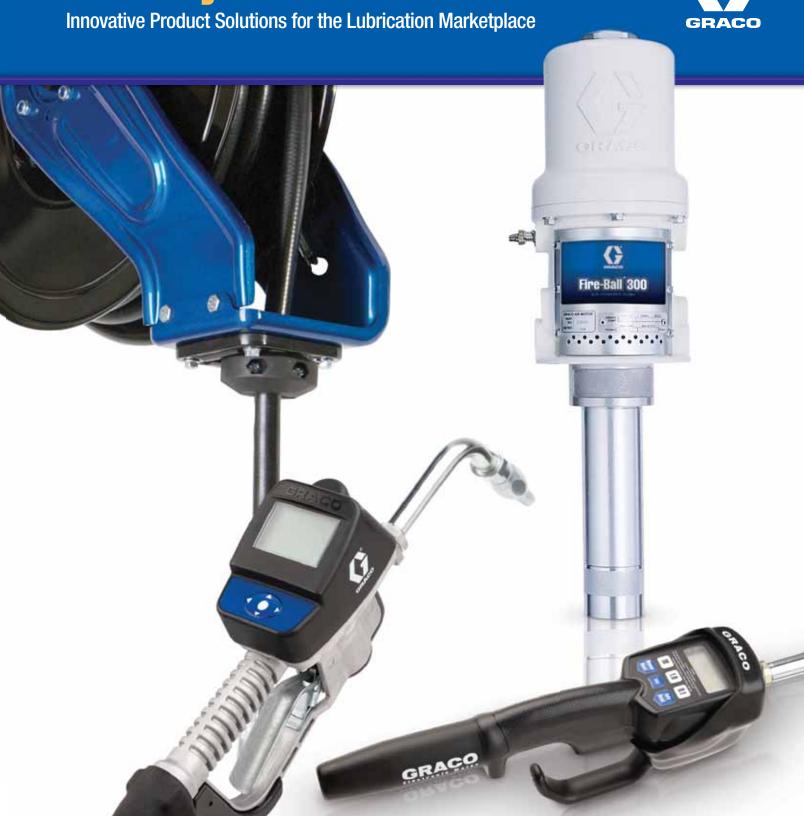
# PMG Buyer's Guide





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# **Table of Contents**

Oil Pump	s and Packages	
	Oil Pumps Quick Reference	4-5
	Fast-Ball®	6
	LD Series Pumps and Packages	7-10
	LD Series Pump Accessories	.11
	Mini Fire-Ball® 225, Fire-Ball 300, Fire-Ball 425 and Packages	2-18
	Fire-Ball® and Oil Pump Accessories	<del>)</del> -21
	NXT <sup>™</sup> High-Flo® and NXT Dura-Flo®	2-23
Grease P	umps and Packages	
	Grease Pumps Quick Reference	1-25
	LD Series Pumps, Packages and Accessories	3-27
	Mini Fire-Ball 225	. 28
	Fire-Ball 300	<del>)</del> -30
	Fire-Ball 425	1-33
	Grease Pump Packages and Accessories	1-39
	NXT Check-Mate®	. 40
Transfer		
	Air-Operated Double-Diaphragm Pumps	
	Fast-Flo® (Stainless Steel)	<u>2</u> -43
Electrica	Powered Oil and Fuel Pumps	
	Hurricane <sup>™</sup> Electric Dispense Systems	
	APEX <sup>™</sup> Electric Dispense Systems	
	GTP10 and GTP12 Fuel Transfer Pumps	. 47
Specialty	Pump Package Solutions	
	Diesel Exhaust Fluid (DEF) Dispense Systems	
	Lube Truck and Undercoating/Rust-Proofing Packages	
	Windshield Washer and Coolant Dispense Systems	. 52
Hydraulio	c Oil and Grease Pumps	
	Dyna-Star®, Power-Star™ and Viscount® II Pumps	3-54
Manually	Operated Oil and Grease Pumps and Packages	
	Oil and Grease Dispense	
	Windshield Wash and Coolant Transfer	. 56
Reels an	d Packages	
	LD, SD, XD, 700 and 750 Hose Reels and Accessories	7-70
Dispense	Consoles	
D.	Multi-Station Consoles and Oil Bar	. /1
Dispense	Meters and Control Valves	
	LD, SD, EM6, EM12 and In-Line Electronic Meters	
	Mechanical Meters	
	Accessories	
	SDV15, XDV20, Pro-Shot <sup>™</sup> and Accu-Shot <sup>™</sup> Control and Dispense Valves	J-8 I
Fluid Ma	nagement Systems	
	Horizon™82	
NA	Fluid Commander <sup>™</sup> 84	1-85
Manual (	Grease Guns	
Florid Dec	Grease Guns, Accessories and Fittings	5-88
riuid Ked	claim Packages	
Hoose 5	Oil King <sup>™</sup> , Coolant King <sup>™</sup> , Oil Ace <sup>™</sup> and Accessories	
	ttings and Accessories	
-	and Warranty Information	
IIIUUX		CUI

# **Oil Pumps Quick Reference**Technical Specifications and Selection Chart

O	Annual Usage	Line Length <sup>‡</sup>	Dispense Points	Fluids	Air Inlet	Fluid Inlet	Fluid Outlet
	Fast-Ball, 1:	1			T	T	
	5,000 gal (19,000 l)	< 100 ft (30 m))	1 (no reels)	Motor Oil, ATF, Hydraulic Fluid	1/4 in npt(f)	1-1/2 in npt(f)	3/4 in npt(f)
E							
<u>G</u>	LD Series, 3	:1					
4	20,000 gal (75,000 l)	300 ft (91 m)	1 to 2	Motor Oil, Gear Oil, ATF, Hydraulic Fluid	1/4 in npt(f)	1 in npt(f)	1/2 in npt(f)
G	LD Series, 5	:1					
	20,000 gal (75,000 l)	300 ft (91 m)	1 to 2	Motor Oil, Gear Oil, ATF, Hydraulic Fluid	1/4 in npt(f)	1 in npt(f)	1/2 in npt(f)
					I	I	
86	Mini Fire-Ba	all 225, 3:1					
G transfer	30,000 gal (113,500 l)	250 ft (76 m)	1 to 2	Motor Oil, Gear Oil, ATF, Hydraulic Fluid	3/8 in npt(f)	1-1/2 in npt(f)	1/2 in npt(f)
163	Fire-Ball 30	0, 5:1			Г	Г	
Q September	35,000 gal (132,000 l)	500 ft (152 m)	1 to 3	Motor Oil, Gear Oil, ATF, Hydraulic Fluid	3/8 in npt(f)	1-1/2 in npt(f)	1/2 in npt(f)
0							
	Fire-Ball 42	25, 3:1			T	T	
	>35,000 gal (132,000 l)	Up to 250 ft (76 m)	3 to 4	Motor Oil, Gear Oil, ATF, Hydraulic Fluid	1/4 in npt(f)	1-1/2 in npt(f)	3/4 in npt(f)
0							
	Fire-Ball 42	5, 6:1					
Train (	>35,000 gal (132,000 l)	Up to 500 ft (152 m)	3 to 4	Motor Oil, Gear Oil, ATF, Hydraulic Fluid	1/4 in npt(f)	1-1/2 in npt(f)	3/4 in npt(f)
0							
100	Fire-Ball 42	5, 10:1					
	>35,000 gal (132,000 l)	Up to 750 ft (228.6 m)	3 to 4	Motor Oil, Gear Oil, ATF, Hydraulic Fluid	1/4 in npt(f)	1-1/2 in npt(f)	3/4 in npt(f)

Motor Oil, Gear Oil, ATF, Hydraulic Fluid

# **Oil Pumps Quick Reference**

# **Technical Specifications and Selection Chart**

>35,000 gal (132,000 l) Up to 1000 ft

(305 m)



Annual Usage	Line Length <sup>‡</sup>	Dispense Points	Pump Ratio(s)	Output Per Cycle	Fluids
Dura-Flo, 6:	1				
>35,000 gal (132,000 l)	Up to 500 ft (152 m)	2 to 4	6:1	1000 cc	Motor Oil, Gear Oil, ATF, Hydraulic Fluid
Dura-Flo, 10	D:1				
>35,000 gal (132,000 l)	Up to 750 ft (228.6 m)	2 to 4	10:1	1000 cc	Motor Oil, Gear Oil, ATF, Hydraulic Fluid
Dura-Flo, 12	2:1 Carbon St	teel or Dura-F	lo, 12:1 Stai	nless Steel	
>35,000 gal (132,000 l)	Up to 1000 ft (305 m)	2 to 4	12:1	580 cc	Motor Oil, Gear Oil, ATF, Hydraulic Fluid
Dura-Flo, 23	Dura-Flo, 23:1				
	1	I		I	

23:1

2 to 4

580 сс



Annual Usage	Line Length	Dispense Points	Pump Ratio(s)	Output Per Cycle	Fluids
High-Flo, 3.	5:1				
>35,000 gal (132,000 l)	Up to 250 ft (76 m)	4 to 5	3.5:1	2000 cc	Motor Oil, Gear Oil, ATF, Hydraulic Fluid
High-Flo, 4.	5:1				
>35,000 gal (132,000 l)	Up to 450 ft (137.1 m)	4 to 5	4.5:1	1500 cc	Motor Oil, Gear Oil, ATF, Hydraulic Fluid
High-Flo, 6:	High-Flo, 6:1				
>35,000 gal (132,000 l)	Up to 500 ft (152.5 m)	4 to 5	6:1	2000 cc	Motor Oil, Gear Oil, ATF, Hydraulic Fluid

# Fast-Ball® 1:1

# Air-Powered Oil Pumps and Packages

# **Features and Benefits**

- In-line design with fewer parts for less pump wear
- · Differential air motor ensures smooth pumping
- Double-acting pump provides reliable fluid flow

# **Typical Applications**

- Lubricant transfer
- · Automotive dealerships
- Heavy-duty dealerships
- Fast lube centers
- · Fleet service facilities
- Service shops
- In-plant
- · Lube trucks
- Mining

# **Typical Fluids Handled**

• Petroleum- and synthetic-based oils

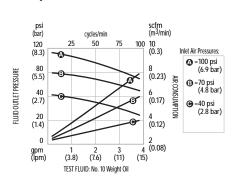
# Technical Specifications

•	
Cycles per Gallon	
Fluid Flow gal/min @ 80 cpm	5 (19 liters)
Maximum Fluid Pressure	
Air Motor Effective Diameter	1.4 in (35.6 mm)
Air Operating Range	
Approx. Air Use and Flow @ 100 psi and 80 cpm	5 scfm
Wetted Materials	
Air Inlet Port Size	
Fluid Inlet Port Size	1-1/2 in npt(f)
Fluid Outlet Port Size	
Line Length‡	Up to 100 ft (30.5 m)
Dispense Points	
Annual Usage	Up to 5,000 gal (19,000 l)
Typical Applications	Continuous duty, maintenance facility dispensing motor oil,
	automatic transmission fluid, hydraulic fluid

# **Ordering Information**

Package	Non-Metered Dispense	U.S./Metric Metered Dispense	Bung-Mounted	Bung-Mounted	Universal
Container Size		55 gal (200 l)		275 gal (1040 l)	Universal
Package No.	222602	239702	222103	222104	222051
Pump		222103		222104	222051
Dispense Kit	218115	239703	_	_	_
Regulator Assembly	218316		_	_	_
Hose	109125	_	_	_	_
Hose Length	6 ft (1.8 m)	_	_	_	_
Bung Adapter	2223		308		_
Instruction Manual	307637			307906	

# **Pump Performance**



239702		2602
222051	222103	222104

<sup>‡</sup> Consult your local authorized Graco representative for line or pipe sizing

# **LD Series 3:1 Pump**

# Air-Powered Oil Pumps and Packages

## **Features and Benefits**

- Built-in thermal relief protects your equipment from thermal expansion
- Three inch air motor provides more power to create better flow
- Cup and plate design eliminates the need for O-rings that wear out faster

# **Typical Applications**

- Lubricant transfer
- Automotive dealerships
- Fast lube centers
- Service shops
- Lube trucks

# **Typical Fluids Handled**

• Petroleum- and synthetic-based oils

# Cycles per minute SS 116 174 232 A0 (6.5 bar) B (6.5 bar) Cycles per minute A0 (1.1) (6.5 bar) Cycles per minute A0 (1.1) (6.5 bar) (6.5 bar) Cycles per minute A0 (1.1) (6.5 bar) (6.5 bar) Cycles per minute A0 (1.1) (6.5 bar) (6.5 bar) Cycles per minute A1 (2.2) (6.5 bar) (6.5 bar) Cycles per minute A1 (6.5 bar) Cycles per minute A1 (1.1) Cycles per minute A1 (1.1) Cycles per minute A2 (1.1) Cycles per minute A3 (1.1) Cycles per minute A4 (1.1) Cycles per minute A2 (1.1) Cycles per minute A3 (1.1) Cycles per minute A4 (1.1) Cycles per minute A5 (1.1) Cycles per minute A5

**Pump Performance** 



LD Series 3:1 Pump

# **Technical Specifications**

Maximum Fluid Working Pressure	450 psi (31 bar, 3.10MPa)
Fluid Pressure Ratio	
Suction Lift (feet of oil)	10
Air Operation Range	20 to 150 psi (1.37 to 10.3 bar)
Recommended Air Pressure (for optimum life)	<125 psi (8.6 bar, 0.86 MPa)
Max Recommended Pump Speed	120 cycles per minute
Cycles Per Gallon/pound (I/kg)	29 cycles per gallon (7 cycles per liter)
Recommended Pump Speed (for maximum life)	75 cycles per minute or lower
Wetted PartsZinc plated carbon, steel, aluminum,	nitrile, polyurethane, nickel plated aluminum
Sound Pressure Level	
Sound Power Level	
Approximate Wieght	7 pounds (3.2 kg)
Air Inlet	1/4 in
Fluid Inlet	1 in
Fluid Outlet	
Free Flow	7.8gpm
Annual Usage	Up to 20,000 gal (76,000 l)

LD Series 3:1 Pumps		
24G576	3:1 Universal Oil Pump with Bung Adapter (24F918)	
24G579	3:1 Oil Pump with Cut to length Down Tube, and Bung Adapter (24F918)	
24G582	3:1 Oil Pump with 55 gallon (200 liter) Down Tube and Bung Adapter (24F918)	
24G585	3:1 Oil Pump with 275 gal (1040 liter) Down Tube and Bung Adapter (24F918)	

# **LD Series 5:1 Pump**

# Air-Powered Oil Pumps and Packages

## **Features and Benefits**

- Built-in thermal relief protects your equipment from thermal expansion
- Three inch air motor provides more power to create better flow
- Cup and plate design eliminates the need for O-rings that wear out faster

# **Typical Applications**

- Lubricant transfer
- Automotive dealerships
- Fast lube centers
- Service shops
- Lube trucks

# **Typical Fluids Handled**

• Petroleum- and synthetic-based oils

# 5:1 Performance Curve Tested with ISO 46 Hyd Oil 7:4 Cycles per minute 222 (6.9 bar) (6.9 bar) (7.1) (8.9 bar) (1.1) (8.9 bar) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1) (1.1)

**Pump Performance** 



LD Series 5:1 Pump

# **Technical Specifications**

•	
Maximum Fluid Working Pressure	750 psi (51.7 bar, 5.17MPa)
Fluid Pressure Ratio	5:1
Suction Lift (feet of oil)	10
Air Operation Range	20 to 150 psi (1.37 to 10.3 bar)
Recommended Air Pressure (for optimum life)	<125 psi (8.6 bar, 0.86 MPa)
Max Recommended Pump Speed	
Cycles Per Gallon/pound (I/kg)	37 cycles per gallon (10 cycles per liter)
Recommended Pump Speed (for maximum life)	75 cycles per minute or lower
Wetted PartsZinc plated carbon, steel, aluminu	um, nitrile, polyurethane, nickel plated aluminum
Sound Pressure Level	
Sound Power Level	82 dB(a)
Approximate Wieght	7.7 pounds (3.5 kg)
Air Inlet	1/4 in
Fluid Inlet	1 in
Fluid Outlet	1/2 in
Free Flow	6.7gpm
Annual Usage	

LD Series 5:1 Pumps		
24G588	5:1 Universal Oil Pump with Bung Adapter (24F918)	
24G591	5:1 Oil Pump with Cut to Length Down Tube and Bung Adapter (24F918)	
24G594	5:1 Oil Pump with 55gal (200 liter) Down Tube and Bung Adapter (24F918)	
24G597	5:1 Oil Pump with 275 gal (1040 liter) Down Tube and Bung Adapter (24F918)	

# **LD Series Oil Pump Packages**

# Air-Powered Oil Pumps and Packages

3:1 Tank P	ackages with LD Reel
24J776	3:1 LD Tank Package. Includes: 3:1 Universal oil pump (24G576), LDM5 Manual meter (256215), 1/2" x 35' LD oil hose reel (24H662), 1/2" Oil inlet kit (24C538), LD swivel mount bracket (24C772)
3:1 Tank P	ackages with SD Reel
24J733	3:1 Tank Package - Manual. Includes: 3:1 Universal Oil pump (24G576), LDM5 Manual meter with rigid extension (256215), SD oil reel, 1/2" x 50' (HPM65B), SD Reel Inlet Kit (218549)
24J734	3:1 Tank Package - Preset. Includes: 3:1 Universal Oil pump (24G576), LDP5 Preset meter with rigid extension (256216), SD oil reel, 1/2" x 50' (HPM65B), SD Reel Inlet kit (218549)
24K836	3:1 Tank Package - Manual Flex: 3:1 Universal Oil pump (24G576), LDM5 Manual meter with flex extension (258693), SD oil reel, 1/2" x 50' (HPM65B), SD Reel Inlet Kit (218549)
3:1 Deluxe	Tank Packages with SD Reel
24K777	3:1 Deluxe Tank Package - Preset Rigid: 3:1 Universal Oil Pump (24G576), LDP5 Preset meter with rigid extension (256216), SD oil reel, 1/2" x 50' (HPM65B), 6ft Air & Fluid hoses with fittings (24J495), 1/4" x 3/8" Mini air regulator with valve (24H420)
24K797	3:1 Deluxe Tank Package - Manual Rigid: 3:1 Universal Oil Pump (24G576), LDM5 Manual meter with rigid extension (256215), SD oil reel, 1/2" x 50' (HPM65B), 6 ft Air & Fluid hoses with fittings (24J495), 1/4" x 3/8" Mini air regulator with valve (24H420)
24K799	3:1 Deluxe Tank Package - Manual Flex: 3:1 Universal Oil Pump (24G576), LDM5 Manual meter with flex extension (258693), SD oil reel, 1/2" x 50' (HPM65B), 6 ft Air & Fluid hoses with fittings (24J495), 1/4" x 3/8" Mini air regulator with valve (24H420)
24K832	3:1 Deluxe Tank Package - Manual Flex: 3:1 Universal Oil Pump (24G576), LDM5 Manual meter with flex extension (258693), SD oil reel, 1/2" x 35' (HPM33B), 6 ft Air & Fluid hoses with fittings (24J495), 1/4" x 3/8" Mini air regulator with valve (24H420)
24K834	3:1 Deluxe Tank Package - Manual Rigid: 3:1 Universal Oil Pump (24G576), LDM5 Manual meter with rigid extension (256215), SD oil reel, 1/2" x 35' (HPM33B), 6 ft Air & Fluid hoses with fittings (24J495), 1/4" x 3/8" Mini air regulator with valve (24H420)
3:1 Tote M	ount Packages with SD Reel
24K838	3:1 Oil Tote Mount with SD Reel -Preset Rigid. Includes: 3:1 Oil pump with 275 gal (1040 liter) steel down tube (24G585), LDP5 Preset meter with rigid extension (256216), SD oil reel, 1/2"x50' (HPM65B), 6 ft Air & Fluid hoses with fittings (24J495), Pump tote mount bracket (24F930), SD reel bracket for tote mount, Meter tray (24F914)
24K840	3:1 Oil Tote Mount with SD Reel -Manual Rigid. Includes: 3:1 Oil pump with 275 gal (1040 liter) steel down tube (24G585), LDM5 Manual meter with rigid extension (256215), SD oil reel, 1/2"x50" (HPM65B), 6ft Air & Fluid hoses with fittings (24J495), Pump tote mount bracket (24F930), SD reel bracket for tote mount, Meter tray (24F914)
24K842	3:1 Oil Tote Mount with SD Reel -Manual Flex. Includes: 3:1 Oil pump with 275 gal (1040 liter) steel down tube (24G585), LDM5 Manual meter with flex extension (258693), SD oil reel, 1/2" x 50' (HPM65B), 6 ft Air & Fluid hoses with fittings (24J495), Pump tote mount bracket (24F930), SD reel bracket for tote mount, Meter tray (24F914)
3:1 Tote M	ount Packages with LD Reel
24H702	3:1 Oil Tote Mount Package - Top. Includes: 3:1 275 gal (1040L) Oil pump (24G585), 6 ft Oil hose kit (24J495), Top mount tote bracket (24F930), LD Reel bracket kit (24F932), Meter tray (24F914), LDM5 Rigid Meter (256215), 1/2" x 35' LD oil hose reel (24H662)
24H704	3:1 Oil Tote Mount Package - Top. Includes: 3:1 275 gal (1040L) Oil pump (24G585), 6 ft Oil hose kit (24J495), Top mount tote bracket (24F930), LD Reel bracket kit (24F932), Meter tray (24F914), LDP5 Rigid Meter (256216), 1/2" x 35' LD oil hose reel (24H662)

24H726	3:1 Oil Tote Mount Package - Drain. Includes: 3:1 Universal oil pump (24G576), 6ft Oil hose kit (24J495), 6 ft Suction hose kit (24H669), Tote mount pump bracket (24F920), Top mount tote bracket (24F931), LD Reel bracket kit (24F932), Meter tray (24F914), LDM5 Rigid meter (256215), LD oil hose reel, 1/2" x 35' (24H662)	
24H728	3:1 Oil Tote Mount Package - Drain. Includes: 3:1 Universal oil pump (24G576), 6ft Oil hose kit (24J495), 6ft Suction hose kit (24H669), Tote mount pump bracket (24F920), Top mount tote bracket (24F931), LD Reel bracket kit (24F932), Meter tray (24F914), LDP5 Rigid meter (256216), LD oil hose reel, 1/2" x 35' (24H662)	
3:1 Wall M	ount Packages	
24H689	3:1 Oil Wall Mount Package - Drum. Includes: 3:1 Universal oil pump (24G576), 6 ft LD oil pump suction hose kit for 55 gal drum (24F935), Wall mount bracket (24F910)	
24H695	3:1 Oil Wall Mount Package - Tote. Includes: 3:1 Universal oil pump (24G576), 6 ft LD Oil pump section hose kit for 275 gal tote (24H666), Oil hose kit (24H859), Wall mount bracket (24F910)	
3:1 Mobile	Packages	
24H751	3:1 Oil Mobile Package with LD Reel. Includes: 3:1 200L Oil pump (24G582), 6ft Oil hose kit (24J495), LDM5 Rigid meter (256215), 55 gal Cart (24F915), LD oil hose reel, 1/2" x 35' (24H662)	
24H753	3:1 Oil Mobile Package with LD Reel. Includes: 3:1 200L Oil pump (24G582), 6ft Oil hose kit (24J495), LDP5 Rigid meter (256216), 55 gal Cart (24F915), LD oil hose reel, 1/2" x 35' (24H662)	
24H775	3:1 Oil Mobile Package. Includes: 3:1 200 L Oil pump (24G582), Fluid hose kit, 5 M (24H865), LDM5 Rigid meter (256215), 55 gal Cart (24F915)	
24H777	3:1 Oil Mobile Package. Includes: 3:1 200 L Oil pump (24G582), Fluid hose kit, 5 M (24H865), LDP5 Rigid meter (256216), 55 gal Cart (24F915)	
3:1 Station	3:1 Stationary Packages	
24H800	3:1 Oil Stationary Package. Includes: 3:1 Multilength oil pump (24G579), 6ft Oil hose kit (24H859), LDM5 Rigid meter (256215)	
24H802	3:1 Oil Stationary Package. Includes: 3:1 Multi-length oil pump (24G579), 6 ft Oil hose kit (24H859), LDP5 Rigid meter (256216)	



# **5:1 LD Series Pump Packages**

# Air-Powered Oil Pumps and Packages

5:1 Tank P	5:1 Tank Packages with LD Reel		
O.I Idilk I	5:1 LD Tank Package. Includes: 5:1 Universal oil pump (24G588),		
24J777	LDM5 Manual meter (256215), 1/2" x 35' LD oil hose reel (24H662), 1/2" Oil inlet kit (24C538), LD swivel mount bracket (24C772)		
5:1 Tank P	ackages with SD Reel		
24J735	5:1 Tank Package - Manual. Includes: 5:1 Multi-length oil pump (24G588), LDM5 Manual meter with rigid extension (256215), SD oil reel, 1/2" x 50' (HPM65B), SD Reel Inlet kit (218549)		
24J736	5:1 Tank Package - Preset. Includes: 5:1 Multi-length oil pump (24G588), LDP5 Preset meter with rigid extension (256216), SD reel, 1/2" x 50' (HPM65B), SD Reel Inlet Kit (218549)		
24K837	5:1 Tank Package - Manual Flex: 5:1 Universal Oil pump (24G588), LDM5 Manual meter with flex extension (258693), SD oil reel, 1/2" x 50' (HPM65B), SD Reel Inlet Kit (218549)		
5:1 Deluxe	Tank Packages with SD Reel		
24K796	5:1 Deluxe Tank Package - Preset Rigid: 5:1 Universal Oil Pump (24G588), LDP5 Preset meter with rigid extension (256216), SD oil reel, 1/2" x 50' (HPM65B), 6 ft Air & Fluid hoses with fittings (24J495), 1/4" x 3/8" Mini air regulator with valve (24H420)		
24K798	5:1 Deluxe Tank Package - Manual Rigid: 5:1 Universal Oil Pump (24G588), LDM5 Manual meter with rigid extension (256215), SD oil reel, 1/2" x 50' (HPM65B), 6 ft Air & Fluid hoses with fittings (24J495), 1/4" x 3/8" Mini air regulator with valve (24H420)		
24K800	5:1 Deluxe Tank Package - Manual Flex: 5:1 Universal Oil Pump (24G588), LDM5 Manual meter with flex extension (258693), SD oil reel, 1/2" x 50' (HPM65B), 6 ft Air & Fluid hoses with fittings (24J495), 1/4" x 3/8" Mini air regulator with valve (24H420)		
24K833	5:1 Deluxe Tank Package - Manual Flex: 5:1 Universal Oil Pump (24G588), LDM5 Manual meter with flex extension (258693), SD oil reel, 1/2" x 35' (HPM33B), 6 ft Air & Fluid hoses with fittings (24J495), 1/4" x 3/8" Mini air regulator with valve (24H420)		
24K835	5:1 Deluxe Tank Package - Manual Rigid: 5:1 Universal Oil Pump (24G588), LDM5 Manual meter with rigid extension (256215), SD oil reel, 1/2" x 35' (HPM33B), 6 ft Air & Fluid hoses with fittings (24J495), 1/4" x 3/8" Mini air regulator with valve (24H420)		
5:1 Tote M	ount Packages with SD Reel		
24K839	5:1 Oil Tote Mount with SD Reel -Preset Rigid. Includes: 5:1 Oil pump with 275 gal (1040 liter) steel down tube (24G597), LDP5 Preset meter with rigid extension (256216), SD oil reel, 1/2" x 50' (HPM65B), 6 ft Air & Fluid hoses with fittings (24J495), Pump tote mount bracket (24F930), SD reel bracket for tote mount, Meter tray (24F914)		
24K841	5:1 Oil Tote Mount with SD Reel -Preset Rigid. Includes: 5:1 Oil pump with 275 gal (1040 liter) steel down tube (24G597), LDM5 Manual meter with rigid extension (256215), SD oil reel, 1/2" x 50' (HPM65B), 6 ft Air & Fluid hoses with fittings (24J495), Pump tote mount bracket (24F930), SD reel bracket for tote mount, Meter tray (24F914)		
24K843	5:1 Oil Tote Mount with SD Reel -Preset Rigid. Includes: 5:1 Oil pump with 275 gal (1040 liter) steel down tube (24G597), LDM5 Manual meter with flex extension (258693), SD oil reel, 1/2"x50' (HPM65B), 6 ft Air & Fluid hoses with fittings (24J495), Pump tote mount bracket (24F930), SD reel bracket for tote mount, Meter tray (24F914)		
5:1 Tote M	ount Packages with LD Reel		
24H868	5:1 Oil Tote Mount Package - Top. Includes: 5:1 1040L Oil pump (24G597), 6 ft Oil hose kit (24J495), Tote top mount bracket (24F930), LD Reel bracket (24F932), Meter tray (24F914), LDM5 rigid meter (256215), 1/2" x 35' LD oil hose reel (24H662)		
24H870	5:1 Oil Tote Mount Package - Top. Includes: 5:1 1040L Oil pump (24G597), 6 ft Oil hose kit (24J495), Tote top mount bracket (24F930), LD Reel bracket (24F932), Meter tray (24F914), LDP5 Rigid meter (256216), 1/2" x 35' LD oil hose reel (24H662)		

24H892	5:1 Oil Tote Mount Package - Drain. Includes: 5:1 Oil universal pump (24G588), 6 ft Oil hose kit (24J495), Suction hose kit tote (24H669), Tote mount pump bracket (24F920), Tote top mount bracket (24F931), LD reel bracket kit (24F932), Meter tray (24F914), LDM5 Rigid meter (256215), LD oil hose reel, 1/2" x 35' (24H662)	
24H894	5:1 Oil Tote Mount Package - Drain. Includes: 5:1 Oil universal pump (24G588), 6 ft Oil hose kit (24J495), Suction hose kit tote (24H669), Tote mount pump bracket (24F920), Tote top mount bracket (24F931), LD reel bracket kit (24F932), Meter tray (23F914), LDP5 Rigid meter (256216), LD oil hose reel, 1/2" x 35' (24H662)	
5:1 Wall M	ount Packages	
24H836	5:1 Oil Wall Mount Package - Drum. Includes: 5:1 Oil universal pump (24G588), 6 ft LD oil pump suction hose kit for 55gal drum(24F935), Wall mount bracket (24F910)	
24H842	5:1 Oil Wall Mount Package - Tote. Includes: 5:1 Oil universal pump (24G588), 6ft Oil hose kit (24H859), 6ft LD Oil pump section hose kit for 275gal tote (24H666), Wall mount bracket (24F910)	
5:1 Mobile	Packages	
24H916	5:1 Oil Mobile Package with LD Reel. Includes: 5:1 55 gal (200 L) Oil pump (24G594), 6 ft Oil hose kit (24J495), LDM5 Rigid meter (256215), 55 gal Cart (24F915), LD oil hose reel, 1/2" x 35' (24H662)	
24H918	5:1 Oil Mobile Package with LD Reel. Includes: 5:1 55 gal (200 L) Oil pump (24G594), 6ft Oil hose kit (24J495), LDP5 Rigid meter (256216), 55 gal Cart (24F915), LD oil hose reel, 1/2" x 35' (24H662)	
24H941	5:1 Oil Mobile Package. Includes: 5:1 55 gal (200 L) oil pump (24G594), Fluid hose kit, 5M (24H865), LDM5 Rigid meter (256215), 55 gal Cart (24F915)	
24H943	5:1 Oil Mobile Package. Includes: 5:1 55gal (200L) oil pump (24G594), Fluid hose kit, 5M (24H865), LDP5 Rigid meter (256216), 55 gal Cart (24F915)	
5:1 Station	5:1 Stationary Packages	
24H965	5:1 Oil Stationary Package. Includes: 5:1 Oil multi-length pump (24G591), Fluid oil hose kit (24H859), LDM5 Rigid meter (256215)	
24H967	5:1 Oil Stationary Package. Includes: 5:1 Oil multi-length pump (24G591), Fluid oil hose kit (24H859), LDP5 Rigid meter (256216)	



# **LD Series Oil Pump Accessories**

# Air-Powered Oil Pumps and Packages

	•
Down Tub	es
16F878	Universal cut to length pvc down tube for LD 3:1 and 5:1 pumps
16F886	Drum length steel down tube for LD 3:1 and 5:1 pumps
16F885	Tote length steel down tube for LD 3:1 and 5:1 pumps
Drum Cov	ers
24F904	Cover for 35 lb (16 kg) pails
24F905	Cover for open-head 120 lb drums
24F906	Cover for open-head 400 lb drums
Suction K	its
24F935	LD Oil Pump Suction hose kit for 55 gal (200 L) drum. Includes: 55 gal (200 L) drum length metal down tube, bung adapter, foot valve, and 6 ft of 1" suction hose
24H666	LD Oil Pump Suction hose kit for 275 gal (1040 L) drum. Includes: 275 gal (1040 L) tote length metal down tube, bung adapter, foot valve, and 6 ft of 1" suction hose
24H669	LD Oil Pump Suction hose kit and adapter for mounting pump to the side of IBC tote and dispensing from drain. Includes 1" x 3' Suction hose, 1" Elbow fitting, and union fitting (160022)
Hose & Fi	tting Kits
24H865	15 ft LD pump fluid hose kit. Includes 1/2" x 15 ft fluid hose, 3/8" x 6 ft Air hose, Swivel (157705), and union fitting (156684)
24H859	6ft LD pump fluid hose kit. Includes 1/2" x 6ft fluid hose, 3/8" x 6 ft Air hose, Swivel (157705), and union fitting (156684)
Air Regula	ators
24H420	Mini air pressure regulator with valve, 1/4 inch NPT x 3/8 inch NPT
Tote Mour	nt Accessories
24F914	Meter drip tray for mounting to the side of IBC tote
24F932	LD Reel bracket for mounting reel to IBC top mount tote bracket (24F930 & 24F920)
24F920	Tote mounting bracket to mount reel on top of IBC tote, (pump mounting bracket is not included)
24F930	Top of tote mounting bracket. For mounting LD pump in top of IBC tote
24F931	Bracket for mounting LD pump on the side of IBC tote
24K285	Bracket for mounting SD hose reel to IBC tote mounting bracket 24F930 (24F930 bracket sold separately)
Mounting	Hardware
24F910	LD pump wall mounting bracket. For use with LD 3:1 & 5:1 pumps
24F918	Bung adapter for LD 3:1 & 5:1 pumps
Carts	
24F915	Drum cart with pneumatic wheels for 400 lb drums, includes chain for securing drum to cart
24H422	Drum cart with pneumatic wheels for 120 lb drums, includes chain for securing drum to cart



# Mini Fire-Ball® 225 3:1

# Air-Powered Oil Pumps and Packages

#### **Features and Benefits**

- In-line design with fewer parts for less pump wear
- · Differential air motor ensures smooth pumping
- Double-acting pump provides reliable fluid flow

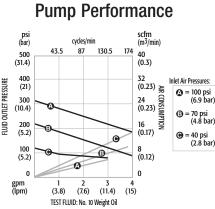
# **Typical Applications**

- Lubricant transfer
- Automotive dealerships
- · Heavy-duty dealerships
- · Fast lube centers
- · Fleet service facilities
- Service shops
- In-plant
- Lube trucks
- Mining

# **Typical Fluids Handled**

• Petroleum- and synthetic-based oils

#### psi (bar) 130.5 500 (31.4) 40 (0.3) 400 (21) Inlet Air Pressures: 24 (0.23) AR CONSUMPTION 16 (0.17) FLUID OUTLET PRESSURE 300 (10.4) (4.8 bar) 16 (0.17) (2.8 bar) (5.2) (0.12)



#### 246775

# **Technical Specifications**

Cycles per Gallon	
Fluid Flow gal/min @ 80 cpm	
Maximum Fluid Pressure	540 psi (37 bar)
Air Motor Effective Diameter	2.25 in (57.2 mm)
Air Operating Range	
Approx. Air Use and Flow @ 100 psi and 80 cpm	
Wetted Materials	Steel, Buna-N, Polyurethane, Aluminum, Rulon®
Air Inlet Port Size	
Fluid Inlet Port Size	1-1/2 in npt(f)
Fluid Outlet Port Size	
Line Length‡	Up to 250 ft (76.2 m)
Dispense Points	1 to 2
Annual Usage	Up to 35,500 gal (132,000 l)
Typical Applications	. Continuous duty, maintenance facility dispensing motor oil, gear oil, automatic transmission fluid, hydraulic fluid

Mini Fire-Ball 225 3:1 Pump	
248097	3:1 Universal Oil Pump with suction tube (15C502) and bung adapter (222308)
246775	3:1 Universal Oil Pump

# Fire-Ball® 300 5:1

# Air-Powered Oil Pumps and Packages

#### **Features and Benefits**

- In-line design with fewer parts for less pump wear
- Differential air motor ensures smooth pumping
- Double-acting pump provides reliable fluid flow

# **Typical Applications**

- Lubricant transfer
- Automotive dealerships
- Heavy-duty dealerships
- · Fast lube centers
- Fleet service facilities
- Service shops
- In-plant
- Lube trucks
- Mining

# 8 (0.23) FLUID OUTLET PRESSURE 150 (10.4) 75 (5.2) 4 (0.12)

**Pump Performance** 

# psi (bar) 450 (31.4) cycles/min ●=40 psi (2.8 bar) 4 (0.08) (15) 0 (7.6) (3.8) TEST FLUID: No. 10 Weight Oil

# **Typical Fluids Handled**

• Petroleum- and synthetic-based oils

# **Technical Specifications**

Cycles per Gallon	
Maximum Fluid Pressure	900 psi (62 bar)
Air Motor Effective Diameter	
Air Operating Range	
Approx. Air Use and Flow @ 100 psi and 80 cpm	
Wetted Materials	Steel, Polyurethane, Aluminum, Buna-N
Air Inlet Port Size	
	1-1/2 npt(f)
Line Length‡	Up to 500 ft (152.5 m)
Dispense Points	1 to 3
Annual Usage	
Typical Applications	Continuous duty, maintenance facility dispensing motor oil,
	near oil, automatic transmission fluid, hydraulic fluid

Fire-Ball 300 5:1 Pump	
203876	5:1 Universal Oil Pump
203872	5:1 Oil Pump, 16 gal (120 lb) drum size, for cover mount
203857	5:1 Oil Pump, 55 gal (400 lb) drum size, for cover mount
204254	5:1 Oil Pump, 55 gal (400 lb) drum size, bung mount
222087	5:1 Oil Pump, 275 gal (1040 lb) tank size, bung mount



203876

# Fire-Ball® 425 3:1

# Air-Powered Oil Pumps and Packages

#### **Features and Benefits**

- In-line design with fewer parts for less pump wear
- · Differential air motor ensures smooth pumping
- Double-acting pump provides reliable fluid flow

# **Typical Applications**

- Lubricant transfer
- Automotive dealerships
- Heavy-duty dealerships
- Fast lube centers
- Fleet service facilities
- Service shops
- In-plant
- Lube trucks
- Mining

# **Typical Fluids Handled**

• Petroleum- and synthetic-based oils

#### 

TEST FLUID: No. 10 Weight Oil

**Pump Performance** 



237526

# **Technical Specifications**

Cycles per Gallon	
Fluid Flow gal/min @ 80 cpm	
Maximum Fluid Pressure	540 psi (37 bar)
Air Motor Effective Diameter	4.25 in (107.9 mm)
Air Operating Range	
Approx. Air Use and Flow @ 100 psi and 80 cpm	58 scfm @ 13.4 gpm (1.64 m³/min @ 50.6 lpm)
Wetted Materials	Steel, Polyurethane, Aluminum, Nitrile
Air Inlet Port Size	
Fluid Inlet Port Size	1-1/2 in npt(f)
Fluid Outlet Port Size	
Line Length‡	
Dispense Points	3 to 4
Annual Usage	Over 35,500 gal (132,000 l)
Typical ApplicationsHigh flow, lo	ow pressure maintenance facility dispensing motor oil, gear oil, automatic transmission fluid, hydraulic fluid

Fire-Ball 425 3:1 Pump	
237526	3:1 Universal Oil Pump

# Fire-Ball® 425 6:1

# Air-Powered Oil Pumps and Packages

#### **Features and Benefits**

- In-line design with fewer parts for less pump wear
- Differential air motor ensures smooth pumping
- Double-acting pump provides reliable fluid flow

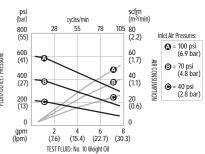
# **Typical Applications**

- Lubricant transfer
- Automotive dealerships
- · Heavy-duty dealerships
- · Fast lube centers
- Fleet service facilities
- Service shops
- In-plant
- Lube trucks
- Mining

# **Typical Fluids Handled**

• Petroleum- and synthetic-based oils

# **Pump Performance**





238108

# **Technical Specifications**

Cycles per Gallon	
	Steel, Polyurethane, Aluminum, Nitrile
All Illiet Full Oize	
	Up to 500 ft (152.5 m)
Dispense Points	3 to 4
Typical ApplicationsHigh	gh flow, medium pressure, maintenance facility dispensing motor oil, gear oil, automatic transmission fluid, hydraulic fluid

Fire-Ball 425 6:1 Pump	
238108	6:1 Universal Oil Pump

# Fire-Ball® 425 10:1

# Air-Powered Oil Pumps and Packages

#### **Features and Benefits**

- In-line design with fewer parts for less pump wear
- · Differential air motor ensures smooth pumping
- Double-acting pump provides reliable fluid flow

# **Typical Applications**

- · Lubricant transfer
- Automotive dealerships
- Heavy-duty dealerships
- Fast lube centers
- Fleet service facilities
- Service shops
- In-plant
- Lube trucks
- Mining

# **Typical Fluids Handled**

• Petroleum- and synthetic-based oils

# psi (bar) cycles/min (m³/min) (abc) (ab

**Pump Performance** 



205626

# **Technical Specifications**

Fluid Flow gal/min @ 80 cpm	4.1 (15.4 liters)
Maximum Fluid Pressure	
Air Motor Effective Diameter	4.25 in (107.9 mm)
Air Operating Range	
Approx. Air Use and Flow @ 100 psi and 80 cpm	32 scfm @ 4.1 gpm (.555 m³/min @ 15.4 lpm)
Wetted Materials	Steel, Polyurethane, Aluminum, Nitrile
Air Inlet Port Size	
Fluid Inlet Port Size	1-1/2 in npt(f)
Fluid Outlet Port Size	
Line Length‡	
Dispense Points	3 to 4
Annual Usage	Over 35,500 gal (132,000 l)
Typical Applications	Long distance, maintenance facility dispensing motor oil, gear oil, automatic transmission fluid, hydraulic fluid

Fire-Ball 425 10:1 Pump			
205626	10:1 Universal Oil Pump		
222065	10:1 Oil Pump, 55 gal (400lb) drum size, cover mount		
222095	10:1 Oil Pump, 55 gal (400lb) drum size, bung mount		

# Fire-Ball® Oil Pump Packages

# Air-Powered Oil Pumps and Packages

## Mini Fire-Ball 225 and Fire-Ball 300 Ordering Information

Packages	Portable	Cover-I	Mounted	Bung-Mounted		Universal
Container Size	16 gal	(60 l)	55 ga	55 gal (200 l) 275 gal (1040 l)		Universal
Mini Fire-Ball 225, 3:1 Package	246903 <sup>(4)</sup>	246904	246906 <sup>(4)</sup>	246906 <sup>(4)</sup> 246907 <sup>(3), (4)</sup>		248230 <sup>(3), (4)</sup>
Mini Fire-Ball, 225 3:1 Pump			248097	(1), (3)		246775
Fire-Ball 300, 5:1 package	225728 (2), (4)	225094 (3), (4)	225642 <sup>(3), (4)</sup>	225640 (3), (4)	225931 <sup>(3), (4)</sup>	225852 <sup>(3), (4)</sup>
Fire-Ball 300 Pump	2038	372	72 203857 204254 222087			203876
Dispense/Hose Fitting Kit	237075	222063			222062	
Fluid Hose		6 ft x 1/2 in (1.8 m x 12.7 mm)				1.5 ft x 1/2 in (0.5 m x 9.5 mm)
Air Hose	_		-	ft x 3/8 in m x 9.5 mm)		1.5 ft x 3/8 in (0.5 m x 9.5 mm)
Air Regulator		224512		_	_	_
Cover	2045	574	200326	_	_	_
Caster Base	203622	_	_	_	_	_
Bung Adapter for 300, 5:1	_	— — 222308			_	
225, 3:1 Manual	309868					
300, 5:1 Manual	307884	307883				306520



<sup>&</sup>lt;sup>(2)</sup> Use 3/8 in (9.5 mm) installation kit (224512) as required

## Fire-Ball 425 Package Ordering Information

Packages	Cover-Mounted Bung-Mounted		Universal Supply	Wall-Mounted	
Container Size	55 gal	(200 I)	Univer	Universal	
Fire-Ball 425, 3:1 Package	_	_	_	244846 <sup>(3)</sup>	
Fire-Ball 425, 3:1 Pump	_	_	_	237526	
Fire-Ball 425, 6:1 Package	_	_	_	244628 <sup>(3)</sup>	
Fire-Ball 425, 6:1 Pump	_	_	_	238108	
Fire-Ball 425, 10:1 Package	225782 (1) (2)	225782 <sup>(1) (2)</sup> 225786 <sup>(1) (2)</sup>		244847	
Fire-Ball 425, 10:1 Pump	222065	222095	205626	205626	
Hose/Fitting Kit	222066		222068		
Fluid Hose	6 ft x 3/4 in (1.8	m x 19.05 mm)	1.5 ft x 3/4 in (0.5 m x 19.05 mm)		
Air Hose	6 ft x 1/2 in (1.8	3 m x 12.7 mm)	1.5 ft x 1/2 in (0.5 m x 12.7 mm)		
Cover	200326	_	_	_	
Filter Regulator	_	_	_	217072	
Air Shutoff Valve	_	_	_	110225	
Fluid Shutoff Valve	_			108537	
Wall Mount Bracket			_	238245	
Instruction Manual	307	883	306520	309351	

<sup>(1)</sup> Use 1/2 in (12.7 mm) air regulator (104266) and air pressure gauge (100960) as required; must be ordered separately—see mounting accessories section



Cover-mounted



Portable

<sup>(3)</sup> Use 3/8 in (9.5 mm) air regulator 109075 as required; must be ordered separately

<sup>(4)</sup> Order low-level cut-off 203688 (1 1/2 inch NPT) separately for metered dispense systems

<sup>(2)</sup> Order low-level cut off (203688) separately for metered dispense systems—see mounting accessories section

<sup>(</sup>S) Includes pump plus: Filter Regulator (217072), Hose and Fitting Kit (222068), Air Shutoff Valve (110225), Fluid Shutoff (108537), Wall Mount Bracket, (238245)

# Fluid Dispense Packages

# Air-Powered Oil Pumps and Packages

# Mini Fire-Ball® 225, 3:1 Bulk-Oil Dispensing Packages

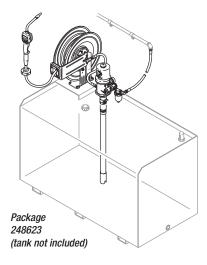
Mini Fire-I	Mini Fire-Ball 225, 3:1 Pump Package				
248623*	Includes: Mini Fire-Ball 225, 3:1 Universal pump with bung adapter and down tube (248097), SD Series reel with 50 ft (15.2 m) x 1/2 in (12.7 mm) fluid hose (HPM65B), LDM5 meter (256215)				
248622*	Includes: Mini Fire-Ball 225, 3:1 Universal pump with bung adapter and down tube (248097), SD Series reel with 25 ft (7.6 m) x 1/2 in (12.7 m) fluid hose (HPM33B), LDM5 meter (256215)				

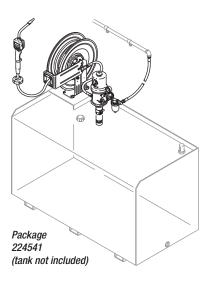
<sup>\*</sup>Order 218549 (1/2 in x 24 in) hose reel inlet kit separately NOTE: Tanks not included

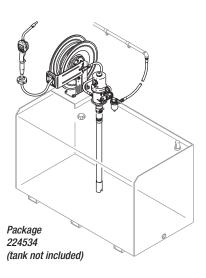
# Fire-Ball 300, 5:1 Deluxe Bulk-Oil Dispensing Packages

Fire-Ball 3	ire-Ball 300, 5:1 Pump Packages					
241633*	Includes: Fire-Ball 300, 5:1 pump universal (203876), 3/8 in (9.5 mm) regulator/gauge (109075), 3/8 in (9.5 mm) x 3/8 in (9.5 mm) nipple (156849), 2 in (50.8 mm) bung adapter (222308), SD Series reel with 25 ft (7.6 m) x 1/2 in (12.7 mm) hose (HPM33B), SDM5 meter (255350)					
224541*	Includes: Fire-Ball 300, 5:1 pump universal (203876), 3/8 in (9.5 mm) regulator/gauge (109075), 3/8 in (9.5 mm) x 3/8 in (9.5 mm) nipple (156849), 2 in (50.8 mm) bung adapter (222308), SD Series reel with 50 ft (15.3 m) x 1/2 in (12.7 mm) hose (HPM65B), 18 in (45.7 cm) hose (220598), 90° swivel (inlet on hose reel) (157416), SDM5 meter (255350)					
244038*	Includes: Fire-Ball 300, 5:1 pump universal (203876), 3/8 in (9.5 mm) regulator/gauge (109075), 3/8 in (9.5 mm) x 3/8 in (9.5 mm) nipple (156849), 2 in (50.8 mm) bung adapter (222308), SD Series reel with 50 ft (15.3 m) x 1/2 in (12.7 mm) hose (HPM65B), 18 in (45.7 cm) hose (220598), 90° swivel (157416), SDP5 meter (255200)					
224534*	Dispensing from Bench-Top Tanks with Fire-Ball 300, 5:1 Pump Package. Includes: Fire-Ball 300, 5:1 pump, Universal (203876), 3/8 in (9.5 mm) regulator/gauge (109075), Air filter (106148), 3/8 in (9.5 mm) x 3/8 in (9.5 mm) nipple (156849), SD Series reel with 50 ft (15.3 m) x 1/2 in 12.7 mm) hose (HPM65B), Drain valve (106151), 72 in (182.9 cm) hose kit (222063), Thermal relief valve (237893), 90° swivel (157416), SDM5 Meter (255350)					

<sup>\*</sup>Order 218549 (1/2 in x 24 in) hose reel inlet kit separately NOTE: Tanks not included









# Fire-Ball® and Oil Pump Accessories

# Air-Powered Oil Pumps and Packages

	Fittings Kits for Mini Fire-Ball 225, 3:1 and Fire-Ball 300, 5:1 Pumps					
222062	18 in (0.5 m) for connecting wall-mounted Mini Fire-Ball 225, 3:1 and Fire-Ball 300, 5:1 pumps to piping. Includes air hose (204560) with swivel elbow (155494), fluid hose (220598) with swivel elbow (155470). Instruction manual 306520					
222063	6 ft (1.8 m) for use with drum-mounted Mini Fire-Ball 225, 3:1 and Fire-Ball 300, 5:1 pumps. Includes air hose (203320) with swivel elbow (155494), fluid hose (220591) with swivel elbow (155470). Instruction manual 307883					
Dispense	Cits for Mini Fire-Ball 225, 3:1 and Fire-Ball 300, 5:1 Pumps					
237075	6 ft (1.8 m) for use with portable lubricators powered by the Fire-Ball 300, 5:1. Includes fluid hose (220591) and SDM5 gear lube valve (255349). Instruction manual: 307884					
Hose and	Fittings Kits for Fire-Ball 425, 3:1, 6:1 and 10:1					
222068	18 in (0.5 m) for connecting wall-mounted Fire-Ball 425, 10:1 pumps to piping. Includes air hose (218093) with swivel elbow (155470), fluid hose (109108) with swivel elbow (160327). Instruction manual: 306520					
238246	24 in (0.6 m) for use with Fire-Ball 425, 3:1 and 6:1 wall-mounted pumps to piping. Includes air hose (218093) with swivel elbow (155470), fluid hose (238247) with swivel elbow (160327)					
222066	6 ft (1.8 m) for use with drum-mounted Fire-Ball 425, 10:1 pumps. Includes air hose (205418) with swivel elbow (155470), fluid hose (109105) with swivel elbow (160327). Instruction manual: 307883					
Suction Ki	is					
236054	6 ft (1.8 m) Suction Kit for 55-gal. (200 l) drums. Includes: 55-gal. (200 l) drum tube, bung adapter and $6$ ft (1.8 m) of $3/4$ in fluid hose with $3/4$ in ID x 1-1/2 in bushing to adapt to any universal Graco oil pump. Allows use of Fast-Ball 1:1, Mini Fire-Ball 225, 3:1, Fire-Ball 300, 5:1 or Fire-Ball 425, 10:1 universal pumps with barrels. Order wall brackets separately. Use with low-level cut-off (203688) when metering fluids. Instruction manual: 308335					
Drum Cove	ers					
200326	Cover for open-head 55 gal (200 l) drums. Use with Mini Fire-Ball 225, 3:1, Fire-Ball 300, 5:1 or Fire-Ball 425, 10:1 pump. Use adapter 160754 for cover-mounting bung-style pumps					
204574	Cover for open-head 16 gal (60 l) or 70 lb (32 kg) drums. Mounts Fast-Ball 1:1, Mini-Fire-Ball or Fire-Ball pumps					
222058	Cover for 5 gal (20 l) pails. Mounts Fast-Ball 1:1, Mini Fire-Ball 225, 3:1, Fire-Ball 300, 5:1 and 15:1 pumps. Bung adapter (222308) and bung adapter plate (160754) sold separately					
160754	Bung-adapter plate for 55 gal (200 l) or 16 gal (60 l) covers. Mounts to 55 gallon (400 lb; 200 l), 16 gal (120 lb; 60 l) drum or 5 gal (20 1) pail covers and converts mounting to standard 2 npt bung opening. Allows use of bung-mounted pumps with drum covers					
Wall-Mour	ting Brackets					
203987	For universal Fast-Ball 1:1, Mini Fire-Ball 225, 3:1, Fire-Ball 300, 5:1 and Fire-Ball 425, 10:1 pumps. Clamps onto universal pump tube					
238245	For use with Fire-Ball 425, 3:1, 6:1 and 10:1 pumps. Mounts directly to pump flange					
236778	For use with Fire-Ball 425, 3:1, Dyna-Star 1/4:1 and Power-Star 1:1 pumps. Clamps to pump tube and provides mounting to wall surface by flange					
Clamps						
203156	Open-drum pump clamp. Attaches to side of open-head drum and mounts on any size pump except Fire-Ball 425, 3:1					
210880	Open-drum pump clamp for Fire-Ball 300, 5:1 and Fire-Ball 425, 10:1 pumps. Clamps onto pump tube and attaches to open-drum lip					
	/orking on Fire-Ball Air Motors					
207579	Padded pliers					
171818	Poppet gauge					
168085	Insert tool					
Carts						
203650	Cart for 5, 10 and 16 gal (20, 40, and 60 l) drums. Drums fit into recess on formed base. Rim clamps secure drum to cart. Use with pail clamp (159952) when using cart with 5 gal (20 l) pails					
222243	Heavy-Duty Cart with Pneumatic Wheels for 120 lb (55 kg) drums. Used for moving lubrication equipment over rough terrain. Requires: Hold down kit (222061)					











203987



# Fire-Ball® and Oil Pump Accessories

# Air-Powered Oil Pumps and Packages

Orueriii	y information			
Portable B	lases			
205054	Band Dolly for 5 gal (20 l) pails (11-1/2 in ID)			
204144	Band Dolly for 10 and 16 gal (40 and 60 l) drums (14 in ID)			
203622	Caster Base for 5, 10 and 16 gal (20, 40 and 60 l) drums			
Drum Elev	ator			
241663	Air-powered elevator to speed-up 55 gal (200 l) drum changes. Maximum raised height is 39.5 in (100.3 cm). Includes cover support (207562), drum elevator (204385), and air control kit (207561)			
Suction Tu	bes For Pumps			
238592	For 16 gal (60 l) cover-mounted Fast-Ball 1:1, Mini Fire-Ball 225, 3:1, Fire-Ball 300, 5:1 and Fire-Ball 425, 10:1. Use bung adapter 222308 on all current production models. Includes (191126) 14-1/2 in (0.36 m) extension (110127) foot spacer			
238593	For 55-gal (200 I) cover-mounts. Includes (191128) 21-3/4 in (0.55 m) extension (110127) foot spacer			
238595	For 55 gal (200 l) bung-mounted Fast-Ball 1:1, Mini Fire-Ball 225, 3:1, Fire-Ball 300, 5:1 and Fire-Ball 425, 10:1. Use bung adapter 222308 on all current production models. Includes (191130) 26 in (0.66 m) extension (110127) foot spacer			
238596	For 275-gal (1100 l) bung-mounts. Includes (191131) 36 in (0.91 m) extension (110127) foot spacer			
15C502	Universal Down Tube 1-1/2 in tube marked for standard container lengths from 20-41 in (0.51-1.04 m)			
Bung Ada	oters			
222308	For Fast-Ball 1:1; Mini Fire-Ball 225, 3:1; Fire-Ball 300, 5:1; and Fire-Ball 425, 10:1 Pumps. Allows direct mounting of all universal length and extended Fast-Ball 1:1, Mini Fire-Ball 225, 3:1, Fire-Ball 300, 5:1 and Fire-Ball 425, 10:1 pumps into standard 2 npt drum bung			
238125	For Mini Fire-Ball 225, 3:1; Fire-Ball 300, 5:1; and the Fire-Ball 425, 10:1. Includes double tap bushing (191075), 1 ft 3/8 in hose (238370), and 90° 3/8 in adapter (155494) for mounting universal pumps to tanks (see 308403 for details)			
214583	For Fast-Flo 1:1 Pumps, allows direct mounting of full-length pump into standard 2 npt drum bung. Comes with bushing sleeve (172405)			
187754	Acetal Bung Adapter includes (100220) thumbscrew (for Fire-Ball 300, 15:1 SST undercoating pump)			
176684	Bung Adapter for Suction Kit (203992). Includes (100220) thumbscrew			
Sealed Bu	ng Adapters (prevents rain water and other fluids from entering drum when pump is outdoors.)			
204076	Sealed bung adapter for full-length Fire-Ball with 2-1/8 in (53.9 mm) bung and Mini Fire-Ball 225, 3:1 (2.140 inch diameter)			
224579	Sealed bung adapter for universal length Fire-Ball pumps, 2.159 inch diameter (will not fit Mini Fire-Ball 225, 3:1 or old style pumps with bottom foot valve)			
217359	Sealed bung adapter for Fast-Flo pumps; can be used with suction kit 236054			
	Cut-Offs (Prevents air from entering pump by closing intake when fluid supply to pump is exhausted. ed with suction hose kit or standard suction tube without changing tube length.)			
203688	Low-level cut-offs for Fast-Ball and Fire-Ball pumps that have a universal design with suction tube extension supplying metered outlets; replaces stand-off suction tube; 1.5 npt (f) inlet. 3 in (76 mm) h			
Thermal R	elief Valve Kits (includes valve, hose and fittings)			
235998	Mini Fire-Ball 225, 3:1 thermal relief valve rated to 600 psi (41 bar)			
237893	Fire-Ball 300, 5:1 and Fire-Ball 425, 6:1 thermal relief valve rated to 900 psi (62 bar)			
248296	Fire-Ball 300, 5:1 and Fire-Ball 425, 6:1 thermal relief valve rated to 900 psi (62 bar) (same as 237893 minus bung adapter and swivel. Includes 6 foot hose)			
237601	Fire-Ball 425, 3:1 thermal relief valve rated to 600 psi (41 bar)			
240429	Fire-Ball 425, 10:1 thermal relief valve rated to 1600 psi (110 bar)			
248324	Fire-Ball 425, 10:1 thermal relief valve rated to 1600 psi (110 bar) (same as 240429 minus bung adapter and swivel. Includes 6 foot hose)			
238899	Diaphragm pump thermal relief valve rated to 150 psi (10.4 bar)			
112353	Diaphragm pump thermal relief valve for fuel dispense; rated to 50 psi (3.4 bar), valve only			





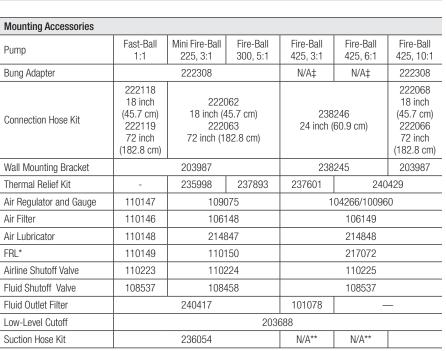




# Fire-Ball® and Oil Pump Accessories

# Air-Powered Oil Pumps and Packages

Bleed-Typ	Bleed-Type Air Shut-Off Valves (rated to 250 psi [17.4 bar]) Female ends					
110223	1/4 in (6.4 mm)					
110224	3/8 in (9.5 mm)					
110225	1/2 in (12.7 mm)					
110226	3/4 in (19.1 mm)					
Fluid Shut	-Off Valves (rated to	2000 psi [138 bar]) For isolatin	g oil dispense lines.			
108458	1/2 in (12.7 mm)					
240418	3/8 in (9.5 mm)					
108537	3/4 in (19.1 mm)					
110314	1 in (25.4 mm)					
240417			orking pressure. Prevents foreign material from 1/2 in npt(f) swivel x 1/2 in npt(m) ports			
Mesh Stra	iner Replacement fo	or 240417				
3 replacem	nent Elements	25 replacement Elements	Mesh			
238433		238434	40 mesh			
238431		238432	60 mesh (standard)			
238429		n/a	100 mesh			
Y-Strainers 400 psi (28 bar) max. working pressure filters material before it enters the pump. 20 mesh screen.						
Y-Strainer		Replacement Screens	Inlet/Outlet			
101078		180199	3/4 npt(f) both ends			
110877		110906	1/2 npt(f) both ends			
110878		110907	1 npt(f) both ends			





<sup>\*\*</sup>Recommend 1-1/2 in, 6 ft hose assembly as suction kit







<sup>‡</sup>Must be wall-mounted or flange-mounted

# **NXT™ High-Flo®**

# Air-Powered Oil Pumps and Packages

#### **Features and Benefits**

- Move large amounts of oil fast-dispenses up to 31 gallons of oil per minute
- Tested to outperform and outlast all other pumps on the market with its long-life packing design
- Models available with intuitive, easy-to-use DataTrak<sup>™</sup> controls—gives you pump diagnostics, material usage tracking and pump runaway protection
- Reduces icing and noise-new NXT air motor is up to 50% quieter than previous models

# **Typical Applications**

- In-plant to supply long-pipe runs or large volume header systems with multiple dispense locations
- Fill remote reservoirs or feed an automated lubrication system
- Transfer and dispense large amounts of lubricant to supply a production process
- Mines/construction for rapid refill of lube trucks and to service off-road equipment



Package Number with DataTrak		247888	247889	247892	247893
Pac	ckage Number without DataTrak	24D602 24D603		24D606	24D607
	Ratio	3.5:1 4.5:1		6:1	6:1
	Mounting	Wall (255143)	Wall (255143)	Wall (255143)	Stand (218742)
ons	Pump with DataTrak and thermal relief kit	24D590	24D591	24D594	24D594
Pump Specifications	Pump w/o DataTrak and thermal relief kit	24D596	24D597	24D600	24D600
pecif	Output per Cycle	2000cc	1500 cc	2000 cc	2000 cc
np S	Output at 60 CPM*	31.5 gpm (119.2 lpm)	23.2 gpm (87.8 lpm)	31.5 gpm (119.2 lpm)	31.5 gpm (119.2 lpm)
Pur	Motor Size	NXT 3400		NXT 6500	
	Maximum Fluid Pressure	350 psi (24.1 bar)	450 psi (31.0 bar)	500 psi (35.2 bar)	
	Maximum Air Input Pressure	100 psi (6.9 bar)		75 psi (5.2 bar)	
	System Manual		312862		
Manuals	Pump Manual	311211		311831	
Man	Pump Lower Manual	311690		311832	
	Motor Manual		31	1238	
Inlet/ Outlet	Pump Inlet Size	1 1/2 i	n npt (f)	2 in npt (f)	
프	Pump Outlet Size	1 in npt (f)		2 in npt (f)	
Hoses	3/4 in x 4 ft Air Hose		11	0048	
유	1 in x 6 ft Fluid Hose	115	5042	247	7969

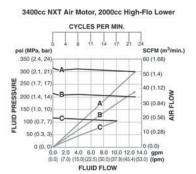
<sup>\*</sup>Graco recommends 20 CPM or less for supply applications

#### **Performance Charts**

A = 100 psi (7.0 bar) air pressure

B = 70 psi (4.9 bar) air pressure

C = 40 psi (2.8 bar) air pressure

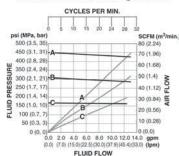


A = 100 psi (7.0 bar) air pressure

B = 70 psi (4.9 bar) air pressure

C = 40 psi (2.8 bar) air pressure

#### 3400cc NXT Air Motor, 1500cc High-Flo Lower

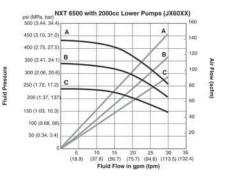


#### Test Fluid is No. 10 Weight Oil for all pumps

A = 70 psi (4.9 bar) air pressure

B = 55 psi (3.7 bar) air pressure

C = 40 psi (2.8 bar) air pressure





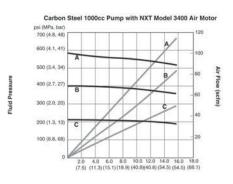
# **NXT™ Dura-Flo®**

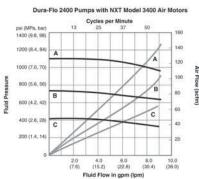
# Air-Powered Oil Pumps and Packages

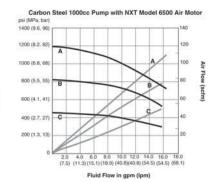
#### **Performance Charts**

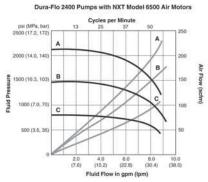
A = 7 bar (100 psi) air pressure or 105 bar (1500 psi) hydraulic oil pressure B = 4.9 bar (70 psi) air pressure or 75 bar (1050 psi) hydraulic oil pressure C = 2.8 bar (40 psi) air pressure or 42 bar (600 psi) hydraulic oil pressure

#### Test Fluid is No. 10 Weight Oil for all pumps











Package Number with DataTrak		247890	247894	247891	247895	
Pac	ckage Number without DataTrak	24D604 24D608		24D605	-	
	Ratio	6:1 10:1		12:1	23:1	
	Mounting		Wall (2	55143)		
ons	Pump with DataTrak and thermal relief kit	24D592	24D595	24D593	-	
icati	Pump w/o DataTrak and thermal relief kit	24D598	24D601	24D599	-	
Pump Specifications	Output per Cycle	100	0cc	58	0cc	
η S <sub>I</sub>	Output at 60 CPM*	17.4 gpm	(65.9 lpm)	9.2 gpm (34.8 lpm)		
Pun	Motor Size	NXT 3400	NXT 6500	NXT 3400	NXT 6500	
	Max. Fluid Pressure	620 psi (42.7, 4.3 bar)	1180 psi (81.3 bar)	1190 psi (82.1 bar)	1725 psi (118.9 bar)	
	Max. Air Input Pressure		100 psi (6.9 bar)		75 psi (5.2 bar)	
	System Manual		312	862		
Manuals	Pump Manual	311	833	311826		
Man	Pump Lower Manual	311	717	311825		
	Motor Manual	311238				
Inlet/ Outlet	Pump Inlet Size	2 in npt(f)				
ᇙ	Pump Outlet Size	1 1/2 in npt(m)				
Hoses	3/4 in x 4 ft Air Hose		110	048		
HOS	1 in x 6 ft Fluid Hose		115	042		

<sup>\*</sup>Graco recommends 20 CPM or less for supply applications

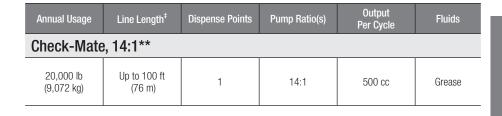
# **Grease Pumps Quick Reference**Technical Specifications and Selection Chart

CB	Annual Usage	Line Length <sup>‡</sup>	Dispense Points	Air Inlet	Material Inlet	Material Outlet
iiiii (Gene	LD Series , 50:1					
•	7,000 lb (3,125 kg)	300 ft (91 m)	1 to 2	1/4 in npt(f)	Priming Piston	1/4 in npt(f)
	Mini Fire-Ba	all 225, 50:1	ı		ı	
30 E	10,000 lb (4,535 kg)	100 ft (30 m)	1	3/8 in npt(f)	Slotted	1/4 in npt(f)
0	Fire-Ball 30	0, 50:1				
	10,000 lb (4,535 kg)	250 ft (76 m)	1 to 2	3/8 in npt(f)	Slotted	1/4 in npt(f)
Ti						
0	Fire-Ball 42	5, 50:1				
	20,000 lb (9,072 kg)	250-500 ft (76-152 m)	4 or more	1/2 in npt(f)	Slotted	3/8 in npt(f)
6	Fire-Ball 425, 75:1					
	20,000 lb (9,072 kg)	250-500 ft (76-152 m)	4 or more	1/2 in npt(f)	Slotted	3/8 in npt(f)
The section of the se						
Q Freehal Mil	Fire-Ball 30	0, 15:1	ı		ı	
	10,000 lb (4,535 kg)	250 ft (76 m)	1 to 2	3/8 in npt(f)	Slotted	1/4 in npt(f)
0	Fire-Ball 42	5, 10:1				
Q Manager	20,000 lb (9,072 kg)	250-500 ft (76-152 m)	4 or more	1/2 in npt(f)	Slotted	1 in npt(f)

# **Grease Pumps Quick Reference**

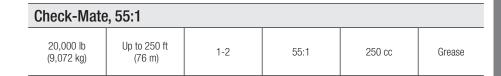
# **Technical Specifications and Selection Chart**





Check-Mate	e, 26:1				
20,000 lb (9,072 kg)	Up to 250 ft (76 m)	1-2	26:1	500 cc	Grease

Check-Mate	e, 29:1				
20,000 lb (9,072 kg)	Up to 250 ft (76 m)	4 or more	29:1	250 cc	Grease



Check-Mate	e, 63:1**				
20,000 lb (9,072 kg)	Up to 250 ft (76 m)	1-2	63:1	100 cc	Grease

Check-Mate	, 68:1**				
20,000 lb (9,072 kg)	Up to 500 ft (152 m)	1-2	68:1	200 cc	Grease



# **LD Series 50:1 Pump**

# Air-Powered Grease Pumps and Packages

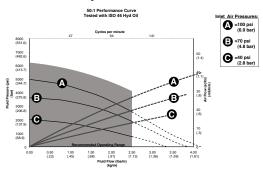
## **Features and Benefits**

- Built-in thermal relief protects your equipment from thermal expansion
- Three inch air motor provides more power to create better flow
- Cup and plate design eliminates the need for O-rings that wear out faster

# **Typical Applications**

- Medium pressure, low to medium volume grease dispense
- Automotive dealerships
- Fast lube centers
- Service shops
- Lube trucks

# **Pump Performance**



# **Technical Specifications**

Maximum Fluid Working Pressure	
Fluid Pressure Ratio	50:1
Air Operation Range	20 to 150 psi (1.37 to 10.3 bar)
	<125 psi (8.6 bar, 0.86 MPa)
Max Recommended Pump Speed	120 cycles per minute
Cycles Per Gallon/pound (I/kg)	247 cycles per pound (103 cycles per kg)
Recommended Pump Speed (for maximum life)	60 cycles per minute or lower
	Steel, brass, nitrile rubber, polyurethane, UHMWPE, acetal
Sound Pressure Level	
Approximate Wieght	2 pounds (5.1 kg), 120 pound drum—15.0 pounds (6.8 kg), 400 pound drum—17.0 pounds (7.7 kg)
Air Inlet	
Fluid Inlet	Priming Piston
Fluid Outlet	1/4 in
	5lb/min
Annual Usage	Up to 7,000 lb (3175 kg)

LD Series 50:1 Pumps		
24G600	35 lb (16 kg) Grease Pump - 50:1	
24G603	120 lb (55 kg) Grease Pump - 50:1	
24G606	400 lb (180 kg) Grease Pump - 50:1	



LD Series 50:1 Pump

# **LD Series Pump Packages and Accessories**

# Air-Powered Grease Pumps and Packages

# **Ordering Information**

50:1 Greas	e Packages		
24J030	35# Portable Grease package includes: 50:1 35# (16kg) Grease pump (24G600), 6ft Grease hose kit (24H862), 35# follower plate (24F901), 35# Drum cover (24F904), Grease valve (242056), Z-swivel (202577)		
24J036	120# Stationary Grease Package includes: 50:1 120# Grease pump (24G603), 6 ft Grease hose kit (24H862), 120# follower plate (24F902), 120# Drum cover (24F905), Grease valve (242056), Z-swivel (202577)		
24J048	120# Mobile Grease Package includes: 50:1 120# pump (24G603), 6ft hose kit (24H862), 120# follower plate (24F902), 120# Drum cover (24F905), 120# Cart (24H422), Grease valve (242056), Z-swivel (202577)		
24J060	120# Mobile Grease Package with LD Reel. Includes: 50:1 120# Grease pump (24G603), 6ft Grease hose kit (24J501), 120# follower plate (24F902), 120# Drum cover (24F905), 120# Cart (24H422), LD grease hose reel, 1/4" x 35" (24H663), Grease valve (242056), Z-swivel (202577)		
24J042	400# Stationary Grease Package includes: 50:1 400# Grease pump (24G606), hose kit (24H862), 400# follower plate (24F903), 400# Drum cover (24F906), Grease valve (242056), Z-swivel (202577)		
24J054	400# Mobile Grease Package. Includes: 50:1 400# Grease pump (24G606), 6 ft hose kit (24H862), 400# follower plate (24F903), 400# Drum cover (24F906), 400# Cart (24F915), Grease valve (242056), Z-swivel (202577)		
400# Mobile Grease Package with & LD Reel. Includes: 50:1 400# Grease pump (24G606), 6 ft Grease hose kit (24J501), 400# follower plate (24F903), 400# Drum cover (24F906), 400# Cart (24F915),LD grease hose reel, 1/4" x 35' (24H663), Grease valve (242056), Z-swivel (202577)			
Drum Covers			
24F904	Cover for 35 lb (16 kg) pails		
24F905	Cover for open-head 120 lb drums		
24F906	Cover for open-head 400 lb drums		
Follower I	Plates		
24F901	For 35lb (16 kg) pails with LD 50:1 pumps		
24F902	For 120 lbs drum with LD 50:1 pumps		
24F903	For 400 lb drums with LD 50:1 pumps		
Hose & Fi	tting Kits		
24H862	6 ft LD pump grease hose kit. Includes 1/4" x 6' grease hose, 3/8" x 6 ft air hose, and fittings		
Air Regula	ators		
24H420	Mini air pressure regulator with valve, 1/4 inch NPT x 3/8 inch NPT		
Carts			
24F915	Drum cart with pneumatic wheels for 400 lb drums, includes chain for securing drum to cart		
24H422	Drum cart with pneumatic wheels for 120 lb drums, includes chain for securing drum to cart		













24J054





# Mini Fire-Ball® 225, 50:1

# Air-Powered Grease Pumps and Packages

#### **Features and Benefits**

- Non-corrosive air motor design for long life
- Double-acting pump ensures smooth fluid flow
- Robust grease inlet cage withstands the most abusive handling

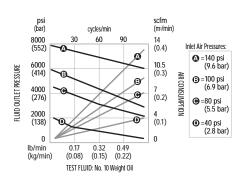
# **Typical Applications**

- Medium pressure, low to medium volume grease dispense
- Automotive dealerships
- · Heavy-duty dealerships
- Fast lube and service centers
- · Fleet service facilities
- Lube trucks
- Mining
- In-plant

# Typical Fluids Handled

• Grease up to NLGI #2

# **Pump Performance**



# **Technical Specifications**

Continuous-Duty Flow Rate	
Maximum Fluid Pressure	
Air Motor Effective Diameter	2.25 in (57.2 mm)
Operating Range	
Approximate Air Use	7.3 scfm @ 0.41 lb/min. (.18 kg/min) @ 100 psi @ 80 cpm
Wetted Materials	Steel, Urethane, Aluminum, Buna-N, Brass, Ethylene, Delrin®
Air Inlet Port Size	3/8 in npt(f)
Material Inlet	Slotted
Material Outlet	
Line Length‡	Up to 100 ft (30.5 m)
Dispense Points	1
Annual Usage	

Mini Fire-Ball 225 50:1 Pumps		
246909	35 lb (16 kg) Grease Pump - 50:1	
246780	120 lb (55 kg) Grease Pump - 50:1	
246781	400 lb (180 kg) Grease Pump - 50:1	



# Fire-Ball® 300, 15:1

# Air-Powered Grease Pumps and Packages

#### **Features and Benefits**

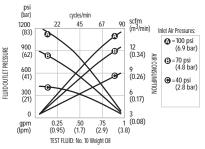
- Non-corrosive air motor design for long life
- Double-acting pump ensures smooth fluid flow
- Robust grease inlet cage withstands the most abusive handling

# **Typical Applications**

- Medium pressure, low to medium volume grease dispense
- Automotive dealerships
- · Heavy-duty dealerships
- Fast lube and service centers
- Fleet service facilities
- Lube trucks
- Mining
- In-plant

# **Typical Fluids Handled**

• Grease up to NLGI #0



**Pump Performance** 

# **Technical Specifications**

Continuous-Duty Flow Rate	0.7 gpm
Maximum Fluid Pressure	
Air Motor Effective Diameter	3 in (7.6 cm)
Operating Range	40-180 psi (2.8-12.5 bar)
Approximate Air Use	17 cfm@ 100 psi (7 bar)
Wetted Materials	CS, AL, Leather, PTFE, Rubber
Air Inlet Port Size	
Material Inlet	1 in npt(f) Straight Inlet
Material Outlet	
Line Length‡	Up to 250 ft (76.2 m)
Dispense Points	1 to 2
Annual Usage	Up to 10,000 lb (4,535 kg))

Fire-Ball 300 15:1 Pumps		
206405	35 lb (16 kg) Grease Pump - 15:1	
206699	120 lb (55 kg) Grease Pump - 15:1	
206700	400 lb (180 kg) Grease Pump - 15:1	



# Fire-Ball® 300, 50:1

# Air-Powered Grease Pumps and Packages

#### **Features and Benefits**

- Non-corrosive air motor design for long life
- · Double-acting pump ensures smooth fluid flow
- Robust grease inlet cage withstands the most abusive handling

# **Typical Applications**

- · Medium pressure, low to medium volume grease dispense
- · Automotive dealerships
- · Heavy-duty dealerships
- Fast lube and service centers
- · Fleet service facilities
- Lube trucks
- Mining
- In-plant

# **Typical Fluids Handled**

• Grease up to NLGI #2

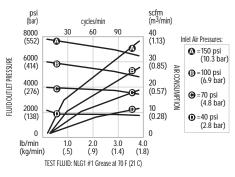
# **Technical Specifications**

Continuous-Duty Flow Rate	1.19 lb/min. (.54 kg/min.)
Maximum Fluid Pressure	
Air Motor Effective Diameter	3 in (76.2 cm)
Operating Range	
Approximate Air Use	22.8 cfm @100 psi (7 bar)
Wetted Materials	CS, Delrin®, Buna-N, Polyurethane
Air Inlet Port Size	
Material Inlet	Slotted
Material Outlet	
Line Length‡	Up to 250 ft (76.2 m)
Dispense Points	1 to 2
Annual Usage	

# **Ordering Information**

Fire-Ball 300 50:1 Pumps				
239877	9877 35 lb or 70 lb (16 kg or 32 kg) Grease Pump - 50:1			
239887	120 lb (55 kg) Grease Pump - 50:1			
239888	400 lb (180 kg) Grease Pump - 50:1			

# **Pump Performance**





# Fire-Ball® 425, 10:1

# Air-Powered Grease Pumps and Packages

## **Features and Benefits**

- Non-corrosive air motor design for long life
- Double-acting pump ensures smooth fluid flow
- Robust grease inlet cage withstands the most abusive handling

# **Typical Applications**

- Medium pressure, low to medium volume grease dispense
- Automotive dealerships
- · Heavy-duty dealerships
- Fast lube and service centers
- Fleet service facilities
- Lube trucks
- Mining
- In-plant

## **Typical Fluids Handled**

• Grease up to NLGI #2

# **Technical Specifications**

Continuous-Duty Flow Rate	
Maximum Fluid Pressure	
Air Motor Effective Diameter	
Operating Range	
Approximate Air Use	13 cfm @100 psi (7 bar)
Wetted Materials	Steel, Bass, Aluminum, Leather, Buna-N
Air Inlet Port Size	1/2 in npt(f)
Material Inlet	Slotted
Material Outlet	1 in npt(f)
Line Length‡	Up to 500 ft (152.4 m)
Dispense Points	. ,
Annual Usage	

Fire-Ball 425 10:1 Pumps		
965124	Stubby mount Fire-Ball 425, 10:1 pump only	



# Fire-Ball® 425, 50:1

# Air-Powered Grease Pumps and Packages

#### **Features and Benefits**

- Non-corrosive air motor design for long life
- Double-acting pump ensures smooth fluid flow
- Robust grease inlet cage withstands the most abusive handling

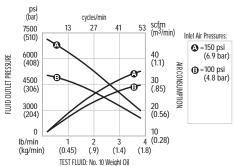
## **Typical Applications**

- · Medium pressure, low to medium volume grease dispense
- · Automotive dealerships
- · Heavy-duty dealerships
- Fast lube and service centers
- · Fleet service facilities
- Lube trucks
- Mining
- In-plant

# **Typical Fluids Handled**

• Grease up to NLGI #2

# **Pump Performance**



# **Technical Specifications**

Continuous-Duty Flow Rate	3.35 lb/min (1.5 kg/min.)
Maximum Fluid Pressure	7500 psi (517 bar)
Air Motor Effective Diameter	
Operating Range	
Approximate Air Use	19 cfm @70 psi (4.8 bar)
Wetted Materials	CS, Leather
Air Inlet Port Size	1/2 in npt(f)
Material Inlet	
Material Outlet	
Line Length‡	Up to 250 ft (76.2 m)
Dispense Points	4 or more
Annual Usage	

Fire-Ball 425 50:1 Pumps		
205394	120 lb (55 kg) Grease Pump - 50:1	
205395	400 lb (180 kg) Grease Pump - 50:1	



# Fire-Ball® 425, 75:1

# Air-Powered Grease Pumps and Packages

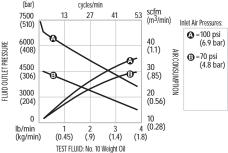
#### **Features and Benefits**

- Non-corrosive air motor design for long life
- Double-acting pump ensures smooth fluid flow
- Robust grease inlet cage withstands the most abusive handling

# **Typical Applications**

- Medium pressure, low to medium volume grease dispense
- Automotive dealerships
- · Heavy-duty dealerships
- Fast lube and service centers
- Fleet service facilities
- Lube trucks
- Mining
- In-plant

**Pump Performance** 



# **Typical Fluids Handled**

• Grease up to NLGI #2

# **Technical Specifications**

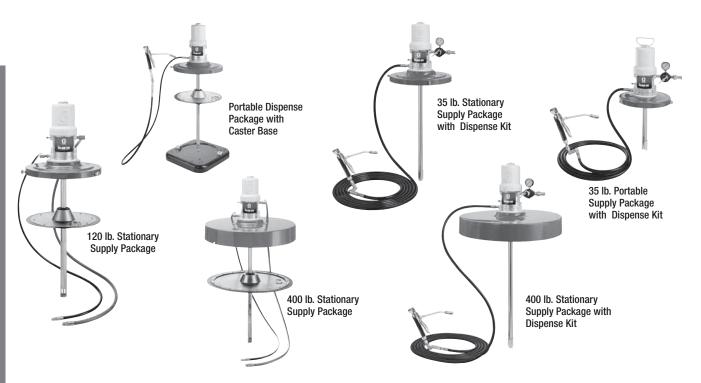
Continuous-Duty Flow Rate	1.95 lb/min (0.88 kg/min)
Maximum Fluid Pressure	
Air Motor Effective Diameter	
Operating Range	
Approximate Air Use	26 cfm @100 psi (7 bar)
Wetted Materials	CS, Leather
Air Inlet Port Size	1/2 in npt(f)
Material Inlet	Slotted
Material Outlet	
Line Length‡	Up to 500 ft (152.5 m)
Dispense Points	4 or more
Annual Usage	

Fire-Ball 425 75:1 Pumps				
239729	120 lb (55 kg) Grease Pump - 75:1			
239730	400 lb (180 kg) Grease Pump - 75:1			
239731	35/70 lb (16/32 kg) Grease Pump - 75:1			



# Fire-Ball® Grease Pump Packages

# Air-Powered Grease Pumps and Packages



# Mini Fire-Ball® 225, 50:1 Grease Pumps and Packages

	Portable Pail Dispenser	Stationary Pail Dispenser	Cart-Mounted Pail Dispenser	Stationary Supply Package	Portable Package w/ Caster Base	Portable Package w/ 2-Wheel Cart	Stationary Supply Package
Container Size	35 lb (16 kg) pail	35 lb (16 kg) pails (	or 70 lb (32 kg) bulk		120 lb (55 kg)		400 lb (180 kg)
Package No.	246910 +	246911 +	246913 +	246914 +	246915 +	246916 +	246917 +
Pump Only.		246909			246780		246781
Container	_	204	134	_	_	_	_
Follower Plate	220653	*	*		220654		
Dispense Kit	236058			222072	2072 236058		222072
Fluid Hose	12 ft x 1/4 in (3.7 m x 6.4 mm)			6 ft x 1/4 in (1.8 m x 6.4 mm)		( 1/4 in ( 6.4 mm)	6 ft x 1/4 in (1.8 m x 6.4 mm)
Dispense Hose Kit	236058		6 ft x 3/8 in (1.8 m x 9.5 mm)	_	_	6 ft x 3/8 in (1.8 m x 9.5 mm)	
Cover	222059			204574			200326
Cart	_	_	203650	_	203622	203650	_
Manual	309967						

<sup>+</sup> Order 3/8 in (9.5 mm) air regulator (109075) separately \* Order follower plate 220653 separately for 35 lb (16 kg) pails or 220654 for 70 lb (32 kg) bulk

# Fire-Ball® 300, 15:1 Grease Pumps and Packages

	Stationary Pail Dispenser	Stationary Drum Dispenser	Cover-Mounted Drum Dispenser	
Container Size lb (kg)	35 lb (16 kg)	120 lb (55 kg)	400 lb (180 kg)	
Package No.	222078	220170	220171	
Pump Only	206405	206699	206700	
Dispense Kit	222080	222081	222081	
Fluid Hose	15 ft x 3/8 in (4.6 m x 9.5 mm)	25 ft x 3/8 in (7.6 m x 9.5 mm)	25 ft x 3/8 in (7.6 m x 9.5 mm)	
Drum Cover	222058	204574	200326	
Instruction Manual		307882		

# Fire-Ball® Grease Pump Packages

# Air-Powered Grease Pumps and Packages

# Fire-Ball® 300, 50:1 35-70 lb (16-32 kg) Grease Pumps and Packages

	Portable Pail Dispenser	Stationary Pail Dispenser	Cart-Mounted Pail Dispenser	Cart-Mounted Pail Topper
Container Size	35 lb (16 kg)	35 lb or 70 lb (16 kg or 32 kg)	35 lb or 70 lb (16 kg or 32 kg)	35 lb (16 kg)
Package No.	222069 *	225827 *	225773 *	226012 *
Metered Package**	245694	_	245695	_
Pump No.		239	877	
Dispense Kit		222	070	
Fluid Hose		12 ft x 1/4 in (3.7 m x 6.4 mm)		
Follower Plate	220653	†	†	_
Cover	222059	204	1574	_
Holster	_		203976	
Container	_	204134	204134	_
Cart	_	— 203650		
Elevator	_	_	_	203664
Inductor Plate	_	_	_	204351
Instruction Manual 307878				

<sup>\*</sup> Use 3/8 in (9.5 mm) air regulator 109075; must be ordered separately \*\* Metered grease package includes 233807 Accu-Shot instead of 242056 Pro-Shot † Order follower plate 220653 for 35 lb (16 kg) containers, and follower plate 220654 for 70 lb (32 kg) containers; must be ordered separately



# Fire-Ball® 300, 50:1 Packages For 120 lb (55 kg) Containers

	Portable with Caster Base	Portable with Two-Wheel Cart	Portable with Heavy-Duty Cart	Stationary Supply	Stationary Supply Topper-Inductor
Container Size Ib (kg)	120 (55)	120 (55)	120 (55)	120 (55)	120 (55)
Package Number	225006 *	225026 *	222245 *	225014 *	222073 *
Metered Package	_	245696 **	_	_	_
Pump Only	239887	239887	239887	239887	239887
Dispense Kits	222070	222070	222383	222072	-
Fluid Hose	12 ft x 1/4 in (3.7 m x 6.4 mm)		25 ft x 1/4 in (7.6 m x 6.4 mm)	6 ft x 1/4 in (1.8 m x 6.4 mm)	6 ft x 1/4 in (1.8 m x 6.4 mm)
Air Hose	_	_	_	6 ft x 3/8 in (1.8 m x 9.5 mm)	6 ft x 3/8 in (1.8 m x 9.5 mm)
Follower Plate	220654	220654	220654	220654	_
Cover	204574	204574	222060	204574	_
Holster	203976	203976	_	_	_
Caster Base	203622	_	_	_	_
Cart	_	203650	222243	_	_
Elevator	_	_	_	_	204121
Pump Support	_	_	_	_	222074†
Hold Down Kit	_	_	222061	_	_
Instruction Manual	307878	307878	307878	307880	306523

<sup>\*</sup> Use 3/8 in (9.5 mm) air regulator 109075; must be ordered separately \*\* Metered grease package includes 233807 Accu-Shot instead of 242056 Pro-Shot

<sup>†</sup> Pump support assembly includes dust cover, base, inductor plate and 6 ft (1.8 m) fluid & air hose

# Fire-Ball® Grease Pump Packages

# Air-Powered Grease Pumps and Packages

## Fire-Ball® 300, 50:1 Packages for 400 lb (180 kg) Containers

	Stationary	Topper-Inductor	
Container Size Ib (kg)	400 (180)	400 (180)	
Package Number	225016*	226013*	
Pump Only	239888	239888	
Hose & Fitting Kit	222072	204467	
Fluid Hose	6 ft (1.8 m) x 1/4 in (6.4 mm)	6 ft (1.8 m) x 1/4 in (6.4 mm)	
Air Hose	6 ft (1.8 m) x 3/8 in (9.5 mm)	6 ft (1.8 m) x 3/8 in (9.5 mm)	
Follower Plate	223845	_	
Cover	200326	_	
Carriage	_	204461	
Elevator	_	204385	
Inductor Plate	_	204353	
Base	_	205339	
Instruction Manual	307880	306556	

## Fire-Ball® 425, 10:1 Packages

#### 10:1 Pump for Closed Head Drum for 400 lb (180 kg)

965129

Fire-Ball 425, 10:1 pump complete with bung adapter. For open head drum, remove bung adapter and mount to 200326, 400 lb (180 kg) drum cover. Ideal for transferring grease from 400 lb (180 kg) drum or side pocket of tote tank. Can be modified for stubby horizontal mount on tote tanks. For more information contact Lubrication Equipment Technical Assistance

#### Fire-Ball 425, 10:1 Pump Only

965124 Fire-Ball 425, 10:1 pump only, Stubby Universal Mount



400 lb. Stationary Supply Package



120 lb. Stationary Supply with Topper-Inductor



Stationary Supply Package



400 lb. Stationary Supply with Topper-Inductor

# Fire-Ball® 425, 50:1; Bulldog® 3:1 Packages for 120-400 lb (56-180 kg) Containers

Description	Stationary Supply	Stationary Supply	Stationary Supply Topper-Inductor	Ram	Bulldog 3:1 (Sinker)
Container Size lb (kg)	120 (55)	400 (180)	400 (180)	400 (180)	400 (180)
Package Number	223108*	225781*	226018*	244905	244848
Pump Only	205394	205395	205395	205395	205148
Air Hose Kit	222076	222076	205102	222076	208610
Fluid Hose	6 ft x 3/8 in (1.8 m x 9.5 mm)				
Air Hose	6 ft x 1/2 in (1.8 m x 12.7 mm)				
Cover	204574	200326	_	_	_
Follower Plate	223344	223846	_	_	_
Carriage	_	_	204461	_	_
Elevator	_	_	204385	_	_
Inductor Plate	_	_	205699	_	222404
Base	_	_	205339	_	_
Ram	_	_	_	_	_
Air Regulator	_	_	_	244844	207651
Adapter Plate	_	_	_	162225	_
Adapter Kit	_	_	_	224266	_
Manual	307880	307880	306556	309345	309345

<sup>\*</sup> Use 1/2 in (12.7 mm) air regulator 104266 and gauge 100960; must be ordered separately For Fire-Ball 425, 50:1 Lube Truck Packages, see the Specialty Pump Section



<sup>\*</sup> Use 3/8 in (9.5 mm) air regulator 109075; must be ordered separately

# Fire-Ball® Grease Pump Packages

# Air-Powered Grease Pumps and Packages



Fire-Ball® 425, 75:1 Packages for 35-400 lb (16-180 kg) Containers

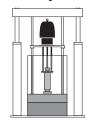
Description	Cover-Mount	Cover-Mount	Inductor	Ram	Pail Length	Bung or Cover
Container Size Ib (kg)	120 (55)	400 (180)	400 (180)	400 (180)	35/70 lb (16/32 kg)	400 (180)
Package Number	244635*	244636*	244637*	244906	_	_
Pump Only	239729	239730	239730	239730	239731	239730
Hose and Fitting Kit	222076	222076	205102	222076		_
Drum Cover	204574	200326	_	_	204574	_
Follower Plate	223344	223846	_	_	**	_
Carriage	_	_	204461	_	_	_
Elevator	_	_	204385	_	_	_
Base	_	_	205339	_	_	_
Inductor	_	_	205699	_	_	_
Ram	_	_	_	_	_	_
Air Regulator	_	_	_	244844	_	_
Adapter Plate	_	_	_	162225	_	_
Adapter Kit	_	_	_	224266	_	_
Manual	307880	307880	306556	09345	_	_

<sup>\*</sup>Use 1/2 in (12.7 mm) air regulator (104266) and gauge (100960); must be ordered separately \*\* 35 lb: 220653/ 70 lb: 223344 • For Lube Truck Packages, see the Specialty Pumps and Packages Solution Section

		· ·			· -
RAM Assemblies					
Description	Fire-Ball 300, 50:1	Fire-Ball 425, 75:1	Fire-Ball 425, 50:1	Fire-Ball 425, 10:1	Bull Dog, 3:1**
System Package	*	244906	244905	*	244641
Bare Pump	239888	239730	205395	965129	205148
Ram	257435	_	_	_	_
Pump Mount Kit	247336	247337	247337	247337	_
Adapter Kit	224267	224266	224266	not needed	_
Air Regulator and Gauge	203716	244844	244844	207468	207651
Ram Plate Seal Kit	247335	247335	247335	247335	224829
Air Hose 3/4 in x 6 ft	_	_	_	_	208610

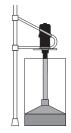
<sup>\*</sup>Order individual components \*\*Drum clamp when required 206537

### **Drum Systems**



### Ram-Mount

- Force feed high volume pumps
- Extreme viscous grease
- Reduce waste
- Clean and convenient method of drum change



### Inductor-Mount

- Reduce waste
- Clean and convenient method of drum change



Cover-Mount with Follower Plate

Economical

# Fire-Ball® Grease Pump Accessories

# Air-Powered Grease Pumps and Packages

Diamanaa	Hose and Filling Vila
•	Hose and Fitting Kits 1,000-5,000 psi (345 bar) for Portable Fire-Ball 300, 50:1 or Mini Fire-Ball 225, 50:1 Pumps
Rated to 4	
222080	For Fire-Ball 300, 15:1. Includes: 15 ft (4.6 m) of 4,000 psi, 3/8 in (9.5 mm) fluid hose (109165), grease dispense valve (242056), Z-Swivel (202577), 3/8 in (9.5 mm) closed nipple (156849), quick-disconnect nipple (169971), quick-disconnect air coupler (110198) and 3/8 in (9.5 mm) air regulator (110234)
222081	For Fire-Ball 300, 15:1. Includes: 25 ft (7.6 m) of 4,000 psi, 3/8 in (9.5 mm) fluid hose (109167), grease dispense valve (242056), Z-Swivel (202577), 3/8 in (9.5 mm) closed nipple (156849), quick-disconnect nipple (169971), quick-disconnect air coupler (110198) and 3/8 in (9.5 mm) air regulator (110234)
236058	For Mini Fire-Ball 225, 50:1. Includes: 12 ft (3.6 m) fluid hose (109151), air coupler (208536), air nipple (169971), grease dispense valve (242056) and Z-Swivel (202577)
222070	For Fire-Ball 300, 50:1. Includes: 12 ft (3.6 m) fluid hose (109151), air coupler (208536), air nipple (169971), grease dispense valve (242056) and Z-Swivel (202577). Instruction manual 307878
222383	For Portable Units Powered by the Mini Fire-Ball 225, 50:1 or Fire-Ball 300, 50:1 Pumps. Includes dispense kit: grease dispense valve (242056), 25 ft (7.6 m) fluid hose (109154), air coupler (208536), air nipple (169971) and Z-Swivel (202577). Instruction manual 307878
Hose and	Fitting Kits
Rated to 5	5000 psi (345 bar) for Stationary Drum-Mounted Fire-Ball 300, 50:1 Pumps
222072	Hose and Fittings Kit. Includes: 6 ft (1.8 m) air hose (203320) with swivel elbow (155494) and 6 ft (1.8 m) fluid hose (109150) with swivel elbow (155541). Instruction manual 307880
Rated to 4	1000 psi (276 bar) for Stationary Drum-Mounted Fire-Ball 425, 50:1 Pumps
222076	Hose and Fittings Kit. Includes: 6 ft (1.8 m) air hose (205418) with swivel elbow (155470) and 6 ft (1.8 m) fluid hose (109163) with swivel elbow (155494). Instruction manual 307880
Bung Ada	pters
239965	For Fire-Ball 425, 50:1 and 75:1 Pumps, 1.65 in ID
239966	For Fire-Ball 300, 15:1 and 50:1 Pumps
Lincoln-to	-Graco Adapter Kit
241246	For Fire-Ball 300, 50:1 when replacing a Series 20 Lincoln
Flange Mo	ounting Accessories for Fire-Ball Pumps
948393	Flange adapter (male) Fire-Ball 300
948392	Flange adapter (male) Fire-Ball 425
512874	Coupler (female)
Follower I	Plates
220653	For 35 lb (16 kg) pails with Mini Fire-Ball 225, 50:1, Fire-Ball 300, 15:1 and 50:1 pumps
220654	For 70 and 120 lb (32/55 kg) drum, Mini Fire-Ball 225, 50:1, Fire-Ball 300, 15:1 and 50:1 pumps
223344	For 120 lb (55 kg) drums with Fire-Ball 425, 50:1 and 75:1 pumps
223700	For 120 lb (55 kg) drums with Dyna-Star 5:1 pumps
223845	For 400 lb (180 kg) drum, Mini Fire-Ball 225, 50:1, Fire-Ball 300, 15:1 and 50:1 pumps, 1.19 in ID
204130	Follower plate same as 223845, but without flexible wiper
223846	For 400 lb (180 kg) drums with Fire-Ball 425, 50:1 and 75:1 pumps, 1-13/32 in ID
205337	Follower plate same as 223846, but without flexible wiper
223701	For 400 lb (180 kg) drums with Dyna-Star 5:1 and Fire-Ball 425, 10:1 pumps, 2.1 in ID
Drum Cov	ers
200326	Cover for open-head 400 lb (180 kg) drums. Use with any Mini Fire-Ball 225-50:1, Fire-Ball 300-15:1 and 50:1, Fire-Ball 425-10:1 or Dyna-Star 5:1 pump. Use adapter 160754 for bung mounted pumps
204574	Cover for open-head 120 lb (55 kg) or 70 lb (32 kg) drums. Mounts Mini Fire-Ball 225, Fire-Ball grease pumps or Dyna-Star 5:1 pump. Use adapter 160754 for bung mounted pumps
222059	Cover for 35 lb (16 kg) pails. Mounts Mini Fire-Ball 225, 50:1 and Fire-Ball 300, 50:1 pumps using friction-style clutch lock. Allows use of 70 lb (32 kg) length pump with 35 lb (16 kg) pail
160754	Bung-adapter plate. Mounts to standard 400 lb (180 kg) or 120 lb (55 kg) drum cover and converts mounting to standard 2 npt bung opening. Allows use of bung-mounted pumps with drum covers



220653





200326







# Fire-Ball® Grease Pump Accessories

# Air-Powered Grease Pumps and Packages

Portable B	ases						
205054	Band Dolly for 35 lb (16 kg) pails						
204144	Band Dolly Base for 70 lb (32 kg) or 120 lb (55 kg) drums						
203622	Caster Base for 35 lb (16 kg), 70 lb (32 kg) or 120 lb (55 kg) drums						
Carts							
203650	For 35 lb (16 kg), 70 lb (32 kg) and 120 lb (55 kg) drums. Drums fit onto recess on formed base. Rim clamps secure drum onto cart. Use with pail clamp 159952 when using cart with 35 lb (16 kg) pails						
222243	For 120 lb (55 kg) drums with pneumatic wheels for rough terrain						
111470	Heavy-duty drum truck for 400 lb (180 kg) drums secures drum onto roll-around base						
Drum Elev	Drum Elevators						
241663	Air-Powered Elevator to speed drum changes. Maximum raised height: 39.5 in (100.33 cm). Includes: Cover Support (207562), Drum Elevator, (204385), Air Control Kit (207561)						
Air Shut-0	ff Valves, Bleed-type, rated to 250 psi (17.4 bar)						
110223	1/4 in (6.4 mm)						
110224	3/8 in (9.5 mm)						
110225	1/2 in (12.7 mm)						
110226	3/4 in (19.1 mm)						
High-Press	sure Grease Shut-Off Valves						
202869	5000 psi (345 bar) high-pressure needle valve, 1/2 npt(f) ported valve for drop-line isolation						





# **NXT™ Check-Mate® Packages**

# Air-Powered Grease Pumps and Packages

### **Ordering Information**

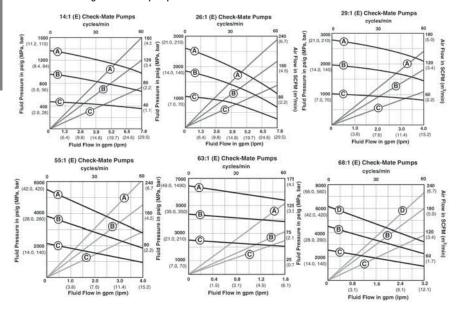
Package Number with DataTrak	247973	247976	247974	247977	247975	247978	
Package Number without DataTrak	24E006	24E007	24E008	24E009	24E010	24E011	
Ratio	14:1	26:1	29:1	55:1	63:1	68:1	
Pump with DataTrak	P14MCS	P26MCS	P29MCS	P55MCS	P63MCS	P68MCS	
Pump w/o DataTrak	P14DCS	P26DCS	P29DCS	P55DCS	P63DCS	P68DCS	
Mounting			Floor Stand	d (223952)			
3/4 in x 6 ft Air Hose			208	610			
1 in x 6 ft Fluid Hose	115042			244657			
System Manual			312	863			
Pump Manual	312376						
Pump Lower Manual	312375						
Motor Manual			311	238			

Note: Graco recommends 20 cpm or less for supply applications

### **Performance Charts**

 $\begin{array}{ll} A=100 \text{ psi (7 bar)} & C=40 \text{ psi (2.8 bar)} \\ B=70 \text{ psi (5.0 bar)} & D=90 \text{ psi (6.3 bar)} \end{array}$ 

### Test Fluid: #10 Weight Oil for all pumps



NXT Check-Mate RAM Packages							
Ratio	14:1	63:1	68:1				
Package Number	247979	247980	247981				
Mounting	RAM System						
Operation Manual		312371					





# **Diaphragm Pumps and Accessories**

# Air-Operated Double Diaphragm Transfer Pumps













DB3525 DF3

DK3525

### **Ordering Information and Technical Specifications**

	ig illiorillatio			a. opco									
Key	OT = Oil Transfer	OE = Oil E	vacuation	WA = Water, A	Anti-Freeze	FD =	= Fuel Disp	ense (with	50 psi relief valv	re)   FT = Fuel Tra	e) FT = Fuel Transfer WWS = Windshield Wash		
Body/Dia	aphragm Descriptio	n	Part Number	Typical Application	Max. Air SCFM	Air Inlet NPT	Max. psi (bar)	Fluid Inlet/ Outlet	Free Flow gpm (lpm)	Air Valve Replacement Kit	Kits (Seats, Balls, Diaphragms)	Diaphragm Kit	Manual
<b>307 3/8</b> i Acetal/TP	in Diaphragm Pump E	)	D31255	OT, WA, WWS	7 <sup>(1)</sup>	1/4	100 (7)	3/8	7 (31.8)	239952	D03255	D03005	308553
	<b>in Diaphragm Pum</b> p n/Buna N	)	243669	OT, OE, WA, WWS	28 <sup>(1)</sup>	1/4	100 (7)	3/4	16 (60.6)	241657	D05277	D05007	308573
	in Diaphragm Pump una Dual Inlet	)	241906	50/50 WWS, WA	28(1)	1/4	100 (7)	3/4	16 (61)	241657	D05277	D05007	308573
	ohragm Pumps luminum/TPE (UL)		647016	OE, WA, FT (leaded fuel only)	67	1/2	120 (8.2)	1	50 (189)		24B634	24B624	313597
1050A AI	luminum/TPE (UL)		647648	FD	20(2)	1/2	50 (3.4)	1	32 (121)	24B766	and 24B639		313597
1050A A	luminum/TPE	·	647666	OT, OE, WA	67(2)	1/2	125 (8.6)	1	50 (189)				312877
<b>1590 1-1</b> Aluminun	<b>1/2 in Diaphragm P</b> o n/TPE	ımp	DB3525	OT, OE, WA	90(3)	1/2	120 (8.3)	1 1/2	90 (341)	236273	D0B525	D0B005	308441
<b>2150 2 i</b> ı Aluminun	<b>n Diaphragm Pump</b> n/TPE		DF3525	OT, OE, WA	175 <sup>(3)</sup>	1/2	120 (8.3)	2	150 (567)	236273	D0F525	D0F005	308368
<b>3275 3 iı</b> Aluminun	<b>n Diaphragm Pump</b> n/TPE		DK3525	OT, OE, WA	325 <sup>(3)</sup>	3/4	120 (8.3)	3	275 (1,041)	238765	D0K525	D0K005	308639

NOTE: All pumps are 1:1 ratio

(1) Max air use at 100 psi (7.0 bar)

(2) Max air use at 125 psi (8.6 bar)

(3) Max air use at 120 psi (7.0 bar)

### **Mounting Accessories**

Pump	307	515/716	1050	1590	2150	3275
Air Line Filter	110	0146	106148	106149	106150	106150
Air Regulator & Gauge	110147	110147	244844	202858	206199	207651
Air Quick-Connect Coupler	208536	1/4 npt(f)		110199, 1/2 npt(f)		N/A
Air Quick-Connect Nipple	169970,	1/4 npt(m)		110196, 1/2 npt(f)		N/A
Bleed Type Air Valve	110	0223	110224	11	0225	110226
Wall Bracket	224	4835	246637	N/A	N/A	N/A
Thermal Relief Kit	238899	238	3428	N/A	N/A	N/A
Thermal Relief Valves 150 psi (10.3 bar)	113497 al/br	n, 112119 ss/tf		113497 a	l/bn , 112119 ss/tf	
Grounding Wire and Clamp			2	222011		
Suction Hose Kit		236054		N/A	N/A	N/A
Flange Adapter Kit	N/A	N/A	N/A	N/A	N/A	N/A
Dual Inlet Manifold	N/A	24D205	24D205	N/A	N/A	N/A
Instruction Manual	308553	308573 & 308981	308326 & 308479	308441	308368	308639

# Fast-Flo® 1:1

### **Transfer Pumps and Accessories**

### **Features and Benefits**

- · Differential air motor for smooth operation and reliability
- Stainless steel models available for corrosion resistance

### **Typical Applications**

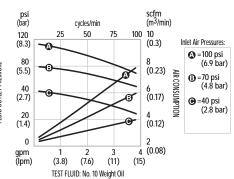
- Low pressure, high volume transfer of low viscosity fluids
- Automotive dealerships
- · Heavy-duty dealerships
- Fast lube centers
- Fleet service facilities
- Service shops
- In-plant
- Lube trucks
- Mining

### **Typical Fluids Handled**

- Water
- Anti-freeze
- Windshield wash fluid
- Used oil
- Used anti-freeze

NOTE: Use Fast-Ball 1:1 for petroleum-based products.

# **Pump Performance**







### **Technical Specifications**

Flow Rate gpm (lpm)	5 (19)
Maximum Fluid Pressure psi (bar)	
Operating Range (1) psi (bar)	
Wetted Materials	See Ordering Info
Air Inlet Size	
Material Inlet <sup>(2)</sup>	1-1/2 npt(f)
Material Outlet	
Line Length‡	Up to 100 ft (30 m)
Dispense Points	1
Annual Usage	Up to 5000 gal (18921 I)

(1) Max Operating Air Pressure for 226951 is 60 psi (4.2 bar)

(2) For universal pump

‡ Consult your local authorized Graco representative for line or pipe sizing

# Fast-Flo® 1:1

# **Transfer Pumps and Accessories**

### **Ordering Information**

Universal-Length Pumps (includes motor and pump-lower assembly)								
Part Number	226948	226952	237130	237131	237132	226943 *	226944 **	226945 **
Material	CS	SST	CS	CS	SST	CS	CS	SST
Std. Seal Repair Kits	218112	218112	213012	213013	213013	213012	215964	215964
Material	Rubber	Rubber	Leather	PTFE	PTFE	Leather	Polyethylene	Polyethylene
Typical Fluids				Motor Oil				Anti-Freeze, Windshield Wash

Note: All seal repair kits are interchangeable with other Fast-Flo pumps.

Drum-Length Pumps (includes motor and pump-lower assembly)									
Part Number	226947	226951 †	226953	237133	237134	237129	226940	226941	226942
Wetted Parts	CS	CS	SST	CS	CS	SST	CS	CS	SST
Std. Seal Repair Kits	218112			213012	213013		213012	2159	964
Material	Rubber			Leather	PTFE		Leather, PTFE, Leather	Polyethylene	, UHMWPE
Typical Fluids		Motor Oil							A/W

Note: All seal repair kits are interchangeable with other Fast-Flo pumps.

\* UL-listed

\*\* UL-listed and CE-marked
† Adjustable down tube length between 18 in (457 mm) to 46.4 in (1180 mm)

### **Accessories**

Motor Serv	Motor Service Kits for all Fast-Flo 1:1 Pumps							
220168	Motor Service Kits for all Fast-Flo 1:1 Air Valve Piston Assembly (used with repair kit 214584, which must be ordered separately)							
Hose and Fittings Kits								
222118	18 in (0.5 m) for connecting wall-mounted Fast-Flo 1:1 pumps to piping. Includes: air hose (109123) with swivel elbow (155541), fluid hose (109108) with swivel elbow (160327)							
222119	6 ft (1.8 m) for use with drum-mounted Fast-Flo 1:1 pumps. Includes: air hose (109125) with swivel elbow (155541), fluid hose (109105) with swivel elbow (160327)							
Bung Adap	nters							
214583	Allows direct mounting of full-length Fast-Flo 1:1 pumps into standard 2 npt drum bung							
217359	Sealed bung adapter for Fast-Flo pumps; can be used with suction kit 236054							
Installation	Installation Kits							
218316	Includes shut-off valve, regulators, gauges and fittings as necessary for normal installation							

# **Hurricane™**

### **Electrical Powered Pumps and Packages**

### **Features and Benefits**

- Electric pump with 6 ft (1.8 m) grounded power cord
- Digital metering standard on all units
- Quick-change bung adapter
- Pumps synthetic- or petroleum-based oils, ATF and antifreeze (up to 50/50 mix)
- Simple two button operation
- Fits any container up to 44 in (1.1 m) tall with a 2 in =NPT opening
- · Measures in quarts, gallons, pints or liters
- Available with 8 ft or 25 ft (2.4 m or 7.6 m) meter and hose or built-in tapper
- Variety of portable package options

### **Typical Fluids Handled**

- Synthetic- and petroleum-based oils
- Automatic transmission fluid
- Anti-freeze (50/50 mix)

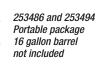
### **Technical Specifications**

Voltage	110 Volts / 60 Hz
Maximum current	6 Amps
Flow rate	
Maximum container height	
Weight (varies by model)	Up to 20 lbs (9 kg)
Meter accuracy	± 1.5%
Instruction manual	311216
Note: ETL listed in US and Canada	

Ordering i	mormation
Hurricane Dis	pense Systems
248918	Hurricane metered tapper unit
234902	Hurricane 8 ft (2.4 m) hose and meter
249294	Hurricane 25 ft (7.6 m) hose and meter
Portable Pack	ages with 25 Gallon Dispense Cart
249783	Hurricane metered tapper unit
249771	Hurricane 8 ft (2.4 m) hose and meter
249821	Hurricane 25 ft (7.6 m) hose and meter
Portable Pack	ages for 16 Gallon (60 I) Barrels
253487	Hurricane caster base with metered tapper
253486	Hurricane caster base with 8 ft (2.4 m) hose and meter
253494	Hurricane caster base with 25 ft (7.6 m) hose and meter
Accessories	
253683	Hurricane caster base









### **APEX™ and APEX On-Demand**

### **Electrical Powered Pumps and Packages**

### **APEX Transfer Pumps**

- Available with 12 VDC, 115 VAC and 230 VAC electric motors
- · Self-priming, positive displacement design
- Pumps petroleum- and synthetic-based lubricants up to 8 gpm (30 lpm)
- · Built-in bypass valve
- Transfer used oil with inlet suction screen (260306)
- TENV electric motor for demanding environments, models 260105, 260106, 260108 and 260109
- System includes suction tube, fluid hose, dispense valve and bung adapter for models 260100, 260101, 260102 and 260104



APEX 115 VAC oil transfer system

APEX On-Demand

12 volt DC dispensing pump

### **APEX On-Demand Dispensing Pumps**

- On-demand sensing system automatically starts and stops the pump
- Low operating and installation costs
- Available in 12 VDC and 115 VAC
- TENV electric motor for demanding environments
- Extremely quiet pump operation
- Output flow is continuous and non-pulsating
- Inlet and outlet check valves with thermal relief valves included

# **Typical Applications**

- Filling bulk tanks from drums
- · Agricultural equipment
- Lubricant transfer from remote locations
- Filling in-plant machinery
- · Construction equipment
- Evacuating used oil receivers
- · Automotive and truck service garages
- · Fleet marine and personal boat service

# 180 (12, 1.2) 160 (11, 1.1) 140 (9.6, 0.9) 120 (8.2, 0.8) 100 (6.8, 0.6) 80 (5.5, 0.5) 60 (4.1, 0.4) 40 (2.7, 0.2) **3 4 5** (11.4) (15.1) (19)

**Pump Performance** 

8 (30.2)

Ó

4 (15.1)

PART NUMBERS

6 (22.7) FLOW RATE

LEGEND

**2** (7.6)

**80** (5.5, 0.5)

**70** (4.8, 0.4)

**60** (4.1, 0.4)

50 (3.4, 0.3)

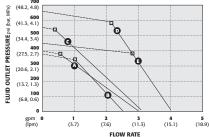
40 (2.7, 0.2)

(2.0, 0.2)

(1.3, 0.1) 10 (0.6, 0.06)

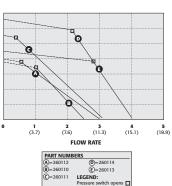
gpm 0 (lpm)





# Typical Fluids Handled

- Synthetic oil
- Petroleum oil\*
- Used oil\*
- Anti-freeze
- Hydraulic fluids
- · Cutting oils
- Liquid soap
- · Non-flammable oil based solvents
- · Oil-based herbicide carriers \*Not for food grade use





# **APEX™ and APEX On-Demand**

# **Transfer Pumps and Packages**

### **APEX Transfer System**

Part Number	260100	260101	260102*	260104	
Motor	12 VDC	115 VAC	115 VAC	230 VAC	
Hertz	NA	60	Hz	50/60 Hz	
Horsepower	0.75	0.50	0.75	0.50	
Maximum Current	35 amps 9.2 amps		9.0 amps	3.9 amps	
Maximum Flow Rate	5.8 gpm (22 lpm)	4.25 gpm (16 lpm)	8.0 gpm (30 lpm)	4.25 gpm (16 lpm)	
Maximum Pressure	65 psi (	65 psi (4.5 bar)			
Inlet Port		1 n	ot(f)		
Outlet Port		3/4 ι	npt(f)		
Weight	34 lbs (15 kg) 25 lbs (11 kg)				
Instruction manual	311305				
Note: All oil transfer systems come with 3/4 in x 8 ft hose, 1 in x 34 in suction tube & 3/4 in outlet dispense valve  *Designed for fluid viscosities of 1000 centistokes or less. If fluid viscosity is greater than 1000 centistokes use part 260101.					





APEX 115 VAC oil transfer system

### **APEX Transfer Pumps**

Part Number	260105* 260106		260108	260109			
Motor		115 VAC					
Hertz		60	Hz				
Horsepower		1.	00				
Maximum Current	7.5 amps 9.0 amps			11.0 amps			
Maximum Flow Rate	3.0 gpm	(11 lpm)	4.0 gpm (15 lpm)	8.0 gpm (30 lpm)			
Maximum Pressure	150 psi (10 bar)						
Inlet Port	1 npt						
Outlet Port	3/4 npt						
Weight	25 lb (11 kg) 30 lb (14 kg)						
Instruction Manual		311306					

Note: All oil transfer pumps come with bung adapter.

\*Part no. 260105 is a wall mount unit

### **APEX On-Demand Pumps**

Part Number	260110 260111 260113 260114				260112		
Voltage		115 VAC					
Hertz		60	Hz		N/A		
Horsepower	0.75	1.00	1.50	2.00	0.75		
Maximum Current	10 amps	13 amps	18 amps 21 amps		75 amps		
Maximum Flow Rate	2.3 gpm (9 lpm)	3 gpm (11 lpm)	4.0 gpm	(15 lpm)	3 gpm (11 lpm)		
Maximum Pressure	370 psi (25 bar)	550 psi (38 bar)	470 psi (32 bar)	650 psi (45 bar)	400 psi (28 bar)		
Inlet Port			3/4 npt				
Outlet Port							
Weight	27 lb (12 kg)	2 kg) 32 lb (15 kg) 41 lb (19 kg) 52 lb (24 kg)					
Instruction Manual	311307						

Note: All on-demand pumps come with bung adapter

### **Accessories**

260145	Wall Mounting Bracket, fits all models
260238	"Y" Strainer with 3/4" npt female in-line strainer for used oil transfer
260306	Inlet Suction Screen Assembly, required for used oil applications, 20 mesh screen
260124	55 in (1.3 m) PVC Suction Tube With inlet check valve



APEX On-Demand 12 volt DC dispensing pump

# **GTP10 and GTP12**

### **Transfer Pumps and Packages**

### **Features and Benefits**

- Heavy-duty, die-cast aluminum
- CSA listed motor
- Built-in relief valve and filter strainer
- · Easy-to-lock security
- High quality, UV resistant automotive finish
- Rain proof for extreme weather conditions
- Two year warranty

# **Typical Applications**

• Fuel transfer for the construction, agriculture, manufacturing and marine industries

### **Typical Fluids Handled**

- Gasoline
- Diesel fuel
- Kerosene
- Bio-fuels



ordering information						
Kit Number	260000 260020 260025 260025					
Voltage	12 VDC	24 VDC	115 VAC	230 VAC		
Inlet Port		11	npt			
Outlet Port		3/4 npt				
Current	12 amps	6 amps	1.7 amps	1 amps		
Power Cord	18 ft (	5.5 m)	N/A			
Hose		3/4 in x 12 ft (19 mm x 3.7 m)				
Suction Tube		1 in x 34 in (25 mm x 0.9 m)				
Weight		20 lbs (9 kg)				
Max Fluid Flow	10 gpm (38 lpm) 12 gpm (45 lpm)					
Instruction Manual	311304					
	•					

Fuel Transfer Kit: Includes pump, fuel nozzle, bung adapter, 34 in (0.9 m) suction tube, 12 ft (3.7 m) grounded hose, elbow fitting, 18 ft (5.5 m) power cable, wire nuts and strain relief

NOTE: AC units do not include power cable, wire nuts or strain relief

### **Accessories**

260078	Unleaded nozzle
260083	Unleaded nozzle with auto shut-off
260082	Regular/diesel nozzle with auto shut-off
260079	Regular/diesel nozzle
260523	8 ft x 34 in (2.4 m) npt UL Listed hose
260521	12 ft x 3/4 in (3.7 m) npt UL Listed hose





# **Diesel Exhaust Fluid (DEF) Dispense Systems**

# **Specialty Pumps and Packages**

### **Features and Benefits**

All packages come with quick changeover inlet kit, air controls, air-operated double diaphragm pump, inlet hose, dispense hose and manual or auto shut-off nozzle. Simple bolt together assembly with no special tools.

### **Typical Applications**

- Automotive and heavy-duty dealerships
- Mining
- Service and fast lube centers
- Fleet service facilities
- In-plant
- Lube trucks

### **Typical Fluids Handled**

• Diesel Exhaust Fluid

Tote/Wall DE	F Package with Meter
24F531	Package includes: Air-Operated Diaphragm pump (24G745), Tote/Wall mounting bracket with nozzle holder (24F870), Automatic shut off SST nozzle with swivel (24F529), DEF meter package for auto nozzle (24H293), Quick connect inlet kit (24F532), DEF Inlet hose—6 ft, 3/4 in BSPP (M) (124581), DEF Dispense hose, 20 ft, 3/4 in BSPP, MBE (124603), Air Controls: Regulator (110147), vent (110223), 50 psi valve (124963)
Tote/Wall DE	F Package without Meter
24F878	Package includes: Air-Operated Diaphragm pump (24G745), Tote/Wall mounting bracket with nozzle holder (24F870), Automatic shut off SST nozzle with swivel (24F529), Quick connect inlet kit (24F532), DEF Inlet hose–6 ft, 3/4 in BSPP (M) (124581), DEF Dispense hose, 20 ft, 3/4 in BSPP, MBE (124603), Air Controls: Regulator (110147), vent (110223), 50 psi valve (124963)
Drum DEF Pa	ackage without Meter
24F947	Air-Operated Diaphragm pump (24G745), Drum mounting bracket with nozzle holder (24F679), Manual nozzle (125078), Quick connect inlet kit (24F532), DEF Inlet hose—2 ft, 3/4 in BSPP X cut (124875), DEF Dispense hose—12 ft, 3/4 in BSPP M x cut end (125079), Air Controls: Regulator (110147), vent (110223), 50 psi valve(124963)
Pumps	
24G745	Air-Operated Diaphragm pump (15 gpm free flow, polypropylene–3/4 in BSPP (F)
24G636	Pump, hand, DEF compatible
	Reels
HSDD5A	DEF XD-30 hose reel, 3/4 x 50, white (see XD hose reel section for dimension details)
HSDD5B	DEF XD-30 hose reel, 3/4 x 50, blue (see XD hose reel section for dimension details)
HSDD5F	DEF XD-30 hose reel, 3/4 x 50, yellow (see XD hose reel section for dimension details)
HSDDDA	DEF XD-30 hose reel, bare, white (see XD hose reel section for dimension details)
HSDDDB	DEF XD-30 hose reel, bare, blue (see XD hose reel section for dimension details)
HSDDDF	DEF XD-30 hose reel, bare, yellow (see XD hose reel section for dimension details)









# **Diesel Exhaust Fluid (DEF)**

# **Specialty Pumps and Packages**

Hoses	
124875	DEF hose, 2 ft, 3/4 in BSPP(M) x cut end (inlet hose)
124581	DEF hose, 6 ft, 3/4 in BSPP(M) x cut end (inlet hose)
125478	DEF hose, 4 ft, 3/4 in BSPP cut both ends (for hand pump only)
125079	DEF hose,12 ft, 3/4 in BSPP(M) x cut end
124671	DEF hose,12 ft, 3/4 in BSPP (mbe)
124603	DEF hose, 20 ft, 3/4 in BSPP (mbe)
125074	DEF hose, 20 ft, 3/4 in BSPP(M) x cut end
125242	DEF hose, 50 ft, 3/4 BSPP X 3/4 BSPP
Mounting	
24F870	Tote/Wall mounting bracket with nozzle holder
24F679	Drum mounting bracket with nozzle holder
124541	Holder, nozzle bath
Meter Kits	
24G738	Meter only, 1/2 in BSPP(F/F)
24H293	Meter Kit with fittings for SST auto nozzle
Nozzles	
124398	Automatic shut off SST nozzle without swivel–3/4 in BSPP(F)
24F529	Automatic shut off SST nozzle with swivel-3/4 in BSPP(F)
125078	Manual nozzle
24F524	SST Swivel, 3/4BSPP (M) x 3/4 BSPP(F)
Inlet Kits and	Accessories
24F532	Quick connect inlet kit: Includes: 24F532 drum coupler, 124549 drum insert and 124550 down tube
124548	Drum coupler
124549	Drum insert with NPS thread
125014	Drum insert with buttress thread
124550	Down tube
124963	50 psi air safety valve
125479	Suction tube (DEF hand pump)









# Fire-Ball® Lube Truck Oil and Grease Packages

# **Specialty Pumps and Packages**

Oil Package Selection and Ordering Information

	Fire-Ball 300 Cover-Mounted Package	Fire-Ball 300 Cover-Mounted Package	Fire-Ball 300 Bung-Mounted Package	Fire-Ball 425 Cover-Mounted Package	Fire-Ball 425 Bung-Mounted Package		
Ratio		5:1		10	):1		
Container Size	16 gal (60 l) Open-head	55 gal (200 l)	Closed-head*	55 gal (200 l)	Closed-head*		
Package Number	222086	206655	204264	206656	222067		
Pump Only	203872	203857	204254	222065	222095		
Hose/Fitting Kit		222063			222066		
Hose Length	6 ft (1.8 m)	6 ft (1.8 m)	6 ft (1.8 m)	6 ft (1.8 m)	6 ft (1.8 m)		
Air Regulator	(1)	(1)	(1)	(2)	(2)		
Hold-Down Kit	222061		207	7361			
Drum Cover	222060	207367	-	207367 <sup>(3)</sup>	-		
Bung Adapter	-	-	204076 (2.140 in Dia.)	-	224579 (2.159 in Dia.)		
Pump Clamp	-	-	204095	-	204095		
Instruction Manual		307883					

<sup>\*</sup> For closed-head drums, pump mounts off-center on drum cover. Pump draws through standard 2 npt bung opening and is equipped with grommet for rain-tight seal to the drum cover.

### **Grease Package Selection and Ordering Information**

	Fire-Ball 300 Cover-Mounted Package	Fire-Ball 300 Cover-Mounted Package	Fire-Ball 425 Cover-Mounted Package	Fire-Ball 425 Cover-Mounted Package	Fire-Ball 425 Cover-Mounted Package	Fire-Ball 425 Cover-Mounted Package
Ratio		50	):1		75	5:1
Container Size	120 lb (55 kg) Open-head	400 lb (180kg) Open-head	120 lb (55 kg) Open-head	400 lb (180 kg) Open-head	120 lb (55 kg) Open-head	400 lb (180 kg) Open-head
Package Number	222085	222071	223107	222075	243817	243818
Pump Only	239887	239888	205394	205395	239729	239730
Hose/Fitting Kit	222	072		222	076	
Hose Length			6 ft (1	l.8 m)		
Air Regulator	,	*		**		*
Hold-Down Kit	222061	207361	222061	207361	222061	207361
Drum Cover	222060	207366	222060	207366	222060	207366
Follower Plate	220654	223845	223344	223846	223344	223846
Instruction Manual	307880					

<sup>\*</sup> Order 3/8 in (9.5 mm) air regulator and gauge separately, (109075).

222086

<sup>(1)</sup> Order 3/8 in (9.5 mm) air regulator and gauge separately, (109075).

<sup>©</sup> Order 1/2 in (12.7 mm) air regulator (104266) and gauge (100960) separately.

<sup>\*\*</sup> Order 1/2 in (12.7 mm) air regulator (104266) and gauge (100960). 243818 206656 223107

# Fire-Ball® 300, 15:1 Undercoating/Rust-Proofing Packages

### **Specialty Pumps and Packages**

### **Features and Benefits**

- Available in carbon steel for petroleum-based or SST for water-based materials
- Durable air motor provides trouble-free operation

### **Typical Applications**

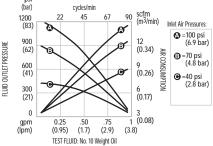
- Undercoating, rust-proofing and sound-deadening materials
- Automotive and heavy-duty vehicle dealerships
- Fast lube centers and service shops
- Fleet service facilities

### **Typical Fluids Handled**

· Undercoating and rust-proofing (verify chemical compatibility for pump's wetted components with undercoating material supplier or contact Graco directly at 1-800-533-9655)



**Pump Performance** 



### **Technical Specifications**

Maximum Fluid Pressure	2700 psi (186 bar)
Effective Air Motor Diameter	3 in (76.2 mm)
Operating Range	
Continuous-Duty Flow Rate	
Approx. Air Consumption @ 100 psi (7 bar)	
Air Inlet	
Material Outlet	1/4 npt(f)
Material Inlet for Non-SST Pump	1 npt (straight inlet)
Material Inlet for 224825 (SST Pump)	1 npt (barbed inlet)
Wetted Parts for Non-SST Pump	CS, Aluminum, PTFE, Rubber
Wetted Parts for SST pump	. SST, Aluminum, Leather, PTFE, Rubber
Instruction Manual for non-SST Pump	306531
Instruction Manual for SST Pump	308069

### **Ordering Information**

	Undercoating			Spray Masking
Style	Portable	Portable Dolly-Mounted	Stationary	Bung-Mounted Stationary
Container Size	35 lb (16 kg)	120 lb (54 kg)	400 lb (180 kg)	400 lb (180 kg)
Package Number	222077	226342	226269	224826*
Pump Only	206405	206699	206700	224825 (SST pump)
Dispense Kit	222079	222079	222082	224023
Tip	286517			286211 / 286621
Hose Length	15 ft (4.6 m)	15 ft (4.6 m)	25 ft (7.6 m)	25 ft (7.6 m)
Cover	222058	204574	200326	-
Caster Base	-	204144	-	-
Instruction Manual	307879/306531			308069

<sup>\*</sup> Package 224826 includes flexible short tube (224022) long enough for 400 lb (180 kg) container, but can be trimmed to accommodate smaller containers.

60-mesh Aluminum filter (3/8 npt(f) inlet; 1/4 npt(f) outlet). Max. working pressure: 3000 psi (210 bar)

Replacement Screen Elements (SST) 3-pack/25-pack

224458/238436 30-mesh | 224459/238438 60-mesh | 224468/238440 100-mesh

202577	Z-Swivel allows non-binding movement for hard-to-reach spots. Order 155570 adapter separately to accommodate 234237 gun
206496	Nozzle Extension delivers 360° coating fan into blind areas. Length 30-3/4 in (99 cm) x 7/8-14(f) end. Tip 206502, size .043
234237	4 Finger Silver Gun with tip guard 243161 and tip 286517. 4,500 psi (310 bar) x 3/8 npt(f) inlet. Must order 155570 adapter and 239663 straight swivel to accommodate gun to 1/4" (mbe) hose
239966	Bung Adapter

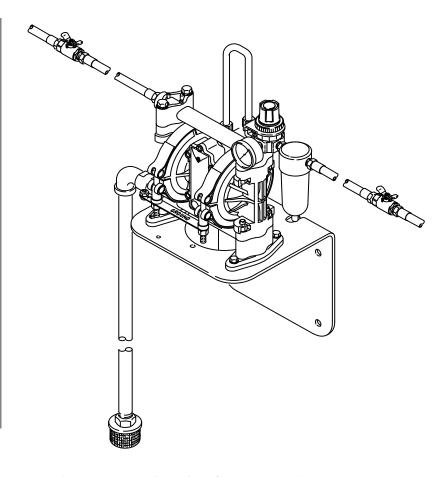


# **Windshield Wash and Coolant Dispense**

# **Specialty Pumps and Packages**

### Packages for Pre-Mixed Windshield Wash Solvent and Coolant Dispense

307 Air-Ope	307 Air-Operated Double-Diaphragm Pump				
237161	Complete package includes the following: 307 Diaphragm Pump (D31255), 6 ft (1.8 m) air hose (109125), 4 ft (1.2 m) coupled nitrile fluid hose (220596), air filter (110146), air gauge (108190), air line fitting (111511), 1/4 npt air regulator (110318), elbow (100611), 15 in (381 mm) 3/8 in ID tube, (187479), mounting bracket (190125), adapter (156022), 1/4-18 npt nipple (156971), suction hose kit (223888), 6 ft (1.8 m) coupled PVC hose and 304 SST 16 mesh strainer, wall bracket (224835)				
237160	Includes all items listed above except diaphragm pump and wall bracket				



### **Bulk Anti-Freeze and Windshield Solvent Transfer Packages**

Description	1050 AODD	1050 AODD	716 AODD	716 AODD
	Dual Inlet	Single Inlet	Dual Inlet	Single Inlet
Package Number	244679	244680	244681	244682
Pump	647016	647016	243669	241906
Air Regulator	109075	109075	110147	110147
Fluid Connect Hose	115042	115042	109105	109105
Air Connect Hose	205418	205418	109125	109125
Air Shut-off Valve	110224	110224	110223	110223
Wall Mount Bracket	24C637	24C637	224835	224835
Dual Inlet Manifold	24D205	_	-	-
Suction Kit	2-236054	236054	2-236054	236054
Thermal Relief Kit	238428	238428	113497	113497
Instruction Manual	309353	309353	309353	309353

# **Dyna-Star® and Power-Star™ Pumps**

### **Hydraulic Powered Pumps and Packages**

### **Features and Benefits**

- Ties into existing hydraulic systems on mobile equipment
- Operates quieter than air driven pumps and doesn't require mufflers
- Eliminates the need for air compressors
- · Provides self-lubrication for long life and reliability
- Hydraulic changeover is faster with less pulsation allowing smoother output pressure, even with long plumbing runs

### **Typical Applications**

- Low pressure, high volume oil transfer
- High pressure, high volume grease dispense
- · Heavy-duty dealerships
- · Fleet service facilities
- Service shops
- In-plant
- Lube trucks
- Mining

### **Typical Fluids Handled**

- Petroleum- and synthetic-based oils
- Grease up to NLGI #2

### Ordering Information for Oil Packages

Oil Applications	Power-Star, 1:1	Dyna-Star®, 1:1	Dyna-Star, 1:1	Dyna-Star, 1/4:1	Stainless Steel Dyna-Star, 1:1
Drum Size	Universal	Universal	55 gal (200 l) Bung- or Cover- Mounted	Universal	Universal
Pump Number	236754	224741	224742	236753	237653
Max. Input Pressure	1500 psi (102 bar)	1500 psi (102 bar)	1500 psi (102 bar)	1500 psi (102 bar)	1000 psi (70 bar)
Max. Fluid Input Volume	12 gpm (45.4 lpm)	3 gpm (11.4 lpm)	3 gpm (11.4 lpm)	3 gpm (11.4 lpm)	3 gpm (11.4 lpm)
Max. Output Flow Rate	12 gpm (45.4 lpm)	3 gpm (11.4 lpm)	3 gpm (11.4 lpm)	10 gpm (37.9 lpm)	3 gpm (11.4 lpm)
Maximum CPM	60	60	60	60	60
Max. Fluid Output Pressure	1500 psi (102 bar)	1500 psi (102 bar)	1500 psi (102 bar)	375 psi (25.1 bar)	1500 psi (102 bar)
Hydraulic Supply Inlet	3/4 npt	3/8 npt	3/8 npt	3/8 npt	3/8 npt(f)
Hydraulic Return Outlet	1-1/4 npt	3/4 npt	3/4 npt	3/4 npt	3/4 npt(f)
Fluid Outlet	1/2 npt	1/2 npt	1/2 npt	1/2 npt	1/2 npt(f)
Fluid Inlet	1-1/2 npt	1-1/2 npt	1-1/2 npt	1-1/2 npt	1-1/2 npt
Max. Incoming Fluid Temp.	130° F (54° C)	130° F (54° C)	130° F (54° C)	130° F (54° C)	130° F (54° C)
Instruction Manual	308391	308155	308155	308390	308155
Applications	Bulk oil transfer	Oil dispensing	Oil dispensing	Bulk oil transfer	Anti-freeze dispensing



# **Dyna-Star® and Viscount® II Pumps**

# **Hydraulic Powered Pumps and Packages**

### **Ordering Information for Grease Packages**

Grease Applications	Dyna-Star, 5:1	Dyna-Star, 10:1	Viscount II, 2.4:1
Part No. – Drum Size	224912 – 35 lb (16 kg) 224751 – 120 lb (55 kg) 224752 – 400 lb (180 kg)	247540 - 60 lb (27 kg) 247443 - 120 lb (55 kg) 247450 - 400 lb (180 kg)	222902 – 400 lb (180 kg)
Max. Input Pressure	1500 psi (102 bar)	600 psi (41 bar)	1500 psi (102 bar)
Max. Hydraulic Fluid Input Vol.	3 gpm (11.4 lpm)	3 gpm (11.4 lpm)	12 gpm (45.4 lpm)
Max Grease Flow Output Rate	4 lb/min (1.8 kg)	1.1 lb/min (0.5 kg)	54 lb/min (20.4 kg)
Maximum CPM	60	60	60
Max. Fluid Output Pressure	7,500 psi (517 bar)	7,500 psi (517 bar)	2,300 psi (159 bar)
Hydraulic Supply Inlet	3/8 npt	3/4-16 in. JIC (37° Flare)	3/4 npt
Hydraulic Return Outlet	3/4 npt	3/4 npt	1 npt
Fluid Outlet	1/2 npt	1/2 npt	1-1/2 npt
Maximum Incoming Hydraulic Fluid Temp.	130° F (54° C)	200° F (93° C)	130° F (54° C)
Instruction Manual	308156	312350	308149

Hydraulic Fluid Controls (Required for each pump)					
236864	Dyna-Star Fluid Controls [1500 psi (102 bar); 3 gpm (11.4 lpm)]. Includes manifold with pressure-reducing valve, flow control valve, pressure gauge, shut-off ball valves and 3 ft (0.9 m) supply and return hoses. Instruction manual 308395.				
236865	Power-Star and Viscount II Fluid Controls [1500 psi (102 bar); 12 gpm (45.4 lpm)]. Includes manifold with pressure-reducing valve, flow control valve, pressure gauge, shut-off ball valves and 3 ft (0.9 m) supply and return hoses. Instruction manual 308395.				
237904	1:1 Dyna-Star Thermal Relief Valve, 1600 psi (110 bar)				
235998	Mini Fire-Ball 225, 3:1 thermal relief valve rated to 600 psi (41 bar)				

### **Accessories**

Follower F	Plates
224916	Follower plate for 35 lb (16 kg)
223700	Follower plate for 120 lb (55 kg)
223701	Follower plate for 400 lb (180 kg)
Covers	
224915	Cover for 35 lb (16 kg)
204574	Cover for 120 lb (55 kg)
200326	Cover for 400 lb (180 kg)
Tie-Down	Covers
222060*	Tie-Down Cover for 120 lb (55 kg)
207366**	Tie-Down Cover for 400 lb (180 kg)
*Use with hold	-down kit 222061 **Use with hold-down kit 207361



# **Oil and Grease Dispensing Packages**

# **Manually Operated Pumps**

# 16 Gallon (60 I) Metered and Non-Metered Dispensing Packages

Designed for manual dispensing of fluid oil from bulk containers to point of application.

Description	Portable Metered ATF Dispenser	Portable Metered Gear Lube Dispenser	Cart-Mounted Metered Gear Lube Dispenser	Stationary Non-Metered Gear Lube Dispenser	Portable Non-Metered Gear Lube Dispenser
Package Number	225880	225376	225384	225380	225378 *
Pump Only			204867		
Metered Dispense Kit	239707	239	9705	-	-
Dispense Kit	-	-	-	214658	214658
Hose Diameter	-	-	1/2 in (12.7 mm)		
Hose Length	-	-	6 ft (1.8 m)		
Drum Cover	204574				
Caster Base	203	622	203622		203622
Cart	-	-	203650	-	-
Instruction Manual			306436		

<sup>\*</sup> Hydraulic; can be used for gear oil dispensing.

### Pail Dispensing Package for 5 gal (20 I) Pails

Mounts on top of a standard 5 gal (20 l) pail (pail not included). Delivery hose has curved nozzle that stores in cover port.

Description	Economy Gear-Lube Dispenser (Dispenses 1.6 to 1.9 oz. [47.3 to 56.2 ml] per stroke)
Package No.	226289
Hose length	4 ft (1.2 m)
Instruction manual	306875



# **Windshield Wash and Coolant Transfer**

### **Manually Operated Pumps**

# Pumping Bulk Lubricants out of 16 gal (60 l) or 55 gal (200 l) Drums $^{(1)}$

All pumps come with suction tube and bung adapter.

Description	Lever Pump <sup>(2)</sup>	Rotary Pump <sup>(3)</sup>	Hand-Lever Diaphragm Pump <sup>(4)</sup>
Pump Number	114829	226290	112202
Delivery rate	0.1 gal (0.4 l) per downstroke	1 gal (3.7 l) per 18 cycles	1 gal (3.7 l) per 9 cycles
Fluids Handled	Petroleum-based products, Anti-freeze	Petroleum-based products	Petroleum-based products <sup>(5)</sup>
Hose Length	-	-	8 ft (2.5 m)
Instruction manual	-	306876	-

<sup>(1)</sup> Drums not included

### Manual Dispense from Bulk Containers

Description	Buckshot Luber with Booster Gun	Buckshot Luber without Booster Gun	Grease Gun Fill Pump	Grease Gun Fill Pump	
Container Size		35 lb (16 kg)		120 lb (55 kg)	
Package No.	225914 <sup>(1)</sup>	225844(1)	112197 (2)	112198 <sup>(2)</sup>	
Pump	203	702	-	-	
Dispense Kit	203	703	Filler Adapter <sup>(3)</sup>		
Booster Gun	203697	-	-	-	
Cover and Follower Plate	203701		-	-	
Instruction Manual	306	455	-	-	

<sup>&</sup>lt;sup>(i)</sup> Delivers 1/4 oz (0.7 grams) of grease per stroke at pressures to 3,000 psi (207 bar). Can service fittings directly or be used to charge a booster gun for more efficiency at higher pressures.



Telescopic suction tube mounts 2 npt bung opening of 16 gal (60 l) or 55 gal (200 l) drum. Package includes bung adapter and spout outlet.

<sup>&</sup>lt;sup>(8)</sup> Package has adjustable 2 npt bung mounting to allow use with either 16 gal (60 l) or 55 gal (200 l) drum. Package includes bung adapter and spout outlet.
<sup>(4)</sup> A double-action high volume pump for gasoline and similar petroleum products.

<sup>&</sup>lt;sup>40</sup> A double-action high volume pump for gasoline and similar petroleum products. Fits 30 gal (113 l) to 55 gal (200 l) drum. Complete with an 8 ft (2.4 m) hose with 3/4 in fittings and aluminum telescoping suction pipe. Delivers approximately one gallon per nine strokes.

<sup>(5)</sup> This package is recommended for gasoline, diesel, heating oil and petroleum products, but NOT recommended for water-based fluids, solvents or weak acids.

Fills all three-way loading grease guns equipped with filler fittings.

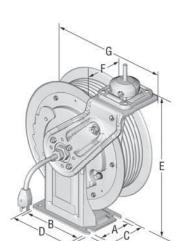
<sup>(9)</sup> Dispense kit 203703 can be used for direct greasing applications (must be ordered separately).

# **SD Series™ Cord and Light Reels**

### **Electric Cord Reel and Accessories**

### **Features and Benefits**

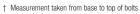
- Durable, heavy gauge steel frame won't flex or bend for long lasting performance
- Strong spring has the capacity to take on more load than the competition and is easy to pull down and retract so you don't have to fight to get it to operate
- One source for your entire automotive or industrial reel bank so you get everything you want including expert help when you need it
- Meets UL355\*, CSA22.2 No. 21 and IP44 standards for general, commercial and industrial grade use
- Enclosed spring and components are protected from harmful elements for longer lasting, dependable operation
- Easy to install, maintain, and repair
  - \* Rated for light outdoor use



### **Dimensions**

SD SERIES SIZE 5				
A 3.5 in (89 mm)				
В	6.38 in (162 mm)			
С	4.7 in (120 mm)			
D	7.48 in (190 mm)			
Ε <sup>†</sup>	14.8 in (376 mm)			
F*	6.6 in (168 mm)			
G**	13.84 in (352 mm)			

	ಿ	D SENIES SIZE IU
	Α	3.5 in (89 mm)
	В	7.5 in (191 mm)
	С	4.7 in (120 mm)
	D	9 in (229 mm)
	Ε <sup>†</sup>	19.5 in (498 mm)
F* 7 in (17		7 in (177 mm)
	G**	17.5 in (445 mm)



<sup>\*</sup> Measurement taken from edge of spool to front of arm.

\*\* Measurement taken from end of wire-nut to top surface of cover.

### **Technical Specifications**

### Operating Tempature:

Part numbers 24M510-24M518, 24M521-24M526, 24M542-24M544	22° F to 122° F (-30° C to 50° C)
Part numbers 24M527-24M541	4° F to 104° F (-20° C to 40° C)
Weight without accessories:	
Size 5: 16AWG, Cord Length - 35 Feet	25.4 lbs
Size 5: 16AWG, Cord Length - 50 Feet	27.6 lbs
Size 10: 16 AWG, Cord Length - 95 Feet	46.3 lbs
Size 5: 12AWG, Cord Length - 35 Feet	28.2 lbs
Size 5: 12AWG, Cord Length - 50 Feet	32.0 lbs
Size 10: 12 AWG, Cord Length - 95 Feet	
Sound Pressure(1)	80 dB(A)
Sound Power(2)	
Manual	3A2592



24M521

# **SD Series**<sup>™</sup> **Cord and Light Reels**

### **Electric Cord Reel and Accessories**

### **Ordering Information with Specifications**

All Graco cord and light reels have a metallic blue finish and are 120 volt with UL/CSA approved.

Part Number	Size	Accessory	AWG	Amp	Cord Length	Insulation
24M510	5		16	13	50 ft (15 m)	SJTOW
24M511	10	No Accessory	16	10	95 ft (29 m)	SJTOW
24M512	5	Cord Only	12	20	50 ft (15 m)	SJ00W
24M513	10		12	18	95 ft (29 m)	SJ00W
24M517	5		16	13	35 ft (10 m)	SJTOW
24M518	5	0	16	13	50 ft (15 m)	SJTOW
24M521	5	Single Industrial Receptacle	12	20	35 ft (10 m)	SJ00W
24M522	5	Песеріасіе	12	20	50 ft (15 m)	SJ00W
24M524	10		12	18	95 ft (29 m)	SJ00W
24M525	5	Duplex GFCI	12	20	50 ft (15 m)	SJ00W
24M526	10	Industrial Receptacle <sup>‡</sup>	12	18	95 ft (29 m)	SJ00W
24M527	5		16	<1	35 ft (10 m)	SJTOW
24M528	5	Fluorescent Light	16	<1	50 ft (15 m)	SJTOW
24M529	10		16	<1	95 ft (29 m)	SJTOW
24M530	5	Fluorescent Light	16	10	35 ft (10 m)	SJTOW
24M531	5	with Single Tool	16	10	50 ft (15 m)	SJTOW
24M532	10	Tap Plug	16	10	95 ft (29 m)	SJTOW
24M533	5		16	<1	35 ft (10 m)	SJTOW
24M534	5	LED Light	16	<1	50 ft (15 m)	SJTOW
24M535	10		16	<1	95 ft (29 m)	SJTOW
24M536	5		16	13	35 ft (10 m)	SJTOW
24M537	5	LED Light with In-line Tool Tap	16	13	50 ft (15 m)	SJTOW
24M538	10	in-iine toot tap	16	10	95 ft (29 m)	SJTOW

### **Mounting Channel For Ceiling**

For use when mounting reels without an enclosure. Available to accommodate one to six reels. Refer to manual for longer channels.

24N674	For mounting one SD Series Size 5 reel
24A934	For mounting one SD Series Size 10 reel**
24N675	For mounting two SD Series Size 5 reels
24A935	For mounting two SD Series Size 10 reels**

<sup>\*\*</sup>Design is the same as SD Series size 10 hose reels.

### **Enclosed Reel Mounting Channel For Ceiling or Wall**

 $For use with \ enclosure \ kits \ only. \ Available \ to \ accommodate \ one \ to \ six \ reels. \ Refer \ to \ the \ manual \ for \ longer \ channels.$ 

203521	For mounting one Size 5 and 10 reel
203522	For mounting two Size 5 and 10 reels







24M536

# $\textbf{SD Series}^{^{\scriptscriptstyle{\top}}} \textbf{ Cord and Light Reels}$

### **Electric Cord Reel and Accessories**

### **Ordering Information with Specifications**

All Graco cord and light reels have a metallic blue finish and are 120 volt with UL/CSA approved.

### **Cord Reel Enclosure Kits**

Enclosure kit for one reel provides protection to extend the life of reel, while giving your shop a professional look

professional look.						
Size 5 Enclos	Size 5 Enclosure and spacer bracket					
24N690	White	White				
24N682	Metallic Blue					
24N683	Red					
24N684	Black					
24N691	Dark Blu	ue .				
24N685	Yellow					
Size 10 Enclo	sure kit	for one reel				
24A217	White					
24A940	Metallic	Blue				
24A941	Red					
24A942	Black					
24A943	Dark Blu	ue				
24A944	Yellow					
End Panel Kit	s					
24A950	Black o	nly (Same kit as Size 10 hose reels)				
Retrofit Moun	iting Bra	cket				
24P164		SD Series size 5 spacer bracket for mounting in existing Graco SD enclosure				
16N883		Clamping plate to mount size 5 reel to existing SD Series open channel				
Swivel Mount Allows reel to s		t For Wall 0° with two lockable positions				
24N814		SD Series size 5				
24N444		SD Series size 10				
		or Ceiling or Wall				
	lide the r	eel in and out for easy installation				
24N686		SD Series size 5				
24H193		SD Series size 10				
I Beam Mount		For Ceiling nel to I-beam without drilling				
Secures mount	ung chan	Fits SD Series size 5 and 10 reels (Two brackets are required for one to three reels)				
204741		Pits ob belies size 3 and 10 feets (two blackets are required for one to timee feets)				
Hands-free M	Hands-free Magnetic Clip					
16P999		Magnetic clip with non-marring cover won't scratch vehicle finish. Snap onto light tube for hands-free operation. Spin the fixture to direct light where you need it.				
Retrofit Mount For Competitiv	•					
24N688		Fits size 5 reel				
24N689		Fits size 10 reel				
		1				





24N686



24N814



101333

# **LD Series Enclosed Hose Reels**

### **Hose Reels and Packages**

### **Features and Benefits**

- · Designed for light-duty applications
- Enclosed for safety and protection, extends hose life
- Flexible mounting options—hang on wall or ceiling; bench, table or tank top-mount options are available
- Full-flow swivel maximizes fluid flow with minimal pressure drop
- Easy spring tension adjustment—increase or decrease pressure spring tension while reel is pressurized

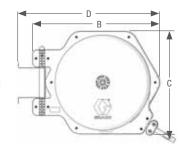
### **Typical Applications**

- Small maintenance shops
- Tire/muffler shops
- Small fast lubes
- Independent repair facilities
- Industrial manufacturing facilities

### **Typical Fluids Handled**

- Petroleum- and synthetic-based oils
- Grease
- Air only
- Air/water
- Anti-Freeze
- Windshield Washer





**Dimensions** 

В

С

D

LD SERIES

7.1 in (180 mm)

23.0 in (585 mm)

18.5 in (470 mm)

25.6 in (650 mm)

# G GRACO

Enclosed hose reel comes with ceiling/wall mounting swivel bracket. Required inlet hose kit sold separately.

### NPT Replacement Reels\* Ordering Information

	ld x L	ength	Pressure psi (bar)	Connection Size Inlet NPT(m) x Outlet NPT(m)
Air Only	6 mm x 11 m	1/4 in x 35 ft	250 (17.2)	1/2 in x 1/4 in
Air Only	6 mm x 15 m	1/4 in x 50 ft	250 (17.2)	1/2 in x 1/4 in
Air/Water	10 mm x 11 m	3/8 in x 35 ft	250 (17.2)	1/2 in x 3/8 in
Air/Water	10 mm x 15 m	3/8 in x 50 ft	250 (17.2)	1/2 in x 3/8 in
Air/Water	12 mm x 11 m	1/2 in x 35 ft	250 (17.2)	1/2 in x 1/2 in
Air/Water	12 mm x 14 m	1/2 in x 45 ft	250 (17.2)	1/2 in x 1/2 in
Oil	10 mm x 11 m	3/8 in x 35 ft	1800 (124)	1/2 in x 3/8 in
Oil	12 mm x 11 m	1/2 in x 35 ft	1800 (124)	1/2 in x 1/2 in
Grease	6 mm x 11 m	1/4 in x 35 ft	5000 (345)	3/8 in x 1/4 in
	Air Only Air/Water Air/Water Air/Water Air/Water Oil Oil Grease	Air Only 6 mm x 15 m  Air/Water 10 mm x 11 m  Air/Water 10 mm x 15 m  Air/Water 12 mm x 11 m  Air/Water 12 mm x 14 m  Oil 10 mm x 11 m  Oil 12 mm x 11 m	Air Only 6 mm x 15 m 1/4 in x 50 ft  Air/Water 10 mm x 11 m 3/8 in x 35 ft  Air/Water 10 mm x 15 m 3/8 in x 50 ft  Air/Water 12 mm x 11 m 1/2 in x 35 ft  Air/Water 12 mm x 14 m 1/2 in x 45 ft  Oil 10 mm x 11 m 3/8 in x 35 ft  Oil 12 mm x 11 m 1/2 in x 35 ft  Grease 6 mm x 11 m 1/4 in x 35 ft	Air Only 6 mm x 15 m 1/4 in x 50 ft 250 (17.2)  Air/Water 10 mm x 11 m 3/8 in x 35 ft 250 (17.2)  Air/Water 10 mm x 15 m 3/8 in x 35 ft 250 (17.2)  Air/Water 12 mm x 11 m 1/2 in x 35 ft 250 (17.2)  Air/Water 12 mm x 14 m 1/2 in x 45 ft 250 (17.2)  Oil 10 mm x 11 m 3/8 in x 35 ft 1800 (124)  Oil 12 mm x 11 m 1/2 in x 35 ft 1800 (124)  Grease 6 mm x 11 m 1/4 in x 35 ft 5000 (345)

\*Reel only. Mounting Hardware is not included



### Hose Inlet Kits for LD Enclosed Hose Reel

	Part Number	Hose Inlet Description	Fits Reel	Pressure psi (bar)	Hose id in (mm)	Length in (mm)	Hose Inlet in	Hose Outlet in
For NPT connections	040440	24C443 Air	24H655	- 250 (17.2)	1/4 (6)	36 in (915) 1/2 npt(m)*	1/4 npt(m)*	1/4 npt(m)*
	240443		24H656					
	24C444		24H657		3/8 (10)		1/2 nnt/m\*	3/8 npt(m)*
	24C445	- Air/water	24H658		1/2 (12)			1/2 npt(m)*
	24C537	Oil	24H661	1 900 (124)	3/8 (10)		3/8 npt(m)*	
	24C538	Oll	24H662	1,800 (124)	1/2 (12)			1/2 npt(m)*
	24C539	Grease	24H663	5,000 (345)	1/4 (6)		1/4 npt(m)*	1/4 npt(m)*

<sup>\*</sup> NPT hose connection when using BSP to NPT adapter (included)



# **LD Series Enclosed Hose Reels**

# **Hose Reels and Packages**

### Wall Mount Package\* (NPT)

Package Part Number	Application	Hose Size Id x Length	Reel (NPT)	Wall Mount Kit	Inlet Kit
24F735	Air	1/4 in x 35 ft	24H655	24G866	24C443
24F736	Air	1/4 in x 50 ft	24H656	24G866	24C443
24F737	Air/Water	3/8 in x 35 ft	24H657	24G866	24C444
24F738	Air/Water	3/8 in x 50 ft	24H658	24G866	24C444
24F739	Air/Water	1/2 in x 35 ft	24H659	24G866	24C444
24F740	Air/Water	1/2 in x 45 ft	24H660	24G866	24C444
24F741	Oil	3/8 in x 35 ft	24H661	24G866	24C537
24F742	Oil	1/2 in x 35 ft	24H662	24G866	24C538
24F743	Grease	1/4 in x 35 ft	24H663	24G866	24C539



### Fixed Mount Package\* (NPT)

Package Part Number	Application	Hose Size Id x Length	Reel (NPT)	Fixed Mount Kit	Inlet Kit
24F753	Air	1/4 in x 35 ft	24H655	24G865	24C443
24F754	Air	1/4 in x 50 ft	24H656	24G865	24C443
24F755	Air/Water	3/8 in x 35 ft	24H657	24G865	24C444
24F756	Air/Water	3/8 in x 50 ft	24H658	24G865	24C444
24F757	Air/Water	1/2 in x 35 ft	24H659	24G865	24C444
24F758	Air/Water	1/2 in x 45 ft	24H660	24G865	24C444
24F759	Oil	3/8 in x 35 ft	24H661	24G865	24C537
24F760	Oil	1/2 in x 35 ft	24H662	24G865	24C538
24F761	Grease	1/4 in x 35 ft	24H663	24G865	24C539

<sup>\*</sup>Reel, Inlet kit, Fixed Bracket Kit

### Swivel Mount Package\* (NPT)

Package Part Number	Application	Hose Size Id x Length	Reel (NPT)	Swivel Mount Kit	Inlet Kit	
24F771	Air	1/4 in x 35 ft	24H655	24C772	24C443	
24F772	Air	1/4 in x 50 ft	24H656	24C772	24C443	
24F773	Air/Water	3/8 in x 35 ft	24H657	24C772	24C444	
24F774	Air/Water	3/8 in x 50 ft	24H658	24C772	24C444	
24F775	Air/Water	1/2 in x 35 ft	24H659	24C772	24C444	
24F776	Air/Water	1/2 in x 45 ft	24H660	24C772	24C444	
24F777	Oil	3/8 in x 35 ft	24H661	24C772	24C537	
24F778	Oil	1/2 in x 35 ft	24H662	24C772	24C538	
24F779	Grease	1/4 in x 35 ft	24H663	24C772	24C539	

<sup>\*</sup>Hose Reel, Inlet Kit, Swivel Bracket Kit

### **Mounting Kits Ordering Information**

Mounting	wounting rate ordering information										
Part Number	Description										
24G866	Wall Mount Kit										
24G865	Fixed Bracket New Installation Kit										
24E506	Fixed Bracket Replacement Kit										
24C772	Swivel Bracket Kit										







Tote, Bench or Wall Mount Post 24C772

<sup>\*</sup>Hose Reel, Inlet Kit , Wall Mount Bracket Kit Included

### **SD Series Hose Reels**

### **Hose Reels and Packages**

### **Features and Benefits**

- Designed for daily use applications, such as dealerships, fleet service and maintenance facilities
- Structurally engineered frame made from high strength steel won't bend or flex
- Long-lasting spring provides constant spring torque through the entire range of motion
- Flexible positioning of guide arm for mounting on bench or ceiling, wall or utility truck
- Steel spool for demanding applications
- Open swivel ports ensure high fluid flow with minimal pressure loss
- Enclosure kits available-ideal when appearance and protection is important
- Available in six colors. Metallic blue is standard

### **Typical Applications**

- · Car dealerships
- Light/medium-duty truck dealers
- Fleet maintenance
- · Mining maintenance
- · Public works garages
- Construction vehicle maintenance
- Light-utility service trucks

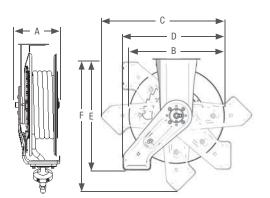
### Typical Fluids Handled

- · Petroleum and synthetic based oils
- Grease
- Air
- Water
- Anti-freeze
- · Windshield washer

### **Dimensions**

5	SD SERIES SIZE 10								
Α	7.0 in (177 mm)								
В	16.2 in (412 mm)								
С	21.0 in (533 mm)								
D	17.1 in (435 mm)								
Е	19.5 in (495 mm)								
F	22.5 in (571 mm)								

;	SD SERIES SIZE 20								
Α	7.0 in (177 mm)								
В	18.1 in (460 mm)								
С	23.4 in (594 mm)								
D	19.2 in (488 mm)								
Е	21.8 in (554 mm)								
F	25.2 in (640 mm)								





### **Ordering Information**

### **Technical Specifications**

		Model numbers by color							Н	lose	Conne	Operating	
Applications		Metallic Blue	White	Red	Black	Dark Blue	Yellow	psi (bar)	id (in)	Length ft (mt)	Inlet npsm(m)	Outlet	Temp.
	0	HPL23B	HPL23A	HPL23C	HPL23D	HPL23E	HPL23F	300 (20.7)	3/8	35 (11)	1/2	3/8 npt (m)	
Air, Water,	SIZE 10	HPL25B	HPL25A	HPL25C	HPL25D	HPL25E	HPL25F	300 (20.7)	3/8	50 (15)	1/2	3/8 npt (m)	
Anti-freeze, Windshield	S	HPL33B	HPL33A	HPL33C	HPL33D	HPL33E	HPL33F	300 (20.7)	1/2	35 (11)	1/2	1/2 npt (m)	
Washer Fluid	: 20	HPL56B	HPL56A	HPL56C	HPL56D	HPL56E	HPL56F	300 (20.7)	3/8	65 (20)	1/2	3/8 npt (m)	1
	SIZE	HPL65B	HPL65A	HPL65C	HPL65D	HPL65E	HPL65F	300 (20.7)	1/2	50 (15)	1/2	1/2 npt (m)	-20°-190° F (-28°-87° C)
	10	НРМ33В	НРМ33А	HPM33C	HPM33D	НРМ33Е	HPM33F	2,000 (138)	1/2	35 (11)	1/2	1/2 npt (m)	(20 0/ 0)
Petroleum or	SIZE	HPM3BB*	HPM3BA*	HPM3BC*	HPM3BD*	HPM3BE*	HPM3BF*	2,000 (138)	1/2	35 (11)	1/2	1/2 npsm (f)	
Synthetic based Oils	: 20	HPM65B	HPM65A	HPM65C	HPM65D	HPM65E	HPM65F	2,000 (138)	1/2	50 (15)	1/2	1/2 npt (m)	
	SIZE	HPM6DB*	HPM6DA*	HPM6DC*	HPM6DD*	HPM6DE*	HPM6DF*	2,000 (138)	1/2	50 (15)	1/2	1/2 npsm (f)	
	0	HPH15B	HPH15A	HPH15C	HPH15D	HPH15E	HPH15F	5,000 (345)	1/4	50 (15)	3/8	1/4 npt (m)	
	SIZE 10	HPH23B	HPH23A	HPH23C	HPH23D	HPH23E	HPH23F	4,000 (276)	3/8	35 (11)	3/8	1/4 npt (m)	
Grease	S	HPH1DB*	HPH1DA*	HPH1DC*	HPH1DD*	HPH1DE*	HPH1DF*	5,000 (345)	3/8	35 (11)	3/8	1/4 npt (f)	-40°-200° F (-40°-93° C)
	: 20	HPH55B	HPH55A	HPH55C	HPH55D	HPH55E	HPH55F	4,000 (276)	3/8	50 (15)	3/8	1/4 npt (m)	( 10 00 0)
	SIZE	HPH5DB*	HPH5DA*	HPH5DC*	HPH5DD*	HPH5DE*	HPH5DF*	4,000 (276)	3/8	50 (15)	3/8	1/4 npt (f)	

# **SD Hose Reel Packages and Accessories**

# **Hose Reels and Packages**

	Application	SD	Packages	Ho	se Re	el l	Hose Inle	et Kit	Wh	ite Encl	osure	Valve/Me	ter	Fitting
	Air/Water	:	24D989		HPL23B		21854	19	24A217			_		-
Steel Spool	Air/Water	:	24D990	HPL25B		3	218549			24A217	7	_		_
	Air/Water	:	24D991	Н	IPL33E	3	21854	19		24A217	7	_		_
	Air	:	24D992	Н	IPL23E	3	21854	19		24A217	7	218545	5	_
eel	Water	:	24D993	Н	IPL23E	3	21854	19		24A217	7	180685	5	150287
S	Water	:	24D994	Н	HPL33B		218549			24A217	7	180685	5	159842
	Motor Oil	:	24D995	Н	PM33	В	21854	19		24A217	7	_		_
	Motor Oil	:	24D996	Н	PM33	В	21854	19		24A217	7	255350	)	_
	Motor Oil	:	24D997	Н	PM33	В	21854	19		24A21	7	255348	3	-
SD R	eel Packages	with	out Enclosu	re K	iit									
	Application	SD	Packages	Но	se Re	el l	Hose Inle	et Kit		Enclosu	re	Valve/Me	ter	Fitting
000	Air	:	24D998	Н	IPL23E	3	21854	19		-		218545	5	-
Steel Spool	Water	:	24D999	Н	IPL23E	3	21854	19		-		180685	5	150287
Ste	Motor Oil		24E001	Н	PM33	В	21854	19		_		255350	)	_
	Motor Oil		24E002	Н	PM33	В	21854	19		_		255348	3	_
Hose	Inlet Kits for	SD ar	nd XD10 and	20	Pres	sure p	osi (bar)	Hose	id ii	n (mm)	Lengt	h in (mm)	Н	ose Inlet
2185	549 L	ow/m	edium press	ure	2	2000 (	137)		1/2 (	12)	24	1 (610)		npt(m)
2185	550 H	ligh p	gh pressure		4000		276)	3/8		10)	24	24 (610)		npt(m)
2244	17 H	ligh p	pressure 500				(345) 1/4 (6)			24	24 (610)		npt(m)	
	Enclose Kits	for	Provides protection to			o exter	nd the life	e of ho	ses and bearing		ngs for	SD single p	pedestal reels	
One	Reel		Whit	te*		Meta	llic Blue	Re	d Black		Da	ark Blue	١	/ellow
	10 Enclosure		24A2	217		24	A940	24A9	)41	24A94	2 2	4A943	2	4A944
	20 Enclosure		24A2	4A218		24A94		24A9	146	16 24A947 2		24A948 2		4A949
	10 End Caps (2		_			_		_	- 24A950		_			
Size 2	20 End Caps (2	)		_						24A951				
	losed Reel inting Channe	el E	inclosure mo	untir	ng cha	nnel k	xits includ	e all pa	arts f	or mount	ting hos	se reels to v	valls	or ceiling
Desc	cription		1 Reel	2 Re		els	3 R	eels 4 Reels		5 Reels		6 Reels		
SD E	Enclosed		203521		2035	522	203	523	3 203524			203525		203526
	n Reel		ccommodate	s on	e, two,	, three,	, four, five	or six ı	reels	(includes	all part	s for wall or	ceilir	ng mounts
Mou	ınting Channe	91	1 Reel 2 Re			els	ls 3 Reels			4 Reels		5 Reels		6 Reels
SD10	0/SD20 Open		24A934		24A9	24A935 24A9		936	24A937			24A938		24A939
Retro	ofit Adapter K	its												
24A2	224	Incl	udes all part	s to	moun	t hose	reel to e	xisting	500	series m	ounting	pattern		
24C1	00	Incl	udes all parts	s to o	conver	t SD10	) hose re	els to fi	t exis	ting 250	series	enclosures		
Mou	nting Bracket	(Secu	ures mountin	g ch	annel	to I-be	eam with	out dril	ling)					
2047	'41	Two	brackets ar	e re	quired	for 1-	3 hose r	eels; th	ree b	rackets	for 4-6	hose reels		
Ball	Stop Kits													
222225 For 1/4 in (6.4 mm) i.d. hose (Not for use with XD30, 700 or 750)														
218340 For 1/4-3/8 in (6.4-9.5 mm) i.d. hose (Not for use with XD30, 700 or 750)														
2183	341	.78	2 ID used for	r 3/8	3 in an	d 1/2	in (9.5 m	m and	12.7	mm) ho	se (Not	for use with XD	30, 70	00 or 750)
2378	372	1.0	ID used for	5/8	in (15.	9 mm	) hose							
2378	373	1.1	23 ID used f	or 3	/4 in (	19.1 n	nm) hose							
2378	374	1.3	74 ID used f	or 1	in (25	.4 mn	n) hose							
24D132 For 3/8 in (9.5 mm) o.d. hose						ose								
	24D133 For 1/2 in (12.7 mm) o.d. hose													

Hose Reel Enclosure

Mounting Channel





<sup>\*</sup> Bare Reel-hose sold separately Wetted parts-bare hose reel only: zinc plated steel, steel, nitrile rubber Dry Weight: 52 lbs (23.5 kg) Instruction Manual: 313431



# **XD Series Hose Reels**

### **Hose Reels and Packages**

### **Features and Benefits**

- Designed for robust/heavy-duty applications such as mobile lube trucks or large equipment service, yet with a narrow footprint to fit more reels into small spaces
- Dual pedestal frame provides increased strength for extreme-duty applications
- Long lasting spring is sealed for protection against the weather
- Durable steel spool rides on sealed roller bearings to ensure trouble-free performance
- Available in four colors. Metallic blue is standard
- · Available with arms removed for bulkhead mounting

### **Typical Applications**

- Heavy-duty truck dealers
- Fleet maintenance
- Mining maintenance
- · Public works garages
- Construction vehicle maintenance
- · Heavy-duty mobile service trucks
- Mining

### Typical Fluids Handled

- Petroleum and synthetic based oils
- Grease
- Fuel evacuation
- Pressure wash
- Air
- Water
- Anti-freeze
- Windshield washer

Note: Hose Inlet Kit for all XD Reels sold separately.

### **Dimensions**

:	XD SERIES SIZE 10									
А	7.5 in (196 mm)									
В	16.2 in (412 mm)									
С	21.0 in (533 mm)									
D	18.0 in (457mm)									
Е	18.5 in (470 mm)									
F	22.5 (571 mm)									

XD SERIES SIZE 20									
Α	7.5 in (196 mm)								
В	18.1 in (460 mm)								
С	23.4 in (594 mm)								
D	20.0 in (508 mm)								
Е	21.0 in (533 mm)								
F	25.2 in (640 mm)								

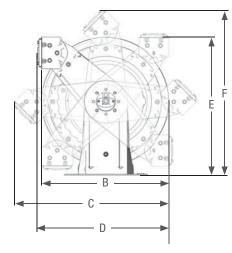
XD S	XD SERIES SIZE 30									
Α	A 9.0 in (229 mm)									
В	21.50 in (546.00 mm)									
С	25.96 in (659.45 mm)									
D	22.12 in (561.73 mm)									
Е	23.10 in (588.00 mm)									
F	27.60 in (700.82 mm)									











# **XD Series Hose Reels**

# **Hose Reels and Packages**

### **Ordering Information**

# **Technical Specifications**

			Model numb	ers by color		Pressure		Hose	Connect	tion Size	Operating	
Applications		Metallic Blue	White	Yellow	Desert Sand	psi (bar)	id in	Length ft (m)	Inlet in	Outlet in	Temp.	
	10	HSL25B	HSL25A	HSL25F	HSL25G		3/8	50 (15)		3/8 npt(m)		
	SIZE 10	HSL33B	HSL33A	HSL33F	HSL33G		1/2	35 (11)		1/2 npt(m)	-20–190° F (-28–87° C)	
Air, water, Anti-freeze,	50	HSL56B	HSL56A	HSL56F	HSL56G	000 (00 7)	3/8	65 (20)	1/2 npsm(m)	3/8 npt(m)		
windshield Washer fluid	SIZE 20	HSL65B	HSL65A	HSL65F	HSL65G	300 (20.7)	1/2	50 (15)		1/2 npt(m)		
Traction that	30	HSLC8B	HSLC8A	HSLC8F	HSLC8G		1/2	75 (23)		1/2 npt(m)	-40–180° F	
	SIZE 30	HSLD5B	HSLD5A	HSLD5F	HSLD5G		3/4	50 (15)	3/4 npsm(m)	3/4 npt(m)	(-40-82° C)	
	: 10	HSM33B	HSM33A	HSM33F	HSM33G			35 (11)		1/2 npt(m)		
	SIZE 10	HSM3BB *	HSM3BA *	HSM3BF	HSM3BG	0.000 (4.00)		35 (11)		1/2 npt(f)	-20–190° F	
	50	HSM65B	HSM65A	HSM65F	HSM65G	2,000 (138)	1/0	50 (15)	1 (0 ()	1/2 npt(m)	(-28–87° C)	
Petroleum-	SIZE 20	HSM6DB *	HSM6DA*	HSM6DF*	HSM6DG		1/2	50 (15)	1/2 npsm(m)	1/2 npt(f)		
and synthetic– based oils		HSMC8B	HSMC8A	HSMC8F	HSMC8G	1,500 (103)		75 (23)	1	1/2 npt(m)		
	30	HSMCFB *	HSMCFA *	HSMCFF *	HSMCFG *	2,000 (138)		75 (23)		1/2 npsm(f)	-40–180° F	
	SIZE 30	HSMD5B	HSMD5A	HSMD5F	HSMD5G	1,250 (86)	3/4	EO (4E)	2/4 ppom/m)	3/4 npt(m)	(-40-82°C)	
		HSMDDB *	HSMDDA *	HSMDDF *	HSMDDG *	2,000 (138)	3/4	50 (15)	3/4 npsm(m)	3/4 npsm(f)		
	SIZE 10	HSH15B	HSH15A	HSH15F	HSH15G	0.000 (550)	1/4	50 (15)	3/8 npsm(m)	1/4 npt(m)		
	SIZE	HSH1DB *	HSH1DA *	HSH1DF*	HSH1DG *	8,000 (552)	3/8	35 (11)		3/8 npt(f)	-40–200° F	
	50	HSH55B	HSH55A	HSH55F	HSH55G	4,000 (276)				1/4 npt(m)	(-40°–93° C)	
Grease	SIZE 20	HSH5DB*	HSH5DA*	HSH5DF*	HSH5DG*	8,000 (552)	1/0	E0 (4E)		3/8 npsm(f)		
		HSHC5B	HSHC5A	HSHC5F	HSHC5G		1/2	50 (15)	1/2 npsm(m)	1/2 npt(m)		
	SIZE 30	HSHCDB *	HSHCDA *	HSHCDF *	HSHCDG *	5,000 (345)				1/2 npsm(f)	-40–180° F (-40–82° C)	
	S	HSHB7B	HSHB7A	HSHB7F	HSHB7G		3/8	75 (23)		3/8 npt(f)		
		HSPB8B	HSPB8A	HSPB8F	HSPB8G	4.000 (070)	2/0	7E (00)		3/8 npt(m)		
Pressure wash	SIZE 30	HSHFFB *	HSHFFA *	HSHFFF *	HSHFFG *	4,000 (276)	3/8	75 (23)	1/2 npsm(m)	3/8 npsm(f)	-20–225° F (-28–107° C)	
	0,	HSPC5B	HSPC5A	HSPC5F	HSPC5G	4,500 (310)	1/2	50 (15)		1/2 npt(m)		
Fuel/Evacuation	SIZE 30	HSLE3B	HSLE3A	HSLE3F	HSLE3G	125 (8.6)	1	30 (9)	3/4 npsm(m)	1 npt(m)	-40-120° F (-40-49° C)	
DEE	SIZE 30	HSDD5B	HSDD5A	HSDD5F	NA	50 (3.4)	3//	50 (15)	3/4 bspp(m)	3/4 bspp ORB	12–140° F	
DEF	SIZI	HSDDDB*	HSDDDA	HSDDDF	NA	JU (3.4)	3/4	50 (15)	ora nohh(III)	0/4 Nohh AUD	(-11–60° C)	

Maximum dry weight with hose: XD10 = 54 lbs (24.5 kg), XD20 = 59 lbs (27 kg), XD30 = 98 lbs (44.5 kg) Wetted parts-Bare hose reel only: zinc plated steel, anodized aluminum, nitrile rubber Instruction Manuals: XD10 and XD20: 313431, XD30: 3A0138 \* Bare reel-hose sold separately

# **XD Series HN Model Hose Reels**

### **Hose Reels and Packages**

### **Features and Benefits**

Ideally suited for lube truck installations where space is a premium. Structurally engineered frame and spool is made from high strength steel that won't bend or flex. Long-lasting spring provides constant spring torque through the entire range of motion. Open swivel ports ensure high fluid flow with minimal pressure loss.

### **Typical Applications**

- Mining maintenance
- · Public works garages
- Construction vehicle maintenance
- · Light-utility service trucks

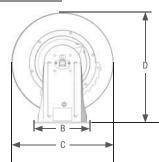
### **Typical Fluids Handled**

- · Petroleum and synthetic based oils
- Grease
- Air/Water
- Anti-freeze
- Fuel Evacuation

### **Dimensions**

XD30 Hose Reels HN Model									
Α	9.0" (229 mm)								
В	13.77" (350.00 mm)								
С	21.50" (546.00 mm)								
D	23.10" (588.00 mm)								







### **Ordering Information**

### **Technical Specifications**

		Model numbers by color		Pressure	H	ose	Connecti	on Size	Operating	
Applications		Metallic Blue	White	Yellow	psi (bar)	id in.(M)	Length ft (m)	Inlet npsm(m)	Outlet	Temp.
		HNL56B	HNL56A	HNL56F	300 (20.7)	3/8	65	1/2 npsm(m)	3/8npt(m)	
	50	24C246^	24C245^	24C247^	300 (20.7)	3/8	65	1/2 npsm(m)	3/8npt(m)	-20° F to 190° F
Air, Water, Anti- Freeze, Windsheild	Size	HNL65B	HNL65A	HNL65F	300 (20.7)	1/2	50	1/2 npsm(m)	1/2 npt(m)	(-28° C to 87° C)
Washer Fluid		24C249^	24C248^	24C250^	300 (20.7)	1/2	50	1/2 npsm(m)	1/2 npt(m)	
	30	HNLC8B	HNLC8A	HNLC8F	300 (20.7)	1/2	75	1/2 npsm(m)	1/2 npt(m)	-40° F to 180° F
	Size	HNLD5B	HNLD5A	HNLD5F	300 (20.7)	3/4	50	3/4 npsm(m)	3/4 npt(m)	(-40° C to 82° C)
	3 20	HNM65B	HNM65A	HNM65F	2000 (138)	1/2	50	1/2 npsm(m)	1/2 npt(m)	-20° F to 190° F
	Size	24C252^	24C251^	24C253^	2000 (138)	1/2	50	1/2 npsm(m)	1/2 npt(m)	(-28° C to 87° C)
Petroleum- and synthetic based oils	30	HNMC8B	HNMC8A	HNMC8F	1500 (103)	1/2	75	1/2 npsm(m)	1/2 npt(m)	
oymanous sussu ons	Size 3	HNMD5B	HNMD5A	HNMD5F	1250 (86)	3/4	50	3/4 npsm(m)	3/4 npt(m)	-40° F to 180° F (-40° C to 82° C)
	S	HNMDDB*	HNMDDA*	HNMDDF*	2000 (138)	3/4	50	3/4 npsm(m)	3/4 npt(m)	( 10 0 to 02 0)
	3 20	HNH55B	HNH55A	HNH55F	4800 (331)	3/8	50	3/8 nptsm(m)	1/4 npt(m)	-40° F to 200° F
	Size	24C255^	24C254^	24C256^	4800 (331)	3/8	50	3/8 nptsm(m)	1/4 npt(m)	(-40° C to 93° C)
Grease	30	HNHC5B	HNHC5A	HNHC5F	5000 (345)	1/2	50	1/2 npsm(m)	1/2 npt(m)	
	Size 3	HNHCDB*	HNHCDA*	HNHCDF*	5000 (345)	1/2	50	1/2 npsm(m)	1/2 npt(m)	-40° F to 180° F (-40° C to 82° C)
	S	HNHB7B	HNHB7A	HNHB7F	5000 (345)	3/8	75	1/2 npsm(m)	3/8 npt(m)	( 10 0 10 02 0)
		HNPB8B	HNPB8A	HNPB8F	4000 (276)	3/8	75	1/2 npsm(m)	3/8 npt(m)	
Pressure Wash	30	HNHFFB*	HNHFFA*	HNHFFF*	4000 (276)	3/8	75	1/2 npsm(m)	3/8 npsm(f)	-20° F to 225° F (-28° C to 107° C)
	Size	HNPC5B	HNPC5A	HNPC5F	4500 (310)	1/2	50	1/2 npsm(m)	1/2 npt(m)	(25 5 15 15 15)
Fuel/ Evacuation		HNLE3B	HNLE3A	HNLE3F	125 (86)	1	30	3/4 npsm(m)	1 npt(m)	-40° F to 100° F (-40° C to 49° C)

Wetted parts—bare hose reel only: zinc plated steel, steel, nitrile rubber HN Dry Weight: 64 pounds (29.0 kg) Instruction Manual: 3A0138
Wetted parts—HSL, HSM, HNL, and HNM Models are Nickel Plated Carbon Steel, Aluminum, Buna N Rubber, UHMWPE. HSH, HSP, HNH, and HNP Models are Nickel Plated Stainless Steel, Buna N Rubber, UHMWPE



# **700 Series Hose Reels**

### **Hose Reels and Packages**

### **Features and Benefits**

- Fully ported swivel and shaft for unrestricted flow
- Handles hose lengths up to 75 ft (23 m)
- Heavy-duty ball bearings outlast sleeved-type bearings
- Easy rewind with minimal hose guidance

### **Typical Applications**

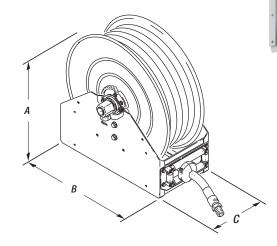
- · Heavy-duty truck dealers
- Fleet maintenance
- Mining maintenance
- Public works garages
- Construction vehicle maintenance
- Heavy-duty mobile service trucks
- Mining

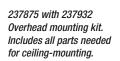
### **Typical Fluids Handled**

- Petroleum and synthetic based oils
- Grease
- Fuel evacuation
- Pressure wash
- Air
- Water
- Anti-freeze
- Windshield washer

### **Dimensions**

	700 SERIES
Α	26.25 in (628 mm)
В	24.0 in (609 mm)
С	11.83 in (300 mm)





# **Technical Specifications**

Inlet	Outlet	Max. Pressure	Maximum	Operating	Wetted	Weight	Instruction
npsm (m)	npt (m)	Psi (bar)	Vacuum	Temp.	Parts	(bare reel)	Manual
1 npt(f)	1 npt(f)	1500 psi (bare reel))	24 in Hg	-40° F to 180° F (-40° C to 82° C)	Carbon Steel, Buna	103 lb (46.7 kg)	308546

Medium-Pressure Oil Dispense Reels (rated to 1500 psi/103 bar)				
237728	Bare Hose Reel			
237879 *	Hose Reel with 3/4 in x 75 ft (19.1 mm x 23 m) hose			
Medium-Pressure Oil Evacuation and Dispense Reels (rated to 212 psi/14.6 bar)				
241910 *	910 * Hose Reel with 1 in x 50 ft (25.4 mm x 15 m) hose; 24 in (0.3 m) Hg vacuum			
Medium-Pressure Fuel Dispense Reel (rated to 125 psi/8.6 bar)				
237884 *	Hose Reel with 1 in x 50 ft (25.4 mm x 15 m) hose			

<sup>\*</sup> Not recommended for overhead installation

# **750 Series Hose Reels**

# **Hose Reels and Packages**

### **Features and Benefits**

- Heavy-duty, high volume reel
- Industrial-grade paint for high abrasion and corrosion resistance
- Full-flow shaft
- Heavy-duty brackets and springs
- Rugged base and hose rollers
- Heavy-duty latch mechanism

### **Typical Applications**

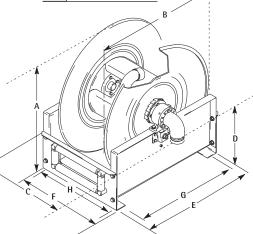
- · Heavy-duty truck dealers
- Fleet maintenance
- Mining maintenance
- Public works garages
- Construction vehicle maintenance
- Heavy-duty mobile service trucks
- Mining

### **Typical Fluids Handled**

- Petroleum and synthetic based oils
- Water
- Anti-freeze
- Unleaded and diesel fuels

### **Dimensions**

	750 Series
Α	26.25 in (667 mm)
В	26.25 in (667 mm)
С	21.88 in (556 mm)
D	13.75 in (349 mm)
Е	24.25 in (616 mm)
F	17.50 in (445 mm)
G	22.125 in (562 mm)
Н	13.50 in (343 mm)





### **Technical Specifications**

Inlet	Outlet	Max. Pressure	Hose	Operating	Wetted	Weight	Instruction
npsm (m)	npt (m)	Psi (bar)	Capacity	Temp.	Parts	(bare reel)	Manual
1-1/2 npt(f)	1-1/2 npt(f)	375 psi (26 bar)	50 ft (15.2m) x 1.50 in ID Hose	150° F (65° C)	Carbon Steel, Buna	139 lbs (63 kg)	309442

Bulk Dispense Reels (rated to 125psi/8.6 bar))		
245410	Bare hose reel	

# **XD, 700 and 750 Series Hose Reel Accessories**

# **Hose Reels and Packages**

Oruciniy iiilo	imation					
XD Enclosure Kits	Provides protection to extend the life of hose and bearings for XD reels					
Reel Enclose kits for One Reel	White	Metallic Blue	Red	Black	Dark Blue	Yellow
Size 10 Enclosure	24N331	24N332	24N333	24N334	24N335	24N336
Size 20 Enclosure	24N337	24N339	24N340	24N341	24N342	24N343
Size 10 End Caps (2)	_	_	_	24A950	_	_
Size 20 End Caps (2)	_	_	_	24A951	_	_
Enclosed Reel Mounting Channel	Enclosure mou	nting channel kit	ts include all pa	rts for mounting	hose reels to wa	alls or ceiling
Description	1 Reel	2 Reels	3 Reels	4 Reels	5 Reels	6 Reels
XD Enclosed	24N323	24N324	24N325	24N326	24N327	24N328
Open Reel	Accommodates	one, two, three,	four, five or six re	eels (includes all p	parts for wall or c	eiling mounts
Mounting Channel	1 Reel	2 Reels	3 Reels	4 Reels	5 Reels	6 Reels
XD10/XD20 Open	24A219	24A220	24A221	_	_	24A222
Retrofit Adapter Kits	;	•				
24A224	Includes all parts	s to mount hose	reel to existing	500 series mour	nting pattern	
24C100	Includes all parts	to convert SD10	) hose reels to fi	t existing 250 se	ries enclosures	
Mounting Bracket						
2014/41	Secures mounting reels; three brace	•		illing. Two bracke	ets are required	for 1-3 hose
Ball Stop Kits	Typical Hose I.I	).				
222225	For 1/4 in (6.4 r	nm) I.D. hose (ма	nt for use with XD30,	700 or 750)		
218340	For 1/4-3/8 in (6	6.4-9.5 mm) I.D.	hose (Not for use	with XD30, 700 or 75	50)	
218341	.782 I.D. used fo	or 3/8 in and 1/2	2 in (9.5 mm an	d 12.7 mm) hos	O (Not for use with X	D30, 700 or 750
237872	1.0 I.D. used for	5/8 in (15.9 mr	n) hose			
237873	1.123 I.D. used	for 3/4 in (19.1	mm) hose			
237874	1.374 I.D. used	1.374 l.D. used for 1 in (25.4 mm) hose				
24D132	For 3/8 in (9.5 mm) O.D. hose					
24D133	For 1/2 in (12.7	mm) O.D. hose				









Ball Stop Kit

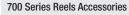


# **XD, 700 and 750 Series Hose Reel Accessories**

# **Hose Reels and Packages**

### **Ordering Information**

Hose Inlet Kits for SD and XD10 and 20		Pressure psi (bar)	Hose id in (mm)	Length in (mm)	Hose Inlet
218549	Low/medium pressure	2000 (137)	1/2 (12)	24 (610)	npt(m)
218550	High pressure	4000 (276)	3/8 (10)	24 (610)	npt(m)
224417 High pressure		5000 (345)	1/4 (6)	24 (610)	npt(m)
Hose Inlet Kits for XD30					
Hose Inlet Kit	s for XD30	Pressure psi (bar)	Hose id in (mm)	Length in (mm)	Hose Inlet
24E283	s for XD30 High pressure	5000 (345)	1/2 (12)	24 (610)	npt(m)
	I	,	, ,	. ,	
24E283	High pressure	5000 (345)	1/2 (12)	24 (610)	npt(m)



237932*	Overhead mounting kit includes all parts needed for ceiling-mounting reel (one required per reel)
237944*	Roller support kit includes roller support accessories for ceiling mounted reels (reel not included)
109064	Hose inlet kit 1 (mbe) x 28 in (71 cm)

\*Required for overhead mounting

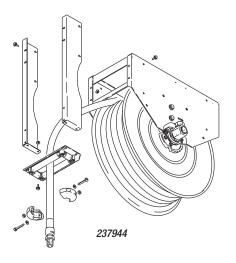
DEF Hoses				
124875	DEF hose, 2 ft, 3/4 in BSPP (M) x cut end (inlet hose)			
124581	DEF hose, 6 ft, 3/4 in BSPP (M) x cut end (inlet hose)			
Valve Hanger Kit				
224444	Mounts to side of reel to allow hanging of non-metered and high flow dispensing valves			

224444	inounts to side of reel to allow hanging of hon-metered and high how dispensing valves					
Metal Label Kits (includes one 3/4 in x 4-1/4 in (1.9 cm x 10.8 cm) metal label and mount)						
218670	Motor oil	218675	Air	218674	Hydraulic Oil	
218671	Grease	218676	Water	218673	ATF	
218672	Gear lube	218677	Anti-freeze	218678	Evacuation	

### Self Adhesive Identification Label Set

Set includes: 1 in x 5 in (25.4 mm x 127 mm) hose reels labels for Anti-Freeze, Water, SAE 5-40, SAE 10-40, SAE 20W, Hydraulic, Gear, SAE 10W, SAE 10-30, SAE 30W, Dexron, Air, Chassis, ATF





# **Dispense Consoles**

### **Multi-Station Consoles and Accessories**

### Multi-Station Consoles\*

### Six-Station Console

222629

Includes upper and lower floor plates with roller guides and brackets (1-110236; 5-196471) to hold one water bib and five Graco LDM dispense valves. Console dimensions (without brackets): 27 in high x 54 in long x 12 in wide (68.58 cm high x 139.7 cm long x 25.4 cm wide). Console requires a floor opening of 6 in x 51 in (15.2 cm x 122.4 cm)

### **Four-Station Console**

223448

Includes upper and lower floor plates, roller guides and brackets (1-110236; 3-196471) to hold one water bib and three Graco LDM dispense valves. Console dimensions (without brackets): 27 in high x 36 in long x 12 in wide (68.58 cm high x 139.7 cm long x 25.4 cm wide). Console requires floor opening of 6 in x 33 in (15.2 cm x 83.8 cm)

### Single Add-On Fluid Module

222645

For adding-on to four- or six-station consoles. Includes add-on module, floor plates with roller guides to fit module and one 196471. Console requires floor opening of 6 in  $\times$  8-1/2 in (15.2 cm  $\times$  21.6 cm). Add-on fluid module dimensions 27 in high  $\times$  9 in long  $\times$  10 in wide (68.5 cm high  $\times$  22.86 cm long  $\times$  25.4 cm wide)

\*Hoses not included

Lubricant	Lubricant Dispense Consoles Accessories		
110236	Water bib bracket		
110237	Em6 mounting bracket		
110285	Pistol-grip dispense valve bracket		
196471	Universal dispense valve bracket for EM5 and PM5		
249440	Matrix dispense valve bracket		
222641	Console roller repair kit (upper)		
218591	Floor plate roller repair kit (lower)		
178670	Roller only		
234423	End panel replacement comes with 8 screws		

### Oil Dispense Bar

220107

Tough metal cabinet with baked-on enamel finish. Constructed with single-dispense tap and waste pan with plated, perforated metal service area and drain connection. Modular convenient design allows up to 2 oil dispense taps or 3 meters to be added at the time of installation, or later if required. Instruction manual 307742. Maximum working pressure 900 psi (62 bar). 22.6 in H x 13.25 in D x 18.3 in W (57.4 cm H x 33.7 cm D x 46.5 cm W)

Ta	IV:T
ıan	KIT

220112

Add to oil dispense bar to convert into two or three taps, as needed. Kit also includes non-drip dispense valve, manifold and all necessary mounting hardware

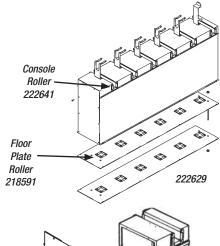
### Meter Kit

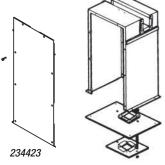
Any individual tap on the oil dispense bar can be fitted with a fluid meter. Kit includes meter 239824 and all necessary mounting hardware. Maximum working pressure 500 psi (34 bar)

220110 Spigot valve replacement









222645

### **LD Series Electronic Meters**

# **Dispense Meters and Control Valves**

### **Features and Benefits**

- Manual and Preset Dispense
- Dispenses in gallons, quarts, pints and liters
- Easy to read LCD display with durable switches for long life
- Rugged engineered material for superior impact resistance and long life
- Ergonomically-designed handle for optimum comfort
- Standard rigid extension kit and automatic thermal compensating nozzle
- Optional extensions available

### **Typical Applications**

- Metered oil dispense
- · Automotive dealerships
- Heavy-duty dealerships
- Fast lube centers
- Fleet service facilities
- Service shops
- For indoor use only
- In-plant

### **Typical Fluids Handled**

- Petroleum- and synthetic-based oils
- Anti-freeze

### **Technical Specifications**

Flow Range <sup>(1)</sup>	0.1 - 5 gpm (0.4 - 19 lpm)
Maximum Working Pressure	1000 psi (69 bar)
Units of measure	
Weight	
Inlet	1/2 in npt
Inlet	
Operating Temperature Range	32 - 120° F (0 - 48.8° C)
Storage Temperature Range	30 - 120° F (-34.4 - 48.8° C)
Storage Temperature Range	9 volt alkaline
Battery Life	one year
Wetted Parts	sst, nitrile rubber, zinc, cs, lcp
Meter Pressure Loss <sup>(1)</sup>	
Accuracy <sup>(2)</sup>	±0.5%
Dimensions (without extension)	11 in L x 3.25 in W x 3.25 H
	(28 cm L x 8.3 cm W x 8.3 cm H)
Maximum Totalizer	
Maximum Recorded Dispense	
Warranty	
Instruction Manual	

(1) Tested in 10W oil at 70°F. Flow rates vary with fluid pressure, temperature, viscosity, inlet fitting and nozzle type. (2) @ 2.5 gpm (9.5 lpm) @ 70° F (21° C) with 10 wt. oil and 1 gal (3.8 l) dispensed.

May require re-calibration. Out-of-box accuracy ±1.25%. Not recommended for in-line installation.

ordoring information		
LDM5 Manual Dispense Meters		
255751	1/2 in npt(f) swivel, flexible extension and automatic nozzle for oil and anti-freeze	
256215	1/2 in npt(f) swivel, rigid extension, trigger guard/boot and automatic nozzle for oil and anti-freeze	
258693	1/2 in npt(f) swivel, flexible extension, trigger guard/boot and automatic nozzle for oil and anti-freeze	
LDP5 Preset Dispense Meters		
255277	1/2 in npt(f) swivel, flexible extension and automatic nozzle for oil and anti-freeze	
256216	1/2 in npt(f) swivel, rigid extension, trigger guard/boot and automatic nozzle for oil and anti-freeze	
258694	1/2 in npt(f) swivel, flexible extension, trigger guard/boot and automatic nozzle for oil and anti-freeze	





## **SD Series Electronic Meters**

## **Dispense Meters and Control Valves**

#### **Features and Benefits**

- Fluid inlet options (½ in and ¾ in npt) meets standard and high-flow requirements
- Large LCD display and simple operator controls
- Locking trigger (LDP5/LDP15 models) and durable cast guard prevents accidental triggering
- Flush-mount nozzle valve design prevents leaks and contamination

### **Typical Applications**

- Automotive dealerships
- Heavy-duty dealerships
- Fast lube centers
- Lube trucks

- Fleet service facilities
- Service shops
- In-plant
- Mining

### Typical Fluids Handled

• Petroleum- and synthetic-based oils • Anti-freeze

#### **Technical Specifications**

Flow Range (1)	0.1–14 gpm (0.4 - 53 lpm)
Weight	
Inlet	3/4 in–14 npt or 1/2 in–14 npt
Outlet	3/4 in–16 straight thread O-ring Boss
Maximum Totalizer	
	999.9 Units
	999.9 Units
Storage Temperature Range	40–158° F (-40-70° C)
Operating Temperature Range	4–158° F (-20-70° C)
Battery	4 AA alkaline or 4 AA lithium
	e, manual models – one year w/alkaline 4 AA alkaline/lithium
Wetted Parts	Aluminum, sst, pbt/pc, nitrile rubber, cs
Meter Pressure Loss (1)	
Accuracy (2)	+/- 0.5%
Dimensions (without extension)	13 in L x 3.75 in W x 5.75 in H, (33cm x 9.5cm x 14.6cm)
Warranty	Five years overall, three years electronics
Instruction Manual	312865

<sup>(1)</sup> Tested in 10W oil at 70° F. Flow rates vary with fluid pressure, temperature, viscosity, inlet and nozzle type.

SDM5 MANUAL DISPENSE ELECTRONIC METER, 5 GPM OR LESS		
255350	1/2 in npt(f) swivel, rigid extension with standard automatic non-drip quick-close nozzle for oil	
255348	1/2 in npt(f) swivel, flexible extension with standard automatic non-drip quick-close nozzle for oil	
255349	1/2 in npt(f) swivel, extension with standard quick-close nozzle for gear lube	
255802	1/2 in npt(f) swivel, rigid extension with standard quick-close nozzle for anti-freeze	
255803	1/2 in npt(f) swivel, flexible extension with standard quick-close nozzle for anti-freeze	
SDM15 M	ANUAL DISPENSE ELECTRONIC METER, 14 GPM OR LESS	
256836	1/2 in npt(f) swivel, rigid extension with high flow, quick-close nozzle for oil and anti-freeze	
256837	1/2 in npt(f) swivel, flexible extension with high flow, quick-close nozzle for oil and anti-freeze	
255800	3/4 in npt(f) swivel, rigid extension with high flow, quick-close nozzle for oil and anti-freeze	
255801	3/4 in npt(f) swivel, flexible extension with high flow, quick-close nozzle for oil and anti-freeze	
SDP5 PRESET DISPENSE ELECTRONIC METER, 5 GPM OR LESS		
255200	1/2 in npt(f) swivel, rigid extension with standard automatic non-drip quick-close nozzle for oil	
255351	1/2 in npt(f) swivel, flexible extension with standard automatic non-drip quick-close nozzle for oil	
255352	1/2 in npt(f) swivel, extension with standard quick-close nozzle for gear lube	
255355	1/2 in npt(f) swivel, rigid extension with standard quick-close nozzle for anti-freeze	
255356	1/2 in npt(f) swivel, flexible extension with standard quick-close nozzle for anti-freeze	
SDP15 PRESET DISPENSE ELECTRONIC METER, 14 GPM OR LESS		
256838	1/2 in npt(f) swivel, rigid extension with high flow, quick-close nozzle for oil and anti-freeze	
256839	1/2 in npt(f) swivel, flexible extension with high flow, quick-close nozzle for oil and anti-freeze	
255353	3/4 in npt(f) swivel, rigid extension with high flow, quick-close nozzle for oil and anti-freeze	
255354	3/4 in npt(f) swivel, flexible extension with high flow, quick-close nozzle for oil and anti-freeze	



<sup>\*\*</sup>Residu in Tow on at 70°F, Flow rates vary with how pressure, temperature, viscosity, linet and nozzie type.

At 2.5 gpm (9.5 lpm) @ 70°F (21°C) with 10 wt. oil and 1 gal (3.8 l) dispensed. May require re-calibration. Out-of-box accuracy ±1.25%.

<sup>&</sup>quot;At 2.5 gpm (9.5 ipm) @ 70°F (21°C) with 10 wt. oil and 1 gai (3.8 l) dispensed. May i "Average shop use with alkaline batteries (included); 30-35% longer life with lithium AA.

## EM6™ Electronic Meter

## **Dispense Meters and Control Valves**

#### **Features and Benefits**

- Screw-tight nozzle for positive shut off
- Ball bearing swivel for ease of use
- Durable design ideal for use in harsh environments
- Reset capable for periodic dispense history information

### **Typical Applications**

- Metered oil dispense in demanding environments
- Automotive dealerships
- · Heavy-duty dealerships
- Fleet service facilities
- In-plant Lube trucks
- Service and fast lube centers
- Mining

## Typical Fluids Handled\*

- Petroleum- and synthetic-based oils
- \* Not recommended for use with anti-freeze or windshield washer fluid

## **Technical Specifications**

Maximum Operating Pressure	1500 psi (105 bar, 10.5,)
Operating Temperature Range	-40-180° F (-40-82° C)
Storage Temperature Range	-40-140° F (-40-60° C)
Inlet	1/2 npt
Outlet	
Wetted Parts	aluminum, SST, CS, acetal, nitrile rubber, Geolast™
Instruction Manual	308642
Accuracy/Repeatability	+/- 0.6%
Geolast™ is a registered trademark of Advanced Elastomer Systems.	

#### **Ordering Information**

ordoring information			
EM6 Elect	ronic Meters		
243599	U.S. measure (rigid extension)		
243600	U.S. measure (gear lube extension)		
243601	U.S. measure (flexible extension)		
243602	Metric measure (rigid extension)		
243603	Metric measure (gear lube extension)		
243604	Metric measure (flexible extension)		
243992	1/2 in (12.7 mm) bare valve (without locking trigger)		
Accessori	es		
235878	U.S. Electronic Control Replacement		
235901	Metric Electronic Control Replacement		
203655	Twist Lock Nozzle Replacement 1/4 npt(m)		
203687	Flex Extension, hose with 203655 tip		
201701	Gear Lube Extension with tip		
203265	Rigid Extension with tip		
Color-cod	ed Impact Guards for Electronic Meters		
	various fluids dispensed to reduce errors, match store colors, or create a customized appearance. nic meters only		
191782	Black		
191783	Red		
	I		





235878



191782

## **EM12™ Electronic Meter**

## **Dispense Meters and Control Valves**

#### **Features and Benefits**

- Reset capable for periodic dispense history information and locking trigger for hands-free operation
- High-flow capability provides up to 12 gpm (45 lpm)
- Rugged design withstands demanding environments

## **Typical Applications**

- Automotive and heavy-duty dealerships
- Service and fast lube centers
- In-plant

- Mining
- Fleet service facilities
- Lube trucks

## Typical Fluids Handled\*

- Petroleum- and synthetic-based oils

## **Technical Specifications**

Maximum Recommended Flow Rate	
Maximum Operating Pressure	
Operating Temperature Range	4-130° F (-20-55° C)
Storage Temperature Range	40-140° F (-40-60° C)
Inlet	1/2 npt and 3/4 npt
Outlet	1/2 npt
Wetted Parts	aluminum, SST, CS, acetal, nitrile rubber, Geolast
Instruction Manual	308642

## **Ordering Information**

EM12 Electronic Meters with 3/4 in npt(f) swivel inlet			
238636	U.S. measure, rigid extension		
238637	U.S. measure, flexible extension		
238638	Metric measure, rigid extension		
238639	Metric measure, flexible extension		
EM12 Elec	ctronic Meters with 1/2 in npt(f) swivel inlet		
238640	U.S. measure, rigid extension		
238641	U.S. measure, flexible extension		
238642	Metric measure, rigid extension		
238643	Metric measure, flexible extension		
Bare Valve	Bare Valves with Locking Trigger (no meter or extension)		
238647	Inline flow through with 1/2 npt(f) swivel inlet and outlet		
238646	Inline flow through 3/4 npt(f) swivel inlet; 1/2 npt(f) outlet		
Accessories			
235878	U.S. Electronic control replacement		
235901	Metric electronic control replacement		
223920	High flow twist lock nozzle, 1/2 npt(f) with 1 in diameter tip		
238400	Automatic nozzle 1/2 npt(f) with 1 in diameter tip		
185416	Filter 40 mesh stainless steel		
Color-coded Impact Guards for Electronic Meters			
For color-cod	For color-coding fluids dispensed to reduce errors, match store colors, or to protect vehicle's finish. For electronic meters only.		
191782	Black		
191783	Red		









## **In-Line Electronic Meters**

## **Dispense Meters and Control Valves**

#### **IM5 Low Pressure Meter**

- · Heavy-duty construction for outdoor use
- Easy-to-use meter dispenses pints, quarts, liters or gallons
- · Compatible with windshield wash solvent or anti-freeze

### **Typical Applications**

- Automotive dealershipsFast lube centers
- Service shops
- In-plant

### **Typical Fluids Handled**

- Petroleum- and synthetic-based oils
- Anti-freeze
- · Windshield wash fluid

### IM6 and SDI15 Medium/High Pressure Meters

- Reset capable for periodic dispense history information
- Shock-resistant durable design ideal for rugged environments
- Easy-to-use meter dispenses pints, quarts, liters or gallons

## **Typical Applications**

- Automotive and large truck dealerships
- Fast lubes and service shops
- Mining

- Fleet service facilities
- Lube trucks (IM6 only)
- In-plant



244075

247453

## Typical Fluids Handled\*

• Petroleum- and synthetic-based oils \* Not recommended with anti-freeze or windshield wash

## **Technical Specifications**

	IM5 In-Line Meter	IM6 In-Line Meter	SDI15 In-Line Meter	
Flow Range*	0.5 to 5 gpm (1.9 to 19 lpm)	0.12 to 12.0 gpm (0.46 to 45.6 lpm)	0.1 to 14 gpm (0.4 to 53 lpm)	
Max. Working Pressure	500 psi (34 bar)	1500 psi (103 bar)	1500 psi (103 bar)	
Weight	1.8 lb (0.8 kg)	1.9 lb (0.95 kg)	1.8 lb (0.82 kg)	
Units of Measurement	Quarts, pints, gallons, liters (factory-set to quarts)**			
Accuracy	± 0.5%	± 1.0%	± 0.5%	
Inlet/Outlet	1/2 npt*	1/2 npt*	1/2 npt*	
Operating Temperature Range	-4 - 122° F (-20 - 50° C)	-4° - 130° F (-20° - 55° C)	-4 - 122° F (-20 - 50° C)	
Storage Temperature Range	-13 - 122° F (-25 - 50° C)	-40° - 140° F (-40° - 60° C)	-13 - 122° F (-25 - 50° C)	
Outdoor	yes	yes	no	
Max Totalizer	99,999	19,999	99,999	
Max Recorded Dispense	999.99	199.99	999.99	
Meter Pressure Loss*	15 psi (1 bar) @ 5 gpm (19 lpm)	120 psi (8.3 bar) @ 6 gpm (23 lpm)	22 psi (1.5 bar) @ 14 gpm (53 lpm)	
Battery	9-volt, alkaline	Lithium	2AA alkaline	
Wetted Parts	nickel, zinc, zenite, nitrile rubber	aluminum, carbon steel, nitrile rubber,	aluminum, carbon steel, nitrile rubber,	
welleu rans		nickel, bronze, SST #304, cast ALNICO 8	nickel, bronze, SST, Geolast	
Instruction Manual	308687	307965	313048	

<sup>\*</sup>Tested with number 10 motor oil. Flow rates vary with fluid pressure and viscosity. \*\* Display shows quantity in 0.01 increments up to 999.99 gallons, quarts, pints, or liters. Totalizes in gallons or liters up to 99,999 units (IM5 only).

<b>3</b>		
IM5 In-Line Meter		
239824	IM5 In-Line Meter	
IM6 In-Line Electronic Meter		
244075	In-Line Meter (U.S.)	
244076	In-Line Meter (Metric)	
235878	Replacement Electronics (U.S.)	
235901	Replacement Electronics (Metric)	
SDI15 In-Line Electronic Meter		
247453	In-Line Meter (U.S.)	



## **Mechanical Meters**

## **Dispense Meters and Control Valves**

#### **Features and Benefits**

- Balanced, lightweight, rugged construction, and comfortable grip
- Non-resettable totalizing register helps manage material usage
- Handles a variety of petroleum- and synthetic-based oils and anti-freeze
- Ideal for indoor and outdoor use

### **Typical Applications**

- Automotive dealerships
- Heavy-duty dealerships
- Fast lube centers
- Fleet service facilities
- In-plant
- Lube trucks
- Mining

## **Typical Fluids Handled**

• Petroleum- and synthetic-based oils and anti-freeze

## **Technical Specifications**

Maximum Flow*	4 gpm (15.1 lpm)
Minimum Flow*	
Maximum Operating Pressure	
Operating Temperature Range	40-140° F (-40-60° C)
Accuracy	± 0.65%
Weight	6.0 lb (2.7 kg)
Inlet and outlet connections	1/2 npt(f)
For use with petroleum-based fluids only.	
*Tested with Mobil® DTE-25 motor oil. Minimum/maximum flow rates will vary with fluid viscosity.	

Manual Meters		
256556	16 Quart Meter with flexible extension and twist lock nozzle	
253601	10 Liter Meter with flexible extension and twist lock nozzle	
256786	16 Quart Meter with rigid extension and twist lock nozzle	
256788	10 Liter Meter with rigid extension and twist lock nozzle	
256787	16 Quart Meter with gear lube extension and automatic nozzle	
256789	10 Liter Meter with gear lube extension and automatic nozzle	
Preset Meters		
207738	60 Quart Meter valve with rigid extension and automatic nozzle	
207739	60 Gallon Meter valve with rigid extension and automatic nozzle	
207742	60 Liter Meter valve with rigid extension and automatic nozzle	
Nozzles		
255459	Quick-close nozzle only for oil	
255460	Quick-close nozzle only for anti-freeze	
255470	Quick-close nozzle only for gear lube	









# **Accessories**

# **Dispense Meters and Control Valves**

### LDM and LDP Accessories

Nozzle Extension Kits		
255861	Automatic nozzle with flexible extension for oil and anti-freeze*	
239949	Automatic thermal compensating nozzle with rigid extension for oil and anti-freeze	
239951	Automatic thermal compensating nozzle with flexible extension for oil and anti-freeze	
239950	Automatic thermal compensating nozzle with rigid extension for gear lube	
239829	Automatic thermal compensating nozzle for oil and anti-freeze without extension	
238371	Automatic thermal compensating gear lube nozzle without extension	

200011	National distination of the state of the sta		
*Economical extension used on model 255751			
Additional LDM5 Accessories			
240416	Inlet Swivel		
114017	Inlet Filter, 80 mesh		
196471	Valve Bracket for Dispense Console		
240453	Valve Repair Kit		
Swivel Co	vers	Protective Boots with Trigger Guard	
191294*	Black	247759*	Black
191287	Red	243835	Red
101000			

Swiver Covers		Protective Boots with Irigger Guard	
191294*	Black	247759*	Black
191287	Red	243835	Red
191288	Blue	243836	Blue
191289	Green	243837	Green
191295	Yellow	247760	Yellow
+1 1 1 1	. 050045 050040 050000 1050004		

<sup>\*</sup>Included on meter 256215, 256216, 258693 and 258694

#### **SDM and SDP Accessories**

Nozzle Ext	Nozzle Extension Replacement Kits For SD Series Meters		
255852	Automatic non-drip quick-close nozzle with rigid extension for oil		
255853	Automatic non-drip quick-close nozzle with flexible extension for oil		
255854	Non-drip quick-close nozzle with rigid extension for gear lube		
255855	Non-drip quick-close nozzle with rigid extension for anti-freeze		
255856	Non-drip quick-close nozzle with flexible extension for anti-freeze		
255459	Automatic non-drip quick-close nozzle only for oil		
255460	Quick-close nozzle only for anti-freeze		
255470	Quick-close nozzle only for gear oil		
255857	Non-drip quick-close high-flow nozzle with rigid extension for oil and anti-freeze		
255858	Non-drip quick-close high-flow nozzle with flexible extension for oil and anti-freeze		
255461	Quick-close high-flow nozzle only for oil and anti-freeze		
Swivel Co	vers		
15T366	Black swivel cover (standard color with meter)		
15T367	Red swivel cover		
15T368	Blue swivel cover		
15T369	Green swivel cover		
15T370	Yellow swivel cover		
Filter Kits	for SD Series Meters		
255885	Filter kit includes (10) filters/strainers, (10) spacers and (10) 0-rings (155332)		





## **SDV15 Control Valve**

## **Dispense Meters and Control Valves**

#### **Features and Benefits**

- Moves fluid up to 15 gpm (56.8 lpm) (15 gpm obtained with high-flow nozzle-purchased separately)
- Sturdy cast body designed for use in tough environments
- · Lock-on trigger
- 1/2 in npt(f) inlet with built-in ball bearing swivel allows for ergonomic operation
- Inlet screen aids in keeping fluids clean

## **Typical Applications**

- Automotive dealerships
- Heavy-duty dealerships
- Fast lube centers
- Fleet service facilities
- Service shops
- In-plant
- Lube trucks
- Mining

## **Typical Fluids Handled**

- Motor oils
- Transmission fluid
- Anti-freeze

## **Technical Specifications**

Maximum Recommended Flow Rate	
Maximum Operating Pressure	
Weight	
Operating Temperature Range	40°–180° F (-40°–82° C)
Inlet	
Outlet	
Wetted Parts	Aluminum, sst, cs, acetal, nitrile rubber, tpe
Warranty	Five years
Instruction Manual	
1. Tooted in 10M ail at 700 F. Flau rates you with fluid procesure, temperature	viceseity inlet fitting and pozzle type

1. Tested in 10W oil at 70° F. Flow rates vary with fluid pressure, temperature, viscosity, inlet fitting and nozzle type.

SDV15 Cor	ntrol Valves	
247712	1/2 in npt(f) swivel, locking open trigger, rigid extension and standard automatic non-drip quick-close nozzle for oil products	
247713	1/2 in npt(f) swivel, locking open trigger, flexible extension and standard automatic non-drip quick-close nozzle for oil products	
247714	1/2 in npt(f) swivel locking open trigger, gear lube extension and standard quick-close nozzle	
247715	1/2 in npt(f) swivel locking open trigger, rigid extension and standard quick-close nozzle for anti-freeze	
247716	1/2 in npt(f) swivel locking open trigger, flexible extension and standard quick-close nozzle for anti-freeze	
Bare Valve	Bare Valve (no extension)	
247717	1/2 in npt(f) swivel locking open trigger, 3/4 in - 16(f) straight thread O-ring boss outlet, and trigger lock, no extension	
Accessorie	Accessories	
256164	Filter kit includes (10) filters/strainers (185416)	
255459	Quick-close nozzle only for oil	
255460	Quick-close nozzle only for anti-freeze	
255470	Quick-close nozzle only for gear lube	
255857	Non-drip quick-close high-flow nozzle with rigid extension for oil and anti-freeze	
255858	Non-drip quick-close high-flow nozzle with flexible extension for oil and anti-freeze	
255461	Quick-close high-flow nozzle only for oil and anti-freeze	



## **XDV20 Control Valve**

## **Dispense Meters and Control Valves**

#### **Features and Benefits**

- Moves fluid up to 20 gpm (76 lpm)
- Lock-on/lock-off trigger for hands-free operation
- Rugged cast-body design withstands harsh environments
- Built-in ball bearing swivel allows for ergonomic operation
- Inlet screen aids in keeping fluids clean
- Quick close high flow nozzle for high volume dispensing-moves fluids fast!

## **Typical Applications**

- High-flow, non-metered oil dispense
- Automotive dealerships
- Heavy-duty dealerships
- Fast lube centers
- · Fleet service facilities
- In-plant
- Lube trucks
- Mining

## **Typical Fluids Handled**

- Motor oils
- Transmission fluid
- Anti-freeze

## **Technical Specifications**

•	
Maximum Recommended Flow Rate	
Maximum Operating Pressure	
Assembly Weight (no meter)	0.4 lb (0.18 kg)
Operating Temperature Range	-40°-180° F (-40-82° C)
Inlet	
Outlet	
Wetted Parts	aluminum, SST, CS, acetal, nitrile rubber, Geolast
Instruction Manual	

XDV20 Control Valves		
247718	1/2 npt(f) swivel inlet, 1/2 in (12.7 mm); rigid extension, high flow, quick-close nozzle	
247721	1/2 npt(f) swivel inlet, 1/2 in (12.7 mm); flexible extension, high flow, quick-close nozzle	
247722	3/4 npt(f) swivel inlet, 1/2 in (12.7 mm); rigid extension, high flow, quick-close nozzle	
247723	3/4 npt(f) swivel inlet, 1/2 in (12.7 mm); flexible extension, high flow, quick-close nozzle	
Bare Valves (no extension)		
247724	Has locking trigger and in-line flow through 1/2 npt(f) swivel inlet; 7/8-14 straight thread 0-ring boss outlet	
247725	Has locking trigger and in-line flow through 3/4 npt(f) swivel inlet; 7/8-14 straight thread 0-ring boss outlet	
Accessories		
255793	Quick-close high flow nozzle for oil, ATF and anti-freeze; 7/8-14 straight thread 0-ring boss inlet (XDV20 only)	
255859	Flex extension with quick-close nozzle (255793) for XDV20	
255921	Rigid extension with quick-close nozzle (255793) for XDV20	





# **Grease Dispense Valves**

## **Dispense Meters and Control Valves**

### **Pro Shot™ Non-Metered Grease Valves**

- Rugged design for harsh environments
- Pressure-assisted trigger for ease of operation
- · Easy top adjustment with locking nut
- Pro-Shot adjustment nut protected by rigid guard

### **Typical Applications**

- Service shops
- Heavy-duty dealerships
- Fast lube centers
- Automotive dealerships
- In-plant
- Lube trucks
- Mining



• Grease up to NLGI #2

#### **Ordering Information**

Pro-Shot Grease Dispense Valve	
242056	1/4 npt(f) inlet with coupler and extension 200389
242055	1/4 npt(f) inlet without coupler or extension
242058	3/8 npt(f) inlet with coupler and extension 200389
242057	3/8 npt(f) inlet without coupler or extension
224872	Includes 30 in (76.2 cm) whip hose (109148), Z-Swivel (202577) and grease valve (242056)

# **Accu-Shot<sup>™</sup> Metered Grease Valves**

- Accurate grease metering within ±3%
- Easy-to-read LCD display
- Handles pressure up to 5000 psi (345 bar) and flow up to 36 oz/min (1 kg/min)

## **Typical Applications**

- Lube trucks
- · Heavy-duty dealerships
- In-plant
- Fleet service facilities
- Mining

## **Typical Fluids Handled**

• Grease up to NLGI #2

ordering information		
Accu-Shot Electronic Metered Grease Valve		
233807	U.S. Measurement, includes extension and hydraulic coupler	
233933	Metric Measurement, includes extension and hydraulic coupler	





## Horizon™

## Fluid Management Systems

### **Features and Benefits**

- Allows multiple technicians to dispense simultaneously
- Easily configured and expandable for any facility
- Increases technician productivity
- Password-protected to prevent unauthorized dispensing
- Tracks inventory levels and alerts operators to low inventory conditions to minimize out-of-stock situations

### **Typical Applications**

- Bulk-dispensing to multiple service bays
- Automotive dealerships
- · Heavy-duty dealerships
- Fleet service facilities

### **Typical Fluids Handled**

- Petroleum- and synthetic-based oils
- Anti-freeze

#### **Technical Specifications**

#### System Specifications

System Specifications	
Control Modules on a System (1 Master only, plus 39 Slaves)	40 maximum
Keypads on a System (1 keypad per Control Module)	40 maximum
Solenoids on a System (40 Control Modules, 6 ports each)	240 maximum
Meters on a System (40 Control Modules, 6 ports each)	240 maximum
Fluids on a System	.10 maximum
Dispense Areas (reel banks)	.99 maximum
Operator Names / PIN Numbers	100 maximum
Dispense Records Stored	668 maximum
Simultaneous Dispenses (same and/or different fluids):	12 maximum
Jobs Waiting in Queue	.12 maximum
Printer per System OR Attached Computer per System	1 maximum
(either must be connected to Master Control Module)	
Accuracy of System	±0.6%
Control Module Ports	
Solenoid Ports (air or fluid) per Control Module	
Pulse Meter Ports per Control Module	6
Port for Keypad per Control Module	1
Port for Printer or Computer per Master Control Module	1
Voltage Input	
90-120 Volts AC, 50/60 Hz, single phase, 2 amps maximum draw	
208-240 Volts AC, 50/60 Hz, single phase, 1 amp maximum draw	
Operating Temperature Range40 - 140° F (4 - 6	60° C) ambient
Pre-set or Free-flow Options	
Maximum Preset or Free-Flow Dispense	999.9 units
Minimum Preset Dispense	0.5 units
Units of Measure	
Dispenseliters, quarts, gallons or pints (configurable	
Inventoryliters or gallons (dependent upon dispense	units chosen)
Maximum Cable Lengths	
From Keypad to Control Module	'
From Solenoid to Control Module	
From Pulse Meter to Control Module	
From Printer/Computer to Master Control Module	50 ft (15.3 m)
From one end of the Control Module Network to the other end (daisy-	chained)





Reference Data

## Horizon™

238618

## Fluid Management Systems

#### **Ordering Information**

Control Module drives air and fluid solenoids, and counts pulses from meters. On-board memory contains a map of available system resources, and a power supply that supports both 120 and 240 Volt AC operation. Combine one Master Control Module with up to 39 Slave Control Modules per system

238624	Master Control Module (one per system)
238625	Slave Control Module (up to 39 per system)
Keypads: Basic, Enhanced and Administrative	
113551	Basic Keypad for navigating through the Horizon's menus
113553	Administrative Keypad is needed to set up and make changes to the system parameters
191368	Keypad Wall-Mounting Bracket
<b>Air Solenoids</b> open and close the air supply to the fluid pump air motor. Each solenoid can be up to 50 ft (15.3 m) from a Control Module. Up to 6 solenoids (air or fluid) can be connected to each Control Module	
215407	For pumps requiring normal air flow (Mini Fire-Ball 225, 3:1 and Fire-Ball 300, 5:1)
512926	For pumps requiring higher air flow (Fire-Ball 425, 6:1 and 3:1)

Fluid Solenoids start and stop the fluid dispense cycles. These must be placed at each dispense point for each fluid being dispensed. Each fluid solenoid can be up to 50 ft (15.3 m) from a control module. Up to 6 solenoids (either air or fluid) can be connected to each control module. The low-flow model is available in a kit with a ready light which alerts the operator when the job is ready to dispense

215487	Low-flow: supports 3 gpm (11.4 lpm)
512927	Higher-flow: supports up to 6 gpm (22.7 lpm)
514150	Anti-Freeze Solenoid
218588	Low-flow Solenoid with Ready Light Kit
238996	Ready Light Kit (only; less the solenoid)

Pulse Meters measure fluid flow to dispense points and send a train of pulses back to the Control Modules which are counted to determine how much fluid has been dispensed. If there are multiple meters for a single fluid, check valves (111620) should be placed in series with each meter to prevent "cross talk" and oscillations. Pulse Meters can be used for either U.S. or metric units

215474	For anti-freeze
111620	Check Valve, 1/2 in
Thermal Relief Kits	
235998	600 psi (41 bar)
102527	Thermal Relief Valve, 900 psi (62 bar)
237893	900 psi (62 bar)
240429	1600 psi (110 bar)
System Printer prints job tickets after each dispense is complete, plus has save function for later analysis	
113774	Printer
514037	Printer paper 1 roll

514037	Printer paper, 1 roll

Keypad or	eypad or Printer Cables	
191393	25 Ft (7.6 M) cable with connectors	
191394	Cable with connectors, 50 Ft (15.3 M)	

For oils, gear lube, automatic transmission fluid

Control Module Network		
113559	500 Ft (152.5 M) bulk cable	
113560	1000 Ft (305 m) bulk cable	

Pulse Met	Pulse Meter Cable	
113555	Length: 500 ft (152.5 m)	
113556	Length: 1000 ft (305 m)	
Solenoids	Cable	
113557	Length: 500 ft (152.5 m)	

113557	Length: 500 ft (152.5 m)
113558	Length: 1000 ft (305 m)
Computer	Cable with Connectors
192873	Computer I/O 25 ft (7.6 m)
192874	Computer I/O 50 ft (15.3 m)







113553

113551





113774



## Fluid Commander™

## Fluid Management Systems

#### **Features and Benefits**

- · Provides increased accuracy over mechanical counters
- · PIN code prevents unauthorized dispensing
- Dispense totals tracked by location
- · Easy to read display
- · Accurate controlled dispense with parts room authorization

### **Typical Applications**

- Parts room authorized dispensing for inventory control
- · Automotive dealerships
- · Heavy-duty dealerships
- · Fleet service facilities

### **Typical Fluids Handled**

- Petroleum- and synthetic-based oils
- Anti-freeze

### Easy to Use

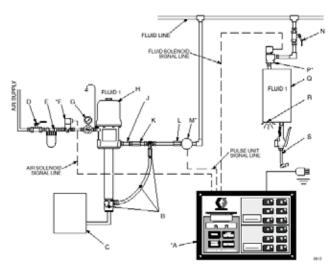
- Service technician enters the service bay number, type of product, and amount to be dispensed, then activates the dispense button.
- 2. A "ready" light (located on the hose reel or dispense bar of the target service bay) signals when dispensing can begin.
- As fluid is dispensed, the Fluid Commander tallies the amount dispensed and shuts-off when the pre-set amount is reached.
   No further dispensing takes place until new dispensing data is entered.

## **Technical Specifications**

Maximum Number of Fluids	1 or 2
Dispense Stations/Bays	6 or 12
Air Solenoids Required	1 (per pump)
Fluid Solenoids Required	1 (per fluid dispense station)
Electrical Requirements	120 V, 60 Hz, .25 amps
Weight	4 lb, 5 oz. (8.0 kg)
Wiring Requirements	90V; 2-wire
Distance/Gauge 200 ft (61 m) = 18 gauge, 2	01 to 500 ft (61 m to 152 m) = 16
gauge,	501  ft  (152  m)  or more = 14  gauge
Instruction Manual	308238



## **Typical Fluid Commander System Layout**



#### KEY

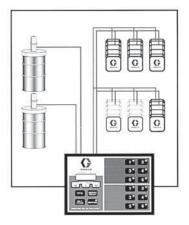
- A. Control\*
- B. Pressure Relief Kit, 237893, 1-1/2 npt (m x f)
- C. Supply Tank
- D. Air Shutoff Valve, bleed-type
- E. Air Filter
- F. Air Solenoid Valve\*, 215407
- G. Air Regulator, 202156
- H. Pump
- J. Flexible Hose, 3–6 ft (0.9–1.8 m) long
- K. Check Valve\*, 111620 (required)
- L. Fluid Filter, 223179
- M. Pulse Meter\*, 236763 or 236764
- N. Fluid Shutoff Valve, 108458, 1/2"
- P. Fluid Solenoid Valve\*, 215487
- Q. Hose Reel
- R. Ready Light, 238996
- S. Dispense Valve
- \* These parts are included with Model 232076, 240448, or 241905.



# Fluid Management Systems

## Fluid Commander™

Fluid Com	mander Systems		
232076	U.S. Measure Fluid Commander System for 2 products and 6 stations. Includes: One 2-product/6-station Fluid Commander (235532), oil meter (236763), fluid solenoid valve (215487), air solenoid valve (215407), Check valve (111620)		
241905	U.S. Measure Fluid Commander System for 1 product and 12 stations. Includes: One 1-product/12-station Fluid Commander (235531), Oil Meter (236763), Fluid Solenoid valve (215487), Air Solenoid valve (215407), check valve (111620).		
240448	Metric Measure Fluid Commander System for 2 products and 6 stations. Includes: One 2-product/ 6-station Fluid Commander (232077), oil meter (236764), Fluid Solenoid valve (215487), Air Solenoid valve (215407), check valve (111620)		
Accessori	es		
111620	Check valve		
236763	Electronic Pulse Meter (quarts)		
236764	Electronic Pulse Meter (liters)		
215474	Mechanical Pulse Meter (quarts)		
215745	Mechanical Pulse Meter (liters)		
244342	Meter Pulse Converter, used when upgrading old-style modular fluid commander to electronic allows use of 215474/215475 with the EFC. Instruction manual 309276		
Air Solend	oid Valves		
215407	Air Solenoid Valve, 150 psi (10 bar) (1/2 npsm(f) conduit ports for wiring; 1/4 npt(f) air ports, adapted to 3/8(f) IN, 3/8(m) OUT) operates on 24V DC and 110 VAC. Automatically shuts-off air inlet to pump when pre-set dispensed amount is reached. Materials of construction: brass, SST, Buna		
105474	Air Solenoid Valve (bare) 150 psi (10 bar), same as 215407 but without wire connectors or adapters 1/2 npsm(f) conduit ports for wiring; 1/4 npt(f) air ports.150 psi (10.3 bar) max. working pressure		
Fluid Sole	noid Valves		
215487	Fluid Solenoid Valve, 1/2 npt(f) 3000 psi (207 bar) operates on 24V DC. Automatically shuts-off fluid when pre-set dispensed amount is reached. Includes tube, valve, pin connector, wire plug connector and adapter		
514150	Fluid Solenoid Valve for anti-freeze, 150 psi max. (10 bar), 1/2 npt(f), same as features as 215487		
110025	Bare Fluid Solenoid Valve, 1/2 npt(f) 3000 psi, same features as 215487 above, but without wiring connectors or adapters		
Ready-Lig	ht Kits		
218588	Ready-Light Kit, signals operator when dispensing can begin. Includes "ready to dispense" Indicator Light (239019), Strainer (240417), Fluid Solenoid Valve (215487) and hardware. Manual 307696		
238996	Ready-Light with Junction Box (no solenoid or strainer)		
239019	Ready-to-Dispense Indicator Light only		
113859	Lamp for Indicator Only		
Installatio	n Components		
223179	Fluid Filter Kit (for bare electronic meter)		
186472	Wall-Mounting Bracket		
108458	Fluid Shut-Off Valve		
237893	Thermal Relief Kit for 900 psi (62 bar), relieves excess heat-induced pressure from dispense system. Male and female ends allow for simple installation. Instruction manual 308403		
Connectir	g Cables for Connecting Solenoids and Consoles, 90-volt, 2-wire, 18-gauge		
215481	100 ft (30.5 m) pre-connected at both ends		
	•		









# **Manually Operated Grease Guns**

# Grease Guns, Accessories and Fittings

### **Ordering Information**

Grease Gu	ns	
202600	1/8 npt(f) Power-Shot Booster Gun boosts incoming pressure up to 18,000 psi (1,242 bar). Use with any high-pressure lubricator. Maximum inlet pressure: 5000 psi (345 bar). Includes nozzle (200389). (Hose swivel 202579 must be ordered separately). Instruction Manual: 306271	
110218	Standard Lever-Action Grease Gun: Develops up to 6000 psi (400 bar) working pressure and 1.8 oz (51 g) per 40 strokes. Can be loaded via cartridge or bulk fill. Optional loader fitting ava Equipped with rigid extension and hydraulic coupler	
110216	Heavy-Duty Lever-Action Grease Gun with high-pressure variable low-volume. Three-way load bulk fill, loader fitting or 14 oz cartridge. Pumps 1.24 oz per 40 strokes. Includes air bleeder variable duth rigid extension and hydraulic coupler (M IL-G-3859). Can develop up to 10,000 (690 bar). Comes with 236171, easy fill valve	
110203	Pistol-Matic Grease Gun with three-way loading: bulk fill, loader fitting or cartridge. Pumps .72 (28.4 g) per 40 strokes. Includes air bleeder valve. Equipped with rigid extension and hydraulic coupler. Can develop up to 3500 psi (241 bar)	
203697	1/8 npt(f) Hot-Shot Portable Booster Gun for portable operation without continuous connection to grease supply. Has 4 oz (113 g) grease reservoir in handle capable of servicing up to 100 fittings before needing a refill. Has grease fitting for recharging from either manual or air-powered luber. Single-hand operation squeeze handle develops up to 10,000 psi (690 bar). Includes grease extension and nozzle 200389. Instruction Manual: 306460	
110202	Pistol-Matic Grease Gun is the same as 110203 but with 12 in (30.4 cm) flexible rubber hose and hydraulic coupler	
112196	1/4 npt Pistol-Style Air-Operated Grease Gun is a spring-primed, single-shot gun. Three-way loading: bulk fill, loader fitting or 14 oz (400 g) cartridge. Air input range of 75 to 100 psi (5 to 7 bar); working pressure of 6000 psi (414 bar). Pumps 1.2 oz (34 g) per 40 pulls at 100 psi (7 bar). Includes standard gun coupler and bleeder valve, 1/8 in-27 NPT rigid extension. (1/4 npt air input connection)	
110201	Suction Gun for evacuating and filling fluids into gear housings, differentials, transmissions and related applications. Holds 1 pint (16 oz/473 cc), comes with red clear plastic 12 in (30.4 cm) ho	
Z-Swivels		
202579	1/8 npt(m) x 1/4 npt(f) free-ball bearing	
202577	1/4 npt(m) x 1/4 npt(f) free-ball bearing use with dispense valve 242055 and 242056	
224569	3/8 npt(m) x 3/8 npt(f) free-ball bearing use with dispense valve 242057 and 242058	
207948	1/2 npt(m) x 1/2 npt(f) free-ball bearing	
Straight Sv	vivels	
204082	1/8 npt(m) x 1/8 npt(f) 8000 psi (550 bar) free-ball bearing	
204083	1/4 npt(m) x 1/8 npt(f) 8000 psi (550 bar) free-ball bearing	
204084 1/4 npt(m) x 1/4 npt(f) 8000 psi (550 bar) free-ball bearing		
214925 3/8 npt(f) x 1/4 npsm(f-union) 5000 psi (345 bar)		
214926	3/8 npt(f) x 1/2 npsm(f-union) 5000 psi (345 bar)	
207946	3/8 npt(f) x 1/2 npsm(f-union) 5000 psi (345 bar)	
207947	1/2 npt(m) x 1/2 npt(f) 6000 psi (414 bar)	
360° Swive	els	
Swivels and	l locks into full 360° angle. Use for maximum coupler adaptability and reach	
203597	360° Grease Swivel with tapered-nose coupler (200325)	
203198	360° Grease Swivel, 8,000 psi (552 bar) maximum working pressure (without coupler)	





# **Manually Operated Grease Guns**

## **Grease Guns, Accessories and Fittings**

Standard nozzle. Includes straight 6 in (15.2 cm), 1/8 npt(m) extension tube (197471) and tapered nose coupler (200325)	
Swivel nozzle. Includes straight 6 in (15.2 cm), 1/8 npt(m) extension tube (197471) and tapered coupler (200325). Coupler has 360° swivel adapter (203198) for added convenience	
Swivel nozzle. Includes straight 12 in (30.4 cm), 1/8 npt(m) extension tube (155836) and tapered nose coupler (200325)0. Coupler has 360° swivel adapter (203198) for added convenience	
Flexible 12 in (30.4 cm) hose nozzle. 1/8 npt(m) includes tapered-nose coupler (200325)	
Flexible 12 in (30.4 cm) hose nozzle. 1/8 npt(m) includes tapered-nose coupler (200325) and lock sleeve connector (203497) for quick connection to any grease nozzle having tapered-nose coupler	
109145 12 ln (30.4 cm) hose nozzle without coupler	
18 ln (45.8 cm) hose nozzle without coupler	
30 ln (76.2 cm) hose nozzle without coupler, has 1/8 npt(m) both ends. Use as alternate for rigid nozzle with tapered-nose coupler 200325	
ial injection hazard. Not for use above 5000 psi (345 bar).	
- S r - F - F - S - 1	

*Warning: pote	ential injection hazard. Not for use above 5000 psi (345 bar).		
Grease Couplers			
200325 1/8 npt(f) inlet standard tapered-nose coupler. Hardened jaws grip grease fittings through wide-sealing angle, but release easily. Maximum working pressure 8000 psi (551 bar)			
202650 1/8 npt(f) inlet standard straight nose grease coupler for manual operated grease guns only.  Maximum working pressure 3000 psi (206 bar)			
200020 1/8 npt(f) inlet standard button-head coupler. Gives fast, positive seal on button-head fittings			
200021	1/8 npt(f) inlet giant button-head coupler. Gives fast, positive seal on larger button-head fittings		
Adapters have lock-sleeve quick-connector, works with any grease nozzle with a tapered-nose coupler			
201881	Hydraulic-to-push adapter. Used for U-joints and low-pressure service		
205532	Hydraulic-to-steel needle adapter. Used for flush fittings. 250 psi (17 bar) max, not for air grease applications or guns		
205582 Hydraulic-to-nylon needle adapter. Used for removable plugs. 250 psi (17 bar) max, not for air grease applications or guns			
223187	90° hydraulic-to-push adapter (K-car). Refer to instruction manual 306708		
203497	Lock sleeve connector. 1/8 npt(f) outlet. Allows for quick connection to tapered-nose coupler. Inlet is standard grease fitting with sleeve to lock connector in place		
236171	Easy-fill valve. For faster loading of graco hand grease guns with gun loaders. Replaces hydraulic fittings on all grease guns with 1/8 npt(f)		
204929	Grease loader valve. For use with lever-operated, high-volume grease pumps. Permits quick bulk-filling of hand-operated grease lever guns equipped with easy-fill valve 236171		



205592

1/8 npt Threa	ded Grease Fittings (steel; ball-cl	neck)	
Part No.	Shank	Description	Pressure Rating
100054	9/32	1/8 npt straight	
101277	1-9/32	1/8 npt straight	
100970	9/32	1/8 npt 30° angle	10 000 ppi (600 bor)
100834	9/32	1/8 npt 45° angle	10,000 psi (690 bar)
100971	9/32	1/8 npt 65° angle	
100833	9/32	1/8 npt 90° angle	

Hydraulic adapter assortment package. Contains needle adapter (205568), plug adapter (205554), push adapter (201881), nylon needle adapter (205582), hydraulic-to-steel needle adapter (205532) and whip hose nozzle connector (203504)









# **Manually Operated Grease Guns**

# **Grease Guns, Accessories and Fittings**

100848	3/8	1/4 npt 67° angle	
100846	3/16	1/4-28 straight	-
100847	13/64	1/4-28 45° angle	_
101283	3/16	1/4-28 90° angle	10,000 psi (690 bar
101281	11/32	1/4-28 straight	10,000 psi (000 bai)
110702	19/64	1/4-28 65° angle	$\dashv$
100835	12/32	1/4-28 straight	_
	-Forming Grease Fittings (steel;	1 1 1 1 1 1 1	
110703	13/64	1/4-28 straight	
110705	13/64	1/4-28 90° angle	10,000 psi (690 bar)
	d-Forming Grease Fittings (steel		
110706	3/32	3/16 npt straight	
110709	7/32	3/16 npt 65° angle	10,000 psi (690 bar
	ase Fittings (steel; no check)	O TO TIPE OU ATIGIO	
110713	1/4	3/16 not straight	
101312	1/4	3/16 npt straight	
110710	1/4	3/16 npt straight 5/16 npt straight	
101287	17/64	5/16 ript straight	
	on-Head Grease Fitting (steel)	1711100	oudigni
100837	7/16	1/4 nnt	straight
101297	33/64	1/4 npt straight 3/8 npt straight	
110711	35/64	1/2 npt	
	ead Grease Fitting (steel)		
110712	9/16	3/8 npt	straight
100854	1/2	1/4 npt	
Grease Access	orv Packages		
202654	1	ns the following threaded fittings	s in the quantity listed:
Shank	Description	Grease Fitting No.	Quantity
9/32	1/8 npt straight	100054	30
9/32	1/8 npt 30° angle	100970	10
9/32	1/8 npt 90° angle	100833	10
3/16	1/4-28 straight	100846	20
13/64	1/4-28 45° angle	100847	10
			_
Easy-Outs			
<b>Easy-Outs</b> 101604	1/8 npt		



101287





101297









# Oil King,<sup>™</sup> Coolant King<sup>™</sup> and Oil Ace<sup>™</sup>

## Fluid Reclaim Packages and Accessories

### Oil King and Coolant King

- Large 25 gallon capacity with sight gauge
- Convenient tool trays and filter areas
- Large offset collection pan with screen
- Oversized tires to get over hose and rough floors
- Color specific receiver for easy identification

## **Typical Applications**

- · Used fluid receiver
- · Fast lube centers
- Automotive dealerships
- Fleet service facilities
- Heavy-duty dealerships
- Service shops

### Typical Fluids Handled

- Used oil-Oil King
- Used antifreeze-Coolant King

### **Ordering Information**

Oil King Oil Receiver			
238866	238866 25 gal (95 l) Polyethylene tank with used-filter tray, tool holders and sight gauge. Includes all hardware for topside evacuation or bottom drain*. Instruction manual 308667		
Coolant King Anti-Freeze Receiver			
248632	248632 25 gal (95 l) Polyethylene tank with used-filter tray, tool holders and sight gauge. Includes all hardware for topside evacuation or bottom drain*		

<sup>\*</sup> Must use 224873 for topside evacuation. Must ship via truck

#### Oil Ace

- Easy to drain using shop air pressure
- Large 24 gallon capacity
- Large offset collection pan with screen

## **Typical Applications**

- Pressurized used oil receiver Service shops
- Automotive dealerships
- Fast lube centers
- · Heavy-duty dealerships
- Fleet service facilities

## **Typical Fluids Handled**

Used oil

oradining	ordornig information		
Oil Ace			
119577	24 gal (90 l) Steel-tank Pressurized Oil Drain		









## **Oil Receivers and Drains**

## Fluid Reclaim Packages and Accessories

#### **Ordering Information**

	9		
16 gal (60 I) Used-Oil Receiver with drum			
239301	Use with evacuation kit 240832. Instruction manual 306449		
16 gal (60	16 gal (60 I) Used-Oil Receiver without drum		
239302	Instruction manual 306449		
Funnel Kit			
243650	Use with 238866, 239301, 239302 and 248632. Includes tray and pipe		
Wall-Moui	Wall-Mounted Funnel Drain		
154616	Use with Pedestal Receiver 225272 to open automatic check-valve and drain used oil through wall to waste tank. Drain has 1-1/4 npt(f) outlet		
Drum-Mounted Funnel Drain			
	Use with Pedestal Receiver (225272) to open automatic check-valve and drain used oil into standard		

#### **ATF Drain Funnel**

208009

156789

Use with Pedestal Receiver (225272) to extend funnel reach. Use for draining transmissions. (Not equipped with drain plug.) 16 in x 24 1/2 in

drum. Funnel drain has 2 npt bung fitting for use with 55 gal (210 l) or 16 gal (60 l) drums, or 275

#### Rolling Used-Oil Receiver

gallon (1,100 l) tanks

218969

Specially designed for car and truck fast-lube facilities where speed and mobility are important. Adjustable steel rollers fit track widths of 39 in (99 cm) to 46 inches (117 cm), with a minimum running width of 2-1/2 in (63.5 mm). Front and rear drain fittings allow use of two drains on a single track, permitting two receivers to be drained simultaneously. Instruction manual 307727. Unit includes 30 gal (114 l) steel tank, 1-1/2 npt drain valve (108204), 1-1/2 npt quick coupler (108202) and 1-1/2 npt coupler cap. Dimensions: 24 in (61 cm) wide; 33 in (84 cm) long; 11 in (28 cm) deep; 3 in (7.6 cm) diameter wheels. 1-1/2 in drain hose—see manual provided

#### Narrow Rolling Used-Oil Receiver

235346

Same as 218969 above, except track width range is from 34.2 in (87 cm) to 42.2 in (108 cm). 27 gal (102 l) capacity. Instruction manual 307727. See accessories on page 101

#### Big Hauler™ Truck Drain

244055

Specially-designed for truck maintenance facilities, the Big Hauler Truck Drain boasts a large capacity and easy maneuverability. Dimensions: 42 in (106.7 cm) long; 30 in (76.2 cm) wide; 9 in (22.9 cm) deep. Capacity: 26 gallons (98 l). Instruction manual 309194. Gravity drain valve at bottom of unit allows for easy drain access. 3/4 in npt outlet can also be used with 224873 for diaphragm evacuation. 240832 can be ordered separately for existing diaphragm pump evacuation systems. Instruction manual 308719









## **Oil Evacuation**

## Fluid Reclaim Packages and Accessories

#### Packages for Used-Oil Evacuation with Air-Operated Diaphragm Pumps

Wall-Mounted Packages		
24E166	Includes: 1050A (1 in) diaphragm pump (647016), wall bracket (189233), air installation kits (240684), fluid installation kits (240685), drum style adapter kits (240832) NOTE: Used-oil receivers are not included and must be ordered separately. See instruction manual 313597 for more information.	
224873	Includes: 716 (3/4 in) diaphragm pump (241906), wall bracket (224835), air installation kits, fluid installation kits (240685), drum style adapter kits (240832)  NOTE: Used-oil receivers are not included and must be ordered separately:	

#### Stationary Gear-Oil Evacuation Systems with 716 or 1050 Diaphragm Pump

System evacuates lube from differential case using suction generated by a diaphragm pump. Nylon tubes ranging in size from 3/16 in OD to 1/2 in OD are included to fit through sight plug to completely drain the case. Evacuated gear lube is then pumped to waste tank. Piping and waste tank not included. Systems are fully-groundable and bondable for safe transfer of used oil

224955	Includes: 716 diaphragm pump (241906), air control kit (110149), mounting kit (224759), swivel union (157785), hose coupler (111474), suction hose/wand** (221146) and control valve** (220969) **Order additional suction hose/wand (221146) and additional control valve (220969) for each additional suction point.  Note: Order grounding clamp (222011) or use locally-supplied grounding wires and clamps in accordance with applicable codes.
24E167	Includes: UL-listed 1050A diaphragm pump (647016), air control kit, hose and fitting kit (222149), evacuation, suction hose/wand** (221146) and wall bracket (189233)  ***Order additional suction hose/wand 221146 and additional control valve 220969 for each additional suction point.  Note: Order grounding clamp 222011 or use locally-supplied grounding wires and clamps in accordance with applicable codes.  See instruction manual 313597 for more information.

#### Port-Evacuation Pump

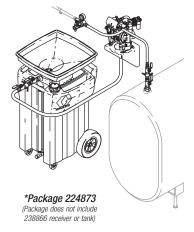
223695

Port-Evacuation allows fast, clean withdrawal of gear lube, ATF, anti-freeze, and related fluids. Includes: 716 diaphragm pump (241906), mounting kit with 10 ft (3 m) suction hose (223697) which attaches to wands of four different diameters (suction wand kit, 223696): 1/2 in (12.7 mm); 3/8 in (9.5 mm); 1/4 in (6.4 mm), and 3/16 in (4.7 mm). Instruction manual 308035

Suction Wand Kits	
223696	15 in (38.1 cm)
224762	48 in (121.9 cm)

#### **Used-Oil Handling Accessories**

4-Way Eva	4-Way Evacuation Valve		
120581	1' npt (f) 4-way evacuation valve		
120601	1.5" npt (f) 4-way evacuation valve		
Tandem D	rain Kit		
218970	Tandem drain kit connects two rolling receivers for flow-through draining operation. Kit includes connector hose, shut-off valve, pipe nipple, and quick-connect nipple. Instruction manual 307727		
108491	Drain hose kit allows rolling used-oil receiver to be drained directly into the used-oil line. Kit is 24 in (0.6 m) in length with camlock coupler on one end		
Swing-Arm Drain Kit			
221007	Used for servicing single rolling used-oil receiver (218969). When used with tandem drain kit (218970) it can service two receivers on a single track. Kit includes swivel elbow (108867), connector hose, dust cap (108203) and male adapter (108202)		
Oil Tank M	onitor		
116229	Shuts off air to the pump when tank is full. Mounted at either end of fast lube service pit, swing-arm drain stores against pit wall and is rotated into position for use		
Accessories for Port-Evac Pump (223695)			
223888	6 ft (1.8 m) suction hose for ATF and anti-freeze. Includes filter screen		













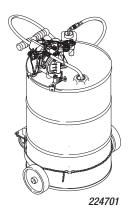
## **Oil Evacuation**

## Fluid Reclaim Packages and Accessories

#### Fluid Reclaim Accessories

243167	U-tube for used-oil drain cart evacuation system. 1/2 npt (mbe)	
222011	Grounding clamp for all used-oil handling systems includes 25 ft (7.6 m) grounding wire	
Fas-Vac E	vacuation Systems	
224667*	Fas-vac evacuation system (without drum) basic system includes 716 diaphragm pump and mounting hardware. Instruction manual 308154	
224700*	16 gallon (60 l) system includes pump (224667), dolly (224665), wand storage kit (224666), evacuation hose (224669) and 16 gallon (60 l) drum (111468). Instruction manual 308154	
224701*	55 gallon (200 l) system (without drum) includes pump (224667), 55 gallon (200 l) drum truck (111470), wand storage kit (224666) and evacuation hose (224702). Instruction manual 308154	
187359	4-way valve 1/2 npt(f) ports	

<sup>\*224759</sup> FLR mounting kit and 110149 FRL must be ordered separately. See instruction manual 308163.



#### Hoses, Fittings and Accessories

#### Air Filters

Centrifugal action 1/4, 3/8 and 1/2 npt. (with 20 micron filters); 3/4 npt having 40 micron filters to remove water and foreign particles from air supply

110146	1/4 npt(fbe)	106148	3/8 npt(fbe)
106149	1/2 npt(fbe)	106150	3/4 npt(fbe)

#### **Automatic Filter Drain**

106151 Float-type drain for automatic emptying of accumulated fluid in a filter assembly. 1/4 npt(m) (does not fit air filter 110146)

#### Air Regulators

Provides precision control of outlet air pressure. Feedback principle provides constant pressure to pump regardless of air demand rate and fluctuations in supply pressure. (Additional fittings required except air regulators with installation kits.)

110318	1/4 npt(fbe)	
110147	1/4 npt(fbe) with gauge	
110234	/8 npt(fbe)	
109075	3/8 npt(fbe) with gauge	
202858	3/8 npt(m) x 1/2 npsm(f) with gauge	
104266	1/2 npt(fbe)	
244844	1/2 npt(fbe) with gauge	
207755	3/4 npt(fbe)	
244845	3/4 npt(fbe) with gauge	

#### Installation Kits

Installation kits include: shut-off valve, regulators, gauges and fittings as necessary for normal installation

218316	Installation kits for Fast-Flo, Fire-Ball, or Husky 307 and 716 diaphragm pumps
224512	Installation kits for Mini Fire-Ball 225 and Fire-Ball

#### Air Lubricators

Extends pump life and smooths pump movement by applying measured lubricant to all moving parts within the pump air motor. Control knob and sight window allow adjustment of dispensed lubricant

	, ,
214848	1/2 npt(fbe)
110148	1/4 npt(fbe)
214847	3/8 npt(fbe)
214849	3/4 npt(fbe)





106151







# Accessories

# **Hoses and Fittings**

FRI Combi	nation Units				
	es filter, regulator, pressure gauge, lubricator and connection fittings				
110149	1/4 npt (fbe)				
110150	3/8 npt (fbe)				
217072	1/2 npt (fbe)				
217073	3/4 npt (fbe)				
Bleed-type	Air Shut-off Valves				
	nlet to pump and relieves trapped air pressure down line from valve. Recommended for each pump ote: Be certain to install correctly: if installed backwards air will constantly escape from the valve				
110223	1/4 npt(fbe)				
110224	3/8 npt(fbe)				
110225	1/2 npt(fbe)				
110226	3/4 npt(fbe)				
107142	1/2 npt(mxf)				
107141	3/4 npt(mxf)				
Air Line Sh	ut-off Valves Ball valve-type air line shut-off valve; non-pressure relieving				
208390	1/4 npt(mbe)				
208393	3/8 npt(mbe)				
208630	1/2 npt(m) x 3/8 npt(f)				
109077	3/4 npt(fbe)				
118464	1 npt(fbe)				
Quick-Con	nect Coupler				
Permits qui	ck, convenient attachment of air supply hoses				
208536	1/4 npt(fbe)				
110198	3/8 npt(f)				
110199	1/2 npt(f)				
110200	3/4 npt(f)				
Quick-Con	nect Nipple				
Allows quic	k attachment of air supply hoses to pump motor				
169970	1/4 npt(m)				
169967	1/4 npt(f)				
169971	3/8 npt(m)				
110196	1/2 npt(m)				
110197	3/4 npt(m)				
Air Needle	Valve				
Controls pu	mp speed by restricting air flow to pump or other air-operated equipment				
205090	1/4 npt(f) outlet port; 1/4 npt(m) inlet port				
206264	1/8 npt(f) outlet port; 1/4 npt(m) inlet port				
Air Pressu	re Relief Valve				
Prevents pu	mp from operating beyond recommended working pressure by opening at a pre-set maximum air pressure				
103347	90 psi (6 bar)				
110065	60 psi (4 bar)				



















# Accessories

# **Hoses and Fittings**

Air Pressure	e Gauge		
Allows visua	check of air pressure being supplied to the pump. Rated to 200 psi (14 bar)		
110319	1/8 npt(m) bottom inlet; black		
100960	1/4 npt(m) bottom inlet; black		
101180	1/4 npt(m) bottom inlet; chrome		
Air manifold			
Supply sever	al pumps from one supply line. Larger port delivery ensures adequate air flow to all pumps		
158990	Four outlet ports; 3/8 npt(f)		
601950	Three outlet ports; 1/2 npt(f)		
Runaway Va	live		
	mp damage by automatically closing the air line to stop the pump when a runaway pump condition o an empty barrel or hose leak		
224040	3/4 npt(fbe)		
Blow Guns			
208627	Air Blow Gun, 1/4 npt(f), use with coupler 208536		
236211	Safety Blow Gun tip swivels freely and cannot be removed. Tip pressure will not exceed 30 psi (2 bar), adequate for cleaning. Maximum working pressure 150 psi (10 bar). Use with coupler 208536		
Tire Inflator	S		
236205	Heavy-duty Tire Inflator includes 12 in (30 cm) hose with swivel dual-foot chuck and pop-out gauge. Tapered chuck nut fits wheel-cover holes on cars and light trucks. Gauge ranges from 0-120 psi in 2 psi increments. Maximum working pressure 250 psi (18 bar), 1/4 npt(f) inlet		
236206	Passenger Car Tire Inflator includes 12 in (30 cm) hose with straight-on chuck and pop-out gauge. Tapered chuck nut fits wheel cover holes on cars and light trucks. Ideal for use on reels. Gauge ranges from 0-90 psi in 2 psi increments. Maximum working pressure 250 psi (18 bar), 1/4 npt(f) inlet		
218545	1/4 npt(f) Tire Chuck, durable, full-volume tool for adding/relieving air pressure		
Water Valve			
180685	Water/Anti-Freeze Bib is a durable, full-volume dispense nozzle for water, anti-freeze and windshield washer fluid. Nitrile rubber seals with 1/4 npt(f) inlet. Maximum pressure is 100 psi (7 bar).		
180685	Water/Anti-Freeze Bib is a durable, full-volume dispense nozzle for water, anti-freeze and windshield washer fluid. Nitrile rubber seals with 1/4 npt (f) inlet. Maximum pressure is 100 psi (7 bar)		



Heavy-duty reinforced hose for use with grease, oil and undercoating material. Hoses are black, male at both ends. Lubrication hoses listed are grounded for static electrical discharge.

1/4 in ID hoses with maximum pressure rating of 5000 psi (345 bar)				
Part No.	Length	Fittings		
109145	12 in (0.3 m)	1/8 in x 1/8 in (4.8 mm x 4.8 mm) with bend restrictor		
109146	15 in (0.4 m)	3/8 in x 3/8 in (9.5 mm x 9.5 mm)		
109147	24 in (0.6 m)	3/8 in x 3/8 in (9.5 mm x 9.5 mm)		
109148	30 in (0.8 m)	1/8 in x 1/8 in (4.8 mm x 4.8 mm) with bend restrictor		
109149	48 in (1.2 m)	1/4 in x 1/4 in (6.4 mm x 6.4 mm)		
109150	72 in (1.8 m)	1/4 in x 1/4 in (6.4 mm x 6.4 mm)		
109151	12 ft (3.6 m)	1/4 in x 1/4 in (6.4 mm x 6.4 mm)		
109152	15 ft (4.6 m)	1/4 in x 1/4 in (6.4 mm x 6.4 mm)		
109153	20 ft (6.1 m)	1/4 in x 3/8 in (6.4 mm x 9.5 mm)		
109154	25 ft (7.6 m)	1/4 in x 1/4 in (6.4 mm x 6.4 mm)		
109156	35 ft (10.6 m)	1/4 in x 3/8 in (6.4 mm x 9.5 mm)		
109157	40 ft (12.2 m)	1/4 in x 3/8 in (6.4 mm x 9.5 mm)		
109158	50 ft (15.3 m)	1/4 in x 3/8 in (6.4 mm x 9.5 mm)		



# **Lubrication Hoses**

# **Hoses and Fittings**

3/8 in ID hoses with maximum pressure rating of 4000 psi (276 bar)				
Part No.	Length	Fittings		
109160	12 in (0.3 m)	1/4 in x 1/2 in (6.4 mm x 12.7 mm)		
109161	24 in (.62 m)	3/8 in x 3/8 in (9.5 mm x 9.5 mm)		
109162	48 in (1.2 m)	3/8 in x 3/8 in (9.5 mm x 9.5 mm)		
109163	72 in (1.8 m)	3/8 in x 3/8 in (9.5 mm x 9.5 mm)		
109165	15 ft (4.6 m)	1/4 in x 1/4 in (6.4 mm x 6.4 mm)		
109170	50 ft (15.3 m)	1/4 in x 3/8 in (6.4 mm x 9.5 mm)		
109169	40 ft (12.2 m)	1/4 in x 3/8 in (6.4 mm x 9.5 mm)		
109170	50 ft (15.3 m)	1/4 in x 3/8 in (6.4 mm x 9.5 mm)		

### **Lubrication Hoses (Oil)**

1/2 in ID hoses with maximum pressure rating of 3000 psi (207 bar)			
Part No.	Length	Fittings	
110069	15 in (0.4 m)	1/2 in x 1/2 in (12.7 mm x 12.7 mm)	
220598	18 in (0.5 m)	1/2 in x 1/2 in (12.7 mm x 12.7 mm)	
220600	54 in (1.4 m)	1/2 in x 1/2 in (12.7 mm x 12.7 mm)	
220591	72 in (1.8 m)	1/2 in x 1/2 in (12.7 mm x 12.7 mm)	
220590	10 ft (3.1 m)	1/2 in x 1/2 in (12.7 mm x 12.7 mm)	
220592	16 ft (4.9 m)	1/2 in x 1/2 in (12.7 mm x 12.7 mm)	
220593	20 ft (6.1 m)	1/2 in x 1/2 in (12.7 mm x 12.7 mm)	
220608	25 ft (7.6 m)	1/2 in x 1/2 in (12.7 mm x 12.7 mm)	
221092	40 ft (12.2 m)	1/2 in x 1/2 in (12.7 mm x 12.7 mm)	
221093	50 ft (15.3 m)	1/2 in x 1/2 in (12.7 mm x 12.7 mm)	
237861	75 ft (22.9 m)	1/2 in x 3/4 in (12.7 mm x 19.1 mm)	
109108	18 in (0.4 m)	3/4 in x 3/4 in (19.1 mm x 19.1 mm)	
109105	72 in (1.8 m)	3/4 in x 3/4 in (19.1 mm x 19.1 mm)	
111010	10 ft (3.0 m)	3/4 in x 3/4 in (19.1 mm x 19.1 mm)	
237865	75 ft (22.9 m)	1/2 in x 1 in (12.7 mm x 25.4 mm)	
237866	50 ft (15.2 m)	1/2 in x 1 in (12.7 mm x 25.4 mm)	
1 in ID hose	rated to maximum pressure o	of 125 psi (8.7 bar)	
Part No.	Length	Fittings	
249058	50 ft (15.2)	1 in x 1 in (25.4 mm x 25.4 mm)	
1 in ID hose rated to maximum pressure of 212 psi (14.6 bar)			
Part No.	Length	Fittings	
241908	50 ft (15.2)	1 in x 1 in (25.4 mm x 25.4 mm)	
241907	30 ft (9.1 m)	1 in x 1 in (25.4 mm x 25.4 mm)	

#### Air/Water Hoses

Hoses for air, water, anti-freeze and windshield washer fluid. Hoses are red with male fittings at both ends.

Coiled 1/4 in ID hose with maximum pressure rating of 180 psi (12 bar)					
Part No. Length Fittings					
205600 50 ft (15.3 m) 1/4 in x 50 ft (6.4 mm x 15.3 m)					



# **Air/Water Hoses**

# **Hoses and Fittings**

Fabric-Reinforced 1/4 in ID hoses with maximum pressure rating of 180 psi (12 bar)					
Part No.	Length Fittings				
109123	18 in (0.5 m)	1/4 in x 1/4 in (6.4 mm x 6.4 mm)			
109124	4 ft (1.2 m)	1/4 in x 1/4 in (6.4 mm x 6.4 mm)			
109125	6 ft (1.8 mm)	1/4 in x 1/4 in (6.4 mm x 6.4 mm)			
109126	10 ft (3.1 m)	1/4 in x 1/4 in (6.4 mm x 6.4 mm)			
109127	25 ft (7.6 mm)	1/4 in x 1/2 in (6.4 mm x 12.7 mm)			
109128	40 ft (12.2 m)	1/4 in x 1/2 in (6.4 mm x 12.7 mm)			
218491	40 ft (12.2 m)	3/8 in x 1/4 in (9.5 mm x 6.4 mm)			
3/8 in ID ho	ses with maximum pressure ra	ating of 180 psi (12 bar)			
Part No.	Length	Fittings			
204560	18 in (0.5 m)	3/8 in x 3/8 in (9.5 mm x 9.5 mm)			
109130	4 ft (1.2 m)	3/8 in x 3/8 in (9.5 mm x 9.5 mm)			
203320	6 ft (1.8 m)	3/8 in x 3/8 in (9.5 mm x 9.5 mm)			
109131	10 ft (3.1 m)	3/8 in x 3/8 in (9.5 mm x 9.5 mm)			
110326	16 ft (4.9 m)	1/4 in x 3/8 in (6.4 mm x 9.5 mm)			
109132	25 ft (7.6 m)	3/8 in x 1/2 in (9.5 mm x 12.7 mm)			
109133	30 ft (9.2 m)	3/8 in x 1/2 in (9.5 mm x 12.7 mm)			
109134	40 ft (12.2 m)	3/8 in x 1/2 in (9.5 mm x 12.7 mm)			
109135	60 ft (18.3 m)	3/8 in x 1/2 in (9.5 mm x 12.7 mm)			
1/2 in ID ho	se with maximum pressure rat	ting of 180 psi (12 bar)			
Part No.	Length	Fittings			
218093	22 in (0.56 m)	1/2 in x 1/2 in (12.7 mm x 12.7 mm)			
110046	4 ft (1.2 m)	1/2 in x 1/2 in (12.7 mm x 12.7 mm)			
205418	6 ft (1.8 m)	1/2 in x 1/2 in (12.7 mm x 12.7 mm)			
214656	10 ft (3.1 m)	1/2 in x 1/2 in (12.7 mm x 12.7 mm)			
248312	25 ft (7.6 m)	1/2 in x 1/2 in (12.7 mm x 12.7 mm)			
248313	50 ft (15.2 m)	1/2 in x 1/2 in (12.7 mm x 12.7 mm)			
3/4 in ID ho	3/4 in ID hoses with maximum pressure rating of 180 psi (12 bar)				
Part No.	Length	Fittings			
110047	18 in (0.5 m)	3/4 in x 3/4 in (19.1 mm x 19.1 mm)			
110048	4 ft (1.2 m)	3/4 in x 3/4 in (19.1 mm x 19.1 mm)			
208610	6 ft (1.8 m)	3/4 in x 3/4 in (19.1 mm x 19.1 mm)			
214955	10 ft (3.1 m)	3/4 in x 3/4 in (19.1 mm x 19.1 mm)			
208611	25 ft (7.6 m)	3/4 in x 3/4 in (19.1 mm x 19.1 mm)			

# **Pipe Fittings and Swivels**

# **Hoses and Fittings**

Bushing – re	ducing, standard and	expanding			
Part No.	Thread Size (m x f)	Part No.	Thread Size (m x f)	Part No.	Thread Size (m x f)
100030	1/4 in x 1/8 in	159841	3/8 in x 1/4 in	100206	1/2 in x 1/4 in
100081	1/2 in x 3/4 in	100615	3/4 in x 1/4 in	100505	3/4 in x 3/8 in
100896	3/4 in x 1/2 in	100380	1 in x 1/2 in	158586	1 in x 3/4 in
Pipe Adapter	S		•	•	
Part No.	Thread Size (m x f)	Part No.	Thread Size (m x f)	Part No.	Thread Size (m x f)
150171	1/8 in x 1/8 in	159840	1/8 in x 1/4 in	156580	1/8 in x 3/8 in
150287	1/4 in x 3/8 in	159842	1/4 in x 1/2 in	150286	3/8 in x 3/8 in
156022	3/8 in x 1/2 in	168595	1/2 in x 3/4 in		1
Street Elbow	S		•		
Part No.	Thread Size (m x f)	Part No.	Thread Size (m x f)	Part No.	Thread Size (m x f)
100840	1/4 in x 1/4 in	155699	3/8 in x 3/8 in	158683	1/2 in x 1/2 in
176393	3/4 in x 3/4 in		1		
Coupling (sta	ındard)	•			
Part No.	Thread Size	Part No.	Thread Size	Part No.	Thread Size
100451	1/8 in	113093	1/4 in	162024	3/8 in
158581	1/2 in	100385	3/4 in	100474	1 in
Hex Nipple (s	standard and reducing	g)		•	<u>.                                      </u>
Part No.	Thread Size	Part No.	Thread Size	Part No.	Thread Size
151519	1/4 in x 1/8 in	156971	1/4 in x 1/4 in	156296	3/8 in x 1/8 in
165198	3/8 in x 1/4 in	156849	3/8 in x 3/8 in	162449	1/2 in x 1/4 in
159239	1/2 in x 3/8 in	158491	1/2 in x 1/2 in	194048	3/4 in x 3/8 in
157191	3/4 in x 1/2 in	175013	3/4 in X 3/4 in	158555	1 in x 3/4 in
Square-Head	l Plug			•	<u> </u>
Part No.	Thread Size	Part No.	Thread Size	Part No.	Thread Size
111697	1/4 in	100040	3/8 in	100737	1/2 in
104663	3/4 in		•		
Straight Swi	vel Adapter*				
Part No.	Rigid (m) x Swivel (f)	Part No.	Rigid (m) x Swivel (f)	Part No.	Rigid (m) x Swivel (f)
208434	1/8 in x 1/4 in	156823	1/4 in x 1/4 in	157705	1/4 in x 3/8 in
155665	3/8 in x 3/8 in	162505	3/8 in x 1/2 in	156684	1/2 in x 1/2 in
158256	1/2 in x 3/8 in	157785	3/4 in x 3/4 in	202965	1 in x 3/4 in
160022	1 in x 1 in				
90° Swivel A	dapter*				
Part No.	Rigid f) x Swivel (f)	Part No.	Rigid (f) x Swivel (f)	Part No.	Rigid (f) x Swivel (f)
157676	1/4 in x 1/4 in	155677	3/8 in x 3/8 in	159801	3/8 in x 1/2 in
157416	1/2 in x 1/2 in	156589	3/4 in x 3/4 in		
Straight Swi	vel Adapter*			•	
Part No.	Rigid (f) x Swivel (f)	Part No.	Rigid (f) x Swivel (f)	Part No.	Rigid (f) x Swivel (f)
155570	1/4 in x 1/4 in	159153	3/8 in x 1/4 in	156173	3/8 in x 3/8 in
155653	1/2 in x 1/4 in	161077	1/2 in x 3/8 in	155865	1/2 in x 1/2 in
156172	3/5 in x 3/4 in	158383	1 in x 1 in		
90° Swivel*				-	
Part No.	Rigid (M) x Swivel (F)	Part No.	Rigid (M) x Swivel (F)	Part No.	Rigid (M) x Swivel (F
155541	1/4 in x 1/4 in	155495	3/8 in x 1/4 in	155494	3/8 in x 3/8 in
217430	3/8 in x 1/2 in	161037	1/2 in x 3/8 in	155470	1/2 in x 1/2 in
160327	3/4 in x 3/4 in		1	<u> </u>	1
45° Swivel A					
Part No.	Rigid (M) x Swivel (F)	Part No.	Rigid (M) x Swivel (F)	Part No.	Rigid (M) x Swivel (F
	• ( )		1 7 17	i ait INU.	riigia (ivi) x Swivel (F
161889	3/8 in x 3/8 in	105281	3/4 in x 3/4 in	l	

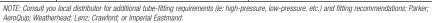
<sup>\*</sup>Not a "live" swivel, position is stationary after tightened



# **Tube and Fittings**

## **Hoses and Fittings**

Tube Fittings	Tube Fittings				
Maximum pre	ssure rating of 3000 psi (207 bar) with appropriate	tubing wall thickness			
Tube Union F	low 90° Elbow				
Part No.	Part No. Tube OD -				
101012	5/8 in	-			
101376	7/8 in	-			
Tube Union -	Straight				
Part No.	Tube OD	-			
101009	5/8 in	-			
101340	7/8 in	-			
Male Connec	tor				
Part No.	Tube OD	Thread			
101339	7/8 in	3/4 npt			
Female Conn	ector – Straight				
Part No.	Tube OD	Thread			
101008	101008 5/8 in 1/2 npt				
Tube Tee with Female Branch					
Part No.	Tube OD	Thread			
101013	5/8 in	5/8 npt			





Always use a qualified installer and ensure the installer follows the detailed instructions included with every Graco product.

- 1. Always use new pipe. Make certain that pipes are clean and free of rust and scale.
- 2. When cutting pipe remove burrs and chips that may damage dispense valves and meters.
- 3. Always flush the system with oil before attaching dispense valves and meters.

#### Air Lines

Main Line	Branch Line	Pump Model	
3/4 in or 1 in ID pipe	3/8 in or 1/2 in ID pipe	Fast-Ball; Mini Fire-Ball 225	
3/4 in or 1 in ID pipe	1/2 in ID pipe	Fire-Ball	

#### **Fluid Lines**

This information applies to typical automotive flow rate service requirements

Chassis Grease Lubricant Supply Lines (based upon 5000 psi (345 bar) maximum working pressure)				
Supply Line Length	Supply Pump	Hydraulic Supply Line Tubing		
Up to 50 feet	50:1 Fire-Ball 300, 425	5/8" OD x .109" Wall Tube		
50 to 100 feet	50:1 Fire-Ball 300, 425	5/8" OD x .109" Wall Tube		
100 to 200 feet	50:1 Fire-Ball 300	N/A		
100 to 200 feet	50:1 Fire-Ball 425	N/A		
200 feet and up	50:1 Fire-Ball 300, 425	N/A		
Motor Oil, Gear Lube, or ATF	Lubricant Supply Lines (based upon 1	000 psi maximum working pressure)		
Supply Line Length	y Line Length Supply Pump Hydraulic Supply Line Tu			
Up to 50 feet	5:1 Fire-Ball 300	5/8" OD x .049" Wall Tube		
Up to 50 feet	10:1 Fire-Ball 425	3/4" OD x .049" Wall Tube		
50 to 100 feet	5:1 Fire-Ball 300	3/4" OD x .049" Wall Tube		
50 to 100 feet	10:1 Fire-Ball 425	1" OD x .049" Wall Tube		
100 to 200 feet	5:1 Fire-Ball 300	1" OD x .049" Wall Tube		
100 to 200 feet	10:1 Fire-Ball 425	1-1/2" OD x .095" Wall Tube		
200 feet and up	5:1 Fire-Ball 300	1-1/2" OD x .095" Wall Tube		
200 feet and up	10:1 Fire-Ball 425	1-1/2" OD x .095" Wall Tube		





## **Petroleum Management Group**

## **Ordering and Warranty Information**

This Price List supersedes all previous price lists dated prior to January 2, 2011.

Prices, discount codes, and family codes subject to change without notice.

\$50.00 U.S. net minimum billing, exclusive of application taxes and transportation.

The goods are sold to Distributor EX Works (Incoterms 2000) Graco's premises or the premises of Graco's Supplier. All freight charges, handling, insurance, duty, taxes and other charges are at Distributor's expense, with the following exception: for single orders and/or shipments to USD \$2,500 net value or more, Graco will prepay surface freight charges to the U.S. port of exit or the U.S. freight forwarder of Distributor's choice.

All prices are F.O.B. shipping point.

Returns will not be accepted on configured or low demand products built to special customer order. These orders are subject to a cancellation fee.

Graco strives to ship all orders within 48 hours. If you have need for an emergency shipment and your order is received before 2:30 p.m. Central Time, you may request same day shipment.

Graco Inc. reserves the right to correct any typographical errors in this price list.

Possession of this list does not permit any party to purchase any or all of the items listed herein.

Prices, as shown herein, do not include any sales tax, excise tax, or other similar tax which must be added when, as, and if applicable.

This price list does not list parts that are obsolete or discontinued. Always refer to the most recent lists and instruction forms.

#### **GEDI®** Website

GEDI stands for Graco Extranet for Distributor Information and is for use exclusively by authorized Graco distributors. This online tool features up-to-the-minute list price, net price, order/product information, product availability and shipping information. Access to this portion of the **www.graco.com** website requires your Graco account number and the assignment of a GEDI password.

If you would like to access GEDI, visit **www.graco.com** for easy online instructions.

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- Literature orders
- · Order status
- · Shipping charges
- Tracking information
- Same day shipping\*

\*All orders entered and credit approved by noon qualify for same day shipping

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- Shipping location
- · Graco sales release number
- Total net order entry value
- · Line item pricing
- · Quantity available by line item
- Part description

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- Data Sheets
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## **Petroleum Management Group**

## **Ordering and Warranty Information**

## Standard Graco Warranty 1 Year Warranty Policy

Graco warrants all equipment manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale by an authorized Graco distributor to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective.

This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations. This warranty does not cover, and Graco shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment

does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

THIS WARRANTY IS EXCLUSIVE, AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

Graco's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

Graco makes no warranty, and disclaims all implied warranties of merchantability and fitness for a particular purpose in connection with accessories, equipment, materials or components sold but not manufactured by Graco. These items sold, but not manufactured by Graco (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. Graco will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

In no event will Graco be liable for indirect, incidental, special or consequential damages resulting from Graco supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of Graco, or otherwise.

## **Graco Petroleum Management Group Equipment Extended Warranty**

Graco warrants all equipment referenced in this document that is manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale to the original purchaser for use. Graco will, for a period as defined in the table below from the date of sale, repair or replace equipment covered by this warranty and determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

	5 Year Warranty	7 Year Warranty	10 Year Warranty
Oil/Grease Pumps and Packages	LD Pumps	Mini-Fireball 225	Fireball 425
	Fastball / Fast-Flo	Fireball 300	NXT Pumps
	AODD		
Electronic Meters and Valves	LD Meters	Matrix Meters	
LD Meter Electronics (2 years) All other meter series electronics (3 years)		SD Electronic Meters	
meter series electronics (5 years)		EM6/EM12 Electronic Meters	
		IM5/IM6 Electronic Meters	
		SDI15 Electronic Meters	
		SDV15 Valve	
		XDV20 Valve	
Hose Reels and Packages	LD Series Reels and Packages	SD Series Reels & Packages	
All reel series wear parts, including but not limited to: hose, swivel seats, roller		XD Series Reels & Packages	
guides (12 months). All bare hose reels,		700 Series Reels	
all components (12 months).			
Accessories	Oil King		
	Coolant King		
	Oil Ace		

Equipment or components not identified are not covered by this warranty. Complete part number list available by request.



Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No
15C502	12, 17, 20		63			24N325	69
15T366	78		63		27, 60, 61		69
	78		63 63				63, 69
	78 78		63		9, 10, 11		
	78		40		9		69
5Y478	66		40		9		69
	59		40		9		69
	59 10		40		9 9		
	59, 63		40		9		69
	63	24E166	91	24H753	9, 10		69
	69		91		9		69
	63, 69		49		9 9		
	69 63, 69		48, 49 48		9		
	58, 63		48, 49		10		
	58, 63		48, 49		10		
	63		61				59
	63		61		27		59
	63 63		61 61				5! 
	59, 63		61		10		
4A941	59, 63	24F740	61	24H892	10	24N688	59
4A942	59, 63		61	24H894	10		5
	59, 63		61		10		
	59, 63 63		61 61		10 10		5: 5:
	63		61		10		5
	63		61		10		
4A948	63	24F756	61	24H967	10	100030	97
	63		61		10		97
	59, 63, 69		61		27		87, 8
	63, 69 41		61 61		27 27		9 9
	41		61		27		2
	41		61		27		9
4B766	41	24F772	61		27		9
	63, 69		61		27		9
	66		61		9, 10		9
	66 66		61 61		27 9		9 5
	66		61		9		9
	66		61		10		9
	66		61		10		87, 88
	66		48, 49		9		87, 8
	66 66		48 11. 27		10 11		8
	66		27		9		9
	66		27		10		8
	66		11, 27		9		8
	60, 61		11, 27		10		8
	60, 61 60		11, 27 9. 10. 11		9 10		8
	60, 61				9		
	9, 10, 60, 61				10		87, 8
1C539	60, 61				9		8
	52, 91		9, 10, 11		10		9
	9, 10, 61 61				9 10		9
	63, 69			24K037 24K838	9		9
	63, 69	24F935		24K839	10		2
	41, 52	24F947	48	24K840	9		9
ID590	22	24G576	7, 9	24K841	10		8
ID502	22		7, 9 7, 9		9 10		8
	23		7, 9 7, 9		58		8
D594	22				58	101297	8
ID595	23	24G591	8, 10	24M512	58	101312	8
	22	24G594			58	101339	g
	22 23		8, 10 26, 27		58 58		9
	23		26, 27		57, 58		8
	22		26, 27		58	101605	8
D601	23	24G636	48	24M524	58	102527	8
D602	22		49	24M525	58	103347	01 00 07 50 0
	22		48		58	104266	17, 21, 36, 37, 50, 9
	23 23		61 61		58 58		9
	22		59		58		8
	22		48, 49		58	106148	
ID608	23	24H420	9, 10, 11, 27	24M531	58	106149	21, 41, 9
ID989	63	24H422	11, 27	24M532	58	106150	41, 9
	63		60, 61		58		18, 92, 9
	63		60, 61	24M534	58	10/141	9
	63 63		60, 61 60, 61	24IVIDJD 24M536	58 58		9
	63		60, 61		58		90, 9
	63		60, 61	24M538	58	108203	9
	63				69		C

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
108458	21, 84, 85		91		97		
	91 17, 21		52 				
	91		97 41		11, 97 19, 43, 97		19, 21
109064	38 70	112196	86	160754	19, 38	204072	87
	17, 18, 21, 34, 35, 36, 50, 52, 92 93		56 56		97 97		20, 50
109105	19, 43, 52, 95	112202	56	161889	97	204083	86
	19, 43, 95 43, 96		87 20		97 36. 37		
109124	96	113093	97	162449	97	204121	35
			41, 52 83		97 97		38 34, 35
109127	96	113553	83	168085	19	204144	
	96 96		83 83		97 93		
	96		83		41, 93		50
	96 96		83 83				35
109134	96	113560	83		20		
			83 85		97 97		36, 37
109146	94	114017	78	176684	20	204560	19, 96
	94 81, 87, 94		56 22, 23, 40, 52		71 21		17, 19, 34, 35, 36, 37, 38, 51, 54, 55 
109149	94		91		63, 94	204867	55
		119577	93 89		70 75, 79		87 87
109152	94		91	186472	85	205054	20, 39
	94 94		49 49		92 52	205090	
	94		49		20		36, 37
	94 94		49 49		52 20		38 36, 37
109160	95	124581	48, 49, 70		20		
	95 95		48, 49 49		20 20		
109163	38, 95	124875	48, 49, 70	191287	78	205532	87
	38, 95 38		48, 49 49		78 78		87 87
109169	95	125074	49	191294	78	205582	87
	95 85		48, 49 48, 49		78 83		87 95
110046	96	125242	49	191393	83	205626	16, 17
	96 22, 23, 96		49 49		83 74, 75		
110065	93	150171	97	191783	74, 75	206264	93
	95 20		97 63, 97		74, 75 83		29, 34, 51 51
110146	21, 41, 52, 92	150622	87	192874	83	206502	51
	21, 41, 48, 52, 92 21, 92		97 90		97 71, 78		
110149	21, 91, 92, 93	155332	78	200020	87		50
	21, 93		19, 38, 97 19, 20, 38, 97		87 86, 87		29, 34, 51 29, 34, 51
110197	93	155495	97	200326	17, 19, 34, 36, 37, 38, 51, 54	207279	37
110198 110199					81, 86, 87 74	207361 207366	50, 54 50, 54
	93 86		97 97		87 84		50
110202	86	155677	97		27, 38, 51, 81, 86	207561	20, 39
	86		97 87		86		20, 39
110218	86 86		97		86 87	207651	
110223	21, 39, 41, 48, 52, 93		52, 97 97		88		77 77
110225	17, 21, 39, 41, 93	156173	97	202869	39		77
110226	21, 39, 41, 93		97 97		97 19		92 86
110236	71	156589	97	203198	86, 87	207947	86
	71 71		11, 97 90		74 19, 38, 96		86 90
110314	21	156823	97	203497	87	208390	93
	52, 92 94						93 97
110326	96	157191	97	203522	58, 63	208536	
			18, 97 97	203523	63		
110705	88	157705	11, 97	203525	63	208627	94
	88 88		91, 97 97		86 17, 20, 34, 35, 39, 55		93 19
110710	88	158383	97	203650	19, 34, 35, 39, 55	213012	43
	88 88		97 97		74 35		43
110713	88	158581	97	203687	74	214583	20, 43
	21 21		97 97			214584	
110906	21	158990	94	203701	56	214658	55
	21 95		97 97		56 56	214847 214849	21, 92 21, 92
111468	92	159801	97	203716	37	214849	92
111470	19, 39, 92	159840	97	203857	13, 17, 50	214925	86

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page I
214926	86		63, 69	226342	51	238637	
214955	96		19, 35, 39	226940	43		
	83, 84, 85 83, 85				43		
	85		35, 38		43		-
15481	85	222404	36	226944	43	238642	
	83, 84, 85		63, 70		43		
	85 43		6 71		42, 43		
	17, 21, 93		71		42, 43		
	93		71		43		
	20, 43		54	226953	43		20,
	97		50		84, 85		83, 84,
	19, 96 43						
	6		87		81		
	6, 43, 92	223344			51		
	63, 69		71		71		
	63, 69		91				
	96 63, 94		91 91				
	9, 10, 18, 63, 70				85		
18550	63, 70	223701	38, 54	235878	74, 75, 76	239729	33, 37,
	83, 85		34, 36, 38, 50		74, 75, 76		33, 37,
	71 70				20, 21, 54, 83		33, 71
	70 70		52, 91 75		19, 20, 21, 41, 43, 52		71,
	70		40		86, 87		30,
18673	70	223965	91	236205	94	239887	30, 35,
	70		51		94		30, 36, 37,
	70		94 		94 91		
	70 70		37		41		
	70		70		41		
18969	90, 91		51		53	239965	
	<u>9</u> 1		17, 92		53, 54		38,
	71		18		84, 85		
	71 71		18 86		84, 85 19		21,
	43		20, 50		54		20, 21,
	34		92		54		84,
	34		92		17, 19		
	95		92		43		
	19, 95 95		92 92				90.
	95		92		43		
	52		92		43		
	18, 19, 95		53, 54		43	241657	
	95		53		52		20,
	95 34, 35, 37, 38		54 54		52 14. 17		
			91, 92		20, 21		41, 02,
	91		91		53		
	91		51		67		
	95		51		95		
	95 91				95 95		81, 30, 30, 61, 81,
	41, 91, 92		81		63, 69		
	6	224873	90, 91		63, 69	243161	
			54		63, 69		
	34, 35, 38		54		67		
22000 22061	35, 50, 54 19, 35, 50, 54		54 91		67 67		
			35		18, 20, 21, 83, 84, 85		
22063	17, 18, 19, 21, 50	225014	35	237904	54	243602	
			36	237932	67, 70		
	17, 19, 21, 50		35 17		70 		
	17, 19, 21		90		20		41,
	35, 37		55		17, 19, 21		
2070	35, 38	225378	55	238246	19, 21	243818	
	50		55		19		
	34, 35, 36, 38, 50		55 17		20		
.2073 2074	35 35		17		78 75	243037	
	50	225728	17		41, 52	244038	
2076	36, 37, 38, 50	225773	35, 37		21	244055	
	51		36		21		
	34 51		17 17		21 21		
	34, 38		35, 37		21		
	34, 38		56		51		
22082	51	225852	17	238437	51	244636	
22085	50				51	244637	
	50		55		51		
	13, 17 89		56 17		20 20		
	16, 17, 50		35, 37		20		
	6		36		20	244681	
22104	6	226018	36	238618	83	244682	
	21, 43		51		83	244844	36, 37, 41,
//119	21, 43 91	220289	55	238625	83	244845	

244847 17 256355. 73 D31255 41 FP.33C 244905 66 FP.35549. 77 78 D8395 41 FP.33C 244906 63 77 256549. 77 78 79 D83925 41 FP.33D 244906 63 77 256549. 77 78 79 D83925 41 FP.33E 245010 68 256460 77 78 79 D83925 41 FP.33E 245010 68 256460 77 78 79 D83925 41 FP.33E 245010 68 256460 77 78 79 D83925 41 FP.33E 245094 33 5 256461 78 79 D83925 41 FP.35E 66 FP.56E 245094 35 256470 77 78 79 D83925 66 FP.56E 66 FP.56E 245095 35 256470 77 78 FP.56E 66 FP.56E 67 FP.56	62 62 62 62 62 62 62 62 62 62 62 62 62 6
244906	62 62 62 62 62 62 62 62 62 62 62 62 62 6
246410	62 62 62 62 62 62 62 62 62 62 62 62 62 6
245995. 35 255470. 77, 78, 79 HNF55B. 66 HPL56B. 246698. 35 255751. 72, 78 HNF55F. 66 HPL56C. 246693. 41 255793. 80 HNF87A. 66 HPL56C. 246673. 21, 13, 17 255800. 73 HNF87B. 66 HPL56E. 2467670. 28, 34 255801. 73 HNF87B. 66 HPL56E. 246781. 28, 34 255801. 73 HNF87B. 66 HPL56E. 246781. 28, 34 255802. 73 HNF87B. 66 HPL56E. 246780. 12, 34 255803. 73 HNF57B. 66 HPL56S. 246903. 17 255803. 73 HNF5B. 66 HPL65C. 246904. 17 255803. 73 HNF5B. 66 HPL65C. 246906. 17 255852. 78 HNF5B. 66 HPL65C. 246909. 28, 34 255855. 78 HNF5B. 66 HPL65E. 246909. 28, 34 255855. 78 HNF5B. 66 HPL65E. 246910. 34, 37 255857. 78, 79 HNFFB. 66 HPM3BA. 246911. 34, 37 255858. 78, 79 HNFFF. 66 HPM3BA. 246913. 34, 37 255859. 80 HNL56A. 66 HPM3BC. 246914. 34 255859. 80 HNL56A. 66 HPM3BC. 246915. 34, 37 255855. 78 HNL56B. 66 HPM3BC. 246916. 34, 37 255855. 78 HNL56B. 66 HPM3BC. 246917. 34, 37 255858. 78, 79 HNFFF. 66 HPM3BC. 246918. 34, 37 255858. 78, 79 HNFFF. 66 HPM3BC. 246919. 34, 37 255855. 78 HNL56B. 66 HPM3BC. 246914. 34 255859. 80 HNL56A. 66 HPM3BC. 246915. 34, 37 25586B. 78 HNL56B. 66 HPM3BC. 246916. 34, 37 25586B. 78 HNL56B. 66 HPM3BC. 246917. 34 255869. 80 HNL56A. 66 HPM3BC. 247335. 37 256164. 78 HNL56B. 66 HPM3BC. 247335. 37 256164. 79 HNL56B. 66 HPM3BC. 247335. 37 256216. 9, 10, 18, 72, 78 HNL56B. 66 HPM3BC. 247335. 37 256216. 9, 10, 18, 72, 78 HNL56B. 66 HPM3BC. 247336. 77 HNL58B. 66 HPM3CB. 66 HPM3CB. 247443. 64 256786. 77 HNL58B. 66 HPM3CB. 66 HPM3CB. 247443. 64 256786. 77 HNL5B. 66 HPM3CB. 66 HPM3CB. 67 HPM3CB. 67 HPM3CB. 67 HPM3CB. 67 HPM3CB. 66 HPM3CB.	62 62 62 62 62 62 62 62 62 62 62 62 62 6
246696	62 62 62 62 62 62 62 62 62 62 62 62 62 6
24676. 12,13,17 25680. 73 HNHB7B. 66 HPL56E. 246781 28,34 256802. 73 HNHB7B. 66 HPL56F. 246781 28,34 256802. 73 HNHB7B. 66 HPL56F. 246903. 1,7 256803. 73 HNHCSA. 66 HPL6SA. 246904. 1,7 256862. 78 HNHCSF. 66 HPL6SB. 246904. 1,7 256852. 78 HNHCSB. 66 HPL6SC. 246909. 1,7 256853. 78 HNHCDB. 66 HPL6SC. 246909. 2,8,34 256855. 78 HNHCDB. 66 HPL6SE. 246910. 34,37 256856. 78 HNHCDB. 66 HPL6SE. 246911. 34,37 256856. 78 HNHCDB. 66 HPL6SE. 246913. 34,37 256858. 78,7 HNHFFA. 66 HPM3BA. 246914. 34 255885. 78,7 HNHFFF. 66 HPM3BB. 246915. 34 256859. 80 HNL56A. 66 HPM3BB. 246916. 34,37 256856. 78 HNL56B. 66 HPM3BB. 246917. 34 256859. 80 HNL56A. 66 HPM3BB. 246918. 34 255821. 80 HNL56B. 66 HPM3BB. 246919. 34 255821. 80 HNL56A. 66 HPM3BB. 246919. 34 255821. 80 HNL56A. 66 HPM3BB. 247338. 37 256164. 79 HNL56B. 66 HPM3BB. 247338. 37 256164. 79 HNL65B. 66 HPMBDB. 247339. 37 256216. 9,10,18,72,78 HNL65F. 66 HPMBDB. 247339. 37 256216. 9,10,18,72,78 HNL65B. 66 HPMBDB. 247343. 37 25626. 77 HNL6B. 66 HPMBDB. 247439. 54 256698. 77 HNL56B. 66 HPMBDB. 247439. 54 256698. 77 HNL56B. 66 HPMBDB. 247440. 54 256698. 77 HNL56B. 66 HPMBDB. 247450. 54 256698. 77 HNL56B. 66 HPMBDB. 2474740. 54 256698. 77 HNL56B. 66 HPMBDB. 2474740. 54 256698. 77 HNL56B. 66 HPMBDB. 2474740. 59 256839. 73 HNL56B. 66 HPMBDB. 2474740. 79 256839. 73 HNL56B. 66 HPMBDB. 247711. 79 256839. 73 HNL56B. 66 HPMBSB. 247711. 79 256839. 73 HNL53B. 66 HPMBSB. 247711. 79 256839. 73 HNL53B. 66 HPMBSB. 247712. 80 260000. 47 HNMSB. 66 HPMBSB. 247722. 80 260000. 47 HNMSB. 66 HPMSB. 247799. 247719. 79 256839. 73 HNMSBB. 66 HPMBSB. 247799. 247719. 79 256839. 73 HNMSBB. 66 HPMBSB. 247719. 79 256839. 73 HNMSBB. 66 HPMBSB. 247719. 79 256839. 74 HNMDDB. 66 HSDDB. 247719. 79 256839. 74 HNMDDB. 66 HSDDB. 247719. 79 256839. 47 HNMDDB. 66 HSDDB. 247719. 79 256839. 47 HNMDDB. 66 HSDDB. 247719. 79 256839. 47 HNMDDB. 66 HSDDB. 247719. 79 256000. 47 HNMDDB. 66 HSDDB. 247719. 79 2560	62 62 62 62 62 62 62 62 62 62 62 62 62 6
246780	62 62 62 62 62 62 62 62 62 62 62 62 62
246781	62 62 62 62 62 62 62 62 62 62 62 62
246904 17 258852 78 HNHCDF 66 HPL65C 246906 17 258853 78 HNHCDB 66 HPL65D 246907 17 258853 78 HNHCDB 66 HPL65E 246907 17 258854 78 HNHCDB 66 HPL65E 246909 28 34 258855 78 HNHCDB 66 HPL65E 246909 28 34 258855 78 HNHCDB 66 HPL65E 246910 34 37 258856 78 HNHCDB 66 HPL65E 246911 34 37 258856 78 HNHCDF 66 HPM38B 246913 34 37 258858 78,79 HNHFFF 66 HPM38B 246913 34 37 258858 78,79 HNHFFF 66 HPM38B 246914 34 258859 60 HNL65A 66 HPM38B 80 246915 34 258859 78,79 HNHFFF 66 HPM38B 66 HPM38B 246916 34,57 258855 78 HNL56F 66 HPM38B 66 HPM38B 246916 34,57 258855 78 HNL56F 66 HPM38B 66 HPM38B 67 247335 37 256164 9,10,72 HNL65B 66 HPM6DD 247335 37 25616 9,10,72 HNL65B 66 HPM6DD 247443 54 256556 77 HNL68 66 HPM6DD 2474443 54 256556 77 HNL68 66 HPM6DD 2474450 54 256566 77 HNL68 66 HPM6DD 2474450 54 256568 77 HNL68 66 HPM6DD 2474450 54 256568 77 HNL68 66 HPM6DD 2474750 54 256788 77 HNL58 66 HPM38B 9, 247711 79 256838 77 HNL58 66 HPM33B 66 HPM33F 247711 79 256838 77 HNL58 66 HPM33B 66 HPM33F 247711 79 256838 77 HNL58 66 HPM33B 66 HPM33F 247711 79 256838 77 HNL58 66 HPM33B 66 HPM33F 247711 79 256838 77 HNL58 66 HPM33B 66 HPM35B 247711 79 256838 77 HNL58 66 HPM35B 66 HPM35B 247711 79 256838 77 HNL58 66 HPM35B 66 HPM35B 247711 79 256838 77 HNL58 66 HPM35B 66 HPM35B 66 HPM35B 247711 79 256838 77 HNL58 66 HPM35B 66 HP	
246906         17         255853         78         HNHCDA         66         HPL65D           246907         17         255854         78         HNHCDE         66         HPL65E           246909         28         34         255856         78         HNHCDE         66         HPL65E           246910         34         37         255856         78         HNHFFA         66         HPM3BA           246911         34         37         255856         78         79         HNHFFB         66         HPM3BA           246913         34         37         255859         9         NUSAGA         66         HPM3BB           246915         34         255859         9         NUSAGA         66         HPM3BD           246916         34         255859         80         NUSAGA         66         HPM3BB           246917         34         255859         80         NUSAGA         66         HPM3BE           247335         37         25621         80         HUSAGA         66         HPM3BE           247336         37         25621         80         HUSAGA         66         HPM6DA           24	
246909         28, 34         255855         78         HNHDF         66         HPL65F           246910         34, 37         255856         78         HNHFFA         66         HPM3BA           246911         34, 37         255858         78, 79         HNHFFF         66         HPM3BB           246913         34, 37         255858         78, 79         HNHFFF         66         HPM3BC           246915         34         255859         80         HNL56A         66         HPM3BD           246915         34         255861         78         HNL56F         66         HPM3BC           246917         34         255865         78         HNL56F         66         HPM3BE           246917         34         255921         80         HNL65A         66         HPM6DA           247336         37         256615         9, 10, 18, 72, 78         HNL65F         66         HPM6DB           247337         37         256215         9, 10, 18, 72, 78         HNL65F         66         HPM6DB           247330         37         256616         9, 10, 72         HNL68A         66         HPM6DB           247343         54	
246910         34, 37         258856         78         HNHFR         66         HPM3BA           246911         34, 37         258857         78, 99         HNHFR         66         HPM3BB           246913         34, 37         258858         78, 79         HNHFFR         66         HPM3BC           246914         34         258699         80         HNL56B         66         HPM3BC           246915         34         258681         78         HNL56B         66         HPM3BC           246916         34, 37         258685         78         HNL56B         66         HPM3BE           246917         34         255985         78         HNL56F         66         HPM3BE           246917         34         255985         78         HNL56F         66         HPM6DA           247335         37         256164         79         HNL65F         66         HPM6DA           247336         37         256216         9, 10, 18, 72, 78         HNL65F         66         HPM6DB           247337         37         256216         9, 10, 72         HNL28         66         HPM6DE           247443         54         256786	
246913.         34, 37         255858.         78, 79         HNHFFF.         66         HPM3BC.           246914.         34         255859.         80         HNL56B.         66         HPM3BE.           246915.         34         255865.         78         HNL56B.         66         HPM3BE.           246917.         34         255921.         80         HNL56A.         66         HPM6DA.           247335.         37         256164.         79         HNL65B.         66         HPM6DD.           247337.         37         256216.         9, 10, 18, 72, 78         HNL65F.         66         HPM6DD.           247337.         37         256216.         9, 10, 18, 72, 78         HNL68B.         66         HPM6DD.           247337.         37         256216.         9, 10, 18, 72, 78         HNL68B.         66         HPM6DD.           247337.         37         256216.         9, 10, 18, 72, 78         HNL68B.         66         HPM6DD.           247430.         54         256786.         77         HNL08B.         66         HPM6DD.           247450.         54         256787.         77         HNL08F.         66         HPM6DD. <tr< td=""><td>62 62 62</td></tr<>	62 62 62
246914	62 62 62
246916.         34, 37         255885.         78         HNL56F.         66         HPM3BF.           246917.         34         255921         80         HNL65B.         66         HPM6DA.           247335.         37         256164         79         HNL65B.         66         HPM6DD.           247336.         37         256215.         9, 10, 72         HNLC8A.         66         HPM6DD.           247337.         37         256216.         9, 10, 72         HNLC8A.         66         HPM6DD.           247443.         54         256586.         77         HNLC8B.         66         HPM6DD.           247450.         54         256786.         77         HNLC8F.         66         HPM6DF.           247450.         54         256788.         77         HNLD5B.         66         HPM33A.           247712.         79         256789.         77         HNLD5B.         66         HPM33B.         9.           247713.         79         256836.         73         HNLE3A.         66         HPM33C.           247714.         79         256837.         73         HNLE3B.         66         HPM65B.           247716.	62
246917       34       255921       80       HNL65A       66       HPM6DA         247335       37       256164       79       HNL65F       66       HPM6DB         247336       37       256215       9, 10, 18, 72, 78       HNL65F       66       HPM6DC         247337       37       256216       9, 10, 72       HNLC8A       66       HPM6DD         247433       54       256566       77       HNLC8F       66       HPM6DE         247450       54       256786       77       HNLC9F       66       HPM6DF         247453       76       256787       77       HNLD5A       66       HPM33A         247540       54       256788       77       HNLD5A       66       HPM33A         247540       54       256788       77       HNLD5F       66       HPM33B       9         247712       79       256836       73       HNL53A       66       HPM33B       9         247714       79       256837       73       HNL23B       66       HPM65A         247715       79       256838       73       HNL23F       66       HPM65B         247716       79 <td></td>	
247335. 37 256164. 79 HNL65B. 66 HPM6DB. 2474336. 37 256215. 9,10,18,72,78 HNL65F. 66 HPM6DD. 247433. 37 256216. 9,10,18,72,78 HNL65B. 66 HPM6DD. 247433. 54 256556. 77 HNLC8B. 66 HPM6DD. 247443. 54 256556. 77 HNLC8B. 66 HPM6DD. 247445. 76 256786. 77 HNL65B. 66 HPM6DD. 247453. 76 256786. 77 HNL65B. 66 HPM33A. 247540. 54 256788. 77 HNL55B. 66 HPM33B. 9, 247712. 79 256789. 77 HNL55F. 66 HPM33B. 9, 247713. 79 256836. 73 HNLE3B. 66 HPM33F. 247714. 79 256836. 73 HNLE3B. 66 HPM33F. 247714. 79 256838. 73 HNLE3B. 66 HPM65B. 247716. 79 256839. 73 HNLE3F. 66 HPM65B. 247717. 79 257435. 37 HNM65B. 66 HPM65B. 247718. 80 258693. 9,10,72 HNM65F. 66 HPM65B. 247718. 80 258694. 72 HNMC8A. 66 HPM65E. 247722. 80 260000. 47 HNMC8B. 66 HPM65E. 247724. 80 260000. 47 HNMC8B. 66 HPM65F. 247724. 80 260000. 47 HNMC8B. 66 HPM65F. 247725. 80 260000. 47 HNMC8B. 66 HPM33B. 247724. 80 260022. 47 HNMC8B. 66 HPM33B. 247759. 78 260082. 47 HNMD5B. 66 HRM33B. 247759. 78 260082. 47 HNMD5B. 66 HRM33B. 247759. 78 260092. 47 HNMD5B. 66 HRM33B. 247759. 78 260092. 47 HNMD5B. 66 HRM33B. 247760. 78 260092. 47 HNMD5B. 66 HRM33B. 247788. 22 260082. 47 HNMD5B. 66 HSDD5B. 247788. 22 260083. 47 HNMD5B. 66 HSDD5B. 247889. 22 260083. 47 HNMDDB. 66 HSDDDB. 247899. 22 260100. 45,46 HNPBB. 66 HSDDDB. 247899. 22 260100. 45,46 HNPBB. 66 HSDDDB.	62
247337 37 256216. 9, 10, 72 HNLC8A 66 HPM6DD 247443. 54 256556. 77 HNLC8F. 66 HPM6DF. 247443. 54 256786. 77 HNLC8F. 66 HPM6DF. 247453 76 256787 77 HNLD5A 66 HPM33A 247540. 54 256788 77 HNLD5B. 66 HPM33B 9, 247712 79 256789 77 HNLD5F. 66 HPM33C. 247713 79 256836 73 HNLE3A 66 HPM35C. 247714 79 256837 73 HNLE3B 66 HPM35F. 247715 79 256838 73 HNLE3F. 66 HPM65A 247716 79 256839 73 HNLE3F. 66 HPM65D 247717 79 257435 37 HNM65B 66 HPM65D 247718 80 258693 9, 10, 72 HNM65B 66 HPM65D 247712 80 258694 72 HNM65B 66 HPM65C 247722 80 260000 47 HNM65F. 66 HPM65E. 247723 80 260020 47 HNM65B 66 HRM33B 66 HRM33D 247725 80 260025 47 HNM05B 66 HRM33D 247759 78 260082 47 HNM05B 66 HRM33D 247760 78 260025 47 HNM05B 66 HRM33D 247765 78 260083 47 HNM05B 66 HRM33D 247769 78 260082 47 HNM05B 66 HRM33D 247769 78 260083 47 HNM05B 66 HRM33E 247769 78 260083 47 HNM05B 66 HRM35E 247769 78 260082 47 HNM05B 66 HRM35E 247788 22 260082 47 HNM05B 66 HSDD5A 247889 22 260083 47 HNM05B 66 HSDD5B 247890 23 260101 45, 46 HNP8B 66 HSDDDF 247892 22 260102 45, 46 HNP8B 66 HSDDDF 247893 22 E60104 45, 46 HNP8B 66 HSDDDF	62
247443       54       256556       77       HNLC8B       66       HPM6DE         247450       54       256786       77       HNLD5A       66       HPM33A         247540       54       256788       77       HNLD5B       66       HPM33B       9,         247712       79       256789       77       HNLD5F       66       HPM33B       9,         247713       79       256836       73       HNLE3A       66       HPM33F         247714       79       256837       73       HNLE3B       66       HPM65A         247715       79       256838       73       HNLE3B       66       HPM65B         247716       79       256838       73       HNLB3F       66       HPM65B         247717       79       256839       73       HNM65A       66       HPM65B         247717       79       257435       37       HNM65B       66       HPM65C         247718       80       258693       9, 10, 72       HNM65F       66       HPM65E         247721       80       258694       72       HNMC3A       66       HPM65E         247722       80	
247453         76         256787         77         HNLD5A         66         HPM33A           247540         54         256788         77         HNLD5B         66         HPM33B         9,           247712         79         256789         77         HNLD5F         66         HPM33C           247713         79         256836         73         HNLE3A         66         HPM33F           247714         79         256837         73         HNLE3B         66         HPM65A           247715         79         256838         73         HNLE3F         66         HPM65B           247716         79         256839         73         HNM65A         66         HPM65C           247717         79         257435         37         HNM65B         66         HPM65D           247718         80         258693         9, 10, 72         HNM65F         66         HPM65E           247721         80         258694         72         HNMC8A         66         HPM65F           247722         80         260000         47         HNMC8B         66         HRM33D           247724         80         260022         47<	62
247540         54         256788         77         HNLD5B         66         HPM33B         9,           247712         79         256789         77         HNLD5F         66         HPM33C           247713         79         256836         73         HNLE3A         66         HPM65A           247714         79         256837         73         HNLE3B         66         HPM65A           247715         79         256838         73         HNLE3F         66         HPM65B           247716         79         256839         73         HNM65A         66         HPM65C           247717         79         257435         37         HNM65B         66         HPM65D           247718         80         258693         9, 10, 72         HNM65F         66         HPM65E           247721         80         258694         72         HNM68A         66         HPM65F           247722.         80         260020         47         HNMC8F         66         HRM33D           247724         80         260022         47         HNMD5A         66         HRM33E           247759         78         260079         47	
247713.         79         256836.         73         HNLE3A         66         HPM33F.           247714.         79         256837.         73         HNLE3B.         66         HPM65A           247715.         79         256838.         73         HNLE3F.         66         HPM65B.           247716.         79         256839.         73         HNM65A.         66         HPM65C.           247717.         79         257435.         37         HNM65B.         66         HPM65C.           247718.         80         258693.         9, 10, 72         HNM65F.         66         HPM65E.           247721.         80         258694.         72         HNMC8A.         66         HPM65F.           247722.         80         260000.         47         HNMC8B.         66         HRL56B.           247723.         80         260002.         47         HNMC9B.         66         HRM33D.           247724.         80         260022.         47         HNMD5B.         66         HRM33E.           2477755.         80         260025.         47         HNMD5B.         66         HSDD5A.           247760.         78         260	10, 18, 62, 63
247714.         79         256837         73         HNLE3B         66         HPM65A           247715.         79         256838         73         HNLE3F         66         HPM65B           247716.         79         256839         73         HNM65A         66         HPM65C           247717.         79         257435         37         HNM65B         66         HPM65D           247718.         80         258693         9, 10, 72         HNM65F         66         HPM65E           247721.         80         258694         72         HNMC8A         66         HPM65E           247722.         80         260000         47         HNMC8B         66         HRM33D           247723.         80         260020         47         HNMC8F         66         HRM33D           247724.         80         260022         47         HNMD5A         66         HSD5A           247759.         78         260072         47         HNMD5A         66         HSD5A           247780.         78         260079         47         HNMDDA         66         HSD5B           247888.         22         260082         47	62
247715.         79         256838         73         HNLE3F.         66         HPM65B.           247716.         79         256839         73         HNM65A.         66         HPM65D.           247717.         79         257435.         37         HNM65B.         66         HPM65D.           247718.         80         258693.         9, 10, 72         HNM65F.         66         HPM65E.           247721.         80         258694.         72         HNMC8A.         66         HPM65F.           247722.         80         260000.         47         HNMC8B.         66         HPM65B.           247723.         80         260020.         47         HNMC8F.         66         HRM33D.           247724.         80         260022.         47         HNMD5A.         66         HRM33E.           247725.         80         260022.         47         HNMD5B.         66         HSDD5A.           247759.         78         260078.         47         HNMD5F.         66         HSDD5B.           247780.         78         260079.         47         HNMDDB.         66         HSDDDA.           247889.         22         2600	
247717.         79         257435.         37         HNM65B.         66         HPM65D.           247718.         80         258693.         9, 10, 72         HNM65F.         66         HPM65E.           247721.         80         258694.         72         HNMC8B.         66         HPM65F.           247722.         80         260000.         47         HNMC8B.         66         HRIS6B.           247723.         80         260020.         47         HNMC8F.         66         HRM33D.           247724.         80         260022.         47         HNMD5A.         66         HRM33E.           247755.         80         260025.         47         HNMD5B.         66         HSDD5A.           247759.         78         260078.         47         HNMD5F.         66         HSDD5B.           247780.         78         260079.         47         HNMDDA.         66         HSDD5F.           247888.         22         260082.         47         HNMDDB.         66         HSDDDA.           247890.         23         260100.         45, 46         HNPB8A.         66         HSDDDF.           247891.         23 <t< td=""><td>. 9, 10, 18, 62</td></t<>	. 9, 10, 18, 62
247718.         80         258693         9, 10, 72         HNM65F.         66         HPM65E.           247721.         80         258694         72         HNMC8A.         66         HPM65F.           247722.         80         260000.         47         HNMC8B.         66         HRL56B.           247723.         80         260002.         47         HNMC8F.         66         HRM33D.           247724.         80         260022.         47         HNMD5A.         66         HRM33E.           247725.         80         260025.         47         HNMD5B.         66         HSDD5A.           247759.         78         260078.         47         HNMD5F.         66         HSDD5B.           247760.         78         260079.         47         HNMDDA.         66         HSDD5F.           247888.         22         260082.         47         HNMDDB.         66         HSDDDA.           247890.         23         260102.         45, 46         HNPB8A.         66         HSDDDF.           247891.         23         260101.         45, 46         HNPB8B.         66         HSDDDF.           247892.         22	
247722         80         260000         47         HNMC8B         66         HRL56B           247723         80         260020         47         HNMC8F         66         HRM33D           247724         80         260022         47         HNMD5A         66         HRM33E           247725         80         260025         47         HNMD5B         66         HSDD5A           247759         78         260078         47         HNMD5F         66         HSDD5B           247760         78         260079         47         HNMDDA         66         HSDD5F           247888         22         260082         47         HNMDDB         66         HSDDA           247890         22         260083         47         HNMDDF         66         HSDDDF           247891         23         260100         45, 46         HNPB8         66         HSDDF           247892         22         260101         45, 46         HNPB8         66         HSH1DA           247893         22         260102         45, 46         HNPB8         66         HSH1DB           247893         22         260104         45, 46 <td< td=""><td>62</td></td<>	62
247723.         80         260020.         47         HNMC8F.         66         HRM33D.           247724.         80         260022.         47         HNMD5A.         66         HRM33E.           247725.         80         260025.         47         HNMD5B.         66         HSDD5A.           247759.         78         260078.         47         HNMD5F.         66         HSDD5B.           247760.         78         260079.         47         HNMDDA.         66         HSDD5F.           247888.         22         260082.         47         HNMDDB.         66         HSDDDA.           247899.         22         260083.         47         HNMDF.         66         HSDDDB.           247891.         23         260100.         45, 46         HNPB8B.         66         HSHDD.           247892.         22         260102.         45, 46         HNPBBF.         66         HSHDB.           247893.         22         260104.         45, 46         HPH1DA.         62         HSHTDF.	
247725.     80     260025.     47     HNMD5B.     66     HSDD5A.       247759.     78     260078.     47     HNMD5F.     66     HSDD5B.       247760.     78     260079.     47     HNMDDA.     66     HSDD5F.       247888.     22     260082.     47     HNMDDB.     66     HSDDDA.       247889.     22     260083.     47     HNMDDF.     66     HSDDDB.       247891.     23     260100.     45, 46     HNPB8A.     66     HSHDDF.       247892.     22     260102.     45, 46     HNPBBF.     66     HSH1DB.       247893.     22     260104     45, 46     HPH1DA.     62     HSH1DF.	
247759.     78     260078.     47     HNMD5F.     66     HSDD5B.       247760.     78     260079.     47     HNMDDA.     66     HSDD5F.       247888.     22     260082.     47     HNMDDB.     66     HSDDDA.       247889.     22     260083.     47     HNMDDF.     66     HSDDDB.       247890.     23     260100.     45, 46     HNPB8A.     66     HSDDDF.       247891.     23     260101.     45, 46     HNPBBB.     66     HSH1DA.       247892.     22     260102.     45, 46     HNPBBF.     66     HSH1DB.       247893.     22     260104     45, 46     HPH1DA.     62     HSH1DF.	
247760.         78         260079.         47         HNMDDA.         66         HSDDFF.           247888.         22         260082.         47         HIMMDDB.         66         HSDDDA.           247889.         22         260083.         47         HIMMDDF.         66         HSDDDB.           247890.         23         260100.         45, 46         HNPB8A.         66         HSDDDF.           247891.         23         260101.         45, 46         HNPB8B.         66         HSH1DA.           247892.         22         260102.         45, 46         HNPBBF.         66         HSH1DB.           247893.         22         260104.         45, 46         HPH1DA.         62         HSH1DF.	
247889.     22     260083.     47     HNMDDF.     66     HSDDDB.       247890.     23     260100.     45, 46     HNPB8A.     .66     HSDDDF.       247891.     23     260101.     45, 46     HNPB8B.     .66     HSH1DA.       247892.     22     260102.     45, 46     HNPBF.     .66     HSH1DB.       247893.     22     260104.     45, 46     HPH1DA.     .62     HSH1DF.	48, 65
247890.     23     260100     45, 46     HNPB8A     66     HSDDDF       247891.     23     260101     45, 46     HNPB8B     66     HSH1DA       247892.     22     260102     45, 46     HNPBBF     66     HSH1DB       247893.     22     260104     45, 46     HPH1DA     62     HSH1DF	
247892       22       260102       45, 46       HNPB8F       66       HSH1DB         247893       22       260104       45, 46       HPH1DA       62       HSH1DF	48, 65
247893	
2/790// 22 260105 /5 /6 UDU1DD 60 UCU1DO	
247894	
247895	
247973	
247974	
247976	65
247977	65 65
247979	65
247980	65
248097	65
248230	
248296     20     260523     47     HPH15D     62     HSHB7B       248312     96     263265     41     HPH15E     62     HSHB7F	
248313	65
248324	
248623	65
248632	
249058	65
249294	65
249440	
249783	65
249821       44       647016       41, 52, 91       HPH55E       62       HSHFFF         253486       44       647648       41       HPH55F       62       HSHFFG	65 65
253487	65
253494	
253683	65
255143	
255200	
255348	65
255349	65 65
255350	65 65 65
255352	
255353	

Part No.	Page No.			

HSL65F65	
HSL65G	
HSLC8A	
HSLC8B	
HSLC8F	
HSLC8G	
HSLD5A	
HSLD5B	
HSLD5F	
HSLD5G	
HSLE3B	
HSLE3F	
HSLE3G	
HSM3BA	
HSM3BB	
HSM3BF65	
HSM3BG65	
HSM6DA65	
HSM6DB	
HSM6DF65	
HSM6DG65	
HSM33A65	
HSM33B65	
HSM33F65	
HSM33G65	
HSM65A65	
HSM65B65	
HSM65F65	
HSM65G65	
HSMC8A65	
HSMC8B65	
HSMC8F65	
HSMC8G65	
HSMCFA65	
HSMCFB65	
HSMCFF65	
HSMCFG	
HSMD5A	
HSMD5B	
HSMD5F65	
HSMD5G65	
HSMDDA	
HSMDDB	
HSMDDF	
HSMDDG65	
HSPB8A	
HSPB8B	
HSPB8F	
HSPB8G	
HSPC5A	
HSPC5B65	
HSPC5F65	
HSPC5G65	
P14DCS	
P14MCS	
P26DCS	
P26MCS40	
P29DCS	
P29MCS	
P55DCS	
P55MCS	
P63DCS	
P63MCS	
P68DCS	

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