
3270-111	1/4" x 1/4"	Steel 3,000 psi (207 bar)
3270-056	3/8" x 3/8"	Steel 4,000 psi (275.8 bar)
3270-112	3/8" x 1/2"	Steel 3,000 psi (207 bar)
3270-113	3/8" x 1/4"	Steel 3,000 psi (207 bar)
3270-055	1/2" x 1/2"	Steel 3,000 psi (207 bar)
3270-114	1/2" x 3/8"	Steel 3,000 psi (207 bar)
3270-058	3/4" x 3/4"	Steel 3,000 psi (207 bar)
3270-060	1" x 1"	Steel 3,000 psi (207 bar)
MODEL	NPT(M) X NPS(F)	TECHNICAL DATA
3270-115	1/4" x 1/4"	Steel 3,000 psi (207 bar)
3270-049	1/4" x 3/8"	Steel 5,000 psi (344.73 bar)
3270-050	3/8" x 3/8"	Steel 2,000 psi (137.8 bar)
3270-116	3/8" x 1/2"	Steel 3,000 psi (207 bar)
3270-117	3/8" x 1/4"	Steel 3,000 psi (207 bar)
3270-051	1/2" x 1/2"	Steel 3,500 psi (241.13 bar)
3270-118	1/2" x 3/8"	Steel 3,000 psi (207 bar)
3270-057	3/4" x 3/4"	Steel 2,500 psi (172.36 bar)
3270-059	1" x 1"	Steel 2,500 psi (172.36 bar)



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Reference

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Lube Piping Specifications

Use these guidelines for selecting line sizes, tubing wall thicknesses and piping schedules for lubrication distribution systems. Air and water recommendations are for supply of air/water hose reels or for supply of air to pumps. Except as noted, maximum pressures shown represent the fluid pressure at the pump outlets when connected to their highest rated air supply pressure.

MOTOR OIL, GEAR OIL, ATF 0-200 FT			TUBING		PIPE	
PUMP	RATIO	MAX PRESSURE	OD	WALL	SIZE	WALL
LYNX®	1:1	120 psi (8 bar)	3/4"	0.025	3/4"	SCH 40
LYNX®	3:1	490 psi (34 bar)	3/4"	0.025	3/4"	SCH 40
LYNX® HD	5:1	760 psi (52 bar)	3/4"	0.025	3/4"	SCH 40
Panther™	3:1	490 psi (34 bar)	3/4"	0.025	3/4"	SCH 40
Panther™	5:1	760 psi (52 bar)	3/4"	0.025	3/4"	SCH 40
Tiger™	6:1	870 psi (60 bar)	1"	0.035	1"	SCH 40
Lion™ 450	3:1	540 psi (37 bar)	3/4"	0.035	3/4"	SCH 40
Lion™ 450	6:1	1,080 psi (74 bar)	3/4"	0.035	3/4"	SCH 40
Lion™ 450	10:1	1,800 psi (124 bar)	3/4"	0.049	3/4"	SCH 40
Lion™ 600	6:1	1,050 psi (73 bar)	3/4"	0.035	3/4"	SCH 40
Lion™ 600	12:1	2,160 psi (149 bar)	3/4"	0.065	3/4"	SCH 40

MOTOR OIL, GEAR OIL, ATF OVER 200 FT			TUBING		PIPE	
PUMP	RATIO	MAX PRESSURE	OD	WALL	SIZE	WALL
LYNX®	1:1	120 psi (8 bar)	N/A	N/A	N/A	N/A
LYNX®	3:1	490 psi (34 bar)	N/A	N/A	N/A	N/A
LYNX® HD	5:1	760 psi (52 bar)	1"	0.035	1"	SCH 40
Panther™	3:1	490 psi (34 bar)	1"	0.035	1"	SCH 40
Panther™	5:1	760 psi (52 bar)	1"	0.035	1"	SCH 40
Tiger™	6:1	870 psi (60 bar)	1 1/4"	0.042	1 1/4"	SCH 40
Lion™ 450	3:1	540 psi (37 bar)	1"	0.035	1"	SCH 40
Lion™ 450	6:1	1,080 psi (74 bar)	1"	0.049	1"	SCH 40
Lion™ 450	10:1	1,800 psi (124 bar)	1"	0.065	1"	SCH 40
Lion™ 600	6:1	1,050 psi (73 bar)	1"	0.049	1"	SCH 40
Lion™ 600	12:1	2,160 psi (149 bar)	1"	0.083	1"	SCH 40

GREASE 0-200 FT			TUBING		PIPE	
PUMP	RATIO	MAX PRESSURE	OD	WALL	SIZE	WALL
Panther®	50:1	6,000 PSI (414 bar)	5/8"	.125	1/2	Sch 80
Lion™ 450	25:1	5,000 PSI (345 bar)	5/8"	.125	1"	Sch 40
Lion™ 450	40:1	8,000 PSI (551 bar)	5/8"	.125	1/2"	Sch 80
Lion™ 450	70:1	7,000 PSI (483 bar)	5/8"	.095	1/2"	Sch 160
Lion™ 600	80:1	8,000 PSI (551 bar)	5/8"	.095	1/2"	Sch 160

GREASE OVER 200 FT			TUBING		PIPE	
PUMP	RATIO	MAX PRESSURE	OD	WALL	SIZE	WALL
Panther®	50:1	5,000 PSI (345 bar)	3/4"	.125	3/4"	Sch 80
Lion™ 450	25:1	5,000 PSI (345 bar)	3/4"	.125	1 1/2"	Sch 80
Lion™ 450	40:1	8,000 PSI (551 bar)	3/4"	.109	3/4"	Sch 80
Lion™ 450	70:1	7,000 PSI (483 bar)	3/4"	.109	3/4"	Sch 160
Lion™ 600	80:1	8,000 PSI (551 bar)	3/4"	.109	3/4"	Sch 160

AIR & WATER 0-200 FT		TUBING		PIPE	
MAX PRESSURE		OD	WALL	SIZE	WALL
150 PSI (10 bar)		5/8	.025	1/2	SCH 40
250 PSI (17 bar)		5/8	.025	1/2	SCH 40
AIR & WATER 0-200 FT		TUBING		PIPE	
MAX PRESSURE		OD	WALL	SIZE	WALL
150 PSI (10 bar)		3/4	.025	3/4	SCH 40
250 PSI (17 bar)		3/4	.025	3/4	SCH 40

Additional notes:

- 1) Line pressures for grease pumps are limited by the strength of steel tubing and grease hose working pressure ratings. Regulate air supply pressure for grease pumps to ("max pressure"/50) psi to avoid line pressure limits.
- 2) Based on use of fully annealed steel tubing, 15,000 psi (1,034 bar) yield strength.
- 3) Multiple air-operated pumps supplied by a common air line may require larger line sizes. Consult your Balcrank Representative for efficient size recommendations.
- 4) Minimize the number of elbows in grease line to reduce pressure drop. Use radius bends is preferred to elbows where installation permits.
- 5) When thermal expansion of oil may be present, use a pump pressure relief valve.

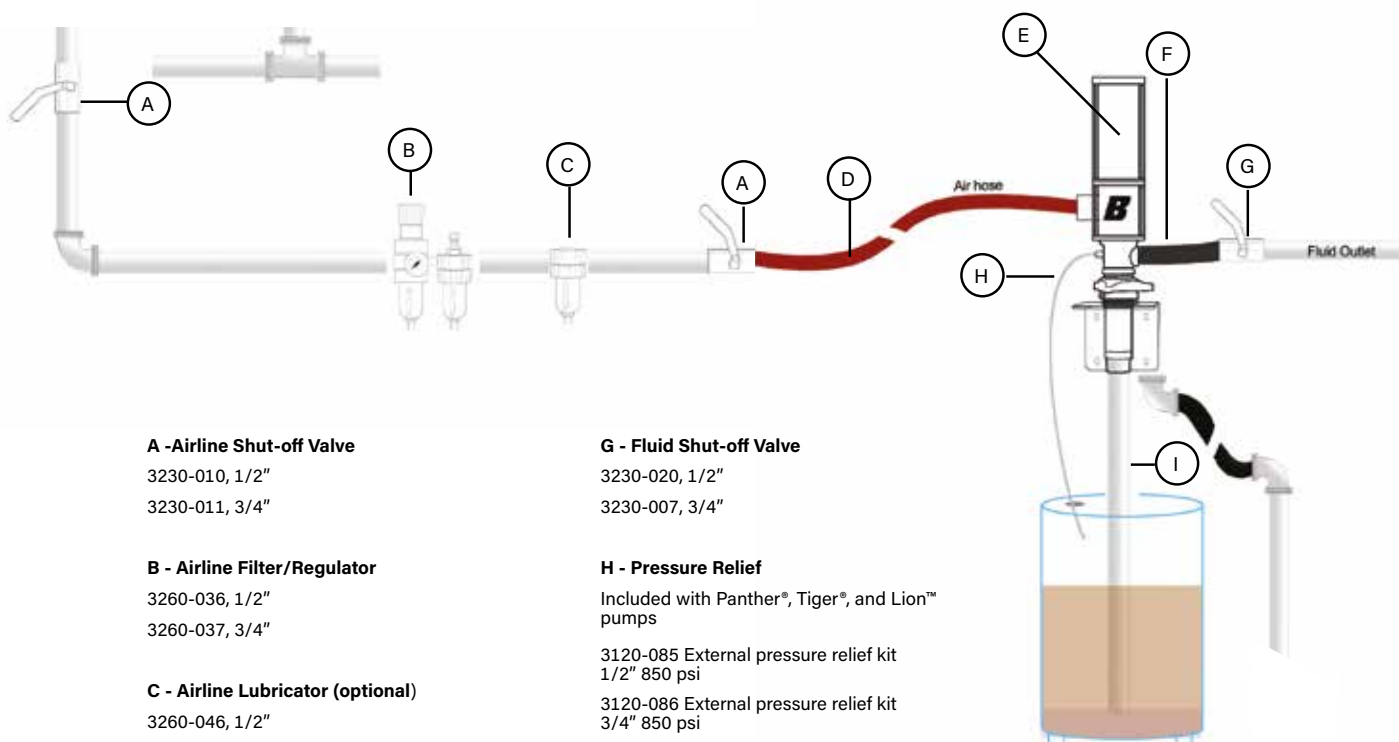


Replacement Hoses

MODEL PREFIX	HOSE TYPE	HOSE I.D.	MAX.WP (PSI)	HOSE END THREADS (NPT)	LENGTH SUFFIX IN FEET													
					2	3	5	6 - 7	8 - 12	16	20 - 25	30	40	50	60	70 - 75	100	
8132	Air / Water	3/8"	300	1/4" M x 1/4" M			-005											
8134	Air / Water	3/8"	300	3/8" M x 3/8" MSW		-003	-005											
8135	Nitrogen-Green	3/8"	250	1/4" M x 1/2" M								-030	-040	-050				
8135	Nitrogen-Green	3/8"	250	1/2" M x 1/2" M	-002x													
8136	Air / Water	3/8"	300	1/4" M x 1/2" M						-016		-030	-040	-050	-060			
8141	Air / Water	1/2"	300	1/2" M x 1/2" M		-003	-005					-030	-040	-050	-060	-075	-100	
8142	Air / Water	1/2"	300	1/2"M x 1/2" MSW	-002x													
8144	Air / Water	1/2"	300	1/2" M x 3/8" M		-003	-005											
8145	Air / Water	1/2"	300 & suc	1/2"M x 1/2" MSW			-005											
8146	Air / Water	1/2"	300 & suc	1/2" MSW x 3/8" F					-010									
8149	Air/Water	1/2"	300	1/2" M x 1/2" MSW			-005											
8161	Air/Water	3/4"	300	3/4" M x 3/4" MSW	-002x									-050	-060	-075		
8171	Air / Water	3/4"	250 & suc	3/4' MSW x 3/4" MSW				-006										
8181	Air / Water	1"	250 & suc	1" MSW x 1" MSW	-002x		-005	-006						-050				
8241	Oil	1/2"	3,000	1/2" M x 1/2" M	-002	-003		-006	-008	-016	-020 & -025	-030	-040	-050	-060	-070		
8242	Oil	1/2"	3,000	3/8" M x 3/8" M	-002	-003	-005	-006	-010		-020	-030	-040	-050	-060			
8249	Oil	1/2"	3,000	1/2" M x 1/2" MSW	-002x	-004	-005	-006	-008 & -010	-016								
8250	Oil	1/2"	2,320	1/2" MSW x 1/2" M											-065	-075	-100	
8261	Oil	3/4"	1,525	3/4" M x 3/4" M		-003	-005		-010									
8262	Oil	3/4"	1,525	1/2" MSW x 1/2" MSW					-010									
8263	Oil	3/4"	1,525	3/4" M x 1/2" MSW					-010									
8264	Oil	3/4"	1,525	3/4" M x 3/4" MSW	-002x	-003	-005					-030		-050		-075		
8281	Oil	1"	2,250	1" M x 1" MSW	-002x		-005											
8321	Grease	1/4"	5,000	1/4" M x 1/4" MSW				-007				-030	-040	-050	-060			
8322	Grease	1/4"	5,000	1/2"-27 F x 1/2"-27 F	-002	-003	-005		-010		-020			-050				
8323	Grease	1/4"	5,000	1/4" M x 3/8" M								-030	-040	-050	-060			
8331	Grease	3/8"	4,000	1/4" M x 1/4" MSW			-005	-007	-010	-016	-020	-030	-040	-050	-060			
8332	Grease	3/8"	4,000	1/4" M x 3/8" M			-005	-007	-010		-020	-030	-040	-050	-060			
8333	Grease	3/8"	4,000	3/8" M x 3/8" M			-005	-007	-010			-030						
8334	Grease	3/8"	4,000	3/8" M x 3/8" MSW	-002x													
8340	Grease	1/2"	5,000	1/2"M x 1/2" MSW	-002x				-010		-020					-075		
8466	Diesel	3/4"	50	3/4"M x 3/4"MSW	-002x							-030		-050				
8481	Diesel	1"	50	1"M x 1"MSW	-002x									-050				
THREADS (BSPP)																		
8551	DEF	1"	50	cut end x simple spout				-006										
8560	DEF	3/4"	150	cut ends w/ hose clamps		-003			-012									
8561	DEF	3/4"	150	cut end x 3/4" M		-003		-006	-012	-016	-020	-030						
8562	DEF	3/4"	150	3/4" M x 3/4" MSW		-003												
8569	DEF	3/4"	150	3/4" MSW x 3/4" MSW W/restrictors						-016	-020	-030		-050				
8570	DEF	3/4"	150	Cut ends w/ hose clamps		-003		-006										
8572	DEF	1"	150	Cut ends w/ hose clamps				-006										

For complete hose model specification, combine "Model Prefix" in the first column with a "Length Suffix" in the right-hand table. Example: Model 8134-030, 3/8" Air/Water Hose, 30 ft. length.

Oil pumping system



A - Airline Shut-off Valve

3230-010, 1/2"
3230-011, 3/4"

B - Airline Filter/Regulator

3260-036, 1/2"
3260-037, 3/4"

C - Airline Lubricator (optional)

3260-046, 1/2"
3260-047, 3/4"

D - Air Connection Hose

8144-005, 5' x 1/2"

E - Balcrank oil piston pump

1130-015 Panther® 3:1
1130-016 Panther® 5:1
1130-019 Tiger® 6:1
1430-001 Lion™ 450 3:1
1430-003 Lion™ 450 10:1

F - Fluid Connection Hose

8249-005, 5' x 3/8"
8149-005, 5' x 4/1"

G - Fluid Shut-off Valve

3230-020, 1/2"
3230-007, 3/4"

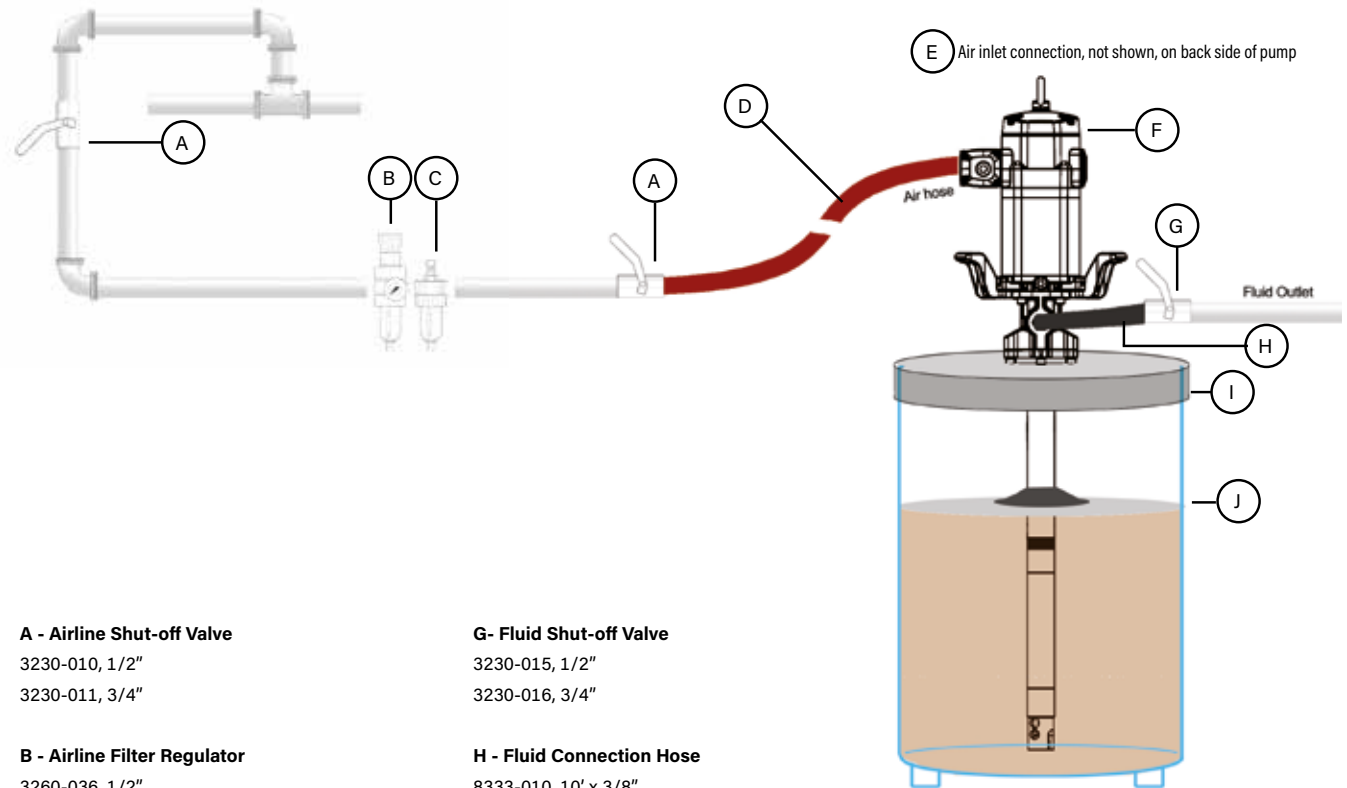
H - Pressure Relief

Included with Panther®, Tiger®, and Lion™ pumps
3120-085 External pressure relief kit
1/2" 850 psi
3120-086 External pressure relief kit
3/4" 850 psi

I - Suction Tube for Direct Immersion for Panther® 3:1, 5:1, and Tiger® 6:1 HP

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

Grease pumping system



A - Airline Shut-off Valve

3230-010, 1/2"
3230-011, 3/4"

B - Airline Filter Regulator

3260-036, 1/2"
3260-037, 3/4"

C - Airline Lubricator (optional)

3260-046, 1/2"
3260-047, 3/4"

D - Air Connection Hose

8144-005, 5' x 1/2"

E - Air inlet connection

3270-001, Nipple
3270-002, coupler

F - Balcrank piston grease pump

1450-002 Lion™ 450 40:1 400 lb

G- Fluid Shut-off Valve

3230-015, 1/2"
3230-016, 3/4"

H - Fluid Connection Hose

8333-010, 10' x 3/8"
8322-005, 5' x 1/4"

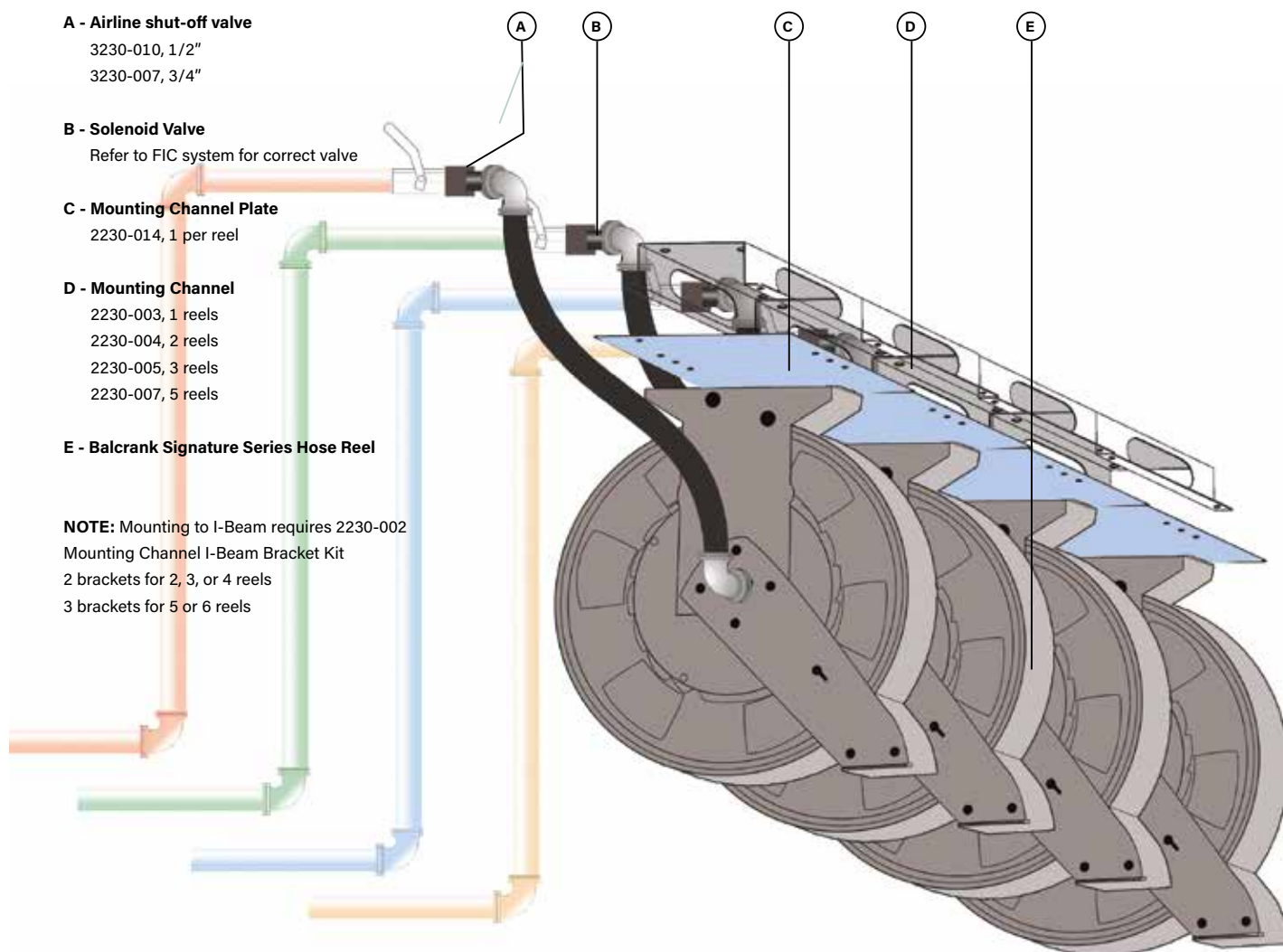
I - Drum Cover 400 lb drum

4420-004 Panther® 50:1
4420-013 Lion™ 40:1

J - Follower Plate

4440-009 Panther® 50:1
4440-015 Lion™ 40:1

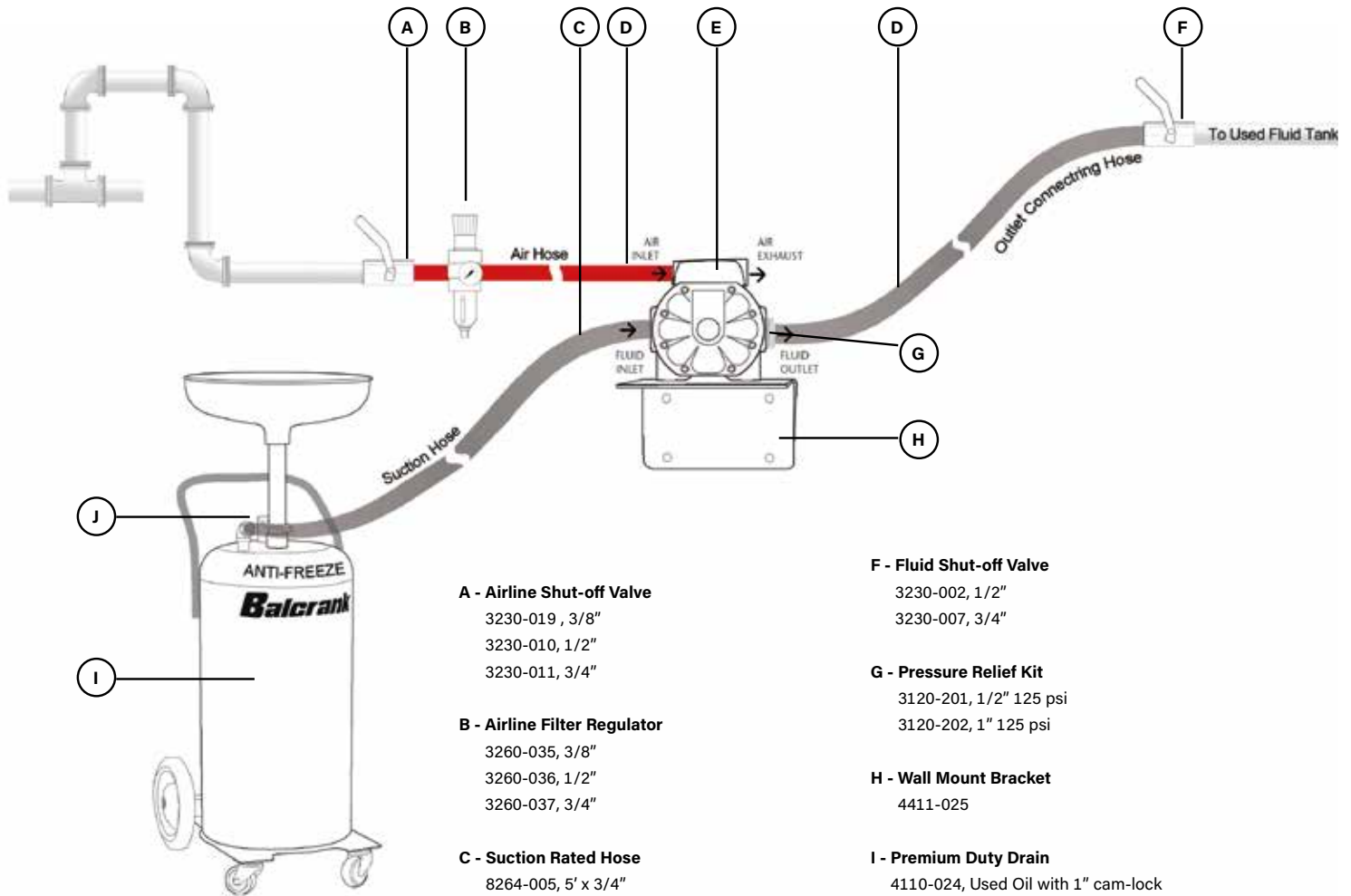
Hose Reel System



NOTE:

Installation detail is based on one location and is intended to clarify the design intent. Adjust hose reel installation as required to suit specific location(s). Number of reels shown on drawing and installation shall comply with Balcrank's reel installation requirements.

Used Fluid Evacuation Systems



A - Airline Shut-off Valve

3230-019, 3/8"
3230-010, 1/2"
3230-011, 3/4"

B - Airline Filter Regulator

3260-035, 3/8"
3260-036, 1/2"
3260-037, 3/4"

C - Suction Rated Hose

8264-005, 5' x 3/4"

D - Air Connection Hose

8134-005, 5' X 3/8"

E - CenterFlo

1120-024A, CF30 Aluminum AODD

F - Fluid Shut-off Valve

3230-002, 1/2"
3230-007, 3/4"

G - Pressure Relief Kit

3120-201, 1/2" 125 psi
3120-202, 1" 125 psi

H - Wall Mount Bracket

4411-025

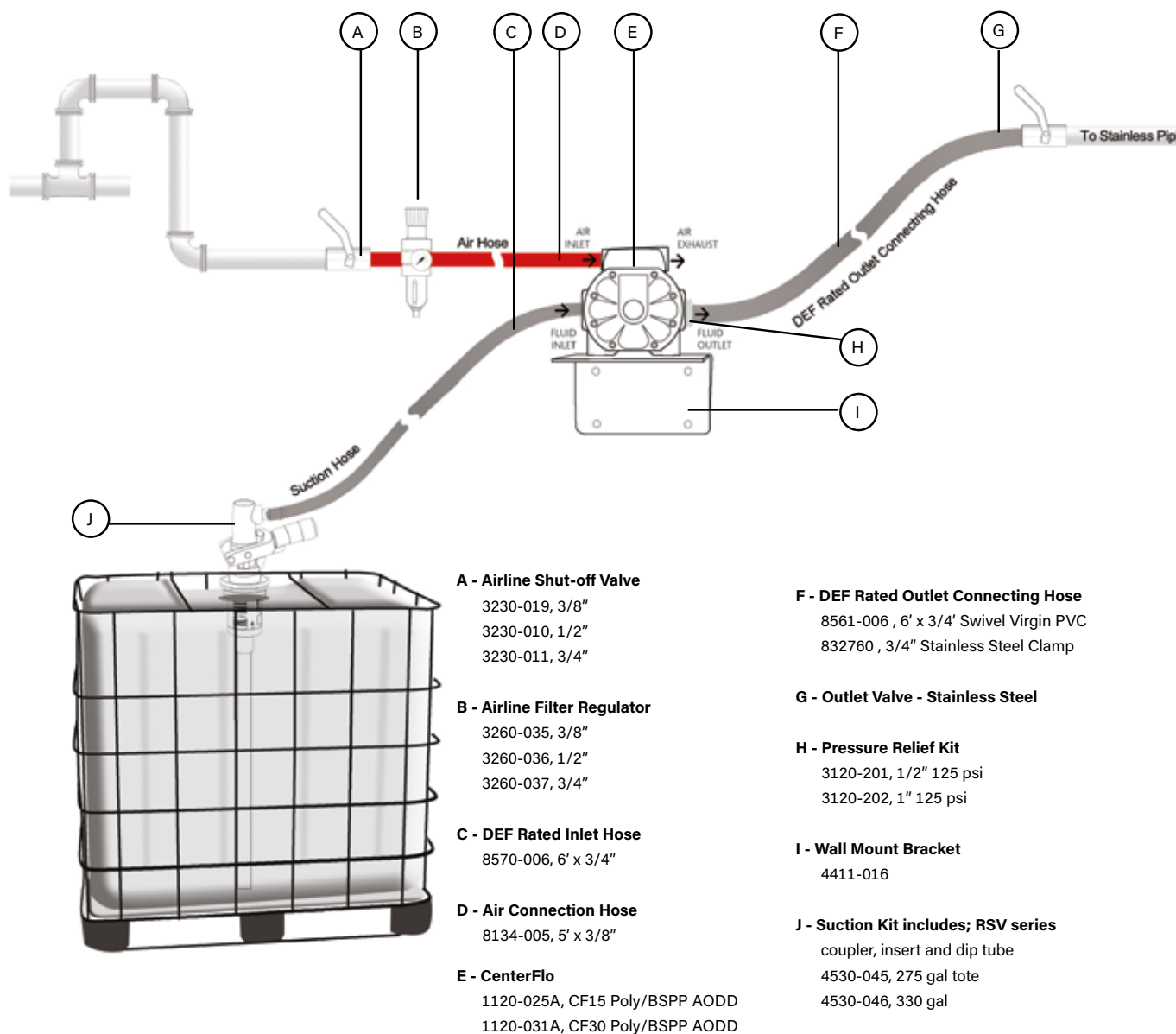
I - Premium Duty Drain

4110-024, Used Oil with 1" cam-lock
4110-025, Used Anti-freeze with 3/4" cam-lock

J - Connection Options

4140-023 Dry Break Nipple 3/4"
4140-051 Dry Break Nipple 1"
4140-054 Cam Lock Nipple 3/4"
4140-055 Cam Lock Nipple 1"

DEF Pumping Systems



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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

Place an Order

Tel.: (800) 747-5300 or (828) 645-4261

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

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

E-mail: orders@balcrank.com

Online: www.shopbalcrank.com

- Place orders on-line 24/7
- Four convenient ways to shop
- Search by product name or number
- Browse the site and add to cart
- Copy past orders to create a duplicate order
- Rapid order entry
- Pricing is live and specific to your account
- Build, print, save, and manage quotes for access at a later date
- Track shipped orders
- Easy management of personnel access and assigned permissions

Distributor