VEHICLE SERVICE EQUIPMENT



Buyer's Guide



PROVEN QUALITY. LEADING TECHNOLOGY.

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About Graco

Established in 1926, Graco has built a worldwide reputation for high quality, reliable and technically advanced products, world-class manufacturing and outstanding customer service. Headquartered in Minneapolis, Minnesota, Graco works closely with distributors around the world to offer innovative products that set the quality standard for spray finishing, paint circulation, lubrication, sealant and adhesives dispensing, process application and contractor power equipment. These best-in-class products are manufactured in the U.S. and China and supplied through our distribution centers around the world. Every day, Graco's fluid-handling equipment and systems move, measure, mix, control, dispense and spray a variety of fluids and materials.



Lubrication Equipment Division

From the first air-powered grease gun to our industry-leading Fire-Ball pump, Graco's Lubrication Equipment Division is what started it all. We manufacture equipment to monitor, control, manage and dispense fluids. Offering innovative equipment for all your vehicle services, industrial and automatic lubrication needs. We offer a full range of high-quality pumps, meters, valves, hose reels and accessories to increase production and reduce waste and downtime.

Graco offers a full line of quality equipment to meet the varying needs of vehicle maintenance and repair. Streamline your workflow and move more lubricants through your shop. We offer reliable, high-quality equipment you can depend on for fuel, diesel, antifreeze, oil and grease. Our versatile fluid inventory control and management systems are designed to accurately track the use of oil, grease and other automotive fluids at vehicle maintenance facilities, and our lubrication equipment ensures you deliver fluids to the right spot in your shop. From light-duty applications to high-performance concepts designed for heavy-duty jobs, our equipment is known for its rugged, durable and long-life design.



Machining is a core competency of Graco – it enables complete control of the component parts needed to ensure precise metering, reliable dispensing and fluid movement.

When it comes to **research and development**, Graco is one step ahead, ensuring we offer the best possible solutions. To guarantee superior quality and to meet the changing requirements of your markets, we prioritize investing resources in research and development. Innovative technologies and extensive field testing are a natural part of our process to develop new products. Also, every aspect of our production is subject to constant testing and

evaluation. It's the foundation to deliver products with long service life and low cost of ownership. The insurance to help you grow your business.



We understand our customers. We build a partnership, working and striving towards new solutions, together. We are at the service of our distribution partners, supporting you along the way. Look at Graco not just as a manufacturer or supplier but as an extension of your business. Our dedicated and experienced teams offer unique capabilities to help you meet your specific goals and challenges.

- Innovative, high-quality products with unique features
- A professional warranty and high service rate
- Purchasing conditions aimed at profitable growth
- A committed sales and marketing team for tailor-made support of expanding sales opportunities
- Continuous technical, commercial and hands-on training

Our world-class distribution centers and unrivaled global distributor network give Graco a unique industry advantage that allows us to rapidly deliver our products to end users worldwide.

Exceeding customer expectations is our priority. Our multilingual team of customer service specialists and technical engineers are available to you. Graco offers instructor-lead training sessions in the United States, EMEA and Asia Pacific. These courses teach theory and hands-on practical applications, covering basic operational to advanced technical knowledge. Each training session can be adapted to your specific needs.

Offering more than just products, we are focused on building relationships, identifying and developing business opportunities with you. Our sales team is available to collaborate, define strategies to assist in navigating through our product offering and provide advice on promotional activities.

Graco's marketing specialists investigate ways to expand the market and develop the right technologies for any application, in close cooperation with distributors and field users. We offer tailor-made



promotional and communication support, from defining strategic requirements to developing marketing campaigns, organizing events and creating digital or printed material.



Did You Know?

Graco also manufactures and sells a complete line of automatic lubrication systems and accessories!



Graco Resources

Graco has developed tools and resources to help educate and better serve our distribution channel. Check them out today:



Graco Sales Book

Graco Sales Book is an innovative mobile application, designed to give Distributors access to Graco product information, including brochures, manuals, videos, and training documents – all on your mobile device.

Download today by visiting Salesbook.graco.com



Graco University

Graco University is an e-learning module that can be accessed online, anytime, and contains assets that help educate you on Graco products.

This innovative online learning program gives the tools to stay on the leading edge with a variety of resources such as virtual and instructor led courses, online books, live and on-demand video presentations, and much more.

Learn more today at training.graco.com



Graco Gear

Graco Gear is your one-stop shop for branded merchandise and other tools that will help you build customer relationships.

Order shirts, hats, banners, and more whenever you need! You can even add your logo for a small fee. Most orders ship next day.

Start shopping today at **gracogear.com**



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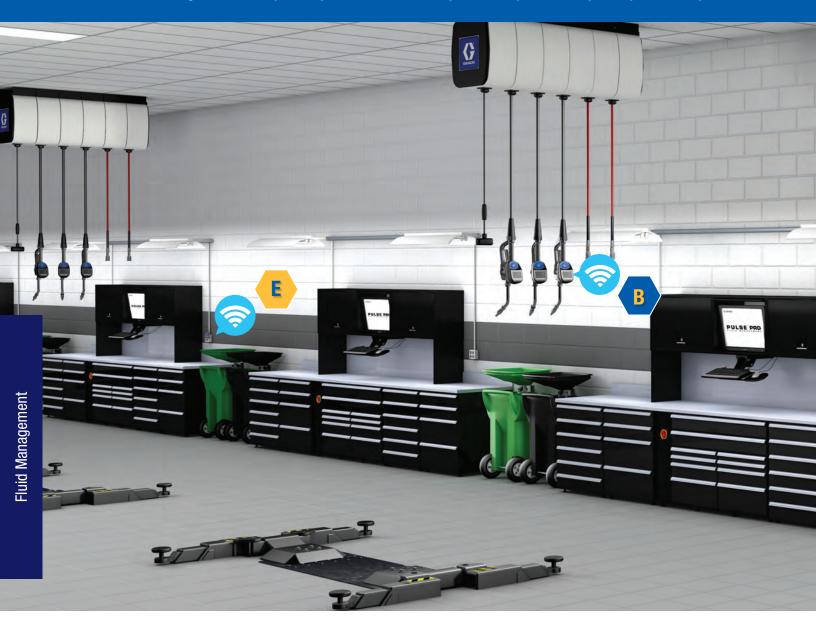




Choosing a Graco Fluid Management Solution

FEATURE	Traditional Box	Pulse FC	Pulse Pro	Pulse Asset
Control. Regulate the amount of fluid that's dispensed	to reduce spillage and v	vaste.		
Allow control of dispenses	✓	✓	✓	~
Restrict the quantity of fluid	✓	✓	✓	~
Ensure correct amount of fluid	✓	~	✓	✓
Meters. Put control into the hands of your technicians a	and maintenance teams	so they can be more	e productive, accurate	e and accountable
Works with petroleum, synthetic based oils, antifreeze	✓	~	✓	✓
Works with windshield wash solvent	✓		✓	~
Meter displays quantity dispensed		~	✓	~
Fluid measured at dispense point (highly accurate)		~	✓	✓
Record dispenses offline then sync to HUB when connected				~
Installation. Seamless integration simplifies dispenses	without compromising	workflows or produc	tivity.	
Works with oil bar	✓	✓	~	~
Wire-free installation		✓	✓	✓
Wireless communication			✓	✓
Pump air control (PAC)	✓		✓	~
Flexibility. Accommodate emerging demands to mainta	ain or expand productivi	ty and profitability.		
Works with mobile roll-around packages		✓	✓	✓
Easy expansion with additional fluids		✓	✓	✓
Easy upgrade to comprehensive fluid management		✓	N/A	N/A
User Interface. Access the information necessary to m	nake more informed dec	isions quickly.		
Simple PC-based software		✓		
No software to install			✓	✓
Accessible from any PC, phone or tablet			✓	✓
Fluid Management. Improve accountability for your er	ntire operations.			
Track dispenses by invoice, work order or asset			~	~
Track dispenses by technician			✓	✓
Record fluid type and quantity dispensed			✓	~
Keeps technician in service bay			~	
Fluid Inventory. Simplify how you re-order and store in	nventory to minimize del	ays.		
Monitor tank levels (TLM)			✓	~
Dealer Management Solution (DMS) integration			✓	✓
Reporting. Capture critical information and insights to	simplify decision-making	g.		
Print on dispense			✓	✓
Automated customizable reports			✓	~
Automated alerts to simplify inventory tasks			✓	✓
Software updates		✓	✓	✓
Permanent record of all dispenses or authorizations		~	~	~

Pulse® Pro Fluid Management simplifies how forward-thinking shops track and manage bulk fluids in real time – adding more transparency and accountability to drive productivity and profitability.



Benefits of Pulse Pro Fluid Management



Transparency. Monitor every drop, every time - automatically - and minimize shrinkage, rounding and discrepancies.



Scalability. Add Pulse into almost any environment quickly, and even retrofit applications or multiple buildings within the same facility.



Accountability. Track issues to the source via advanced technology, including automated alerts and customizable reports.



Accurate billing. Automatically assign every ounce of fluid directly to a work order to simplify billing and maximize profit margins.



Integration. Capture data, integrate it with popular DMSs and share it with other stakeholders quickly.



Simplicity. Avoid surprises, interruptions and delays. Fluids are tracked and recorded instantly and automatically.



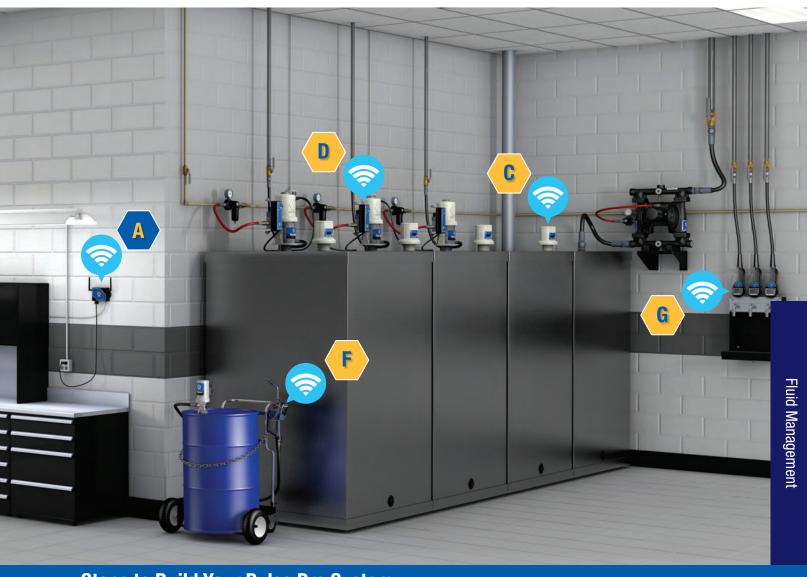
Portability. Pair with mobile dispense units and drums easily to reduce extra steps and hassles for technicians.



Inventory management. Monitor fluid inventory and schedule refills to minimize delays and excessive costs.



Pulse® Pro Fluid Management



Steps to Build Your Pulse Pro System:



Add Accessories



Oil Bar Dispenser

OPTIONAL

Pulse® Pro Fluid Management



Pulse Hub



Simply connect the Pulse Hub to a power source and access your local network to get started. The selfcontained device includes everything necessary for users to access monitoring and reporting tools instantly from any network-connected PC, tablet or smartphone.

Pulse Software

Pulse Pro Fluid Management software is pre-installed on the Pulse HUB and focused on simple intuitive design with powerful information at your fingertips. Get a quick consolidated view of all dispenses for the entire shop via specifically designed web page and easy-to-use software. Track tank levels at a glance. Generate customizable reports and automated e-mail alerts to share critical information with other key decision-makers. For further efficiency and automation, Pulse software can be integrated with your DMS through Pulse standard integrations or our generic third-party interface.



Features and Benefits

- No PC software to install Pulse Hub generates a local web page
- Responsive web design Use any-size screen, from a PC to a phone
- Consolidated dispense queue Find everything you need in one convenient table
- Advanced reporting Create and schedule automated reports to track history and fluid usage
- Informative and preventive alerts The software offers over two dozen alert activities
- Automatic software updates Software notifies you when updates are ready to install

Technical Specifications	
Weight	1.45 lb (660 gm)
Power Supply	
Input Power	100-240 VAC line voltage (0.05 A)
To Hub 5 VDC (0.5 amps)	
Warranty	Two years electronics

Ordering Information

Part Number	Description
25U972	Hub for non-CE installation with global power adapter

DMS Integration Options for Pulse Pro

An integration, put simply, is the communication between two separate business systems. Pulse uses integrations to provide enhanced control and monitoring for fluid dispenses.

Option 1 – Partner Integrations

AssetW**Q**RKS

- Requires FleetFocus: FA or M5 with FluidFocus Module
- Communication through Enterprise Asset Management System



- Requires CDK Drive DMS
- Communication through CDK's Third-Party Access Program

Dealertrack 4

- Requires Dealertrack DMS
- Communication through Dealertrack's Opentrack API



- Requires Excede v9.22+ with Excede Database
- Communication through Excede API v2.0



- Requires PBS DMS
- Communication through PBS Partner Hub



- Requires ERA
- Communication through RCI Web Service

Option 2 – Communication through Graco Third Party Interface



 Requires End-user developed integration for non-supported DMS





How It Works

The interface to business systems or DMS provides two important basic functions:



Ordering Information

Interface Activation Codes

Part Number	Description
25R975	Pulse software with CDK Global Drive
25R976	Pulse software with Dealertrack
25R977	Pulse software with AssetWORKS
25R978	Pulse software with Reynolds & Reynolds
25R979	Pulse software with Procede Software – 2nd site
25R980	Pulse software with Procede Software
25R981	Pulse software with PBS

Pulse® Pro Fluid Management













Pulse Dispense Meter

The dispense meter is durable and easy to use, giving technicians everything they need at their fingertips. PINs and other data can be entered in moments via a larger, more intuitive display. NFC tags can be used for immediate PIN entry and faster access to work orders.

GRACO

5 Year Warranty!

Large, Intuitive Display

High-contrast display for lowand bright-light conditions.

Faster PIN Entry

Built-in NFC reader and simple, efficient controls.

Wireless Communication

Communicates dispense information with Hub.

Ergonomic Design

Lower button placement.



Choose from rigid, flexible or gear lube extensions with automatic flush-mount nozzle design.

Long Battery Life

Uses four off-the-shelf AA batteries easy to replace.

Long-Life Valve Design

Cartridge design for long life and easier repair.

Protective Trigger Guard

Prevents accidental dispenses.

nical Specifications	
Flow Range*	0.25 to 18 gpm (0.9 to 68 lpm)
Maximum Working Pressure	1,500 psi (103.4 bar)
Units of Measure (factory set to quarts)	Pints, quarts, gallons, liters
Weight	5.3 lbs (2.4 kg)
Inlet	1/2 in NPT or 3/4 in NPT
Outlet	3/4 in straight thread O-ring boss
Dimensions (without extension)	
Length	13 in (33 cm)
Width	3.75 in (9.5 cm)
Height	5.75 in (14.6 cm)
Maximum Recorded Dispense	999.99 units
Operating Temperature Range	4°F to 158°F (-16°C to 70°C)
Storage Temperature Range	-40°F to 158°F (-40°C to 70°C)
Battery**	4 AA alkaline or lithium batteries
RF Frequency Band	2,400 to 2,483.5 MHz
Maximum RF Transmit Power	8 dBm
Wetted Parts	Aluminum, stainless steel, PBT, nitrile rubber, zinc-plated carbon steel, nickel-plated carbon ste
Fluid Compatibility	Antifreeze, gear oil, crankcase oil, ATF, windshield wash (up to 50% alcohol-based solutions)
Meter Accuracy [†]	+/- 0.5 percent
Warranty	Five year structural, 3 years electronics, 1 year wear components

^{*}Tested in 10W motor oil. Flow rates vary with fluid pressure, temperature and viscosity.

**Battery required to meet life expectancy: Energizer® Alkaline E91.

*At 2.5 gpm (9.5 lpm), at 70°F (21°C), with 10W oil and 1 gallon dispensed. May require calibration; out-of-box accuracy is +/- 1.25 percent.













8 gpm (30 lpm) Meters

Fluid	Extension	Nozzle	Size (in)	Part Number
Oil	Flexible	Automatic Quick-Close		25M319
Oii	Rigid			25M317
Antifreeze	Flexible	Manual	1/2	25M320
Anuneeze	Rigid	Antifreeze	1/2	25M318
Gear Lube	Gear Lube	Manual None		25M326
Windshield Wash	Rigid			25M328

18 gpm (68 lpm) Meters

Fluid	Extension	Nozzle	Size (in)	Part Number	
Oil / Antifreeze	Flexible	Manual High-Flow	1/2	25M324	
	Rigid		1/2	25M323	
	Flexible	Manual High-Flow	Manual	3/4	25M330
	Rigid		n-Flow 3/4	25M329	

Accessories

Nozzle and Extension Kits

	Extension	Fluid	Nozzle Description	Part Number	Compatible Meters
		Oil	Automatic, non-drip, quick-close	255852	Pulse 8 gpm
	Rigid	Antifreeze	Non-drip, quick-close	26C267	Pulse 8 gpm
No.		Oil/Antifreeze	High-flow, non-drip, quick-close	255857	Pulse 18 gpm
	Rigid	Gear lube	Non-drip, quick-close	255854	Pulse 8 gpm
		Oil	Automatic, non-drip, quick-close	255853	Pulse 8 gpm
The second second	Flexible	Antifreeze	Non-drip, quick-close	26C268	Pulse 8 gpm
		Oil/Antifreeze	High-flow, non-drip, quick-close	255858	Pulse 18 gpm
	Nozzle Only	Oil	Automatic, non-drip, quick-close	17R220	Pulse 8 gpm
		Antifreeze	Non-drip, quick-close	17T207	Pulse 8 gpm
		Oil/Antifreeze	High-flow, non-drip, quick-close	255461	Pulse 18 gpm
	Nozzle Only	Gear lube	Non-drip, quick-close	255470	Pulse 8 gpm
	Flexible	Oil/Antifreeze	Extension only, 2 ft length	131733	Pulse 8 gpm
A	Rigid	Windshield wash	Extension, nozzle	273079	Pulse 8 gpm

NFC Tags

Part Number	Description
131462	NFC tags for user identification with meter. 25-pack, blue.

Pulse Meter Filter Kits

Part Number	Description
25D906	Filter kit includes filters/strainers (15M308) and O-rings (155332)

Swivel Covers / Impact Protection

	Part Number	Description
	15T366	Black swivel cover (standard color with meter)
	15T367	Red swivel cover
	15T368	Blue swivel cover
	15T369	Green swivel cover
	15T370	Yellow swivel cover
8	131226	Pulse / SD meter boot

Pulse® Pro Fluid Management













Pulse Tank Level Monitor (TLM)

Measure your largest tanks accurately with minimal effort. The monitor's ultrasonic sensor records the tank level and can be configured to e-mail a daily report to key stakeholders detailing tank volumes, low- or high-level warnings and more.

G



Simple Wireless Setup

Automatic network identification.

Long Battery Life

Allows for remote installations. Uses four off-the-shelf AA batteries - easy to replace.

Built-In Display

Real-time level visible from built-in display.

Supports Multiple Tank Shapes

Ability to input strapping table for any tank shape.

Tough Exterior

Sealed enclosure to accommodate outdoor usage.

Compact Design

Easily fits into more spaces.

On-Demand Readings

Ability to take reading at any time.



Ordering Information

Part Number Description 25M449 Tank Level Monitor (TLM)

hnical Specifications	
Ultrasonic Tank Depth Measurement range (Not for use in pressurized tanks)	5 in to 30 ft (12.7 cm to 9.14 m)
Fluid Level Measurement Accuracy	+/- 1.8 in (4.57 cm)
Mounting	1.5 in and 2 in threaded NPT connector (Adapter for BSPP and BSPT thread options available)
Weight (with batteries installed)	1.25 lb (567 g)
RF Frequency Band	2,400 to 2,483.5 MHz
Operating Temperature Range (Display will not function below 32°F [0°C])	-22°F to 185°F (-30°C to 85°C)
Storage Temperature Range	-40°F to 185°F (-40°C to 85°C)
Batteries	Four AA alkaline
Enclosure	IPX5
RF Communication	2,400 to 2,483.5 MHz
Vertical Tanks	
Maximum Volume	999,999 gal (999,999 l)
Maximum Height	30 ft (9.14 m)
Cylindrical Tanks	
Maximum Volume	999,999 gal (999,999 l)
Maximum Height	30 ft (9.14 m)
Maximum Length	30 ft (9.14 m)
Maximum Width	30 ft (9.14 m)
Fluid Compatibility	Automatic transmission fluid, antifreeze, window wash, coolant, waste water
Warranty	Two years electronics













Pulse Pump Air Control (PAC)

Prevent unauthorized access to fluid inventory. Pump air supply is shut off automatically after the dispense, preventing spills and expensive cleanup if a broken line occurs. Pump operation is enabled only when a dispense has been activated from the meter.



Easy Installation

Built-in mounting bracket.

Simple Wireless Setup

Automatic network identification.

High-Volume Air Valve

Supports a variety of pumps.

Multiple Thread Options

NPT and BSPP air valve options.



Compact Design

Allows for mounting directly on pump or in tight spaces.

Rugged Exterior

Sealed enclosure to protect internal components.

Multiple Wiring Options

NEMA 5-15 plug or flying leads.



Ordering Information

Part Nun	nber	Description
24Z72	!8	NPT with NEMA 5-15 plug

Technical Specifications	
Minimum Operating Pressure	36 psi (0.25 MPa, 2.5 bar)
Maximum Operating Pressure	145 psi (1.0 MPa, 10 bar)
Maximum Air Flow	93 SCFM (2.6 m³/min)
Power Supply	100-240 VAC line voltage, 24 VDC solenoid
Power Cord	
Model 24Z676, 24Z677	6 ft SJOOW, 3-wire, 18-gauge cable with flying leads
Model 24Z728	Power cord with integrated NEMA 5-15 plug
Current	25 to 60 mA
RF Frequency Band	2,400-2,483.5 MHz
Connection Ports Size (inlet, out	tlet, exhaust)
Model 24Z676, 24Z728	3/8 in NPT
Model 24Z677	3/8 BSPP
Operating Temperature Range	14°F to 122°F (-10°C to 50°C)
Storage Temperature Range	-40°F to 185°F (-40°C to 85°C)
Weight	2.44 lbs (1.11 kg)
Dimensions	
Length	9.5 in (241.3 mm)
Width	2.25 in (57.2 mm)
Height	3.75 in (95.3 mm)
Warranty	Two years electronics



Pulse Extender

The Pulse wireless network can easily be expanded to accommodate large shops or a large number of devices. Simply plug the Extender into wall power to extend the network.



Expands Pulse Network

Supports 20 devices and extends the network range.

Simple Wireless Setup

Automatic network identification.

Integrated Electrical Plug

Simply plugs into wall.

Compact Design

Place conveniently in standard electrical outlet locations.



Pulse"

Remote

Extender

יוטום

ec	echnical Specifications				
	Operating Temperature	32°F to 140°F (0°C to 60°C)			
	Power Input	Universal AC input (100 - 240 VAC)			
	Length	2.31 in (5.87 cm)			
	Width	1.27 in (3.23 cm)			
	Height	3.28 in (8.33 cm)			
	Weight	0.5 lb (0.25 kg)			
	Warranty	Two years electronics			

E Orde

Ordering Information

Part Number	Description
20A058	Pulse Pro Extender

Pulse Remote Extender

The Pulse wireless network can easily be expanded to accommodate devices in secondary on-site buildings. Connect the Remote Extender to wall power and local network via Ethernet or Wi-Fi to extend the network.



Expands Pulse Network

Supports 20 devices and extends the network range.

Simple Wireless Setup

Automatic network identification.

Multiple Network Connection Options

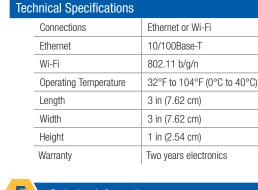
Utilizes local network Ethernet or Wi-Fi to communicate back to Hub.

Compact Design

Easy to place even in tight spaces.



Includes plug-in power adapter.



E

Ordering Information

Part Number	Description
17F878	Remote Extender with global power adapter













Roll Around Package

Pulse Pro Fluid Management wireless technology allows you to control your mobile drums and dispenses by providing security for expensive drums of synthetic and semi-synthetic fluids. Each package contains everything you need to manage your drums in existing Pulse installations. Drum not included.



Proven Durability

Graco LD® Series 3:1 pump is a durable, high performance pump solution.

Ease-of-Use

The battery-powered meter means only an air connection is needed to pump and manage fluid dispenses.

Ready to Roll

Packages include everything you need to set up the pump and meter system on your 55-gallon oil drum.

Mobile Productivity

Dispense fluids anywhere in your shop without compromising security or productivity.



Ordering Information

Package	Futonoiono		Package Includes				
Number	Extensions	Meter	Pump	Downtube	Drum Cart	Air Regulator	Hose
25D948	8 GPM, Rigid	25M317					
25D952	8 GPM, Flexible	25M319	24G576	16F878	24F915	24H420	24H865
25D953	8 GPM, Gear Lube	25M326					



Ordering Information

Oil Bar

Part Number	Description
25D121	Oil Bar Console
25D130	Oil Bar Dispense Kit
25N415	Oil Bar Pulse Dispense Meter



Oil Bar

Components ordered separately. For complete unit, order console (25D121), dispense kit (25D130) (one per meter) and Pulse meters (25N415) as needed.

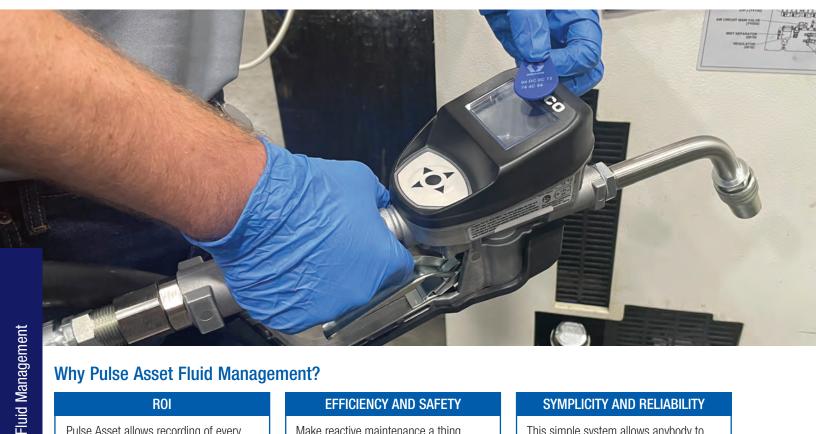
Accessories

~~~	Part Number	Description
	249440	Console bracket

#### **Pulse Pro Demo Kit**

Pulse Pro demo case with everything needed to show customers how Pulse Pro will save them time, gain them more billable hours and maximize their fixed operation's profitability.

Part Number	Description
25D625	Includes Pulse Hub (24Z978), Pulse Dispense Meter, Pulse TLM (25M449), Pulse PAC (24Z728), Pulse Extender (20A058), Pulse Remote Extender (17F878), Pulse NFC Tag, case and protective foam



# Why Pulse Asset Fluid Management?

#### ROI

Pulse Asset allows recording of every drop of fluid dispensed on the factory floor - reducing fluid usage and keeping expenses down. With Pulse Asset, you'll optimize equipment uptime and stay ahead of the competition.

#### **EFFICIENCY AND SAFETY**

Make reactive maintenance a thing of the past. Automated recording of dispenses reduces the chance of errors and optimizes fluid delivery practices. Identify leaking assets and reduce the risk of fluid spills before they happen.

#### SYMPLICITY AND RELIABILITY

This simple system allows anybody to be trained to use – from the factory floor to the manufacturing line. The robust testing done ensures Pulse Asset exceeds quality standards, to provide many years of reliable service.

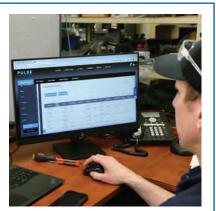
# Ease of Operation*



Fill assets utilizing meter that records up to 40 dispenses.



Sync the meter to the HUB once dispenses are complete.



Analyze dispense history on any PC, phone or tablet connected to LAN.













#### **Pulse Asset Started Kit**

Part Number	Description
2006744	Includes one HUB, one NFC reader-writer, and one 25 pack of NFC pendants

#### **Components**

Part Number	Description
26D776	8 gpm Dispense Meter with 1/2 in NPT inlet – rigid extension, oil nozzle
26D777	8 gpm Dispense Meter with 1/2 in NPT inlet – rigid extension, coolant nozzle
26D784	18 gpm Dispense Meter with 3/4 in NPT inlet – rigid extension, high flow oil-coolant nozzle
131462	NFC pendants, blue with Graco logo – 25 pack
2006845	Adhesive NFC tags – 25 pack
18G102	Replacement NFC reader-writer – note that one is already included with Pulse Asset Starter Kit

### **Oil Pump and Meter Packages**

Part Number	Description
2006857	16 gallon kit with 1:1 Fast-Ball 100 pump
2006858	55 gallon with 1:1 Fast-Ball 100 pump
2006859	Universal with 1:1 Fast-Ball 100 pump
2006860	16 gallon with 5:1 Fire-Ball 300 pump
2006861	55 gallon with 5:1 Fire-Ball 300 pump
2006862	Universal with 5:1 Fire-Ball 300 pump

Each kit includes a pump with bung adapter, an Asset meter with rigid extension, and a hose kit with 6 ft air hose and 6 ft oil hose. 16 and 55 gallon kits also include hand truck for oil barrel (barrel not included).

Pulse® FC is wire-free, so installation and configurations are easier and cheaper. We've replaced the big box console with fast, reliable and convenient fluid cards scanned at easy-to-handle meters, so users can employ the same type of familiar technologies they use elsewhere.



#### **HOW IT WORKS**

1 REQUIRED

Pulse FC is a fluid control system that utilizes SD Preset meters. When put into Pulse FC mode, SD Preset meters will only dispense fluid when authorized with Fluid Cards. These included cards are programmed using the Pulse FC Software and Card Programmer. Once programmed, the cards are simply tapped to the meter which will be preset for the authorized amount of fluid and will not dispense any more than authorized.

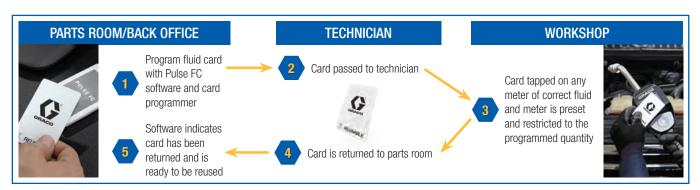
**MINIMUM 1 REQUIRED** 

Add Accessories

**Roll Around Package** 

**OPTIONAL** 

Meters











#### GAIN INSIGHT INTO AND CONTROL OF YOUR BULK FLUIDS



**Simplicity.** Avoid surprises, interruptions and delays. Fluids are easily controlled so technicians can spend more time serving more customers.



**Accountability.** Be assured every vehicle or machine receives the appropriate amount of fluid for more accurate billing.



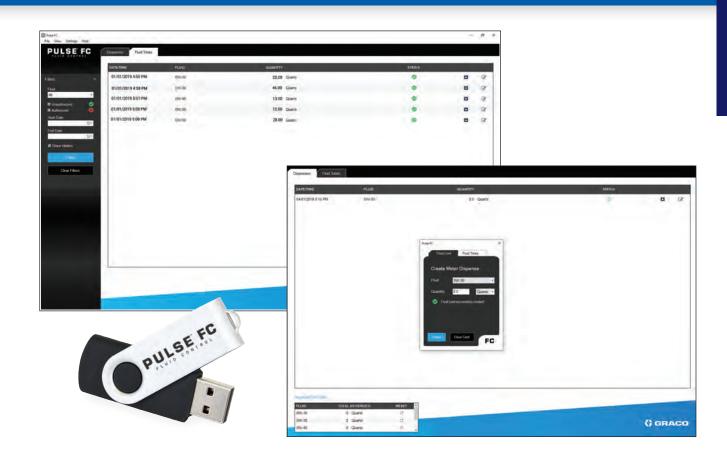
**Scalability.** Add Pulse FC into almost any environment quickly, even retrofit applications and avoid excessive installation costs and delays. You can also easily upgrade to Graco's Pulse Pro.



**Mobility.** Pair with mobile dispense units and drums quickly so your team can conveniently dispense without delays, hassles or extra steps.

## **Pulse FC Software**

Pulse FC is a Windows PC-based software. Paired with the card programmer it allows setup and operation of the system. Cards can be utilized to authorize dispenses, totalize all fluids dispensed, as well as setup and calibrate SD™ Preset meters.













# **Pulse FC Starter Kit**

Enjoy an easy-to-use, easy-to-install, out-of-the-box fluid control system designed for fast wire-free setup and configuration. Pulse FC integrates into existing or new environments quickly and cost-effectively without interrupting daily operations.



#### Pulse FC Fluid Cards

Reusable fluid cards can be scanned directly on the SD preset meter's built-in NFC reader.

Pulse FC Software

Simple PC-based software is used in conjunction with Pulse FC Programmer.

# Ordering Information

Part Number	Description
26C401	Pulse FC Starter Kit – Includes Software. Card Programmer. Software Quick Start and 50-Pack of Fluid Cards

Easy-to-follow instructions for quick system setup.











# SD[™] Preset Dispense Meters

With Pulse FC, dispense only precise volumes to create efficiencies for your entire shop operation. Monitor how much fluid you're using. Choose the amount of fluid each technician can dispense in order to maintain accurate inventory.



GRACO



High-contrast screen for reading in all lighting conditions with easy setup and navigation. See what fluid the meter is setup for and exactly how much you are dispensing.

#### **Upgrade Option**

Compatible with  $Pulse^{T}$  FC and upgradeable to  $Pulse^{T}$  Pro.

# High Flow

Available in two models -8 gpm (30 lpm) or 18 gpm (68 lpm).

#### Durable Cast Body

Designed for heavy duty and harsh applications.

#### Automatic Quick-Close Nozzle

Choose from rigid or flexible extensions with non-drip performance.

## Long-Life Valve Design

Cartridge design for fewer and easier repairs.

#### Ergonomic Handle Design

Four-finger trigger and easy-to-use button pad reduce worker fatigue.

#### **Typical Applications**

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

#### Typical Fluids Handled

- Petroleum- and synthetic-based oils (motor gear, and ATF)
- Antifreeze

Fechnical Specifications	
Flow Range*	0.25 gpm to 18 gpm (0.9 lpm to 68 lpm)
Maximum Working Pressure	1,500 psi (103.4 bar)
Units of Measure	Pints, quarts, gallons, liters (factory set to quarts)
Metered Dispense Valve Accuracy**	+/- 0.5%
Inlet	1/2 in–14 NPT or 3/4 in–14 NPT
Outlet	3/4 in–16 straight thread O-ring Boss
Maximum Recorded Dispense	9999 units (factory set in quarts)
Operating Temperature Range	4°F to 158°F (-20°C to 70°C)
Storage Temperature Range	-40°F to 158°F (-40°C to 70°C)
Wetted Parts	Aluminum, stainless steel, PBT, nitrile rubber, zinc plated carbon steel, nickel plated carbon steel
Dimensions (without extension)	13 in L x 3.75 in W x 5.75 in H (33 cm x 9.5 cm x 14.6 cm)
Weight	5.3 lb (2.4 kg)
Warranty	Five years overall, three years electronics
Instruction Manual	3A6711 and 3A6673

^{*}Tested in 10W motor oil. Flow rates vary with fluid pressure, temperature and viscosity.

^{**}At 2.5 gpm (9.5 lpm), at 70°F (21°C), with 10-weight oil and 1 gallon dispensed. May require calibration.

***Battery required to meet life expectancy: Energizer® Alkaline E91.











# Ordering Information

# **SD[™] Preset Electronic Meters**



	Dispense Type	Flow Range gpm (lpm)	Fluid	Extension	Inlet in (NPT)	Part Number
	Gear lube		Oil	Rigid	1/2	26C384
				Flexible	1/2	26C354
SDP8			Antifreeze	Rigid	1/2	26C385
"				Flexible	1/2	26C355
			Gear lube	Rigid	1/2	26C358
			Rigid	1/2	26C356	
SDP18			Oil	Flexible	1/2	26C357
				Rigid	3/4	26C360
				Flexible	3/4	26C361

# **Nozzle and Extension Kits**

	Extension	Fluid	Nozzle Description	Part Number	Compatible Meters
(Table)		Oil	Automatic, non-drip, quick-close	255852	SDP8
	Rigid	Antifreeze	Non-drip, manual open/close	26C267	SDP8
<b>%</b>		Oil/Antifreeze	High-flow, non-drip, quick-close	255857	SDP18
Rigid Gear lube		Non-drip, quick-close	255854	SDP8	
		Oil	Automatic, non-drip, quick-close	255853	SDP8
	Flexible	Antifreeze	Non-drip, manual open/close	26C268	SDP8
		Oil/Antifreeze	High-flow, non-drip, quick-close	255858	SDP18
The state of the s	Nozzle Only	Oil	Automatic, non-drip, quick-close	17R220	SDP8
4	Nozzle Only	Gear lube	Non-drip, quick-close	255470	SDP8
	Nozzle Only	Oil/Antifreeze	Non-drip, manual open/close	17T207	SDP8
	Flexible	Oil/Antifreeze	Extension only, 2 ft length	131733	SDP8











# Ordering Information

#### **Roll Around Package**

Pulse FC wire-free technology allows you to control your mobile drums and dispenses by providing security for expensive drums of synthetic and semi-synthetic fluids. Each package contains everything you need to manage your drums in existing installations. Drum not included.

|--|

Package	Extensions		Package Includes						
Number	EXTENSIONS	Meter	Pump	Downtube	Drum Cart	Air Regulator	Hose		
26C366	8 GPM, Gear Lube	26C358							
26C367	8 GPM, Flexible	26C354	24G576	24G576	26C354 24G576	16F878	24F915	24H420	24H865
26C409	8 GPM, Rigid	26C384							

#### Oil Bar

Part Number	Description
25D121	Oil Bar Console
25D130	Oil Bar Dispense Kit
25N771	Oil Bar SD Preset Dispense Meter



#### Oil Bar

Components ordered separately. For complete unit, order console (25D121), dispense kit (25D130) (one per meter) and Pulse FC meters (25N771) as needed.

#### **Accessories**

#### **Pulse FC Fluid Cards**

	Part Number	Description
OUNCO TEURARLE	130783	Pulse FC Fluid Cards – 50-Pack, White

#### **Pulse FC Demo Kit**

Part Number	Description
26C399	Includes Pulse FC Dispense Meter, Software, Card Programmer and 5-Pack of Fluid Cards

#### **SD Meter Filter Kits**

Part Number	Description
25D906	Filter kit includes filters/strainers (15M308) and 0-rings (155332)

## **Swivel Covers / Impact Protection**

	Part Number	Description
	15T366	Black swivel cover (standard color with meter)
	15T367	Red swivel cover
	15T368	Blue swivel cover
	15T369	Green swivel cover
	15T370	Yellow swivel cover
8	131226	Pulse / SD meter boot

Graco Pulse® Level offers highly intuitive tank-level-visibility options to help you optimize deliveries, margins and customer service. Choose from multiple tank-level-monitoring technologies, including a system that can run entirely on Wi-Fi. Track tank levels, capture and apply data, and assign distribution routes quickly, accurately and confidently from the industry's leading fluid management expert.



# **Choose Your Pulse Level System:**



#### **Ultrasonic Wi-Fi**

There are other TLM solutions on the market – but none of them are designed for Wi-Fi configuration. When connected to a reliable network, marketers and their customers can avoid service fees or contracts entirely.



#### **Ultrasonic Cellular**

No need to worry about obsolete cellular network, we use a long term data solution. Versatile multi-thread adapter allows for installation on all different tank types.



#### **Pressure Cellular**

No need to worry about obsolete cellular network, we use a long term data solution. Our pressure unit is approved for hazardous locations and measures tanks up to 30 feet tall.

#### Typical Fluids Handled

- Petroleum- and synthetic-based oils (motor, gear and ATF)
- Fuel (diesel/gasoline/kerosene)
- · Water/waste water
- Antifreeze
- · Windshield washer fluid
- Waste oil
- DEF

#### Typical Applications

- Heavy-duty truck dealers
- Fleet maintenance
- · Mining maintenance
- Public works garage
- Construction vehicle maintenance
- Heavy-duty mobile service trucks
- Mining
- · Remote job sites

Part Number	25T460	25T461	25T462
No Monthly Fees	•		
No Maintenance Contract	•	•	•
Easy-to-Use Software for Monitoring Data	•	•	•
Easily Replaceable Batteries	•	•	•
NPT Thread for Easy Installation	•	•	•
Viewable Data with Other Models of Pulse Level	•	•	•
LTE Cellular Coverage		•	•
Works in Remote Locations		•	•
30 ft Tanks			•
Hazardous Environment Approved			•



















# Ultrasonic Wi-Fi



### No Ongoing Fees

Wi-Fi connection.

### Long Battery Life

7-year battery life with replaceable C batteries.

#### On-Demand Reading

Ability to take reading at any time.

#### **Ultrasonic Sensor**

Measure tanks 10 ft tall.

#### **Ultrasonic Cellular**



#### Cellular Communication

No need for local network connection.

#### Long Battery Life

5-year battery life with replaceable C batteries.

#### **On-Demand Reading**

Ability to take reading at any time.

#### Ultrasonic Sensor

Measure tanks 13 ft tall.

## **Pressure Cellular**



#### Cellular Communication

No need for local network connection.

## Long Battery Life

Up to 10-year battery life.

## Submersible Pressure Sensor

Measure tanks up to 30 ft tall.

#### Hazardous-Location Rating

Approved for use with flammable fluids such as gasoline.

# **Pulse® Level Fluid Management**

















#### **Technical Specifications**

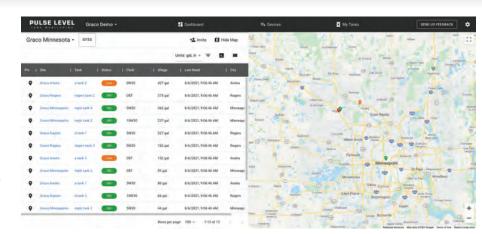
	Ultrasonic Wi-Fi TLM	Ultrasonic Cellular TLM	Pressure Cellular TLM
Compatible Fluids	Oil, kerosene, diesel, lubricants, additives, DEF/AdBlue, coolants, water, waste oil, waste water	Oil, kerosene, diesel, lubricants, additives, DEF/AdBlue, coolants, water, waste oil, waste water	Oil, kerosene, diesel, lubricants, additives, DEF/AdBlue, coolants, water, waste oil, waste water, gasoline
Tank Depth Measurement Range	5.0 in to 9 ft-7 in	5.0 in to 13 ft	30 ft
Fluid Level Measurement Accuracy	+/- 1.0 in	+/- 1.0 in	+/- 1.0 in
Mounting	1.25 in,1.5 in and 2.0 in threaded NPT connector	1.25 in,1.5 in and 2.0 in threaded NPT connector	1 in threaded NPT connector with wall-mounted logger
Clearance Height Above Tank for TLM	7.5 in	7.5 in	N/A
Weight	0.5 lb	1.17 lb with batteries	0.75 lb
RF Frequency Band	2.412 GHz - 2.462 GHz	LTE CAT-M1	LTE CAT-M1
Maximum RF Transmit Power	18 dBm	23 dBm	23 dBm
Operating Temperature Range	0°F to 122°F	0°F to 122°F	-4°F to 131°F
Batteries	Li-SOC12 Size R14, 3.6V C-cell	4 x Alkaline C-cell	Graco Part Number 19D216
Battery Life	7.5 years* from activation	5 years*	10 years* from activation
Enclosure (Ingress Protection)	IP67	IP67	IP68
Tanks			
Maximum Volume	999,999 gallons	999,999 gallons	999,999 gallons
Maximum Height	9 ft-7 in	13 ft	30 ft
Altitude	<6,000 ft	<6,000 ft	<6,000 ft

^{*}The battery life is based upon four (4) measurements per day and one (1) data drop per day from a location with adequate coverage, and a normal distribution over the operating temperature range centered at +25°C (77°F).

#### **Pulse Level Software**

Pulse Level software has a simple intuitive design and gives you powerful information at your fingertips. Get a quick consolidated view of key sites via a specifically designed web page. Track tank levels at a glance, generate customizable reports and automated email alerts, and share critical information with other key decision makers.

- Intuitive alerts ensure your customers never run out of products
- See the status of each customer site on an easy-to-view map
- Advanced reporting create and schedule automated reports to track history and see usage trends
- Expand the capabilities of your existing software systems with tank data from Pulse Level's API
- Simple annual and monthly billing options, or avoid charges altogether with Wi-Fi
- Allow customer to find insights on their own tanks by sharing Pulse Level data
- Use customers' existing Pulse Pro hardware to avoid the cost of additional monitors















# Don't Take Risks With Your Bulk Fluids

Designed for control of bulk fluid tanks, preventing overfill and pump runaway.

# **Monitor and Control up to 5 Tanks**

Manage an entire tank room with one system.

# Fresh Oil and Waste Oil Monitoring

Provides emergency shut off, over-fill and run away protection.

## **Remote Filling**

Allows for up to 1,000 feet between control box and tanks.

#### **Alarm Notifications**

Siren, rotating beacon and remote lights.

# **Pulse Integration**

Integrate with Pulse® software for increased insights, analysis and control.

# **Typical Applications**

- Service shops
- Automotive dealerships
- Fast lube centers
- Agriculture dealers

# **Ordering Information**

Part Number	Description
25V470	Fluid Defender
25V471	Pulse Fluid Defender
25V475	High Level Float
25V476	Low Level 10 ft Float
25V477	Low Level 30 ft Float
25V478	Dual Level 10 ft Float
25V479	Dual Level 30 ft Float
25V482	Air Control Solenoid
18G108	Single Light Bracket Kit
18G109	Multi-Light Bracket Kit



# **Fluid Defender**

Control and monitor up to 5 tanks and utilize air solenoids to increase control and defend from overfill or pump run away.



Receive valuable tank data into the Pulse Pro software to further improve tracking and management of bulk fluids. Set email alerts to increase visibility to alarms during off-business hours.





#### **Technical Specifications**

Announ oppositions	
Controllers	
Dimensions (W x H x D)	11.88 in x 10.29 in x 6.43 in (30.18 cm x 26.14 cm x 16.33 cm)
Weight	5 lbs (2.27 kg)
Operating Temperature	14°F to 122°F (-10°C to 50°C)
Enclosure Rating	NEMA Type 3R
Power Requirement	120 VAC
Audible Alarm	Yes
Audible Alarm Pressure Level	103 dB(A)
Visual Alarm Indicators	Rotating beacon, red light, remote light (optional), email notification (Pulse)
Channels	5
Floats	
Single Tank Versions	10 ft and 30 ft (3.05 m and 9.14 m)
Dual Tank Versions	10 ft and 30 ft (3.05 m and 9.14 m)
Intended Use	Motor Oil, Waste Oil, ATF, Antifreeze, Diesel, WWS
Minimum Specific Gravity	0.75
Amp Rating	0.1 amp
Maximum Fluid Viscosity	2,000 centipoise
Temperature Range	14°F to 122°F (-10°C to 50°C)
Minimum Detectable Tank Level	2 in (5.1 cm)
Minimum Head Space	5.5 in (2.54 cm)

# **Traditional Box – Wired Fluid Control Components**











# >>> Ordering Information

#### **In-Line Meters**

Part Number	Description
236763	Electronic pulse output meter (quarts)
236764	Electronic pulse output meter (liters)
215474	Mechanical pulse output meter (quarts)
244342	Meter pulse converter, used when upgrading old-style modular fluid commander to electronic allows use of 215474/215475 with the EFC.

#### **Air Solenoid Valves**

Part Number	Description
215407	Air solenoid valve, 150 psi (10 bar) (1/2 npsm (f) conduit ports for wiring; 1/4 in 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 in npsm (f) conduit ports for wiring; 1/4 in NPT(F) air ports.150 psi (10.3 bar) max. working pressure.

#### **Fluid Solenoid Valves**

Part Number	Description
215487	Fluid solenoid valve, 1/2 in NPT(F) 3,000 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 antifreeze, 150 psi max. (10 bar), 1/2 in NPT(F), same as features as 215487.
110025	Bare fluid solenoid valve, 1/2 in NPT(F) 3,000 psi, same features as 215487 above, but without wiring connectors or adapters.

## **Ready-Light Kits**

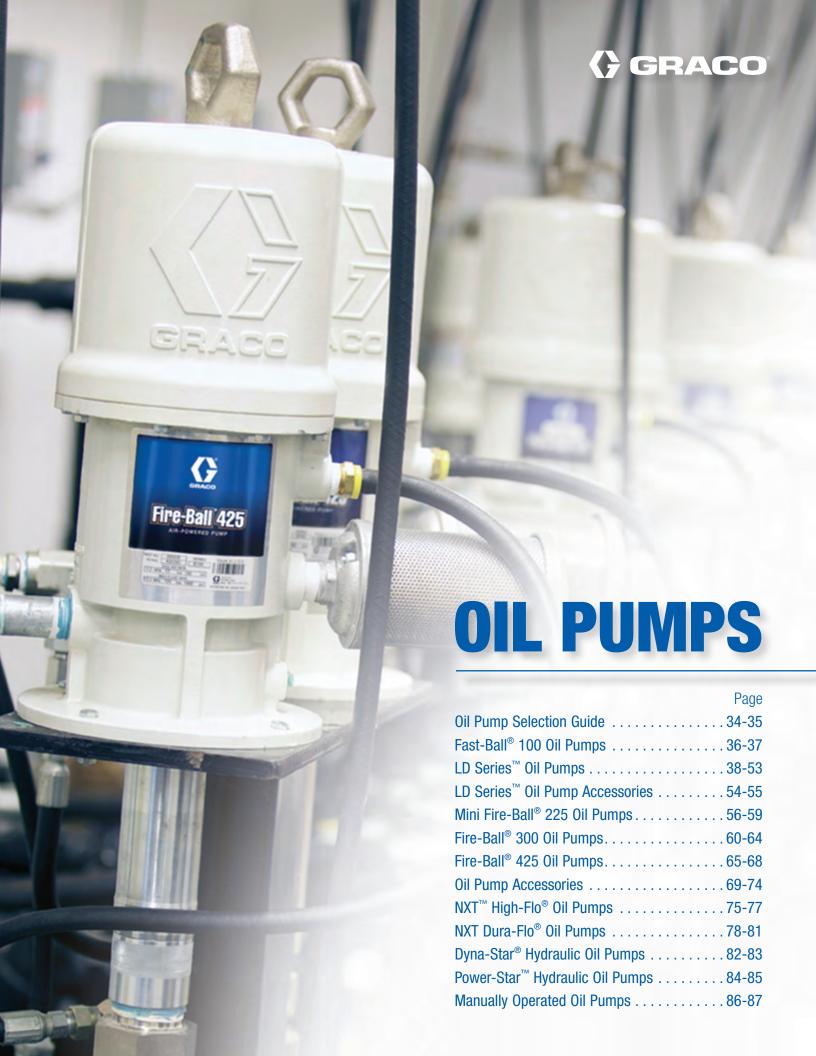
Part Number	Description
218588	Ready-light kit, signals operator when dispensing can begin. Includes "ready to dispense" indicator light (239019), strainer (240417), fluid solenoid valve (215487) and hardware.
238996	Ready-light with junction box (no solenoid or strainer)
239019	Ready-to-dispense indicator light only
113859	Lamp for indicator only

# **Installation Components**

Part Number	Description
111620	Check valve
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.

# Connecting Cables for Connecting Solenoids and Consoles, 90-volt, 2-wire, 18-gauge

Part Number	Description
215481	100 ft (30.5 m) pre-connected at both ends



# **Oil Pump Selection Guide**

				Cimultaneous	Approximate					
Pump Family and Fluid Pressure Ratio	Typical Applications	Annual Usage	Line Length	Simultaneous Dispense Points	Approximate Free Flow Rate @ 100 psi	Air Inlet	Fluid Inlet	Fluid Outlet	Air Operation Range	Reference Page
Fast-Ball 100	Fluid transfer     Specially fluid dispenses     Point of use     Mobile fluid carts	5,000 gal (19,00 l)	< 100 ft (30 m)	1 (no reels)	5 gpm (19 lpm)	1/4 NPT(F)	1 NPT(F)	3/4 NPT(F)	40-150 psi (2.8-10.3 bar)	36
LD, 3:1	Automotive dealerships     Fast lube centers     Lube trucks     Lubricant transfer     Service shops	20,000 gal (75,000 l)	300 ft (91 m)	1 to 2	7.8 gpm (30 lpm)	1/4 NPT(F)	1 NPT(F)	1/2 NPT(F)	20-150 psi (1.37-10.3 bar)	38
LD, 5:1	Automotive dealerships     Fast lube centers     Lube trucks     Lubricant transfer     Service shops	20,000 gal (75,000 l)	300 ft (91 m)	1 to 2	6.7 gpm (25 lpm)	1/4 NPT(F)	1 NPT(F)	1/2 NPT(F)	20-150 psi (1.37-10.3 bar)	38
Mini Fire-Ball 225, 3:1	Automotive dealerships     Fast lube centers     Fleet service facilities     Heavy-duty dealerships     In-plant     Lube trucks     Lubricant transfer     Mining     Service shops	30,000 gal (113,500 l)	250 ft (76 m)	1 to 2	8.3 gpm (32 lpm)	3/8 NPT(F)	1-1/2 NPT(F)	1/2 NPT(F)	40-180 psi (2.8-12 bar)	56
Fire-Ball 300, 5:1	Automotive dealerships     Fast lube centers     Fleet service facilities     Heavy-duty dealerships     In-plant     Lube trucks     Lubricant transfer     Mining     Service shops	35,000 gal (132,000 l)	500 ft (152 m)	1 to 3	12.1 gpm (46 lpm)	3/8 NPT(F)	1-1/2 NPT(F)	1/2 NPT(F)	40-180 psi (2.8-12 bar)	60
Fire-Ball 425, 3:1	Automotive dealerships     Fast lube centers     Fleet service facilities     Heavy-duty dealerships     In-plant     Lube trucks     Lubricant transfer     Mining     Service shops	> 35,000 gal (132,000 l)	Up to 250 ft (76 m)	3 to 4	28.7 gpm (109 lpm)	1/2 NPT(F)	1-1/2 NPT(F)	3/4 NPT(F)	40-180 psi (2.8-12 bar)	65
Fire-Ball 425, 6:1	Automotive dealerships     Fast lube centers     Fleet service facilities     Heavy-duty dealerships     In-plant     Lube trucks     Lubricant transfer     Mining     Service shops	> 35,000 gal (132,000 l	Up to 500 ft (152 m)	3 to 4	17.1 gpm (65 lpm)	1/2 NPT(F)	1-1/2 NPT(F)	3/4 NPT(F)	40-180 psi (2.8-12 bar)	65
Fire-Ball 425, 10:1	Automotive dealerships     Fast lube centers     Fleet service facilities     Heavy-duty dealerships     In-plant     Lube trucks     Lubricant transfer     Mining     Service shops	> 35,000 gal (132,000 l	Up to 750 ft (228.6 m)	3 to 4	11.7 gpm (44 lpm)	1/2 NPT(F)	1-1/2 NPT(F)	3/4 NPT(F)	40-180 psi (2.8-12 bar)	65

# **Oil Pump Selection Guide**

Pump Family and Fluid Pressure Ratio	Typical Applications	Annual Usage	Line Length	Simultaneous Dispense Points	Air Inlet	Fluid Inlet	Fluid Outlet	Air Operation Range	Reference Page
NXT High Flo, 3.5:1	Fleet service facilities     In-plant large runs     Large volume lubricant transfer     Mining remote fill	> 35,000 gal (132,000 l)	Up to 250 ft (76 m)	4 to 5	3/4 NPT(F)	1-1/2 NPT(F)	1 NPT(F)	20-100 psi (1.4-7 bar)	75
NXT High Flo, 4.5:1	Fleet service facilities     In-plant large runs     Large volume lubricant transfer     Mining remote fill	> 35,000 gal (132,000 l)	Up to 450 ft (137 m)	4 to 5	3/4 NPT(F)	1-1/2 NPT(F)	1 NPT(F)	20-100 psi (1.4-7 bar)	75
NXT High Flo, 6:1	Fleet service facilities     In-plant large runs     Large volume lubricant transfer     Mining remote fill	> 35,000 gal (132,000 l)	Up to 500 ft (152 m)	4 to 5	3/4 NPT(F)	2 NPT(F)	2 NPT(F)	20-75 psi (1.4-5.2 bar)	78
NXT Dura-Flo, 6:1	Fleet service facilities     In-plant large runs     Large volume lubricant transfer     Mining remote fill	> 35,000 gal (132,000 l)	Up to 500 ft (152 m)	2 to 4	3/4 NPT(F)	2 NPT(F)	1-1/2 NPT(F)	20-100 psi (1.4-7 bar)	78
NXT Dura-Flo, 10:1	Fleet service facilities     In-plant large runs     Large volume lubricant transfer     Mining remote fill	> 35,000 gal (132,000 l)	Up to 750 ft (228.6 m)	2 to 4	3/4 NPT(F)	2 NPT(F)	1-1/2 NPT(F)	20-100 psi (1.4-7 bar)	78
NXT Dura-Flo, 12:1	Fleet service facilities     In-plant large runs     Large volume lubricant transfer     Mining remote fill	> 35,000 gal (132,000 l)	Up to 1000 ft (305 m)	2 to 4	3/4 NPT(F)	2 NPT(F)	1-1/2 NPT(M)	20-100 psi (1.4-7 bar)	78
NXT Dura-Flo, 23:1	Fleet service facilities     In-plant large runs     Large volume lubricant transfer     Mining remote fill	> 35,000 gal (132,000 l)	Up to 1000 ft (305 m)	2 to 4	3/4 NPT(F)	2 NPT(F)	1-1/2 NPT(M)	20-75 psi (1.4-5.2 bar)	78

Pump Family and Fluid Pressure Ratio	Typical Applications	Maximum Output Flow Rate	Maximum Fluid Output Pressure	Hydraulic Inlet	Hydraulic Outlet	Fluid Inlet	Fluid Outlet	Maximum Hydraulic Inlet Pressure	Reference Page
Dyna-Star 1:1	Fleet service facilities Heavy-duty dealerships In-plant Lube trucks Lubricant transfer Mining Service shops	3 gpm (11 lpm)	1500 psi (102 bar)	3/8 NPT(F)	3/4 NPT(F)	1-1/2 NPT(F)	1/2 NPT(F)	1500 psi (102 bar)	82
Dyna-Star 1/4:1	Fleet service facilities     Heavy-duty dealerships     In-plant     Lube trucks     Lubricant transfer     Mining     Service shops	10 gpm (38 lpm)	375 psi (25.1 bar)	3/8 NPT(F)	3/4 NPT(F)	1-1/2 NPT(F)	1/2 NPT(F)	1500 psi (102 bar)	82
Power-Star 1:1	Fleet service facilities     Heavy-duty dealerships     In-plant     Lube trucks     Lubricant transfer     Mining     Service shops	12 gpm (45 lpm)	1500 psi (102 bar)	3/4 NPT(F)	1-1/4 NPT(F)	1-1/2 NPT(F)	1/2 NPT(F)	1500 psi (102 bar)	84











# Designed for Enhanced Quality, Durability and Reliability

When you purchase Graco, you expect the best. The fully redesigned Fast-Ball delivers unmatched Graco performance and operation. Its simple, easy-to-install design allows for efficient serviceability to minimize downtime and keep your operations running.



#### In-Line Design

Means fewer parts for less pump wear.

### **Double-Acting Pump**

Provides reliable fluid flow.

#### Differential Air Motor

Ensures smooth pump operation.

#### 5-Year Warranty

Graco's quality guarantee and peace of mind.

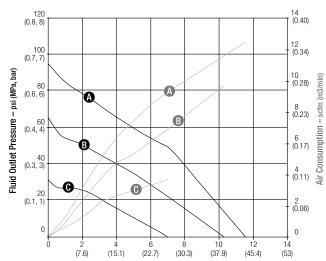


- · Fluid transfer
- Specialty fluid dispenses
- · Point of use
- Mobile fluid carts

#### Typical Fluids Handled

· Petroleum- and synthetic-based oils (motor, gear and ATF)

#### **Pump Performance**



Fluid Flow - gpm (lpm)

B = 70 psi (0.48 MPa, 4.8 bar) C = 40 psi (0.28 MPa, 2.8 bar air pressure

TEST FLUID: ISO 46 Hydraulic Oil







Technical Specifications	
Air Inlet Size	1/4 in NPT
Air Operating Range	40-150 psi (2.8-10.3 bar)
Compatible Material	Oil, Gear Lube, ATF
Maximum Fluid Flow	12.5 gpm (47.3 lpm)
Fluid Inlet Size	1 in NPT
Fluid Outlet Size	3/4 in NPT
Maximum Air Inlet Pressure	150 psi (10.3 bar)
Maximum Continuous Cycle Rate	100 cpm
Maximum Working Pressure	150 psi (10.3 bar)
Power Type	Pneumatic
Pump Ratio	1:1
Sound Power Level	78 dB(A)
Weight	6.3-9.8 lbs (2.9-4.4 kg)

## >>> Ordering Information

### **Pumps**

Part Number	Description
279035	Universal Length Pump
279036	Cut-to-Length PVC Downtube Pump
279037	55 Gallon Drum Length Pump

### **Pump Packages**



		•
Package Number	2000726	2000727
Type of Package	Spigot Kit	Mobile Dolly Kit
Container Size	55 gal (200 l)	55 gal (200 l)
Ratio	1:1	1:1
Pump	279037	279037
Dispense Kit	218115	247712
Air Regulator Kit	218316	24H420
Air Hose Size	1/4 in x 6 ft	3/8 in x 6 ft
Fluid Hose Size	_	1/2 in x 15 ft
Dolly Base	_	129645
Instruction Manual	3A9348	3A9348









5 Year Warranty!

### **Durable and Hardworking**

Stay ahead of the competition with LD Series pumps. These affordable and full-featured pumps are designed for lower-volume applications. LD pumps are fine-tuned for a compact, flexible and durable solution.

#### Three Inch Air Motor

Provides more power to create better flow.

#### **Engineered for Durability**

Patented cup and plate design eliminates the need for O-rings that wear out faster, for a more durable, longer-lasting solution.

#### Modular Air Valve

Air inlet and exhaust locations are easy to configure with just four bolts for simple, hassle-free installations.

#### Pilot Valves

Patented self-cleaning design increases reliability in dirty air environments and minimizes pressure drop with rapid changeovers for reduced stalling and smoother flow.

#### Built-In Thermal Relief and Inlet Strainer

Built-in thermal relief protects your equipment from thermal expansion, and an inlet strainer is built in to protect pump from contaminants.

#### **Typical Applications**

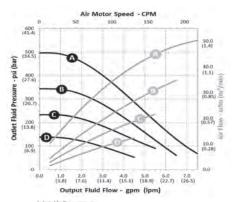
- · Automotive dealerships
- · Fast lube centers
- · Service shops

#### Typical Fluids Handled

· Petroleum- and synthetic-based oils (motor, gear and ATF)

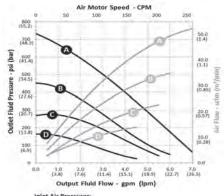
#### **Pump Performance**

#### LD Series 3:1 Pumps





#### LD Series 5:1 Pumps













nnical Specifications		
	LD Series 3:1	LD Series 5:1
Fluid Pressure Ratio	3:1	5:1
Air Motor Effective Diameter	3 in (76.2 mm)	3 in (76.2 mm)
Maximum Fluid Working Pressure	450 psi (31 bar / 3.1 MPa)	750 psi (51.7 bar / 5.17 MPa)
Approximate Free Flow Rate @ 100 psi	7.8 gal/min (30 liters/min)	6.7 gal/min (25 liters/min)
Output per Cycle	131 cc	102 cc
Approximate Air Use and Flow @ 100 psi (80 cpm)	18 scfm @ 2.8 gpm (0.51 m³/min @ 10.6 lpm)	18 scfm @ 2.1 gpm (0.51 m³/min @ 8.0 lpm)
Air Inlet	1/4 in	1/4 in
Fluid Inlet	1 in	1 in
Fluid Outlet	1/2 in	1/2 in
Air Operation Range	20 psi to 150 psi (1.37 bar to 10.3 bar)	20 psi to 150 psi (1.37 bar to 10.3 bar)
Maximum Recommended Pump Speed	120 cpm	180 cpm
Cycles per Gallon (liter)	29 (7.7)	37 (9.8)
Wetted Parts	Zinc plated carbon, steel, aluminum, nitrile, polyurethane, nickel plated aluminum	Zinc plated carbon, steel, aluminum, nitrilo polyurethane, nickel plated aluminum
Sound Pressure Level	72.9 dB(A)	72.9 dB(A)
Sound Power Level	82 dB(A)	82 dB(A)
Approximate Weight	7 lb (3.2 kg)	7.7 lb (3.5 kg)
Instruction Manual	3A1334	3A1334

# >>> Ordering Information

### **LD Series 3:1 Pumps**

Part Number	Description
24G576	3:1 Universal oil pump with bung adapter (24F918)
24G579	3:1 Oil pump with cut-to-length PVC downtube (16F878) and bung adapter (24F918)
24G582	3:1 Oil pump with 55 gal (200 liter) downtube (16F886) and bung adapter (24F918)
24G585	3:1 Oil pump with 275 gal (1,040 liter) steel downtube (16F885) and bung adapter (24F918)

### **LD Series 5:1 Pumps**

Part Number	Description
24G588	5:1 Universal oil pump with bung adapter (24F918)
24G591	5:1 Oil pump with cut-to-length PVC downtube (16F878) and bung adapter (24F918)
24G594	5:1 Oil pump with 55 gal (200 liter) steel downtube (16F886) and bung adapter (24F918)
24G597	5:1 Oil pump with 275 gal (1,040 liter) steel downtube (16F885) and bung adapter (24F918)

### **LD Series 3:1 Oil Pump Packages**







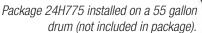


**Ordering Information** 

#### **Mobile Oil Packages – Cart**

Self-relieving air regulator must be used for LD pump thermal relief function. Order regulator 24H420 or filter-regulator 133215 separately.















#### Mobile Oil Packages - Dolly

Self-relieving air regulator must be used for LD pump thermal relief function. Order regulator 24H420 or filter-regulator 133215 separately.



# **LD Series 3:1 Oil Pump Packages**









#### Ordering Information

#### **Wall Mount Oil Packages**

Self-relieving air regulator must be used for LD pump thermal relief function. Order regulator 24H420 or filter-regulator 133215 separately.



	4.9
24H689	24H695
3:1	3:1
24G576	24G576
55 gal drum	275 gal tote
24F935	24H666
_	24H859
24F910	24F910
3A1335	3A1335
	3:1 24G576 55 gal drum 24F935 — 24F910



Package 24H695 installed on a 275 gallon tote (not included in package).

#### **Stationary Oil Packages**

Self-relieving air regulator must be used for LD pump thermal relief function. Order regulator 24H420 or filter-regulator 133215 separately.

Package Number	24H800	24H799	24H802	24H801
Ratio	3:1	3:1	3:1	3:1
Pump Part Number	24G576	24G576	24G576	24G576
Suction Tube Size	Universal	Universal	Universal	Universal
Pump Downtube	16F878	16F878	16F878	16F878
Meter Type	Manual	Manual	Preset	Preset
Meter Part Number	250903	250904	256216	255277
Meter Extension	Rigid	Flexible	Rigid	Flexible
Hose Kit	24H859	24H859	24H859	24H859
Instruction Manual	3A1335	3A1335	3A1335	3A1335









#### **Stationary Oil Packages - Tote**

Standard packages include LD Series hose reel. Self-relieving air regulator must be used for LD pump thermal relief function. Order regulator 24H420 or filter-regulator 133215 separately.



# **LD Series 3:1 Oil Pump Packages**









Ordering Information

### **Deluxe Stationary Oil Packages - Tote**

Deluxe packages include SDX Series hose reel. Self-relieving air regulator must be used for LD pump thermal relief function. Order regulator 24H420 or filter-regulator 133215 separately.



		N
Package Number	24K838	24K842
Ratio	3:1	3:1
Pump Part Number	24G576	24G576
Suction Tube Length	275 gal (1,040 l)	275 gal (1,040 l)
Pump Downtube	16F885	16F885
Reel Type	SDX	SDX
Hose Reel Part Number	SDM6HB	SDM6HB
Meter Type	Preset	Manual
Meter Part Number	256216 25C904	
Meter Extension	Rigid Flexible	
Hoses and Fittings	24J495	24J495
Top Mount Tote Bracket	: 24F930 24F930	
SDX Reel/IBC Tote Bracket	t 24K285 24K285	
Meter Tray	24F914 24F914	
Instruction Manual	3A1335	3A1335









#### **Tank Mount Oil Packages**

Self-relieving air regulator must be used for LD pump thermal relief function. Order regulator 24H420 or filter-regulator 133215 separately.



# **LD Series 3:1 Oil Pump Packages**









Ordering Information

#### **Deluxe Tank Mount Oil Packages**

Deluxe packages include SDX hose reel, air and fluid hoses with fittings, and mini air regulator.







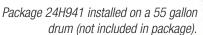




#### **Mobile Oil Packages – Cart**

Self-relieving air regulator must be used for LD pump thermal relief function. Order regulator 24H420 or filter-regulator 133215 separately.







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









#### Ordering Information

#### Mobile Oil Packages - Dolly

Self-relieving air regulator must be used for LD pump thermal relief function. Order regulator 24H420 or filter-regulator 133215 separately.











#### **Wall Mount Oil Packages**

Self-relieving air regulator must be used for LD pump thermal relief function. Order regulator 24H420 or filter-regulator 133215 separately.



24H836	24H842
5:1	5:1
24G588	24G588
55 gal drum 275 gal tote	
24F935 24H666	
-	24H859
24F910	24F910
3A1335	3A1335
	5:1 24G588 55 gal drum 24F935 — 24F910



Package 24H842 installed on a 275 gallon tote (not included in package).

### **Stationary Oil Packages**

Self-relieving air regulator must be used for LD pump thermal relief function. Order regulator 24H420 or filter-regulator 133215 separately.

Package Number	24H965	24H964	24H967	24H966
Ratio	5:1	5:1	5:1	5:1
Pump Part Number	24G588	24G588	24G588	24G588
Suction Tube Size	Universal	Universal	Universal	Universal
Pump Downtube	16F878	16F878	16F878	16F878
Meter Type	Manual	Manual	Preset	Preset
Meter Part Number	25C903	250904	256216	255277
Meter Extension	Rigid	Flexible	Rigid	Flexible
Hose Kit	24H859	24H859	24H859	24H859
Instruction Manual	3A1335	3A1335	3A1335	3A1335

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





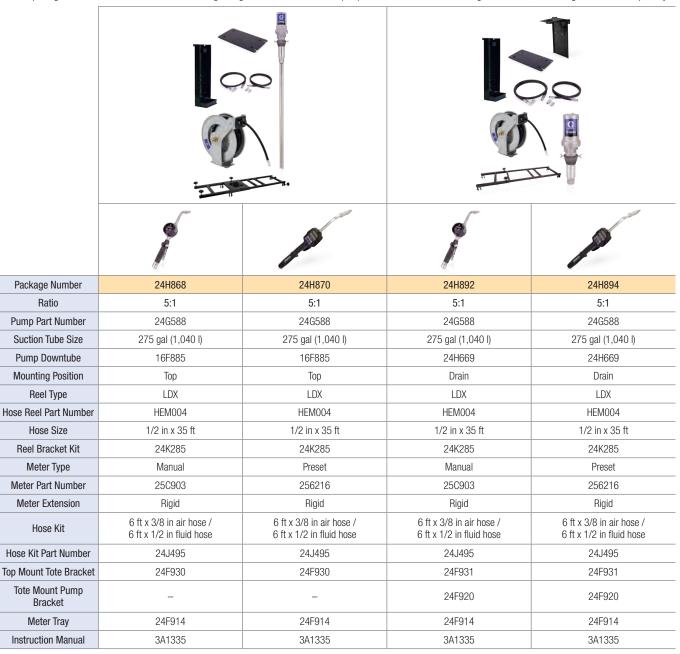




**Ordering Information** 

#### Stationary Oil Packages - Tote

Standard packages include LD Series hose reel. Self-relieving air regulator must be used for LD pump thermal relief function. Order regulator 24H420 or filter-regulator 133215 separately.











#### **Deluxe Stationary Oil Packages – Tote**

Deluxe packages include SDX Series hose reel. Self-relieving air regulator must be used for LD pump thermal relief function. Order regulator 24H420 or filter-regulator 133215 separately.





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









Ordering Information

#### Oil Packages - Tank Mount

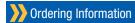
Self-relieving air regulator must be used for LD pump thermal relief function. Order regulator 24H420 or filter-regulator 133215 separately.











#### **Deluxe Oil Packages – Tank Mount**

Deluxe packages include SDX hose reel, air and fluid hoses with fittings, and mini air regulator.



# **LD Series Oil Pump Accessories**









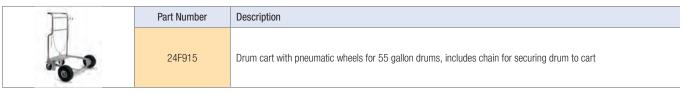


## Ordering Information

### **Air Regulators**

	Part Number	Description
	24H420	Mini air pressure regulator with gauge, 1/4 in NPT x 3/8 in NPT, self-relieving
F0	133215	Mini air filter-regulator with gauge, 1/4 in NPT, self-relieving, semi-auto drain

#### **Carts**



#### **LD Drum Dollies**



Part Number	Description
131183	Drum dolly for 35 lb (16 kg) drum
131184	Drum dolly for 120 lb (54 kg) drum
129645	Drum dolly for 400 lb (182 kg) drum

#### **Downtubes**

1	Part Number	Description
	16F878	Universal cut to length PVC downtube
	16F886	Drum length steel downtube
	16F885	Tote length steel downtube

### **Drum Covers**



Part Number	Description
24F904	Cover for 35 lb (16 kg) pails
24F905	Cover for open-head 120 lb drums
24F906	Cover for open-head 400 lb drums

### **Hose and Fitting Kits**



Part Number	Description	Kit Includes			
Fait Nullibei		Fluid Hose	Air Hose	Swivel	Union Fitting
24H865	15 ft LD pump fluid hose kit	1/2 in x 15 ft	3/8 in x 6 ft	157705	156684
24H859	6 ft LD pump fluid hose kit	1/2 in x 6 ft	3/8 in x 6 ft	157705	156684









### **Suction Kits**

	Part Number	Description
1	24F935	LD oil pump suction hose kit for 55 gal (200 L) drum. Includes 55 gal (200 L) drum length metal downtube, bung adapter, foot valve and 6 ft of 1 in suction hose
	24H666	LD oil pump suction hose kit for 275 gal (1,040 L) drum. Includes 275 gal (1,040 L) tote length metal downtube, bung adapter, foot valve and 6 ft of 1 in suction hose
ake.	24H669	LD oil pump suction hose kit and adapter for mounting pump to the side of IBC tote and dispensing from drain. Includes 1 in x 3 ft suction hose, 1 in elbow fitting and union fitting (160022)

### **Mounting Hardware**

Part Number	Description
24F910	LD Series pump wall mounting bracket
24F918	Bung adapter

### **Tote Mount Accessories**

Ti	Part Number	Description	
	24F914	Meter drip tray for mounting to the side of IBC tote	
41	24F932	LD Series reel bracket for mounting reel to IBC top mount tote bracket (24F930 and 24F920)	
	24F931	Tote mounting bracket to mount reel on top of IBC tote (pump mounting bracket is not included)	
2 10 10 10 10 10 10 10 10 10 10 10 10 10	24F930	Top of tote mounting bracket. For mounting LD Series pump in top of IBC tote.	
	24F920	Bracket for mounting LD Series pump on the side of IBC tote	
	24K285	Bracket for mounting SDX Series hose reel to IBC tote mounting bracket 24F930 (24F930 bracket sold separate	

Fire-Ball 225









# Perfect for Medium Pressure, Low-Volume Applications

You can't afford downtime, especially when your shop is small. The Mini Fire-Ball 225 is designed with fewer moving parts, which means less wear and tear and reduced downtime, allowing you to run a more profitable business.

#### **Durable Casting**

Thick cast aluminum air motor housing offers unmatched durability.

#### Fewer Repairs

Fewer moving parts in the air motor assembly means less downtime and low repair cost.

#### Extended Seal Life

In-line pump design aligns the air motor piston and fluid piston rods to maximize seal life.

#### Superior Sealing

Non-metallic poppet valves offer positive sealing performance, even with contaminated "dirty" air environments for long life without repair.

#### Corrosion-Resistant

Corrosion-resistant design utilizes liquid salt nitriding, nickel plating, stainless steel, aluminum and chrome on key components for longer life.

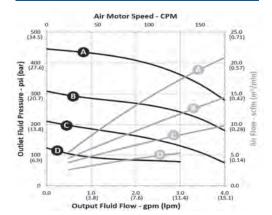
#### Typical Applications

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

#### Typical Fluids Handled

· Petroleum- and synthetic-based oils (motor, gear and ATF)

#### **Pump Performance**













Technical Specifications				
Fluid Pressure Ratio	3:1			
Air Motor Effective Diameter	2.25 in (57.2 mm)			
Maximum Fluid Working Pressure	540 psi (37 bar / 3.7 MPa)			
Approximate Free Flow Rate @ 100 psi	8.3 gal/min (32 liters/min)			
Output per Cycle	87 cc			
Approximate Air Use and Flow @ 100 psi (80 cpm)	9 scfm @ 1.9 gpm (0.25 m³/min @ 7.2 lpm)			
Air Inlet	3/8 in NPT(F)			
Fluid Inlet	1-1/2 in NPT(F)			
Fluid Outlet	1/2 in NPT(F)			
Air Operation Range	40 psi to 180 psi (2.8 bar to 12 bar)			
Maximum Recommended Pump Speed	100 cpm			
Cycles per Gallon (Liter)	43.5 (11.5)			
Wetted Parts	Steel, Buna-N, polyurethane, aluminum, Rulon®			
Sound Pressure Level	77.8 dB(A)			
Sound Power Level	85.6 dB(A)			
Approximate Weight	16 lb (7.3 kg)			
Instruction Manual	309868			

# >>> Ordering Information

### Mini Fire-Ball 225 3:1 Pumps

	Part Number	Description
	246775	3:1 Universal oil pump
248097 3:1 U		3:1 Universal oil pump with suction tube (15C502) and bung adapter (222308)

# Mini Fire-Ball 225 3:1 Oil Pump Packages









#### **Ordering Information**

#### **Oil Packages**



^{*}Order low-level shut-off (203688) (1-1/2 in NPT) separately for metered dispense systems.

^{**}Order low-level shut-off (203688) (1-1/2 in NPT) separately for metered dispense systems. Use 3/8 in (9.5 mm) air regulator (109075) as required; must be ordered separately.









### **Bulk Oil Dispensing Packages**



^{*}Order (218549) (1/2 in x 24 in) hose kit separately.

16









### Ideal for Medium-Sized Shops with High-Pressure Oil Transfer

Install the Fire-Ball 300 in high-pressure, medium-volume oil dispense applications such as automotive dealerships, fast lube centers and service shops. A three inch differential air motor ensures smooth pumping, and the smooth double-acting pump design provides reliable fluid flow and accurate dispense.

#### **Durable Casting**

Thick cast aluminum air motor housing offers unmatched durability.

#### Fewer Repairs

Fewer moving parts in the air motor assembly means less downtime and low repair cost.

#### Superior Sealing

Non-metallic poppet valves offer positive sealing performance, even with contaminated "dirty" air environments for long life without repair.

#### Extended Seal Life

In-line pump design aligns the air motor piston and fluid piston rods to maximize seal life.

#### Corrosion-Resistant

Corrosion-resistant design utilizes liquid nitriding, nickel plating, stainless steel, aluminum and chrome on key components for longer life.

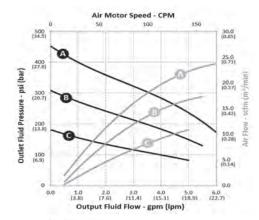
#### Typical Applications

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

#### Typical Fluids Handled

 Petroleum- and synthetic-based oils (motor, gear and ATF)

#### Pump Performance







Test Fluid I ISO 46 Oil



Fire-Ball 300







Fechnical Specifications				
Fluid Pressure Ratio	5:1			
Air Motor Effective Diameter	3 in (76.2 mm)			
Maximum Fluid Working Pressure	900 psi (62 bar / 6.2 MPa)			
Approximate Free Flow Rate @ 100 psi	12.1 gal/min (46 liters/min)			
Output per Cycle	133 cc			
Approximate Air Use and Flow @ 100 psi (80 cpm)	16 scfm @ 2.8 gpm (0.45 m³/min @ 10.6 lpm)			
Air Inlet	3/8 in NPT(F)			
Fluid Inlet	1-1/2 in NPT(F)			
Fluid Outlet	1/2 in NPT(F)			
Air Operation Range	40 psi to 180 psi (2.8 bar to 12 bar)			
Maximum Recommended Pump Speed	70 cpm			
Cycles per Gallon (Liter)	28.4 (7.5)			
Wetted Parts	Steel, polyurethane, aluminum, Buna-N			
Sound Pressure Level	77.8 dB(A)			
Sound Power Level	85.6 dB(A)			
Approximate Weight	17 lb (7.7 kg)			
Instruction Manual	306518			

### Ordering Information

### Fire-Ball 300 5:1 Pumps

	Part Number	Description
	203876	5:1 Universal oil pump
203872 5:1 Oil pump, 16 gal (120 lb) drum size, for cover mount		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		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		5:1 Oil pump, 55 gal (400 lb) drum size, bung mount
222087 5:1 Oil pump, 275 gal (1,040 lb) tank size, bung mount		

## Fire-Ball 300 5:1 Oil Pump Packages









#### **Ordering Information**

#### **Oil Pump Packages**



^{*}Order low-level cut-off (203688) (1-1/2 in NPT) separately for metered dispense systems. Use 3/8 in (9.5 mm) installation kit (224512) as required.

^{**}Order low-level cut- off (203688) (1-1/2 in NPT) separately for metered dispense systems. Use 3/8 in (9.5 mm) air regulator (109075) as required; must be ordered separately.









### **Bulk Oil Dispensing Packages**



218549

Drain Valve

Hose

Thermal Relief Valve

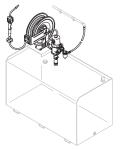
Hose Reel Inlet Kit

(Not Included)



220598

218549



220598

218549

127711

222063

237893

218549

^{*}Order (218549) (1/2 in x 24 in) hose reel inlet kit separately.

# Fire-Ball 300 5:1 Oil Pump Packages









### >>> Ordering Information

### **Lube Truck Packages**



Package Number	222086*	206655*	204264*
Ratio	5:1	5:1	5:1
Package Type	Lube truck	Lube truck	Lube truck
Maximum Container Size	16 gal (60l) open-head	55 gal (200l) closed-head	55 gal (200l) closed-head
Pump	203872	203857	204254
Dispense/ Hose Fitting Kit	222063	222063	222063
Fluid Hose Size	1/2 in x 6 ft (12.7 mm x 1.8 m)	1/2 in x 6 ft (12.7 mm x 1.8 m)	1/2 in x 6 ft (12.7 mm x 1.8 m)
Cover	222060	207367	-
Pump Clamp	-	-	204095
Hold Down Kit	222061	207361	207361
Bung Adapter	_	_	224579
Instruction Manual	307883	307883	307883

 $^{^*\}mbox{Order }3/8$  in (9.5 mm) air regulator and gauge (109075) separately.









### The Pump of Choice for Your Most **Demanding High-Volume Applications**

The Fire-Ball 425 features a 4.25 inch air motor to supply the power you need for long pipe runs and highervolume dispensing. An ideal choice for applications where multiple dispenses happen at the same time.

#### **Durable Casting**

Thick cast aluminum air motor housing offers unmatched durability.

#### Fewer Repairs

Fewer moving parts in the air motor assembly means less downtime and low repair cost.

#### Superior Sealing

Non-metallic poppet valves offer positive sealing performance, even with contaminated "dirty" air environments for long life without repair.

#### Extended Seal Life

In-line pump design aligns the air motor piston and fluid piston rods to maximize seal life.

Corrosion-resistant design utilizes liquid nitriding, nickel plating, stainless steel, aluminum and chrome on key components for longer life.

- · Fleet services facilities
- In-plant
- · Lube trucks
- Mining

· Petroleum- and synthetic-based oils (motor, gear and ATF)

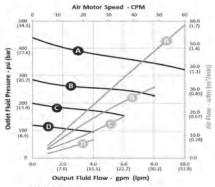




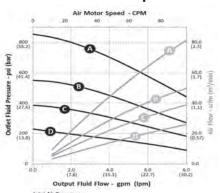


#### **Pump Performance**

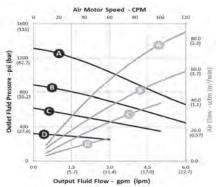
#### Fire-Ball 425 3:1 Pumps



#### Fire-Ball 425 6:1 Pumps



### Fire-Ball 425 10:1 Pumps







CA	= 150 psi
~	(10.3 har)
0	400 msl
0	(6.9 ber)
0	- 20 mm
0	TA Wheel
0	be a count
le	= 40 bit
	(2.8 bur)

hnical Specifications			
Fluid Pressure Ratio	3:1	6:1	10:1
Air Motor Effective Diameter	4.25 in (107.9 mm)	4.25 in (107.9 mm)	4.25 in (107.9 mm)
Maximum Fluid Working Pressure	540 psi (37 bar / 3.7 MPa)	1,100 psi (76 bar / 7.6 MPa)	1,800 psi (124 bar / 12.4 MPa)
Approximate Free Flow Rate @ 100 psi	28.7 gal/min (109 liters/min)	17.1 gal/min (65 liters/min)	11.7 gal/min (44 liters/min)
Output per Cycle	631 cc	261 cc	189 cc
Approximate Air Use and Flow @ 100 psi (80 cpm)	43 scfm @ 13.4 gpm (1.23 m³/min @ 50.6 lpm)	44 scfm @ 6.7 gpm (1.25 m³/min @ 25.4 lpm)	45 scfm @ 4.0 gpm (1.27 m³/min @ 15.2 lpm)
Air Inlet	1/2 in NPT(F)	1/2 in NPT(F)	1/2 in NPT(F)
Fluid Inlet	1-1/2 in NPT(F)	1-1/2 in NPT(F)	1-1/2 in NPT(F)
Fluid Outlet	3/4 in NPT(F)	3/4 in NPT(F)	3/4 in NPT(F)
Air Operation Range	40 psi to 180 psi (2.8 bar to 12 bar)	40 psi to 180 psi (2.8 bar to 12 bar)	40 psi to 180 psi (2.8 bar to 12 bar)
Maximum Recommended Pump Speed	66 cpm	78 cpm	60 cpm
Cycles per Gallon (Liter)	6 (1.6)	14.5 (3.8)	20 (5.3)
Wetted Parts	Steel, polyurethane, aluminum, nitrile	Steel, polyurethane, aluminum, nitrile	Steel, polyurethane, aluminum, nitrile
Sound Pressure Level	82 dB(A)	79.5 dB(A)	78 dB(A)
Approximate Weight	46 lb (20.9 kg)	35 lb (15.9 kg)	29 lb (13.2 kg)
Instruction Manual	308485	308608	308655

### Ordering Information

### Fire-Ball 425 Pumps

Part Number	Description
237526	3:1 Universal oil pump
238108	6:1 Universal oil pump
205626	10:1 Universal oil pump
222065	10:1 Oil pump, 55 gal (400 lb) drum size, cover mount
222095	10:1 Oil pump, 55 gal (400 lb) drum size, bung mount









#### **Oil Pump Packages**



^{*}Order low-level cut-off (203688) (1-1/2 in NPT) separately for metered dispense systems.

^{**}Order low-level cut-off (203688) (1-1/2 in NPT) separately for metered dispense. Use 1/2 in (12.7 mm) air regulator (104266) and air pressure gauge (100960) as required; must be ordered separately.

# Fire-Ball 425 Oil Pump Packages









### >>> Ordering Information

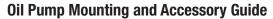
### **Lube Truck Packages**



Package Number	206656*	222067*
Ratio	10:1	10:1
Package Type	Lube truck	Lube truck
Maximum Container Size	55 gal (200 l) closed-head	55 gal (200 l) closed-head
Pump	222065	222095
Dispense/ Hose Fitting Kit	222066	222066
Fluid Hose Size	1/2 in x 6 ft (12.7 mm x 1.8 m)	1/2 in x 6 ft (12.7 mm x 1.8 m)
Offset Cover	207367	_
Pump Clamp	-	204095
Hold Down Kit	207361	207361
Bung Adapter	-	224579
Instruction Manual	307883	307883

 $^{^{\}star}\text{Order}$  1/2 in (12.7 mm) air regulator (104266) and gauge (100960) separately.

Use the quick-reference guide below to determine the part and accessory options available for our most popular oil pumps.



Pump	Fast-Ball 100	Mini Fire-Ball 225 3:1	Fire-Ball 300 5:1	Fire-Ball 425 3:1	Fire-Ball 425 6:1	Fire-Ball 425 10:1
Bung Adapter	222308	222308	222308	_	_	222308
222118 (18 in / 4537 cr	222118 (18 in / 4537 cm)	222062 (18 in / 45.7 cm)	222062 (18 in / 45.7 cm)	238246	238246	222068 (18 in / 4537 cm)
CONNECTION 1103C IVI	222119 (72 in / 182.8 cm)	222063 (72 in / 182.8 cm)	222063 (72 in / 182.8 cm)	(24 in / 60.9 cm)	(24 in / 60.9 cm)	222066 (72 in / 182.8 cm)
Wall Mounting Bracket	203987	203987	203987	238245	238245	203987
Thermal Relief Kit*	_	235998	237893	237601	240429	240429
Air Regulator and Gauge	110147	109075	109075	104266 / 100960	104266 / 100961	104266 / 100962
Air Filter	110146	106148	106148	106149	106149	106149
Air Lubricator	110148	214847	214847	214848	214848	214848
Filter, Regulator, Lubricator, and Gauge	110149	110150	110150	217072	217072	217072
Airline Shutoff Valve	110223	110224	110224	110225	110225	110225
Fluid Shutoff Valve	108537	108458	108458	108537	108537	108537
Fluid Outlet Filter	240417	240417	240417	101078	-	-
Low-Level Cutoff	203688	203688	203688	203688	203688	203688
Suction Hose Kit	236054	236054	236054	_	-	-

*Required



### Ordering Information

### **Bleed-Type Air Shut-Off Valves**

	Part Number	Description
O, O	110223	1/4 in NPT
	110224	3/8 in NPT
No. of the last of	110225	1/2 in NPT
	110226	3/4 in NPT

### **Bung Adapters**

			Compatible	Includes				
	Part Number	Pumps	Double Tap bushing	Bushing Sleeve	1 ft x 3/8 in Hose	90° 3/8 in Adapter	Thumb Screw	
	222308	Allows direct mounting of all universal length and extended pumps to standard 2 NPT drum bung	Fast-Ball 100 Mini Fire-Ball 225 3:1 Fire-Ball 300 5:1 Fire-Ball 425 10:1	-	-	_	-	-
	187754	Acetal bung adapter	All pumps	-	-	_	-	100220
	176684	Bung adapter for suction kit 203992	_	_	-	-	-	100220
	238125	For mounting universal pumps to tanks	Mini Fire-Ball 225 3:1 Fire-Ball 300 5:1 Fire-Ball 425 10:1	191075	172405	238370	155494	_

### **Carts**

	Part Number	Compatible Container Size
	203650	5 gal (20 l) 10 gal (40 l) 16 gal (60 l)
	222243	120 lb (55 kg)
	111470	55 gal (200 l)

### **Clamps**

n	Part Number	Description	Compatible Pumps
	203156	Used to hold pump securely to the edge of an open top drum	Fast-Ball 100 Mini Fire-Ball 225 3:1 Fire-Ball 300 5:1 Fire-Ball 425 6:1 Fire-Ball 425 10:1

### Dispense Kits for Mini Fire-Ball and Fire-Ball 300 Pumps

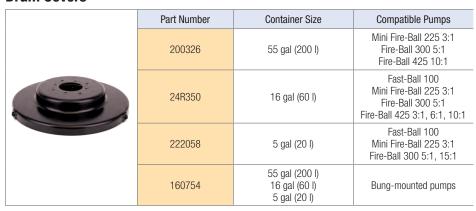
23/11/5	Part Number	Description	Hood Langth	Includes			
	Description	Hose Length	Fluid Hose	Manual SD Gear Lube Valve	Manual		
	237075	Use with portable lubricators powered by Fire-Ball 300 Pump	6 ft	220591	255349	307884	

#### Ordering Information

#### **Downtube - Universal**

Λ	Part Number	Description
	15C502	1-1/2 in ID tube marked for standard container lengths from 20 in to 41 in (.51 m to 1.04 m)

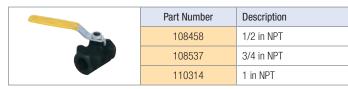
#### **Drum Covers**



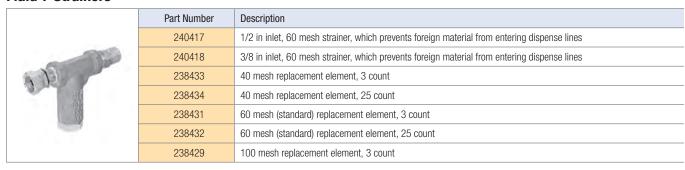
#### **Drum Elevator**

-3m	Part Number	Description	Includes			
	rait Number	Description	Cover Support	Drum Elevator	Air Control Kit	
	241663	Air-powered elevator to speed up 55 gal (200 l) drum changes	207562	204385	207561	

#### Fluid Shut-Off Valves



#### **Fluid T-Strainers**



# **Oil Pump Accessories**

### Ordering Information

### **Fluid Y-Strainers**



Part Number	Description
110877	1/2 in NPT inlet/outlet strainer, which filters material before entering the pump
110906	1/2 in NPT inlet/outlet strainer, replacement screen
101078	3/4 in NPT inlet/outlet strainer, which filters material before entering the pump
129699	3/4 in NPT inlet/outlet strainer, replacement screen
110878	1 in NPT inlet/outlet strainer, which filters material before entering the pump
110907	1 in NPT inlet/outlet strainer replacement screen

### Hose and Fitting Kits for Mini Fire-Ball 225 and Fire-Ball 300 5:1

			Connection	Includes			
	Part Number	Description	Length	Air Hose	Air Hose Swivel Elbow	Fluid Hose	Fluid Hose Swivel Elbow
	222062	For connecting wall-mounted pumps to piping	18 in	204560	155494	220598	155470
	222063	Use with drum-mounted pumps	6 ft	203320	155494	220591	155470

### **Hose and Fitting Kits for Fire-Ball 425 Pumps**



	Part Number	Description	Hose Length	Package Includes					
				Air Hose	Air Hose Swivel Elbow	Fluid Hose	Fluid Hose Swivel Elbow	Manual	
	222068	For connecting wall- mounted Fire-Ball 425 10:1 pump to piping	15 in	218093	155470	109108	160327	306520	
	238246	For connecting wall- mounted Fire-Ball 425 3:1 and 6:1 pumps to piping	24 in	218903	155470	238247	160327	306520	
	222066	For use with drum- mounted Fire-Ball 425 10:1 pump	6 ft	205418	155470	109105	160327	307883	



# Ordering Information

# **Low-Level Cutoffs for Fast-Ball and Fire-Ball Pumps**

Part Number	Description
203688	1-1/2 in NPT cutoff, which prevents air from entering pump when fluid supply from pump is exhausted

#### **Portable Bases**

	Part Number	Description	Compatible Container Size
	205054	Band dolly	5 gal (20 l)
0	204144	Band dolly	10 gal (40 l) 16 gal (60 l)
	203622	Caster base	5 gal (20 l) 10 gal (40 l) 16 gal (60 l)

#### **Runaway Valve**

Prevents pump damage by automatically closing the air line to stop the pump when a runaway pump condition occurs due to an empty barrel or hose leak.

	Part Number	Inlet
40	224040	3/4 in NPT(fbe)

# **Sealed Bung Adapters**

Part Number	Fire-Ball Length	Adapter Inside Diameter	Compatible Pumps
204076	Full length	2.140 in	Mini Fire-Ball 225 3:1
224579	Universal length	2.159 in	All except Mini Fire-Ball 225 3:1

#### **Suction Kits**

Part Number	Description	Includes		
rait Number	Description	Bung Adapter	Bushing Pipe	6 ft Hose
236054	Allows use of Fast-Ball, Mini-Fire-Ball and Fire-Ball universal pumps to work with barrels	188845	101496	109105

# **Oil Pump Accessories**



# Ordering Information

# **Suction Tubes**



Part Number	Container Size	Type of Mount	Compatible Pumps	Includes		
Fait Number	Container Size	Type of Mount	Compatible Fumps	Extension Size	Extension	Foot Spacer
238592	16 gal (60 l)	Cover-mounted	Fast-Ball 100 Mini Fire-Ball 225 3:1 Fire-Ball 300 5:1 Fire-Ball 425 10:1	14-1/2 in	191126	110127
238593	55 gal (200 l)	Cover-mounted		21-3/4 in	191128	110127
238595	55 gal (200 l)	Bung-mounted		26 in	191130	110127
238596	275 gal (1,100 l)	Bung-mounted	1 110 Daii 420 10.1	36 in	191131	110127

# **Thermal Relief Valve Kits**



Part Number	Pressure Rating	Compatible Pumps		Inclu	ıdes	
Fait Nullibei	Fressure nating	Compannie Fumps	Valve	Bung Adapter	Swivel	Hose
235998	600 psi (41 bar)	Mini Fire-Ball 225 3:1	112174	191075	155494	238370
237893	900 psi (62 bar)	Fire-Ball 300 5:1	102527	191075	155494	238370
248296	900 psi (62 bar)	Fire-Ball 300 5:1	102527	-	-	109163
237601	600 psi (41 bar)	Fire-Ball 425 3:1	112174	191075	155494	238370
240429	1,600 psi (110 bar)	Fire-Ball 425 6:1 Fire-Ball 425 10:1	102527	191075	155494	238370
248324	1,600 psi (110 bar)	Fire-Ball 425 6:1 Fire-Ball 425 10:1	113053	_	_	109163

# **Tools for Working on Fire-Ball Air Motors**



Part Number	Description
207579	Padded pliers
171818	Poppet gauge
168085	Insert tool

# **Wall-Mounting Brackets**



Part Number	Description	Compatible Pumps
203987	Clamps onto universal pump tube	Fast-Ball 100 Mini Fire-Ball 225 3:1 Fire-Ball 300 5:1 Fire-Ball 425 10:1
238245	Mounts directly to pump flange	Fire-Ball 425 3:1, 6:1, 10:1
236778	Provides mounting to wall surface by flange	Fire-Ball 425 3:1









Tested to outperform and outlast all other pumps on the market — with its long-life design and intuitive, easy-to-use controls — the NXT High-Flo pump is the best value for the money. Fewer parts, faster repairs and long-lasting durability.



Modular design for easier maintenance with rugged body armor that won't rust or dent.

#### Modular Air Valves

Easy-to-repair valve eliminates stalling and contains de-icing controls.

# Piston Valve with Floating Piston Seal

For maximum pressure balance over a range of material viscosities.

#### **Typical Applications**

- Fleet service facilities
- In-plant
- Mining

# Typical Fluids Handled

• Petroleum- and synthetic-based oils (motor, gear and ATF)

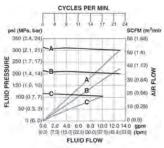






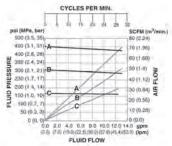
#### **Pump Performance**

# **NXT 3.5:1 High-Flo Pumps**





# **NXT 4.5:1 High-Flo Pumps**





echnical Specifications				
Fluid Pressure Ratio	3.5:1	4.5:1		
Air Motor Effective Diameter	7.5 in (191 mm)	7.5 in (191 mm)		
Maximum Fluid Working Pressure	350 psi (24 bar / 2.4 MPa)	450 psi (31 bar / 3.1 MPa)		
Output per Cycle	2,000 cc	1,500 cc		
Air Inlet	3/4 in NPT(F)	3/4 in NPT(F)		
Fluid Inlet	1-1/2 in NPT(F)	1-1/2 in NPT(F)		
Fluid Outlet	1 in NPT(F)	1 in NPT(F)		
Air Operation Range	20 psi to 100 psi (1.4 bar to 7 bar)	20 psi to 100 psi (1.4 bar to 7 bar)		
Maximum Recommended Pump Speed	60 cpm	60 cpm		
Cycles per Gallon (Liter)	1.9 (0.5)	2.5 (0.67)		
Wetted Parts	Stainless steel, PTFE, leather, UHMWPE, carbon steel	Stainless steel, PTFE, leather, UHMWPE, carbon steel		
Sound Pressure Level	77 dB(A)	77 dB(A)		
Sound Power Level	87 dB(A)	87 dB(A)		
Approximate Weight	99 lb (44.9 kg)	99 lb (44.9 kg)		
Instruction Manuals	System – 312862 Pump – 311211 Pump Lower – 311690 Motor – 311238	System – 312862 Pump – 311211 Pump Lower – 311690 Motor – 311238		









# Ordering Information

# **Oil Pump Packages**

Package Number	24D602	24D603
Ratio	3.5:1	4.5:1
Mounting	255143 (Wall)	255143 (Wall)
Pump with Thermal Relief Kit	24D596	24D597
Output per Cycle	2,000 cc	1,500 cc
Output at 60 CPM	31.7 gpm (120 lpm)	23.8 gpm (90 lpm)
Motor Size	NXT 3400	NXT 3400
Maximum Fluid Pressure	350 psi (24.1 bar)	450 psi (31 bar)
Maximum Air Input Pressure	100 psi (6.9 bar)	100 psi (6.9 bar)
System Manual	312862	312862
Pump Manual	311211	311211
Pump Lower Manual	311690	311690
Motor Manual	311238	311238
Pump Inlet Size	1-1/2 in NPT	1-1/2 in NPT
Pump Outlet Size	1 in NPT	1 in NPT
4 ft x 3/4 in Air Hose	15B554	15B554
6 ft x 1 in Fluid Hose	115042	115042
Instruction Manual	309351	309351

# **Accessories**

# **DataTrak**[™] **Conversion Kit**

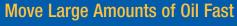
For converting NXT air motors to include the DataTrak module with runaway protection. Refer to manual 311486 for more details.

Part Number	Description
NXT306	Conversion kit for NXT3400 motors.









Tested to outperform and outlast all other pumps on the market – with its long-life design and intuitive, easy-to-use controls - the NXT Dura-Flo pump is the best value for the money. Fewer parts, faster repairs and long-lasting durability.



Intuitive, easy-to-use DataTrak control gives you pump diagnostics, material usage tracking and pump runaway protection.

#### **NXT Air Motor**

Modular design for easier maintenance with rugged body armor that won't rust or dent.

#### Modular Air Valves

Easy-to-repair valve eliminates stalling and contains de-icing controls.

# Integrated Air Controls

Easy-turn, lockable regulator is front-mounted for easy access. Compact and modular with built-in filtration.

# Piston Valve with Floating Piston Seal

For maximum pressure balance over a range of material viscosities.

#### **Typical Applications**

- · Fleet service facilities
- In-plant
- Mining

#### Typical Fluids Handled

• Petroleum- and synthetic-based oils (motor, gear and ATF)

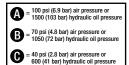






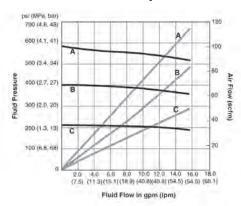
#### **Pump Performance**

#### Inlet Pressures:

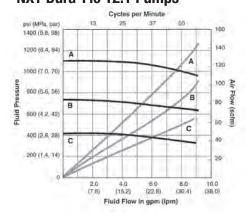


TEST FLUID: No. 10 Weight Oil

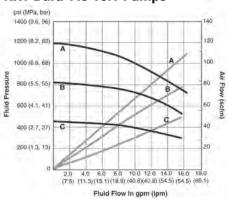
# **NXT Dura-Flo 6:1 Pumps**



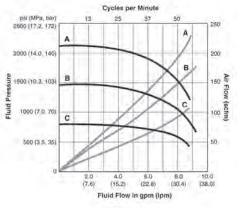
# **NXT Dura-Flo 12:1 Pumps**



#### **NXT Dura-Flo 10:1 Pumps**



#### **NXT Dura-Flo 23:1 Pumps**



# **NXT Dura-Flo Pumps**







nnical Specifications				
Fluid Pressure Ratio	6:1	10:1	12:1	23:1
Air Motor Effective Diameter	7.5 in (191 mm)	10.375 in (264 mm)	7.5 in (191 mm)	10.375 in (264 mm)
Maximum Fluid Working Pressure	620 psi (43 bar / 4.3 MPa)	1,180 psi (81 bar / 8.1 MPa)	1,190 psi (82 bar / 8.2 MPa)	1,725 psi (119 bar / 11.9 MPa)
Output per Cycle	1,000 cc	1,000 cc	580 cc	580 cc
Air Inlet	3/4 in NPT(F)	3/4 in NPT(F)	3/4 in NPT(F)	3/4 in NPT(F)
Fluid Inlet	2 in NPT(F)	2 in NPT(F)	2 in NPT(F)	2 in NPT(F)
Fluid Outlet	1-1/2 in NPT(F)	1-1/2 in NPT(F)	1-1/2 in NPT(F)	1-1/2 in NPT(F)
Air Operation Range	20 psi to 100 psi (1.4 bar to 7 bar)	20 psi to 100 psi (1.4 bar to 7 bar)	20 psi to 100 psi (1.4 bar to 7 bar)	20 psi to 75 psi (1.4 bar - 5.2 bar)
Maximum Recommended Pump Speed	60 cpm	60 cpm	60 cpm	60 cpm
Cycles per Gallon (Liter)	3.8 (1.0)	3.8 (1.0)	6.5 (1.72)	6.5 (1.72)
Wetted Parts	Stainless steel, CS, chrome, zinc, nickel, Buna-N, tungsten carbide, nylon, UHMWPE, leather, PTFE, PEEK	Stainless steel, CS, chrome, zinc, nickel, Buna-N, tungsten carbide, nylon, UHMWPE, leather, PTFE, PEEK	Stainless steel, CS, chrome, zinc, nickel, tungsten carbide, ductile iron, acetal	Stainless steel, CS, chrome, zinc, nickel, tungsten carbide, ductile iron, acetal
Sound Pressure Level	77 dB(A)	80 dB(A)	77 dB(A)	80 dB(A)
Sound Power Level	87 dB(A)	90 dB(A)	87 dB(A)	90 dB(A)
Approximate Weight	113 lb (51.3 kg)	132 lb (59.9 kg)	92 lb (41.7 kg)	102 lb (46.3 kg)
Instruction Manuals	System – 312862 Pump – 311833 Pump Lower – 311717 Motor – 311238	System – 312862 Pump – 311833 Pump Lower – 311717 Motor – 311238	System – 312862 Pump – 311826 Pump Lower – 311825 Motor – 311238	System – 312862 Pump – 311826 Pump Lower – 31182 Motor – 311238









# Ordering Information

# Oil Pump Packages with DataTrak

Package Number with DataTrak	247890	247894	247891	247895
Ratio	6:1	10:1	12:1	23:1
Mounting	255143 (Wall)	255143 (Wall)	255143 (Wall)	255143 (Wall)
Output per Cycle	1,000 cc	1,000 cc	580 cc	580 cc
Output at 60 CPM	17.4 gpm (65.9 lpm)	17.4 gpm (65.9 lpm)	9.2 gpm (34.8 lpm)	9.2 gpm (34.8 lpm)
Motor Size	NXT 3400	NXT 6500	NXT 3400	NXT 6500
Maximum Fluid Pressure	620 psi (42.7 bar)	1,180 psi (81.3 bar)	1,190 psi (82.1 bar)	1,725 psi (118.9 bar)
Maximum Air Input Pressure	100 psi (6.9 bar)	100 psi (6.9 bar)	100 psi (6.9 bar)	75 psi (5.2 bar)
System Manual	312862	312862	312862	312862
Pump Manual	311833	311833	311826	311826
Pump Lower Manual	311717	311717	311825	311825
Air Motor Manual	311238	311238	311238	311238
Pump Inlet Size	2 in NPT	2 in NPT	2 in NPT	2 in NPT
Pump Outlet Size	1-1/2 in NPT	1-1/2 in NPT	1-1/2 in NPT	1-1/2 in NPT
4 ft x 3/4 in Air Hose	15B554	15B554	15B554	15B554
6 ft x 1 in Fluid Hose	115042	115042	115042	115042
Instruction Manual	312862	312862	312862	312862

# Oil Pump Packages without DataTrak

Package Number without DataTrak	24D604	24D608	24D605
Ratio	6:1	10:1	12:1
Mounting	255143 (Wall)	255143 (Wall)	255143 (Wall)
Pump without DataTrak and Thermal Relief Kit	24D598	24D601	24D599
Output per Cycle	1,000 cc	1,000 cc	580 cc
Output at 60 CPM	17.4 gpm (65.9 lpm)	17.4 gpm (65.9 lpm)	9.2 gpm (34.8 lpm)
Motor Size	NXT 3400	NXT 6500	NXT 3400
Maximum Fluid Pressure	620 psi (42.7 bar)	1,180 psi (81.3 bar)	1,190 psi (82.1 bar)
Maximum Air Input Pressure	100 psi (6.9 bar)	100 psi (6.9 bar)	100 psi (6.9 bar)
System Manual	312862	312862	312862
Pump Manual	311833	311833	311826
Pump Lower Manual	311717	311717	311825
Air Motor Manual	311238	311238	311238
Pump Inlet Size	2 in NPT	2 in NPT	2 in NPT
Pump Outlet Size	1-1/2 in NPT	1-1/2 in NPT	1-1/2 in NPT
4 ft x 3/4 in Air Hose	15B554	15B554	15B554
6 ft x 1 in Fluid Hose	115042	115042	115042
Instruction Manual	312862	312862	312862











# Field-Proven, Energy-Efficient

Hydraulic Dyna-Star pumps provide reliable, quiet, ice-free performance at maximum pressure and low-flow rates and are up to three times more energy efficient than comparable compressed-air systems.

## **Built-In Reliability**

Self-lubricating vertical design for long life and reliable operation in high vibration environments.

#### **Quiet Hydraulic Motor**

No need for add-on mufflers.

# **High-Efficiency Motor**

Uses less hydraulic oil.

#### **Typical Applications**

- Service shops
- · Heavy-duty dealerships
- · Fleet services facilities
- In-plant
- Lube trucks
- Mining

#### Typical Fluids Handled

· Petroleum- and synthetic-based oils (motor, gear and ATF)

Technical Specifications				
Fluid Pressure Ratio	1:1	1:1	1/4:1	1:1 Stainless Steel
Pump Number	224741	224742	236753	237653
Applications	Oil dispensing	Oil dispensing	Bulk oil transfer	Antifreeze dispensing
Drum Size	Universal	55 gal (200 l) Bung- or cover-mounted	Universal	Universal
Maximum Input Pressure	1,500 psi (102 bar)	1,500 psi (102 bar)	1,500 psi (102 bar)	1,000 psi (70 bar)
Maximum Fluid Input Volume	3 gpm (11.4 lpm)	3 gpm (11.4 lpm)	3 gpm (11.4 lpm)	3 gpm (11.4 lpm)
Maximum Output Flow Rate	3 gpm (11.4 lpm)	3 gpm (11.4 lpm)	10 gpm (37.9 lpm)	3 gpm (11.4 lpm)
Maximum Recommended CPM	60	60	60	60
Maximum Fluid Output Pressure	1,500 psi (102 bar)	1,500 psi (102 bar)	375 psi (25.1 bar)	1,500 psi (102 bar)
Hydraulic Supply Inlet	3/8 in NPT	3/8 in NPT	3/8 in NPT	3/8 in NPT
Hydraulic Return Outlet	3/4 in NPT	3/4 in NPT	3/4 in NPT	3/4 in NPT
Fluid Outlet	1/2 in NPT	1/2 in NPT	1/2 in NPT	1/2 in NPT
Fluid Inlet	1-1/2 in NPT	1-1/2 in NPT	1-1/2 in NPT	3/4 in NPT
Maximum Incoming Fluid Temp.	130°F (54°C)	130°F (54°°C)	130°F (54°C)	130°F (54°C)
Wetted Parts	Steel, copper, leather	Steel, copper, leather	Aluminum, steel, nitrile, polyurethane	Steel, copper, leather
Sound Pressure Level	77 dB(A)	77 dB(A)	77 dB(A)	77 dB(A)
Approximate Weight	24 lb (10.9 kg)	24 lb (10.9 kg)	48 lb (21.8 kg)	24 lb (10.9 kg)
Instruction Manual	308155	308155	308390	308155









# Ordering Information

# **Dyna-Star Hydraulic Pumps**

Part Number	Description
224741	1:1 Universal oil pump
224742	1:1 Oil pump for 55 gal (400 lb) drum size, bung- or cover- mounted
236753	1/4:1 Universal oil pump
237653	1:1 Universal stainless steel oil pump

#### **Accessories**

# **Drum Covers**



Part Number	Description
200326	For 55 gal (200 I) drums
204574	For 16 gal (60 l) drums
222058	For 5 gal (20 I) pails
160754	For 5 gal (20 l), 16 gal (60 l) and 55 gal (200 l) bung-mounted pumps

#### **Hydraulic Fluid Controls**

Required for each pump.

n ₽	Part Number	Description
	236864	Dyna-Star fluid controls [1,500 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.
	237904	1:1 Dyna-Star thermal relief valve, 1,600 psi (110 bar)

# **Wall-Mounting Brackets**



Part Number	Description	
203987	For stubby/universal 1:1 Dyna-Star pump	
236778	For stubby/universal 1/4:1 Dyna-Star pump	









Hydraulic Power-Star pumps provide reliable, quiet, ice-free performance at maximum pressure and low flow rates and are up to three times more energy efficient than comparable compressed-air systems.



#### **Built-In Reliability**

Self-lubricating vertical design for long life and reliable operation in high vibration environments.

# **Quiet Hydraulic Motor**

No need for add-on mufflers.

## **High-Efficiency Motor**

Uses less hydraulic oil.

#### **Typical Applications**

- Service shops
- · Heavy-duty dealerships
- · Fleet services facilities
- In-plant
- · Lube trucks
- Mining

#### Typical Fluids Handled

• Petroleum- and synthetic-based oils (motor, gear and ATF)

echnical Specifications		
Fluid Pressure Ratio	1:1	
Pump Number	236754	
Applications	Bulk oil transfer	
Drum Size	Universal	
Maximum Input Pressure	1,500 psi (102 bar)	
Maximum Fluid Input Volume	12 gpm (45.4 lpm)	
Maximum Output Flow Rate	12 gpm (45.4 lpm)	
Maximum Recommended CPM	60	
Maximum Fluid Output Pressure	1,500 psi (102 bar)	
Hydraulic Supply Inlet	3/4 in NPT	
Hydraulic Return Outlet	1-1/4 in NPT	
Fluid Outlet	1/2 in NPT	
Fluid Inlet	1-1/2 in NPT	
Maximum Incoming Fluid Temp.	130°F (54°C)	
Wetted Parts	Iron, steel, stainless steel, nitrile, polyurethane	
Sound Pressure Level	78 dB(A)	
Approximate Weight	100 lb (45.4 kg)	
Instruction Manual	308391	









# **Power-Star Hydraulic Pumps**

Part Number	Description
236754	1:1 Universal oil pump

#### **Accessories**

# **Drum Covers**



Part Number	Description
200326	For 55 gal (200 l) drums
204574	For 16 gal (60 l) drums
222058	For 5 gal (20 I) pails
160754	For 5 gal (20 l), 16 gal (60 l) and 55 gal (200 l) bung-mounted pumps

# **Hydraulic Fluid Controls**

Required for each pump.



Part Number	Description
236865	Power-Star fluid controls [1,500 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.

# **Wall-Mounting Bracket**



Part Number	Description
236778	For stubby/universal 1/4:1 Power-Star pump

# **Manually Operated Pumps**









**Ordering Information** 

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

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



^{*}Hydraulic; can be used for gear oil dispensing.









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

Mounts on top of standard 5 gal (20 l) pail (pail not included). Dispenses 1.6 oz to 1.9 oz. (47.3 ml to 56.2 ml) per stroke.



Package Number	226289	
Fluids Handled	Gear lube	
Fluid Hose	4 ft (1.2 m)	
Instruction Manual	306875	

## Pumping Bulk Lubricants from 16 gal (60 l) or 55 gal (200 l) Drums*

All pumps come with suction tube and bung adapter.



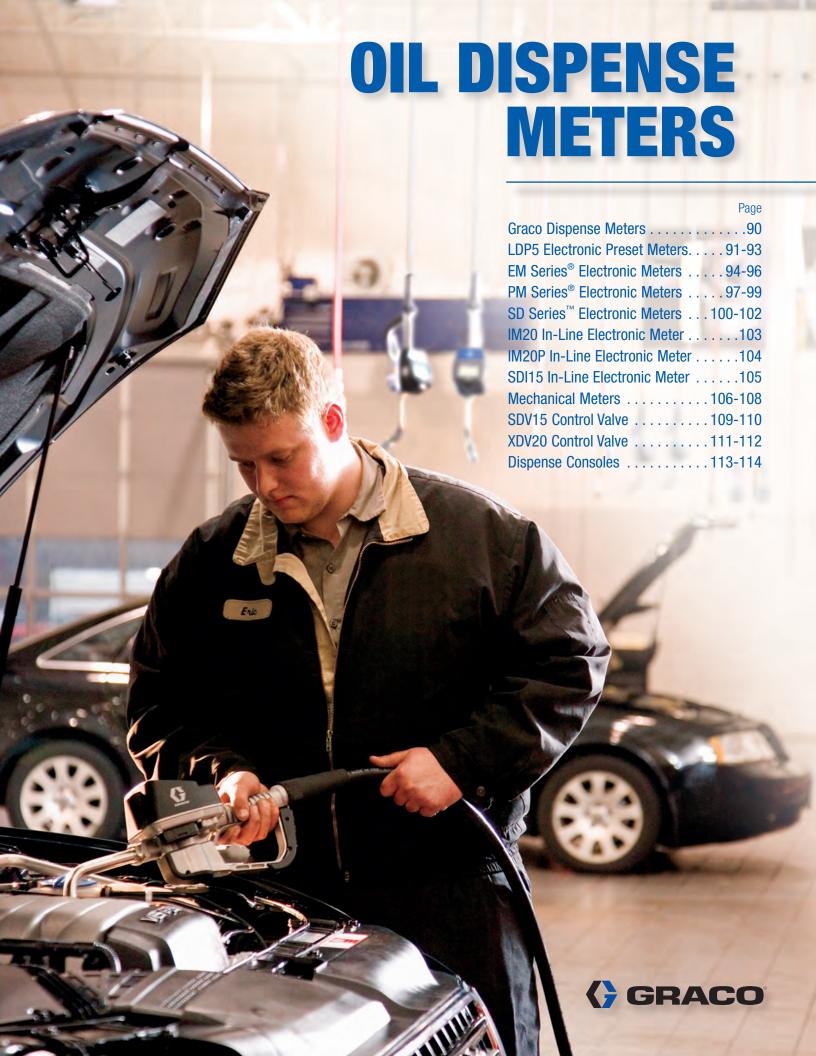
Package Number	114829	226290
Type of Pump	Lever ⁽¹⁾	Rotary ⁽²⁾
Fluids Handled	Petroleum-based products, antifreeze	Petroleum-based products
Delivery Rate	0.1 gal (0.4 l) per downstroke	1 gal (3.7 l) per 18 cycles
Fluid Hose	-	-
Instruction Manual	-	306876

^{*}Drums not included.

¹ Telescopic suction tube mounts 2 in NPT bung opening of 16 gal (60 l) or 55 gal (200 l) drum. Package includes bung adapter and spout outlet

² Package has adjustable 2 in 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

Notes	



# **Graco Dispense Meters**

	Fluid	Manual/ Preset	Maximum Working Pressure	Maximum Flow Rate	Intended Use	Warranty	Reference Pages
LDP5 Electronic Preset Meters	Petroleum- and synthetic-based oils (motor, gear and ATF)     Antifreeze	Preset	1,000 psi (69 bar)	5 gpm (19 lpm)	Indoor	5 years overall (2 years electronics)	91-93
EM Series Electronic Meters	Petroleum- and synthetic-based oils (motor, gear and ATF)     Antifreeze	Manual	1,500 psi (103.4 bar)	20 gpm (76 lpm)	Indoor/ Outdoor	5 years overall (3 years electronics)	94-96
PM Series Electronic Meters	Petroleum- and synthetic-based oils (motor, gear and ATF)     Antifreeze	Preset	1,500 psi (103.4 bar)	20 gpm (76 lpm)	Indoor/ Outdoor	5 years overall (3 years electronics)	97-99
SD Series Electronic Meters	Petroleum- and synthetic-based oils (motor, gear and ATF)     Antifreeze	Manual/ Preset	1,500 psi (103.4 bar)	14 gpm (53 lpm)	Indoor/ Limited Outdoor	7 years overall (3 years electronics)	100-102
IM20 In-Line Meters	Petroleum- and synthetic-based oils (motor, gear and ATF)     Antifreeze	In-Line	1,500 psi (103.4 bar)	20 gpm (76 lpm)	Indoor/ Outdoor	5 years overall (3 years electronics)	103
IM20P In-Line Meter	Petroleum- and synthetic-based oils (motor, gear and ATF)     Antifreeze	In-Line	1,500 psi (103.4 bar)	20 gpm (76 lpm)	Indoor/ Outdoor	1 year	104
SDI15 In-Line Meters	Petroleum- and synthetic-based oils (motor, gear and ATF)     Antifreeze     Diesel exhaust fluid	In-Line	1,500 psi (103.4 bar)	15 gpm (56.8 lpm)	Indoor	7 years overall (3 years electronics)	105
Mechanical Meters	Petroleum- and synthetic-based oils (motor, gear and ATF)     Antifreeze	Manual/ Preset	1,500 psi (103.4 bar)	8 gpm (30 lpm)	Indoor/ Outdoor	5 years	106-108
SDV15 Control Valves	Petroleum- and synthetic-based oils (motor, gear and ATF)     Antifreeze	N/A	1,500 psi (103.4 bar)	15 gpm (56.8 lpm)	Indoor/ Outdoor	7 years	109-110
XDV20 Control Valves	Petroleum- and synthetic-based oils (motor, gear and ATF)     Antifreeze	N/A	1,500 psi (103.4 bar)	20 gpm (76 lpm)	Indoor/ Outdoor	7 years	111-112











For use in small service shops, fast lubes and low-volume in-plant applications.

## Easy-to-Read LCD Screen

Keeps dispenses precise.

## **Operator Controls**

Displays in quarts, pint, gallons or liters. Durable switches for long life.



Fluid Swivel

1/2 inch fluid inlet.



Choose from rigid or flexible extensions with automatic thermal compensating nozzle.

#### Rugged Meter Body

Superior impact resistance and long life.

#### Comfortable Handle

Ergonomically designed for operator comfort. Two-finger trigger with latching on preset models.

# Typical Applications

- · Automotive dealerships
- · Fast lube centers
- Service shops
- · Fleet services facilities
- In-plant

#### Typical Fluids Handled

- Petroleum- and synthetic-based oils (motor, gear and ATF)
- Antifreeze

recrifical Specifications	
Flow Danga*	

Flow Range*	0.1 gpm to 5 gpm (0.4 lpm to 19 lpm)
Maximum Working Pressure	1,000 psi (69 bar)
Units of Measure	Quarts, pints, gallons, liters (factory set to quarts)
Accuracy**	+/- 0.5%
Inlet	1/2 in NPT
Outlet	1/2 in NPT
Maximum Totalizer	999,999 gallons or liters
Maximum Recorded Dispense	999.9 units
Maximum Preset Volume	999.9 units (LDP5 only)
Operating Temperature Range	32°F to 120°F (0°C to 48.8°C)
Storage Temperature Range	-30°F to 120°F (-34.4°C to 48.8°C)
Outdoor Use	No
Battery	9 volt alkaline
Battery Life	One year
Wetted Parts	SST, nitrile rubber, zinc, CS, LCP
Meter Pressure Loss*	90 psi (6.2 bar) @ 5 gpm (19 lpm)
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)
Weight	3 lb (1.36 kg)
Warranty	Five years overall, two years electronics
Instruction Manual	312668

^{*}Tested in 10W oil at 70°F. Flow rates vary with fluid pressure, temperature, viscosity, inlet and nozzle 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 recalibration. Out-of-box accuracy ±1.25%. Not recommended for in-line installation.











# >>> Ordering Information

# **LDP5 Electronic Preset Meters**

Automatic nozzle included

	Extension Inlet in	Inlot in (mm)	n (mm) Part Number	Package Includes		
	EXTENSION	Inlet in (mm)	Part Number	Trigger Guard	Swivel Cover	
A	Flexible		258694	Yes	Yes	
	Rigid	1/2 (13)	256216	Yes	Yes	
	Flexible		255277	No	No	

# **Nozzle Extension Kits**

Extension	Fluid	Nozzle Description	Part Number
	Oil/Antifreeze	Automatic, thermally compensating	239949
Rigid	Gear lube	Automatic, thermally compensating	239950
	Gear lube	Automatic	238887
Flexible	Oil/Antifreeze	Automatic, thermally compensating	239951
Nozzle Only	Oil/Antifreeze/Gear lube	Automatic, thermally compensating	239829
INUZZIE UTIIY	Oil/Antifreeze/Gear lube	Automatic	238371











# **EM5/PM5 to LD Series Upgrade Kits**

	Part Number	Description
F	257350	EM5 to LDM5
P	257351	PM5 to LDP5

#### **Accessories**

	Part Number	Description
	240416	Inlet swivel
	114017	Inlet filter, 80 mesh
-0	240453	Valve repair kit

# **Protective Boots with Trigger Guards**

Part Number	Description
247759	Black
243835	Red
243836	Blue
243837	Green
247760	Yellow

#### **Swivel Covers**

	Part Number	Description
a. A. C. O.	191294	Black
GRAÇO	191287	Red
CRACO	191288	Blue
CHACO	191295	Yellow

# **EM® Series Electronic Manual Dispense Meters**











# **Low-Flow and High-Flow Manual Meters**

Building on the heritage of Graco's first electronic meter, the EM Series features a robust design at an affordable price. Our legacy valve handle features a long-life valve design for years of dependable service. These meters are weather-rated and impact-resistant to withstand the harshest shop conditions.

#### Twist-Close Nozzle Prevents Leaking

Multiple extensions available including rigid, flexible and gear lube.

#### **High-Flow Rates**

Capable of up to 20 gpm.

#### Long Battery Life

Features upgraded electronics and easily replaceable AAA batteries.

#### **Prevent Accidental Dispenses**

Easy-to-hold locking handle.

#### Proven in Harsh Conditions

Sealed electronics (IP69K) are protected against direct pressure washing and dust.

#### Legacy Valve

1/2 and 3/4 inch inlets, compatible with oil, ATF, antifreeze and gear lube.

#### **Typical Applications**

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

#### Typical Fluids Handled

- Petroleum- and synthetic-based oils (motor, gear and ATF)
- Antifreeze

hnical Specifications	EM8	EM20		
Flow Range	0.25 to 8 gpm (0.95 to 30.3 lpm)	0.25 to 20 gpm (0.95 to 75.7 lpm)		
Maximum Operating Pressure	1,500 psi	(102 bar)		
Unit of Measure	Quarts, gallor	ns, pints, liters		
Accuracy/Repeatability	±0.5%			
Inlet	1/2 NPT 1/2 NPT or 3/4 N			
Outlet	3/4 straight thread O-ring boss	7/8 straight thread O-ring boss		
Maximum Totalizer	19,99	19,999 units		
Maximum Recorded Dispense	19,999 units			
Operating Temperature Range	-22°F to 180°F (-30°C to 82°C)			
Storage Temperature Range	-40°F to 185°F	(-40°C to 85°C)		
Outdoor Use	Yes – IP69k as p	per DIN 40050-9		
Battery	2 (AAA) alkaline	or 2 (AAA) lithium		
Wetted Parts	Aluminum, stainless steel, carbon s	teel, acetal, nitrile rubber, Geolast™		
Meter Pressure Loss*	30 psi @ 6 gpm	85 psi @ 12 gpm		
Dimensions	13 in L x 3.5 in W x 5.25 in H (33 cm L x 9 cm W x 13.3 cm H)			
Weight	3 lbs (1.36 kg)	3.1 lbs (1.39 kg)		
Warranty	Five years overall, three years e	Five years overall, three years electronics and 1 year wear parts		
Instruction Manual	3A5	588		

^{*} Tested in 10W oil at 70°F (21°C). Flow rate varies with fluid pressure, temperature, viscosity, inlet fitting size and nozzle type. Geolast is a registered trademark of Advanced Elastomer Systems.



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# **EM® Series Electronic Manual Dispense Meters**

# Ordering Information

		Extension	Inlet in (mm)	Nozzle Type	Part Number
		Flexible	1/2 (13)	Non-drip, manual open/close	25C904
		T lexible		Automatic, non-drip, quick-close	26C526
EM8		Rigid		Non-drip, manual open/close	25C903
		riigid		Automatic, non-drip, quick-close	26C525
		Gear		Non-drip, quick-close	25C905
		Flexible	1/2 (13)	High-flow, non-drip, quick-close	25C915
EM20			3/4 (19)	riigii-iiow, riori-arip, quiok-ciose	25C918
EM		Rigid	1/2 (13)	High-flow, non-drip, quick-close	25C916
			3/4 (19)	nigir-now, non-unp, quiok-ciose	25C919

		Inlet in (mm)	Part Number
EM8		1/2 (13)	25D433
EM20	<b>S</b>	1/2 (13)	25D436
EM		3/4 (19)	25D437

# **EM® Series Electronic Manual Dispense Meters**











# >>> Ordering Information

# **Nozzle and Extension Kits**

	Extension	Fluid	Nozzle Description	Part Number	Compatible Meters
			Non-drip, manual open/close	26C267	EM8
	Rigid	Oil	Automatic, non-drip, quick-close	255852	EM8
			Non-drip, quick-close	255921	EM20
	Rigid	Gear lube	Non-drip, quick-close	255854	EM8
			Non-drip, manual open/close	26C268	EM8
	Flexible	Oil	Automatic, non-drip, quick-close	255853	EM8
			Non-drip, quick-close	255859	EM20
	Nozzle Only	Oil/Antifreeze	Non-drip, manual open/close	17T207	EM8
	Nozzle Only	Oil/Antifreeze	Non-drip, quick-close	255793	EM20
9	Nozzle Only	Gear lube	Non-drip, quick-close	255470	EM8
	Flexible	Oil/Antifreeze	Extension only, 2 ft length	131733	EM8

#### **Accessories**

Part Number	Description			
25D934	Electronic control replacement			
129876	Black impact guard for EM8 or EM20			
25D936	Battery kit: includes AAA batteries, Torx screws and bezel seal			
100896	3/4 NPT(M) x 1/2 NPT(F) adapter			











# **Heavy-Duty Preset Meters for the Toughest Jobs**

Use Graco's PM8 and PM20 electronic preset meters to dispense fluids quickly, reliably and accurately to vehicles, trucks, yellow iron machines and more in the most challenging, extreme environments. Designed with high-quality robust materials to protect key components, these powerful meters can take a beating without fail for optimal productivity.

#### Proven in Harsh Conditions

Sealed electronics (IP69K) are protected against direct pressure washing and dust.

#### Long Battery Life

Features four easily-replaceable AA batteries.

#### High Flow Rates

Capable of up to 20 gpm (75.7 lpm).



#### Long-Life Valve Design

Poppet design offers exceptional valve life for heavy-usage applications.

#### Easy Valve Operation

Ergonomic four-finger trigger for user comfort protected by a robust full-length trigger guard.

## Durable Cast Body

Designed for heavy-duty and harsh applications.

#### **Typical Applications**

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

#### Typical Fluids Handled

- Petroleum- and synthetic-based oils (motor, gear and ATF)
- · Antifreeze/coolant

nnical Specifications	PM8	PM20		
Flow Range	0.25 to 8 gpm (0.95 to 30.3 lpm)	0.25 to 20 gpm (0.95 to 75.7 lpm)		
Maximum Operating Pressure	1,500 ps	i (102 bar)		
Unit of Measure	Quarts, gallor	ns, pints, liters		
Accuracy/Repeatability	±0	.5%		
Inlet	1/2 NPT	1/2 NPT or 3/4 NPT		
Outlet	3/4 straight thr	ead O-ring boss		
Maximum Dispense	19,999	9.9 units		
Maximum Preset Dispense	19,999 units			
Operating Temperature Range*	-20°F to 125°F (-29°C to 52°C)			
Storage Temperature Range	-40°F to 185°F	(-40°C to 85°C)		
Outdoor Use	Yes – IP69k as	per IEC 60529		
Battery	4 (AA) alkaline	or 4 (AA) lithium		
Wetted Parts	Aluminum, stainless steel, carbon	steel, acetal, nitrile rubber, Geolast™		
Meter Pressure Loss**	60 psi @ 6 gpm	150 psi @ 12 gpm		
Dimensions	14.25 in L x 4.1 in W x 7.2 in H (36.2 cm L x 10.4 cm W x 18.3 cm H)			
Weight	5.2 lbs	(2.4 kg)		
Warranty	Five years overall, three years electronics and 1 year wear parts			
Instruction Manual	3A8307			

*Lithium ion batteries are required if operating below 0°F (-18°C). **Tested in 10W oil at 70°F (21°C). Flow rate varies with fluid pressure, temperature, viscosity, inlet fitting size and nozzle type. Geolast is a registered trademark of Advanced Elastomer Systems.



# **PM[™] Series Electronic Preset Dispense Meters**









# Ordering Information

		Fluid	Extension	Flow Range gpm (lpm)	Inlet in (mm)	Part Number
		Oil	Flexible	0.25-8 (1-30) 0.25-5 (1-19)	1/2 (13)	273157
	B	Antifreeze	T TEALDIE			25U086
PM8	<b>3</b> 0	Oil				273156
PN		Antifreeze	Rigid			25U085
		Gear Lube	Rigid			273158
		Oil	Flexible	0.25-20	1/2 (13)	273166
PM20	B				3/4 (19)	273168
		- On	Rigid	(1-76)	1/2 (13)	273165
	B				3/4 (19)	273167













# **Nozzle and Extension Kits**

	Extension	Fluid	Nozzle Description	Part Number	Compatible Meters
		Non-drip, manual open/close	26C267	PM8	
	Rigid	Oil	Automatic, non-drip, quick-close	255852	PM8
			Non-drip, quick-close	255857	PM20
	Rigid	Gear lube	Non-drip, quick-close	255854	PM8
			Non-drip, manual open/close	26C268	PM8
	Flexible Oil	Oil	Automatic, non-drip, quick-close	255853	PM8
			Non-drip, quick-close	255858	PM20
	Nozzle Only	Oil/Antifreeze	Non-drip, manual open/close	17T207	PM8
	Nozzle Only	Oil/Antifreeze	Non-drip, quick-close	255461	PM20
9	Nozzle Only	Gear lube	Non-drip, quick-close	255470	PM8
	Flexible	Oil/Antifreeze	Extension only, 2 ft length	131733	PM8

#### **Accessories**

Part Number	Description			
18F169	Electronic control replacement			
273181	Black impact guard for PM8 or PM20			
25D906	Replacement inlet screen for oil/gear lube			
25U000	Replacement inlet screen for antifreeze			
18F174	Valve replacement for oil/gear lube			
18F175	Valve replacement for antifreeze			
18F170	Replacement gasket seals for electronics			



GRACO









# **Premium Quality and Performance with Ergonomic Design**

Graco's premium SD meters were designed from the ground up to provide the best user experience. These robust meters feature high flow, improved ergonomics and a large high-contrast LCD screen to make viewing dispense amounts easy in all lighting conditions.



#### Large LCD High-Contrast Display

High-contrast screen for reading in all lighting conditions with easy setup and navigation. See what fluid the meter is setup for and exactly how much you are dispensing.

#### Available in Two Models

Manual or preset options. Preset is compatible with  $Pulse^{TM}$  FC and upgradeable to  $Pulse^{TM}$  Pro.

#### High Flow

Available in two models -8 gpm (30 lpm) or 18 gpm (68 lpm).

#### **Durable Cast Body**

Designed for heavy duty and harsh applications.

#### Automatic Quick-Close Nozzle

Choose from rigid or flexible extensions with non-drip performance.

#### Long-Life Valve Design

Cartridge design for fewer and easier repairs.

#### Ergonomic Handle Design

Four-finger trigger and easy-to-use button pad reduce worker fatigue.

#### **Typical Applications**

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

#### Typical Fluids Handled

- Petroleum- and synthetic-based oils (motor gear, and ATF)
- Antifreeze
- Windshield wash

chnical Specifications	
Flow Range*	0.25 gpm to 18 gpm (0.9 lpm to 68 lpm)
Maximum Working Pressure	1,500 psi (103.4 bar)
Units of Measure	Pints, quarts, gallons, liters (factory set to quarts)
Metered Dispense Valve Accuracy**	+/- 0.5%
Inlet	1/2 in–14 NPT or 3/4 in–14 NPT
Outlet	3/4 in–16 straight thread O-ring Boss
Maximum Recorded Dispense	9999 units (factory set in quarts)
Operating Temperature Range	4°F to 158°F (-20°C to 70°C)
Storage Temperature Range	-40°F to 158°F (-40°C to 70°C)
Battery Life***	6 months
Wetted Parts	Aluminum, stainless steel, PBT, nitrile rubber, zinc plated carbon steel, nickel plated carbon steel
Dimensions (without extension)	13 in L x 3.75 in W x 5.75 in H (33 cm x 9.5 cm x 14.6 cm)
Weight	5.3 lb (2.4 kg)
Warranty	Five years overall, three years electronics
Instruction Manual	3A6711 and 3A6673

^{*}Tested in 10W motor oil. Flow rates vary with fluid pressure, temperature and viscosity.

^{**}At 2.5 gpm (9.5 lpm), at 70°F (21°C), with 10-weight oil and 1 gallon dispensed. May require calibration.

^{***}Battery required to meet life expectancy: Energizer® Alkaline E91.













# **SD Electronic Meters**





	Dispense Type	Flow Range gpm (lpm)	Fluid	Extension	Inlet in (NPT)	Part Number
			0:1	Rigid	1/2	26C384
			Oil	Flexible	1/2	26C354
SDP8	Preset (Pulse FC-enabled)	0.25–8 (1–30)	Antifreeze	Rigid	1/2	26C385
0,	(raise re enasiea)	(. 55)	Anuireeze	Flexible	1/2	26C355
			Gear lube	Rigid	1/2	26C358
				Flexible	1/2	26C357
SDP18	Preset (Pulse FC-enabled)	0.25–18 (1–68)	Oil	Flexible	3/4	26C361
S			OII -	Rigid	3/4	26C360
				Rigid	1/2	26C356
	Manual		Oil -	Flexible	1/2	25M406
		0.25–8		Rigid	1/2	25M404
SDIM8			Antifreeze	Flexible	1/2	25M407
SD	Manual	(1–30)		Rigid	1/2	25M405
			Gear Lube	Rigid	1/2	25M413
			Windshield Wash	Rigid	1/2	25M415
				Flexible	3/4	25M417
SDM18	Manual	0.25–18	Oil	Rigid	3/4	25M416
SDN	IVIdHUdi	(1–68)	UII	Flexible	1/2	25M411
				Rigid	1/2	25M410

# **Nozzle and Extension Kits**

	Extension	Fluid	Nozzle Description	Part Number	Compatible Meters
(TEXAN)		Oil	Automatic, non-drip, quick-close	255852	SDM8/SDP8
	Rigid	Antifreeze	Non-drip, manual open/close	26C267	SDM8/SDP8
***		Oil/Antifreeze	High-flow, non-drip, quick-close	255857	SDM18/SDP18
	Rigid	Gear lube	Non-drip, quick-close	255854	SDM8/SDP8
		Oil	Automatic, non-drip, quick-close	255853	SDM8/SDP8
	Flexible	Antifreeze	Non-drip, manual open/close	26C268	SDM8/SDP8
		Oil/Antifreeze	High-flow, non-drip, quick-close	255858	SDM18/SDP18
THE STATE OF THE S	Nozzle Only	Oil	Automatic, non-drip, quick-close	17R220	SDM8/SDP8
	Nozzle Only	Gear lube	Non-drip, quick-close	255470	SDM8/SDP8
	Nozzle Only	Oil/Antifreeze	Non-drip, manual open/close	17T207	SDM8/SDP8
	Flexible	Oil/Antifreeze	Extension only, 2 ft length	131733	SDM8/SDP8
	Rigid	Windshield wash	Extension, nozzle	273079	SDM8













# >>> Ordering Information

# **Filter Kits for SD Series Meters**

 Part Number	Description
255885	Kit includes filters/ strainers, spacers and 0-rings

# **Swivel Covers**

	Part Number	Description
	15T366	Black
	15T367	Red
	15T368	Blue
	15T369	Green
<b>-</b>	15T370	Yellow

# **Impact Protection**

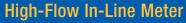
	Part Number	Description
8	131226	Pulse/SD meter boot











Graco's IM20 in-line meter is weather-rated and shock-resistant, protecting the electronics from intense, high-pressure cleaning and mechanical vibration common in industrial applications.



# Easy-to-Read LCD

Simple operator control. Measures in quarts, gallons, pints and liters.

#### Easy Battery Replacement

Long-lasting, replaceable AAA batteries.



#### Sealed Electronics

IP69K-rated meter. Electronics are safe from pressure washing and dusty environments.

#### Tracks Totals in Two Modes

Reset total for a periodic dispense history and non-reset total for the meter's total dispense history.

#### **Typical Applications**

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

#### Typical Fluids Handled

- Petroleum- and synthetic-based oils (motor, gear and ATF)
- Antifreeze

Flow Range*	0.25 to 20 gpm (0.95 to 75.7 lpm)	
Maximum Working Pressure	1,500 psi (102 bar)	
Unit of Measure	Quarts, pints, gallons, liters (factory set to quarts)	
Accuracy/Repeatability	±0.5%	
Inlet/Outlet	3/4 NPT	
Maximum Totalizer	19,999 units	
Maximum Recorded Dispense	19,999 units	
Operating Temperature Range	-22°F to 180°F (-30°C to 82°C)	
Storage Temperature Range	-40°F to 185°F (-40°C to 85°C)	
Outdoor Use	Yes - IP69k as per DIN 40050-9	
Battery	2 (AAA) alkaline or (2) AAA lithium	
Wetted Parts	Aluminum, stainless steel, carbon steel, acetal, nitrile rubber, Geolast™	
Meter Pressure Loss*	35 psi @ 12 gpm	
Dimensions	4.2 in L x 3.4 in W x 3.2 in H (10.7 cm L x 8. cm W x 8.1 cm H)	
Weight	1 lb. 4 oz. (0.57 kg)	
Warranty	Five years overall, three years electronics	
Instruction Manual	3A5588	

*Tested in 10W oil at 70°F (21°C). Flow rate varies with fluid pressure, temperature, viscosity, inlet fitting size and nozzle type. Geolast is a registered trademark of Advanced Elastomer Systems.

# Ordering Information

Part Nur	mber	Description
2508	41	IM20 high-flow, high-pressure in-line meter









# Robust Electric In-Line Meter for Wired Indoor and Outdoor Applications

The IM20P wired electronic meter delivers precise in-line dispenses for in-plant, industrial and other applications. Its heavy-duty aluminum exterior and sealed electronics protect against corrosion inside or outside the plant. Designed and manufactured by a proven leader in meter technology, it's capable of flow rates up to 20 gpm (75.7 lpm) for optimal performance.

IM20P



Flow rates up to 20 gpm (75.7 lpm) for faster dispense.

## Rugged Aluminum Body

Remains corrosion free in harsh environments for years of trouble-free service.

#### Large Inlet and Outlet Porting

Minimal pressure drop to increase production.

# Sealed Electronics

Meters are suitable for indoor or outdoor use. IP69K rated.

#### Wired Convenience

Easily integrated with PLC (programmable logic controller).

#### **Typical Applications**

- · Heavy-duty mobile service trucks
- Mining
- In-plant

#### Typical Fluids Handled

- Petroleum- and synthetic-based oils (motor, gear and ATF)
- Antifreeze/coolant

# Ordering Information

Part Number	Description	
133480	IM20P high-flow, high-pressure in-line pulser meter	

Flow Range*	0.25 gpm to 20 gpm (0.95 lpm to 75.7 lpm)
Maximum Working Pressure	1,500 psi (10 MPa, 102 bar)
Units of Measure	User-defined based on pulse output
Accuracy	+/- 0.5%
Inlet/Outlet	3/4 in NPT
Operating Temperature Range	-22°F to 180°F (-30°C to 82°C)
Storage Temperature Range	-40°F to 185°F (-40°C to 85°C)
Outdoor Use	Yes – IP69K as per DIN 40050-9
Operating Voltage	12-24 VDC
Operating Current	26–51 mA
Wire Connection	2-wire (18 ga) PNP or NPN
Wetted Parts	Aluminum, acetal, nitrile, rubber
Meter Pressure Loss*	35 psi (2.41 bar) @ 12 gpm (45.4 lpm)
Dimensions	5.8 in L x 3.4 in W x 2.9 in H (14.7 cm L x 8.6 cm W x 7.4 cm H)
Weight	1.3 lb (0.59 kg)
Warranty	One year
Instruction Manual	3A8625

^{*}Tested in 10W oil at 70°F. Flow rate varies with fluid pressure, temperature, viscosity, inlet fitting size and nozzle type.

















Powered by two AA alkaline batteries.

#### Tracks Totals in Two Modes

Reset total for a periodic dispense history and non-reset total for the meter's total dispense history.

#### **Typical Applications**

- · Automotive dealerships
- · Fast lube centers
- · Service shops
- · Heavy-duty dealerships
- · Fleet services facilities
- In-plant
- Mining

#### Typical Fluids Handled

- Petroleum- and synthetic-based oils (motor, gear and ATF)
- Antifreeze
- · Windshield washer fluid
- · Diesel exhaust fluid



Remains corrosion free in hard environments for years of trouble-free service.

Rugged Stainless Steel Body

# Large, Easy-to-Read LCD

Simple operator controls and measures in pints, quarts, liters or gallons.

hnical Specifications	
Flow Range*	0.5 gpm to 15 gpm (1.9 lpm to 57 lpm)
Maximum Working Pressure	1,500 psi (103 bar)
Units of Measure	Quarts, pints, gallons, liters (factory-set to quarts)
Accuracy	± 0.5%
Inlet/Outlet	1/2 NPT
Maximum Totalizer	99,999
Maximum Recorded Dispense	999.99
Operating Temperature Range	-4°F to 122°F (-20°C to 50°C)
Storage Temperature Range	-13°F to 122°F (-25°C to 50°C)
Outdoor Use	No
Battery	2AA alkaline
Wetted Parts	Nitrile rubber, SST and Geolast
Meter Pressure Loss*	22 psi (1.5 bar) @ 14 gpm (53 lpm)
Dimensions	5 in L x 3 in W x 2.75 in H (12.7 cm L x 7.6 cm W x 7 cm H)
Weight	1.8 lb (0.8 kg)
Warranty	Seven years overall, three years electronics
Instruction Manual	313048

^{*}Tested in 10W oil at 70°F. Flow rates vary with fluid pressure, temperature and viscosity.

# Ordering Information

#### **Meters**

Part Number	Description	
247453	SDI15 medium/high pressure – medium-/high-flow in-line meter for petroleum- and synthetic-based oils, antifreeze and windshield washer fluid	
24G738	SDI15 medium/high pressure – medium-/high-flow in-line meter for diesel exhaust fluid applications (BSPP)	

#### **Accessories**

	Part Number	Description
-	108458	Shutoff ball valve 1/2 NPT(F)
	223179	Strainer kit 1/2 NPT(F) 1/2 NPT(M)











#### **Typical Applications**

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

#### Typical Fluids Handled

- · Petroleum- and synthetic-based oils (motor, gear and ATF)
- Antifreeze

Flow Range*	0.28 gpm (1.0 lpm) to 8 gpm (30.2 lpm)	
Maximum Working Pressure	1,500 psi (103 bar)	
Units of Measure	Quarts, gallons, liters	
Accuracy	± 1%	
Inlet	1/2 in NPT	
Outlet	3/4-16 straight thread O-ring boss	
Maximum Totalizer	99,999 units	
Maximum Recorded Dispense	60 gallons	
Operating Temperature Range	-50°F to 160°F (-45°C to 70°C)	
Outdoor Use	Yes	
Wetted Parts	Brass, aluminum, SST, TPE	
Meter Pressure Loss*	30 psi (2.1 bar) @ 4 gpm (15 lpm)	
Dimensions	11.5 in L x 5 in W x 6.3 in H (29.2 cm L x 12.7 cm W x 16 cm F	
Weight	3.5 lb (1.6 kg)	
Warranty	Five years	
Instruction Manual	333492	

^{*}Tested with 10W motor oil. Minimum/maximum flow rates will vary with fluid viscosity.











# Ordering Information

# **Manual Meters**

Extension	Model Description	Part Number
Bare	4/16 Liter	24U956
Daie	4/16 Quart	24U959

# **Manual Meter Packages**

	Extension	Model Description	Part Number	Replacement Nozzle/Extension Kit
	Flexible	4/16 Liter	24V043	26C268
		4/16 Quart	24V034	26C268
	Rigid	4/16 Liter	24V046	26C267
		4/16 Quart	24V037	26C267
	Occurlate	4/16 Liter	24V049	255854
	Gear Lube	4/16 Quart	24V040	255854

# **Preset Meters**

	Extension	Model Description	Part Number
	Bare	60 Gallon	24U950
		60 Liter	24U953
		60 Quart	24U947











# Ordering Information

# **Preset Meter Packages**

	Extension	Model Description	Part Number	Package Includes
				Nozzle Extension
	Flexible	60 Gallon	24Z129	255853
		60 Liter	24Z132	255853
Tollar		60 Quart	24Z126	255853
	Rigid	60 Gallon	24Z128	255852
		60 Liter	24Z131	255852
		60 Quart	24Z125	255852
	Short Rigid	60 Gallon	24V055	24W641
		60 Liter	24V058	24W641
		60 Quart	24V052	24W641
	Gear Lube	60 Gallon	24Z130	255854
		60 Liter	24Z133	255854
		60 Quart	24Z127	255854

# **Nozzle Extensions**

	Fluid	Extension	Compatible Meter	Part Number
		Flexible	Manual	255853
	Oil	Rigid	Manual	255852
		Short Rigid	Preset	24W641
	- Antifreeze	Flexible	Manual/Preset	24W306
		Rigid	Manual/Preset	255855
1	Oil/Antifreeze	Flexible (extension only – 2 ft)	Manual/Preset	131733
	Gear lube	Rigid	Manual	255854

# **Accessories**

	Part Number	Description
70	256164	Strainer filter kit, 10-pack











### For Standard and **Heavier-Duty Applications**

Designed to perform in larger dealerships, fleet maintenance shops, municipal garages and higher-volume in-plant applications with longer plumbing runs and larger fluid usage.

### Fluid Extension Kits

Choose from rigid or flexible extensions.

### Lock-On/Lock-Off Trigger

For hands-free operation.

### Sturdy Cast Body

Designed for use in tough environments.

### Fluid Swivel

1/2 inch fluid inlet.

### **Typical Applications**

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

### Typical Fluids Handled

- · Petroleum- and synthetic-based oils (motor, gear and ATF)
- Antifreeze

Tec	Technical Specifications				
	Flow Range*	15 gpm (56.8 lpm)			
	Maximum Working Pressure	1,500 psi (103 bar)			
	Inlet	1/2 in NPT			
	Outlet	3/4-16 straight thread 0-ring boss			
	Operating Temperature Range	-40°F to 180°F (-40°C to 82°C)			
	Outdoor Use	Yes			
	Wetted Parts	Aluminum, SST, CS, acetal, nitrile rubber, tpe			
	Dimensions	12 in L x 8.4 in W x 2.4 in H (30.5 cm L x 21.3 cm W x 6.1 cm H)			
	Weight	0.4 lb (0.18 kg)			
	Warranty	Seven years			

³¹²⁷⁸⁹ *Tested in 10W oil at 70°F. Flow rates vary with fluid pressure, temperature, viscosity, inlet fitting and nozzle type.

Instruction Manual











### **SDV15 Control Valve**

***	Fluid	Extension	Inlet in (mm)	Part Number
	Oil	Rigid		247712
A	OII	Flexible	1/2 (13)	247713
	Antiference	Rigid		247715
	Antifreeze	Flexible		247716
	Gear			247714

### **SDV15 Bare Control Valve**

	Inlet in (mm)	Part Number
0 0	1/2 (13)	247717

### **High Flow Nozzles with Extension**

Extension	Part Number
Rigid	255857
Flexible	255858

### **Filter Kit**

	Description	Part Number
0	Strainer filter kit	256164

### **Quick Close Nozzle**

Extension sold separately.

	Fluid	Part Number
F	Oil	17R220
E	Antifreeze	255460
3	Gear lube	255470
	Oil/Antifreeze (high-flow)	255461









# For Standard and Heavier-Duty Applications

Designed to perform in larger dealerships, fleet maintenance shops, municipal garages and higher-volume in-plant applications with longer plumbing runs and larger fluid usage.



### Fluid Extension Kits

Choose from rigid or flexible extensions with automatic flush-mount nozzle design that re-seats after each dispense to prevent dirt contamination.

### Lock-On/Lock-Off Trigger

For hands-free operation.

### Sturdy Cast Body

Designed for use in tough environments.

### 1/2 and 3/4 Inch Inlet with Swivel Options

Meets standard and high flow requirements.

### **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

- Petroleum- and synthetic-based oils (motor, gear and ATF)
- Antifreeze

echnical Specifications			
	Flow Range*	Up to 20 gpm (75.7 lpm)	
	Maximum Working Pressure	1,500 psi (103 bar)	
	Inlet	1/2 in or 3/4 in NPT	
	Outlet	7/8-14 straight thread O-ring boss	
	Operating Temperature Range	-40°F to 180°F (-40°C to 82°C)	
	Outdoor Use	Yes	
	Wetted Parts	Aluminum, SST, CS, acetal, nitrile rubber, Geolast	
	Dimensions	12 in L x 8.4 in W x 2.4 in H (30.5 cm L x 21.3 cm W x 6.1 cm H)	
	Weight	0.4 lb (0.18 kg)	
	Warranty	Seven years	
	Instruction Manual	308642	

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











### **XDV20 Control Valve**

Includes high flow, quick-close nozzle.

	Extension	Inlet in (mm)	Part Number
	Pigid	1/2 (13)	247718
	Rigid	3/4 (19)	247722
	Flexible -	1/2 (13)	247721
M		3/4 (19)	247723

### **XDV20 Bare Control Valve**

	Inlet in (mm)	Part Number
· M	1/2 (13)	247724
	3/4 (19)	247725

### **Accessories**

Part Number	Description
255793	Quick-close high-flow nozzle for oil, ATF and antifreeze
255859	Flexible extension with quick-close nozzle (255793)
255921	Rigid extension with quick-close nozzle (255793)



### **Lubricant Dispense Consoles**

Includes upper and lower plates with roller guides and brackets. Hoses not included.

1777	Part Number	Description	Package	Includes	
4444	rait ivuilibei	Description	Dispense Valve Brackets (qty)	Water Bib Brackets (qty)	
G	222629	Six-station console	196471 (5)	110236 (1)	
	223448	Four-station console	196471 (3)	110236 (1)	
	222645	Single add-on fluid module	196471 (1)	-	

### **Lubricant Dispense Consoles Accessories**

	Part Number	Description
	110236	Water bib bracket
	110237	Dispense valve bracket for XD meters
*	110285	Pistol-grip dispense valve bracket
4	196471	Dispense valve bracket for LDP5, EM8 and EM20 meters
	249440	Dispense valve bracket for SD/Matrix meters

# **Dispense Consoles**



## >> Ordering Information

### Oil Dispense Bar

7/2	Part Number	Description
	220107	Modular oil dispense bar supports up to 3 dispense taps (1 included) and optional meters. Add up to two additional dispense valves with tap kit 220112.

### **Accessories for Oil Dispense Bar**

Part Number	Description
220112	Dispenser valve kit for adding dispense valves to modular oil dispense bar.
239706	Meter kit for adding IM5 electronic totalizing meter to dispense valve. Reads in gallons, quarts, pints and liters.

# GREASE PUMPS

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# **Grease Pump Selection Guide**

Pump Family and Fluid Pressure Ratio	Typical Applications	Annual Usage	Line Length	Simultaneous Dispense Points	Approx. Free Flow Rate @ 100 psi	Air Inlet	Fluid Outlet	Air Operation Range	Reference Page
LD, 50:1	Automotive dealerships     Fast lube centers     Lube trucks     Lubricant transfer     Service shops	Up to 7,000 lbs (3,175 kg)	Up to 100 (30.5 m)	1	4.5 lbs/min (2 kg/min)	1/4 in NPT(F)	1/4 in NPT(F)	20-150 psi (1.37-10.3 bar)	118-124
Mini Fire-Ball 225, 50:1	Automotive dealerships     Fast lube centers     Fleet service facilities     Heavy-duty dealerships     In-plant     Lube trucks     Lubricant transfer     Mining     Service shops	Up to 10,000 lbs (4,535 kg)	Up to 100 (30.5 m)	1	1.5 lbs/min (0.7 kg/min)	3/8 in NPT(F)	1/4 in NPT(F)	40-140 psi (2.8-10 bar)	125-128 143-146
Fire-Ball 300, 15:1	Automotive dealerships     Fast lube centers     Fleet service facilities     Heavy-duty dealerships     In-plant     Lube trucks     Lubricant transfer     Mining     Service shops	Up to 10,000 lbs (4,535 kg)	Up to 250 ft (76 m)	1-2	7.5 lbs/min (3.4 kg/min)	3/8 in NPT(F)	1/4 in NPT(F)	40-180 psi (2.8-12.5 bar)	129-131 143-146
Fire-Ball 300, 50:1	Automotive dealerships     Fast lube centers     Fleet service facilities     Heavy-duty dealerships     In-plant     Lube trucks     Lubricant transfer     Mining     Service shops	Up to 10,000 lbs (4,535 kg)	Up to 250 ft (76 m)	1-2	7.5 lbs/min (3.4 kg/min)	3/8 in NPT(F)	1/4 in NPT(F)	30-140 psi (2.1-9.7 bar)	129-140 132-136 143-146
Fireball 425, 10:1	Automotive dealerships     Fast lube centers     Fleet service facilities     Heavy-duty dealerships     In-plant     Lube trucks     Lubricant transfer     Mining     Service shops	> 20,000 lbs (9,072 kg)	Up to 500 ft (152 m)	4 or more	29 lbs/min (13.1 kg/min)	1/2 in NPT(F)	1 in NPT(F)	40-180 psi (2.8-12.5 bar)	137-138 144-146
Fire-Ball 425, 50:1	Automotive dealerships     Fast lube centers     Fleet service facilities     Heavy-duty dealerships     In-plant     Lube trucks     Lubricant transfer     Mining     Service shops	> 20,000 lbs (9,072 kg)	Up to 250 ft (76 m)	4 or more	9 lbs/min (4.1 kg/min)	1/2 in NPT(F)	3/8 in NPT(F)	40-150 psi (2.8-10.3 bar)	137-139 141-147
Fire-Ball 425, 75:1	Automotive dealerships     Fast lube centers     Fleet service facilities     Heavy-duty dealerships     In-plant     Lube trucks     Lubricant transfer     Mining     Service shops	> 20,000 lbs (9,072 kg)	Up to 500 ft (152 m)	4 or more	6.5 lbs/min (2.9 kg/min)	1/2 in NPT(F)	3/8 in NPT(F)	40-100 psi (2.8-7 bar)	136-138 140-147
GT 750, 36:1	Fleet service facilities     Heavy-duty dealerships     In-plant     Lube trucks     Mining	> 20,000 lbs (9,072 kg)	Up to 250 ft (76 m)	4 or more	32 lbs/min (14.5 kg/min)	1/2 in NPT(F)	1 in NPT(F)	40-100 psi (2.8-7 bar)	148-149

# **Grease Pump Selection Guide**

Pump Family and Fluid Pressure Ratio	Typical Applications	Annual Usage	Air Inlet	Fluid Outlet	Air Operation Range	Reference Page
Check-Mate 14:1	Fleet service facilities In-plant large runs Large volume lubricant transfer Mining remote fill	> 20,000 lbs (9,072 kg)	3/4 in NPT(F)	1-1/2 in NPT(M)	0-100 psi (0-7 bar)	150-151 153-154
Check-Mate 26:1	Fleet service facilities     In-plant large runs     Large volume lubricant transfer     Mining remote fill	> 20,000 lbs (9,072 kg)	3/4 NPT(F)	1-1/2 in NPT(M)	0-100 psi (0-7 bar)	150-151 154
Check-Mate 29:1	Fleet service facilities     In-plant large runs     Large volume lubricant transfer     Mining remote fill	> 20,000 lbs (9,072 kg)	3/4 NPT(F)	1 in NPT(F)	0-100 psi (0-7 bar)	150-151 154
Check-Mate 55:1	Fleet service facilities In-plant large runs Large volume lubricant transfer Mining remote fill	> 20,000 lbs (9,072 kg)	3/4 NPT(F)	1 in NPT(F)	0-100 psi (0-7 bar)	150 152-154
Check-Mate 63:1	Fleet service facilities     In-plant large runs     Large volume lubricant transfer     Mining remote fill	> 20,000 lbs (9,072 kg)	3/4 NPT(F)	3/4 in NPT(M)	0-72 psi (0-4.9 bar)	150 152-154
Check-Mate 68:1	Fleet service facilities     In-plant large runs     Large volume lubricant transfer     Mining remote fill	> 20,000 lbs (9,072 kg)	3/4 NPT(F)	1 in NPT(F)	0-78 psi (0-5.4 bar)	150 152-154

Pump Family and Fluid Pressure Ratio	Typical Applications	Maximum Grease Output Flow Rate	Maximum Grease Output Pressure	Hydraulic Inlet (Supply)	Hydraulic Outlet (Return)	Grease Outlet	Maximum Hydraulic Inlet Pressure	Reference Page
Dyna-Star 5:1	Fleet service facilities Heavy-duty dealerships In-plant Lube trucks Lubricant transfer Mining Service shops	4 lb/min (1.8 kg/min)	7,500 psi (517 bar)	3/8 in NPT(F)	3/4 in NPT(F)	1/2 in NPT(F)	1,500 psi (102 bar)	155-156
Dyna-Star 10:1	Fleet service facilities Heavy-duty dealerships In-plant Lube trucks Lubricant transfer Mining Service shops	1.1 lb/min (0.5 kg/min)	7,500 psi (517 bar)	3/4 in -16 JIC (37° Flare)	3/4 in NPT(F)	1/2 in NPT(F)	600 psi (41 bar)	155-156

# **LD Series[™] 50:1 Grease Pumps**





5 Year Warranty!

### **Durable and hardworking**

Stay ahead of the competition with LD Series pumps. These affordable and full-featured pumps are designed for lowervolume (up to 7,000 lb/year) applications. LD pumps are fine-tuned for a compact, flexible and durable solution.

### Three-Inch Air Motor

Provides more power to create better flow.

### **Engineered for Durability**

Patented cup and plate design eliminates the need for O-rings that wear out faster, for a more durable, longer-lasting solution.

### Modular Air Valve

Air inlet and exhaust locations are easy to configure with just four bolts for simple, hassle-free installations.

### Pilot Valves

Patented self- cleaning design increases reliability in dirty air environments and minimizes pressure drop with rapid changeovers for reduced stalling and smoother flow.

### **Typical Applications**

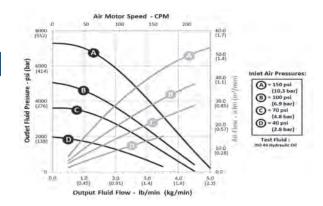
- Automotive dealerships
- · Fast lube centers
- · Service shops
- · Lube trucks

### Typical Fluids Handled

• Grease up to NLGI #2

### **Pump Performance**

### **LD Series 50:1 Pumps**



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chnical Specifications	
Fluid Pressure Ratio	50:1
Air Motor Effective Diameter	3 in (76.2 mm)
Annual Usage	Up to 7,000 lb (3,175 kg)
Maximum Fluid Working Pressure	7,500 psi (517 bar / 51.7 MPa)
Approximate Free Flow Rate @ 100 psi	4.5 lb/min (2 kg/min)
Output per Cycle	0.34 oz (9.7 g)
Approximate Air Use and Flow @ 100 psi (80 cpm)	16 @ 1.7 lb/min (0.45 @ 0.77 kg/min)
Air Inlet	1/4 in NPT(F)
Fluid Outlet	1/4 in NPT(F)
Air Operation Range	20 psi to 150 psi (1.37 bar to 10.3 bar)
Max Recommended Pump Speed	120 cpm
Cycles per Pound (Kg)	47 cpp (103 cpk)
Wetted Parts	Steel, brass, nitrile rubber, polyurethane, UHMWPE, acetal
Sound Pressure Level	72.9 dB(A)
Sound Power Level	82 dB(A)
Approximate Weight	35 lb drum – 11.2 lb (5.1 kg) 120 lb drum – 15.0 lb (6.8 kg) 400 lb drum – 17.0 lb (7.7 kg)
Instruction Manual	3A1334

### **LD Series 50:1 Pumps**

Part Number	Description
24G600	For 35 lb (16 kg) pail
24G603	For 120 lb (55 kg) drum
24G606	For 400 lb (180 kg) drum

## **LD Series 50:1 Grease Pump Packages**



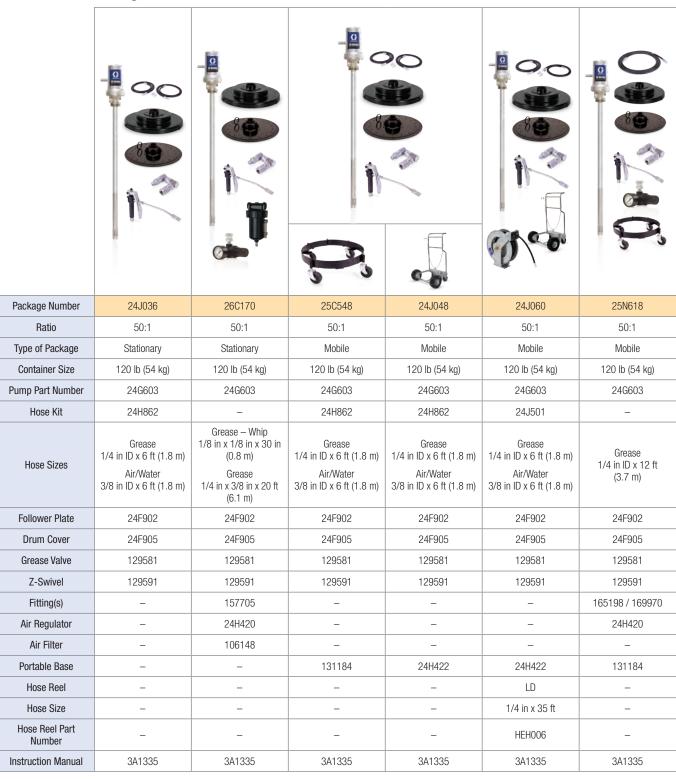
### Ordering Information

### 35 lb Grease Packages





### 120 lb Grease Packages



### **LD Series 50:1 Grease Pump Packages**



### Ordering Information

### 400 lb Grease Packages





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



Technical Specifications				
Pressure	7,500 psi (517 bar / 51.7 MPa)			
Wetted Parts	Steel, nitrile rubber, PTFE			
Inlet Size	1/4 in			

### Ordering Information

Part Number	Description	
129581	LD Pro Shot Grease Valve, 1/4 in NPT	

### **LD Z-Swivel**



- Swivels to prevent twist damage to hoses
- Constructed of heavy-duty steel and ball bearings for smooth and unrestricted movement

# Technical Specifications Pressure 6,000 psi (413 bar / 41.3 MPa)

1/4 in



Inlet Size

Part Number	Description
129591	Z-swivel, 1/4 in NPT

# **LD Series 50:1 Grease Pump Accessories**



### Ordering Information

### **Adjustable Bung Adapter**

2	Part Number	Description
	24P623	Adjustable bung adapter for LD pumps

### **Air Regulators**

Part Number	Description
24H420	Mini air pressure regulator with gauge, 1/4 in NPT x 3/8 in NPT, self-relieving
133215	Mini air filter-regulator with gauge, 1/4 in NPT, self-relieving, semi-auto drain

### **Carts**

B	Part Number	Description
M_	24H422	Drum cart with pneumatic wheels for 120 lb drums; includes chain for securing drum to cart
	24F915	Drum cart with pneumatic wheels for 400 lb drums; includes chain for securing drum to cart

### **Drum Covers**

	Part Number	Description
	24F904	Cover for 35 lb (16 kg) pails
	24F905	Cover for open-head 120 lb (54 kg) drums
	24F906	Cover for open-head 400 lb (182 kg) drums

### **LD Drum Dollies**

	Part Number	Description
	131183	Drum Dolly, 35 lb (16 kg)
	131184	Drum Dolly, 120 lb (54 kg)
	129645	Drum Dolly, 400 lb (182 kg)

### **Follower Plates**

	Part Number	Description
80	24F901	Follower plate for 35 lb (16 kg) pails
	24F902	Follower plate for 120 lb (54 kg) drums
	24F903	Follower plate for 400 lb (182 kg) drums

### **Hose and Fitting Kits**

	Part Number	Doggription	Includes				
	Part Number	Description	Grease Hose	Grease Hose Size	Air Hose	Air Hose Size	Fitting
00	24H862	6 ft LD grease pump hose kit	24H606	1/4 in NPT(M) x 1/4 in NPT(M) x 6 ft	24H858	3/8 in x 6 ft	156823
00	24J501	6 ft LD grease pump hose kit	24J487	1/4 in NPT(M) x 1/4 in NPT(M) (with 90° swivel) x 6 ft	24H858	3/8 in x 6 ft	156823





### Perfect for Medium Pressure, Low Volume Applications

You can't afford downtime, especially when your shop is small. The Mini Fire-Ball 225 is designed with fewer moving parts, which means less wear and tear and reduced downtime, allowing you to run a more profitable business.

### **Durable Casting**

Thick cast aluminum air motor housing offers unmatched durability.

### Fewer Repairs

Fewer moving parts in the air motor assembly means less downtime and low repair cost.

### Extended Seal Life

In-line pump design aligns the air motor piston and fluid piston rods to maximize seal life.

### Superior Sealing

Non-metallic poppet valves offer positive sealing performance, even with contaminated "dirty" air environments for long-life without repair.

### Corrosion-Resistant

Corrosion-resistant design utilizes liquid salt nitriding, nickel plating, stainless steel, aluminum and chrome on key components for longer life.

### **Typical Applications**

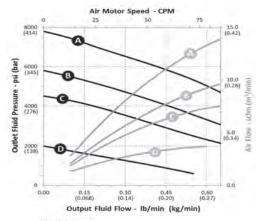
- Automotive dealerships
- · Fast lube centers
- · Service shops
- Heavy-duty dealerships
- · Fleet services facilities
- In-plant
- Lube trucks
- Mining

### Typical Fluids Handled

• Grease up to NLGI #2

### **Pump Performance**

### Mini Fire-Ball 225 Pumps







# Mini Fire-Ball® 225 Grease Pumps



hnical Specifications			
Fluid Pressure Ratio	50:1		
Air Motor Effective Diameter	2.25 in (57.2 mm)		
Annual Usage	Up to 10,000 lb (4,535 kg)		
Maximum Fluid Working Pressure	8,400 psi (578 bar / 57.8 MPa)		
Approximate Free Flow Rate @ 100 psi	1.5 lb/min (0.7 kg/min)		
Output per Cycle	0.12 oz (3.5 g)		
Continuous Duty Flow Rate	0.32 lb/min (0.15 kg/min)		
Approximate Air Use and Flow @ 100 psi (80 cpm)	9.3 @ 0.62 lb/min (0.26 @ 0.28 kg/min)		
Air Inlet	3/8 in NPT(F)		
Fluid Outlet	1/4 in NPT(F)		
Air Operation Range	40 psi to 140 psi (3 bar to 10 bar)		
Max Recommended Pump Speed	100 cpm		
Cycles per Pound (Kg)	130 cpp (287 cpk)		
Wetted Parts	Carbon steel, zinc plating, brass, polyurethane, ultra-high molecular weight polyethylene, Buna-N		
Sound Pressure Level	77.8 dB(A)		
Sound Power Level	85.6 dB(A)		
Approximate Weight	15 lb (6.8 kg)		
Instruction Manual	309966		

### Ordering Information

### Mini Fire-Ball 50:1 Pumps

Part Number	Description
246909	For 35 lb (16 kg) pail
246780	For 120 lb (55 kg) drum
246781	For 400 lb (180 kg) drum



### 35 lb and 50 lb Grease Packages



Package Number		246910*	246911*	246913*
	Ratio	50:1	50:1	50:1
1	Type of Package	Portable pail dispenser	Stationary pail dispenser	Cart-mounted pail dispenser
	Container Size	35 lb to 50 lb (16 kg to 23 kg)	35 lb to 50 lb (16 kg to 23 kg)	35 lb to 50 lb (16 kg to 23 kg)
	Container	-	204134	204134
Pι	ump Part Number	246909	246909	246909
	Fluid Hose Size	1/4 in x 12 ft	1/4 in x 12 ft	1/4 in x 12 ft
D	ispense Hose Kit	236058	236058	236058
Ses	12 ft Hose	109151	109151	109151
Dispense Kit Includes	Air Coupler	114558	114558	114558
- Kit	Air Fitting	169971	169971	169971
sense	Z-Swivel	202577	202577	202577
Dis	Pro-Shot Valve	242056	242056	242056
	Follower Plate	24F901	**	**
	Drum Cover	222059	24R350	24R350
	Portable Base	-	-	203650
In	struction Manual	309967	309967	309967



^{*}Use 3/8 in (9.5 mm) air regulator (109075); must be ordered separately. **Order follower plate (220653) separately for 35 lb (16 kg) pails or (220654) for 70 lb (32 kg) bulk.



### 120 lb and 400 lb Grease Packages



^{*}Use 3/8 in (9.5 mm) air regulator (109075); must be ordered separately.





### Ideal for Shops with Grease Transfer

Install the Fire-Ball 300 in grease dispense applications. A differential air motor ensures smooth the double-acting pump design provides reliable grease flow and accurate dispense.

### Durable

Thick cast aluminum air motor housing offers unmatched durability.

### Fewer Repairs

Fewer moving parts in the air motor assembly means less downtime and low repair cost.

### Extended Seal Life

In-line pump design aligns the air motor piston and fluid piston rods to maximize seal life.

### Superior Sealing

Non-metallic poppet valves offer positive sealing performance, even with contaminated "dirty" air environments for long life without repair.

### Corrosion-Resistant

Corrosion-resistant design utilizes liquid salt nitriding, nickel plating, stainless steel, aluminum and chrome on key components for longer life.

### **Typical Applications**

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

### Typical Fluids Handled

• Grease up to NLGI #2

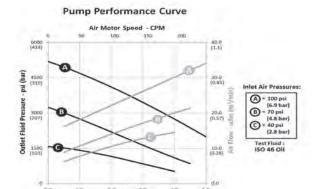


### Pump Performance

### Fire-Ball 300 15:1 Pumps

# **Pump Performance Curve** 15.0 (0.42) Outlet Fluid Pressure - psi (bar) 2000 (24) 200 (24) 200 (24) 200 (24) 200 (25) (6.9 bar) (6.9 bar) (6.9 bar) (70 psi (4.8 bar) (2.8 bar) 750 (52) (1.8) Output Fluid Flow - lb/min (kg/min)

### Fire-Ball 300 50:1 Pumps



Output Fluid Flow - lb/min (kg/min)

	Fire-Ball 300 15:1	Fire-Ball 300 50:1
Fluid Pressure Ratio	15:1	50:1
Air Motor Effective Diameter	3 in (76.2 mm)	3 in (76.2 mm)
Annual Usage	Up to 10,000 lb (4,535 kg)	Up to 10,000 lb (4,535 kg)
Maximum Fluid Working Pressure	2,700 psi (186 bar / 18.6 MPa)	8,400 psi (579 bar / 57.9 MPa)
Approximate Free Flow Rate @ 100 psi	7.5 lb/min (3.4 kg/min)	7.5 lb/min (3.4 kg/min)
Output per Cycle	1.29 oz (36.6 g)	0.34 oz (9.5 g)
Continuous Duty Flow Rate	0.7 lb/min (0.32 kg/min)	1.19 lb/min (0.54 kg/min)
Approximate Air Use and Flow @ 100 psi (80 cpm)	14 @ 6.5 lb/min (0.40 @ 2.9 kg/min)	21 @ 1.7 lb/min (0.59 @ 0.77 kg/mir
Air Inlet	3/8 in NPT(F)	3/8 in NPT(F)
Fluid Outlet	1/4 in NPT(F)	1/4 in NPT(F)
Air Operation Range	40 psi to 180 psi (2.8 bar to 12.5 bar)	30 psi to 140 psi (3.0 bar to 9.7 bar)
Max Recommended Pump Speed	66 cpm	76 cpm
Cycles per Pound (Kg)	12.4 cpp (27 cpk)	47.4 cpp (105 cpk)
Wetted Parts	Carbon steel, brass, copper, aluminum, PTFE, nitrile rubber, leather	Steel, brass, aluminum, acetal, nitrile rubber, polyurethane
Sound Pressure Level	77.8 dB(A)	77.8 dB(A)
Sound Power Level	85.6 dB(A)	85.6 dB(A)
Approximate Weight	22 lb (10 kg)	22 lb (10 kg)
Instruction Manual	306531	308883

### Ordering Information

### Fire-Ball 300 Grease Pumps

Part Number	Ratio	Description
206405	15:1	For 35 lb (16 kg) pail
206699	15:1	For 120 lb (55 kg) drum
206700	15:1	For 400 lb (180 kg) drum
239877	50:1	For 35 lb or 70 lb (16 kg or 32 kg) pail
239887	50:1	For 120 lb (55 kg) drum
239888	50:1	For 400 lb (180 kg) drum



### **15:1 Grease Pump Packages**



P	ackage Number	222078	220170	220171
Т	ype of Package	Stationary Pail Dispenser	Stationary Drum Dispenser	Cover-Mounted Drum Dispenser
	Ratio	15:1	15:1	15:1
	Container Size	35 lb (16 kg)	120 lb (55 kg)	400 lb (180 kg)
Pu	mp Part Number	206405	206699	206700
	Dispense Kit	222080	222081	222081
	Fluid Hose	1/4 in x 15 ft	1/4 in x 25 ft	1/4 in x 25 ft
	Hose Part Number	109165	109167	109167
	Air Coupler	110198	110198	110198
တ္သ	Air Fitting	-	169971	169971
clude	Closed Nipple	156849	156849	156849
Dispense Kit Includes	Z-Swivel	202577	202577	202577
ense	Fitting(s)	169971	-	-
Dispe	Dispenser	Pro-Shot	Pro-Shot	Pro-Shot
	Dispenser Part Number	242056	242056	242056
	Air Regulator	110234	110234	110234
	Air Pressure Gauge	100960	100960	100960
	Drum Cover	222058	204574	200326
Ins	struction Manual	307882	307882	307882



### 50:1 25 to 50 lb Grease Pump Packages



^{*}Use 3/8 in (9.5 mm) air regulator (109075); must be ordered separately.

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^{**}Order follower plate 220654 separately, if needed.



### 50:1 120 lb Grease Pump Packages



^{*}Use 3/8 in (9.5 mm) air regulator (109075); must be ordered separately.



### 50:1 120 lb Grease Pump Packages (Cont.)



Package Number		225014*	222073*
Type of Package		Stationary supply	Stationary supply topper-inductor
	Ratio	50:1	50:1
	Container Size	120 lb (55 kg)	120 lb (55 kg)
Pι	ımp Part Number	239887 239887	
	Dispense Kits	222072	-
	Fluid Hose	1/4 in x 6 ft	-
	Hose Part Number	109150	-
SS	6 ft Coupled Hose	203320	-
Dispense Kit Includes	Air Coupler	_	-
Kit	Air Fitting	-	-
ense	Z-swivel	-	-
Dispe	Fitting(s)	155494/155541	-
	Dispenser	-	-
	Dispenser Part Number	-	-
	Fluid Hose Size	See kit above	-
	Air Hose Size	See kit above	-
	Follower Plate	24F902	-
Drum Cover		24R350	-
Holster		-	-
Portable Base		-	-
Elevator		-	204121
Pump Support		-	222074
	Hold Down Kit	-	-
Instruction Manual		307880	306523

^{*}Use 3/8 in (9.5 mm) air regulator (109075); must be ordered separately.

### 50:1 400 lb Grease Pump Packages



Package Number		225016*	226013*
Type of Package		Stationary supply	Stationary supply topper-inductor
	Ratio	50:1	50:1
	Container Size	400 lb (180 kg)	400 lb (180 kg)
Pι	ump Part Number	239888	239888
Но	se and Fitting Kits	222072	204467
səpn	Fluid Hose	1/4 in x 6 ft	1/4 in x 6 ft
it Incl	Hose Part Number	109150	109150
Dispense Kit Includes	6 ft Coupled Hose	203320	-
	Fitting(s)	155494/155541	100206/156971/205528
	Air Hose Size	3/8 in x 6 ft	3/8 in x 6 ft
	Follower Plate	24F903	-
	Drum Cover	200326	-
	Elevator	-	204385
Pump Support		-	204461
Inductor Plate		-	204353
Base		-	205339
In	struction Manual	307880	306556

^{*}Use 3/8 in (9.5 mm) air regulator (109075); must be ordered separately.



### **50:1 Grease Pump Lube Truck Packages**



Package Number Type of Package		222085*	222071*
		Lube truck	Lube truck
	Ratio	50:1	50:1
	Container Size	120 lb (55 kg)	400 lb (180 kg)
Pι	ump Part Number	239887	239888
	Dispense Kits	222072	222072
səpn	Fluid Hose	1/4 in x 6 ft	1/4 in x 6 ft
it Incl	Hose Part Number	109150	109150
Dispense Kit Includes	6 ft Coupled Hose	203320	203320
Dispe	Fitting(s)	155494/155541	155494/155541
	Air Hose Size	3/8 in x 6 ft	3/8 in x 6 ft
	Follower Plate	220654	223845
Drum Cover		222060	207366
	Hold Down Kit	222061	207361
In	struction Manual	307880	307880

^{*}Use 3/8 in (9.5 mm) air regulator (109075); must be ordered separately.

# Fire-Ball® 300 Grease Pump Packages



### Ordering Information

### 50:1 Grease Pump Side Pocket and Horizontal Mount Packages







# The Pump of Choice for Your Most Demanding Applications!

The Fire-Ball 425 features a large air motor to supply the power you need for long pipe runs and higher-volume dispensing. An ideal choice for applications where multiple dispenses happen at the same time.



Thick cast aluminum air motor housing offers unmatched durability.

### Fewer Repairs

Fewer moving parts in the air motor assembly means less downtime and low repair cost.

### Extended Seal Life

In-line pump design aligns the air motor piston and fluid piston rods to maximize seal life.

### Superior Sealing

Non-metallic poppet valves offer positive sealing performance, even with contaminated "dirty" air environments for long life without repair.

### Corrosion-Resistant

Corrosion-resistant design utilizes liquid salt nitriding, nickel plating, stainless steel, aluminum and chrome on key components for longer life.

### **Typical Applications**

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

### Typical Fluids Handled

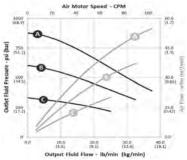
• Grease up to NLGI #2





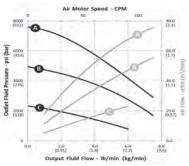
### **Pump Performance**

### Fire-Ball 425 10:1 Pumps



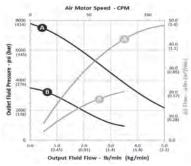


### Fire-Ball 425 50:1 Pumps





### Fire-Ball 425 75:1 Pumps





	EL D. II 40E 40.4	Fi	EL D. II 405 EE :
	Fire-Ball 425 10:1	Fire-Ball 425 50:1	Fire-Ball 425 75:1
Fluid Pressure Ratio	10:1	50:1	75:1
Air Motor Effective Diameter	4.25 in (108 mm)	4.25 in (108 mm)	4.25 in (108 mm)
Annual Usage	20,000+ lb (9,072+ kg)	20,000+ lb (9,072+ kg)	20,000+ lb (9,072+ kg)
Maximum Fluid Working Pressure	1,800 psi (124 bar / 12.4 MPa)	7,500 psi (517 bar / 51.7 MPa)	7,500 psi (517 bar / 51.7 MPa)
Approximate Free Flow Rate @ 100 psi	29 lb/min (13.1 kg/min)	9 lb/min (4.1 kg/min)	6.5 lb/min (2.9 kg/min)
Output per Cycle	5.82 oz (164.7 g)	1.06 oz (30 g)	0.71 oz (20 g)
Continuous Duty Flow Rate	3.5 lb/min (1.59 kg/min)	3.35 lb/min (1.52 kg/min)	1.95 lb/min (0.88 kg/min)
Approximate Air Use and Flow @ 100 psi (80 cpm)	45 @ 29 lb/min (1.3 @ 13 kg/min)	43 @ 5.3 lb/min (1.2 @ 2.4 kg/min)	43 @ 3.5 lb/min (1.2 @ 1.6 kg/min
Air Inlet	1/2 in NPT(F)	1/2 in NPT(F)	1/2 in NPT(F)
Fluid Outlet	1 in NPT(F)	3/8 in NPT(F)	3/8 in NPT(F)
Air Operation Range	40 psi to 180 psi (2.8 bar to 12.5 bar)	40 psi to 150 psi (2.8 bar to 10.4 bar)	40 psi to 100 psi (2.8 bar to 7 bar
Max Recommended Pump Speed	60 cpm	60 cpm	60 cpm
Cycles per Pound	2.75 срр	15.1 cpp	22.7 cpp
Cycles per Kg	6 cpk	33 cpk	50 cpk
Wetted Parts	Steel, brass, aluminum, leather, Buna-N	CS, brass, aluminum, leather	CS, brass, aluminum, leather
Sound Pressure Level	80.9 dB(A)	80.9 dB(A)	80.9 dB(A)
Sound Power Level	94.6 dB(A)	94.6 dB(A)	94.6 dB(A)
Approximate Weight	38 lb (17.2 kg)	34 lb to 37 lb (15 kg to 17 kg)	30 lb to 37 lb (14 kg to 17 kg)
Instruction Manual	309407	306674	308777

### Ordering Information

### Fire-Ball 425 Grease Pumps

Part Number	Ratio	Description
965124	10:1	Stubby pump
965129*	10:1	For 400 lb (180 kg) drum
205394	50:1	For 120 lb (55 kg) drum
205395	50:1	For 400 lb (180 kg) drum

Part Number	Ratio	Description
239731	75:1	For 35 or 70 lb (16 or 32 kg) pail
239729	75:1	For 120 lb (55 kg) drum
239730	75:1	For 400 lb (180 kg) drum

^{*}Includes 2 in NPT Bung Adapter (part number 222308).



### 50:1 120 lb and 400 lb Grease Pump Packages



Package Number  Type of Package		223108*	225781*	226018*
		Stationary Supply	Stationary Supply	Stationary Supply Topper-Inductor
	Ratio	50:1	50:1	50:1
	Container Size	120 lb (55 kg)	400 lb (180 kg)	400 lb (180 kg)
Pı	ump Part Number	205394	205395	205395
	Dispense Kits	222076	222076	205102
ndes	Fluid Hose	3/8 in x 6 ft	3/8 in x 6 ft	3/8 in x 6 ft
Dispense Kit Includes	Hose Part Number	109163	109163	109163
ense k	6 ft Coupled Hose	205418	205418	-
Dispe	Fitting(s)	155470/155494	155470/155494	156859/196220/205528
	Air Hose Size	1/2 in x 6 ft	1/2 in x 6 ft	1/2 in x 6 ft
	Drum Cover	204574	200326	_
	Follower Plate	223344	223846	-
	Pump Support	-	-	204461
	Elevator	-	-	204385
	Inductor Plate	_	-	205699
	Base	-	-	205339
In	struction Manual	307880	307880	306556

 $^{^{\}star}$ Use 1/2 in (12.7 mm) air regulator (104266) and gauge (100960); must be ordered separately.

# Fire-Ball[®] 425 Grease Pump Packages



### >>> Ordering Information

### 75:1 120 lb and 400 lb Grease Pump Packages



Package Number		244635*	244636*	244637*
Type of Package		Stationary Cover-Mount	Stationary Cover-Mount	Stationary Inductor
	Ratio	75:1	75:1	75:1
	Container Size	120 lb (55 kg)	400 lb (180 kg)	400 lb (180 kg)
Pı	ump Part Number	239729	239730	239730
	Dispense Kits	222076	222076	205102
səpr	Fluid Hose	3/8 in x 6 ft	3/8 in x 6 ft	3/8 in x 6 ft
Dispense Kit Includes	Hose Part Number	109163	109163	109163
ense K	6 ft Coupled Hose	205418	205418	-
Dispe	Fitting(s)	155470/155494	155470/155494	156859/196220/205528
Air Hose Size		1/2 in x 6 ft	1/2 in x 6 ft	1/2 in x 6 ft
	Drum Cover	204574	200326	-
	Follower Plate	223344	223846	-
Pump Support		-	-	204461
Elevator		-	_	204385
Inductor Plate		-	_	205699
Base		_	_	205339
In	struction Manual	307880	307880	306556

 $^{^{\}star}$ Use 1/2 in (12.7 mm) air regulator (104266) and gauge (100960); must be ordered separately.



### 50:1 and 75:1 Grease Pump Lube Truck Packages

Package Number	223107*	222075*	243817*	243818**
Type of Package	Lube Truck	Lube Truck	Lube Truck	Lube Truck
Ratio	50:1	50:1	75:1	75:1
Container Size	120 lb (55 kg)	400 lb (180 kg)	120 lb (55 kg)	400 lb (180 kg)
Pump Part Number	205394	205395	239729	239730
Dispense Kits	222076	222076	222076	222076
Fluid Hose	3/8 in x 6 ft	3/8 in x 6 ft	3/8 in x 6 ft	3/8 in x 6 ft
Fluid Hose  Hose Part Number  6 ft Coupled Hose  Fitting(s)	109163	109163	109163	109163
6 ft Coupled Hose	205418	205418	205418	205418
Fitting(s)	155470/155494	155470/155494	155470/155494	155470/155494
Air Hose Size	1/2 in x 6 ft	1/2 in x 6 ft	1/2 in x 6 ft	1/2 in x 6 ft
Drum Cover	222060	207366	222060	207366
Follower Plate	223344	223846	223344	223846
Hold Down Kit	222061	207361	222061	207361
Instruction Manual	307880	307880	307880	307880

 $^{^{\}star}\text{Use}$  1/2 in (12.7 mm) air regulator (104266) and gauge (100960); must be ordered separately.

^{**}Use 3/8 in (9.5 mm) air regulator (109075); must be ordered separately.

# Fire-Ball® 425 Grease Pump RAM Packages



### Ordering Information

### **Grease Pump RAM Packages**



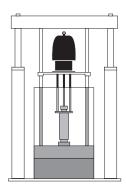


Part		Part 257435 (Ram Assembly) not shown	Part 257435 (Ram Assembly) not shown
Package Number		244905	244906
Type of Package		Stationary Ram	Stationary Ram
Ratio		50:1	75:1
	Container Size	400 lb (180 kg)	400 lb (180 kg)
Pı	ımp Part Number	Fire-Ball 425 – 205395	Fire-Ball 425 – 239730
	Dispense Kits	222076	222076
ndes	Fluid Hose	3/8 in x 6 ft	3/8 in x 6 ft
(it Incl	Hose Part Number	109163	109163
Dispense Kit Includes	6 ft Coupled Hose	205418	205418
Disp	Fitting(s)	155470/155494	155470/155494
	Air Hose Size	1/2 in x 6 ft	1/2 in x 6 ft
	Ram	257435	257435
	Adapter Kit	224266	224266
Air Regulator and Gauge		*	244844
R	am Plate Seal Kit	247335	247335
	Pump Mount Kit	247337	247337
In	struction Manual	309345	309345

^{*}Air gauge included with RAM controller.

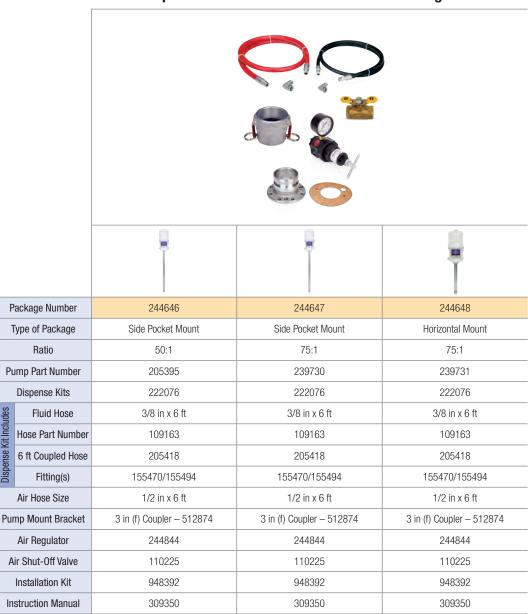
### **RAM-Mount**

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





### 50:1 and 75:1 Grease Pump Side Pocket and Horizontal Mount Packages



# **Fire-Ball Grease Pump Accessories**



### Ordering Information

### **Air Regulators**

0
6

Part Number	Description
109075	3/8 in NPT (fbe) with gauge
244844	1/2 in NPT (fbe) with gauge

### **Bleed-Type Air Shut-Off Valves**



Part Number	Description
110223	1/4 in NPT
110224	3/8 in NPT
110225	1/2 in NPT
110226	3/4 in NPT

### **Bung Adapters**



Part Number	Dimensions	Compatible Pumps		
239965	1.65 in ID	Fire-Ball 425, 50:1 Fire-Ball 425, 75:1		
239966	1.29 in ID	Fire-Ball 300, 15:1 Fire-Ball 300, 50:1		

### **Dispense Hose and Fitting Kits**



	Part Number	Compatible Pump(s)	Includes							
			Fluid Hose Size	Fluid Hose	Grease Dispense Valve	Z-Swivel	3/8 in Closed Nipple	Quick- Disconnect Nipple	Quick- Disconnect Coupler	3/8 in Air Regulator
	222080	Fire-Ball 300, 15:1	1/4 in x 15 ft	109165	242056	202577	156849	169971	110198	110234
	222081	Fire-Ball 300, 15:1	1/4 in x 25 ft	109167	242056	202577	156849	169971	110198	110234
	236058	Mini Fire-Ball 225, 50:1	1/4 in x 12 ft	109151	242056	202577	_	169971	114558	_
	222070	Fire-Ball 300, 50:1	1/4 in x 12 ft	109151	242056	202577	-	169971	114558	_
	26C183	Fire-Ball 300, 50:1	1/4 in x 12 ft	109151	26C184	202577	-	169971	114558	_
	222383	Mini Fire-Ball 225, 50:1 Fire-Ball 300, 50:1	1/4 in x 25 ft	109154	242056	202577	_	169971	114558	_

### **Hose and Fitting Kits**



			Includes					
Part Number	Pressure Rating	Compatible Pumps	6 ft Air Hose	Air Hose Swivel Elbow	6 ft Fluid Hose	Fluid Hose Swivel Elbow		
222072	5,000 psi (345 bar)	Fire-Ball 300, 50:1	203320	155494	109150	155541		
222076	4,000 psi (276 bar)	Fire-Ball 425, 50:1	205418	155470	109163	155494		



# **Drum Covers**

Part Number	Description	Compatible Pumps
222059	Cover for 35 lb (16 kg) pails	Mini Fire-Ball 225, 50:1 Fire-Ball 300, 50:1
24R350	LD Cover for open-head 35 lb (16 kg), 70 lb (32 kg) or 120 lb (55 kg) drums	Mini Fire-Ball 225, 50:1 Fire-Ball Pumps
204574	SD Cover for open-head 70 lb (32 kg) or 120 lb (55 kg)	Mini Fire-Ball 225, 50:1 Fire-Ball Pumps
200326	Cover for open-head 400 lb (180 kg) drums	Mini Fire-Ball 225, 50:1 Fire-Ball 300, 15:1 Fire-Ball 300, 50:1 Fire-Ball 425, 10:1 and 50:1
160754	Bung-adapter plate for mounting pump to 120 lb (55 kg) or 400 lb (180 kg) drum covers	Fire-Ball Pumps

### **Drum Elevator**

-3m	Part Number	Description	Includes			
	Fait Number	Description	Cover Support	Drum Elevator	Air Control Kit	
	241663	Air-powered elevator to speed up 400 lb (180 kg) drum changes	207562	204385	207561	

# **Mounting Accessories for Fire-Ball Pumps**

	Part Number	Description
	948393	Flange Adapter (male) for Fire-Ball 300 Pumps
	948392	Flange Adapter (male) for Fire-Ball 425 Pumps
0	512874	Coupler (female), 3 in thread

# **Fire-Ball Grease Pump Accessories**



### **Ordering Information**

### **Follower Plates**



### **High-Pressure Grease Shut-Off Valve**

Part Number	Description	Pressure Rating	Inlet
202869	High-pressure needle valve	5,000 psi (345 bar)	1/2 in



### **Portable Bases**

	Part Number	Description
	131183	Drum dolly, 35 lb (16 kg)
Q,	131184	Drum dolly, 120 lb (54 kg)
	129645	Drum dolly, 400 lb (182 kg)
	203622	Caster base for 120 lb (54 kg) drums

### **Carts**

	Part Number	Description	Compatible Container Size
	203650	Drums fit onto recess on formed base. Rim clamps secure drum onto cart.	35 lb (16 kg) 70 lb (32 kg) 120 lb (55 kg)
1	222243	Heavy-duty drum cart with pneumatic wheels	120 lb (55 kg)
	111470	Heavy-duty drum truck on roll-around base	400 lb (180 kg)

# **Pro-Shot Dispense Valves**



Part Number	Description	
242055	1/4 in NPT(F) inlet without coupler or extension	
242056	1/4 in NPT(F) inlet with coupler and extension 200389	
242057	3/8 in NPT(F) inlet without coupler or extension	
242058	3/8 in NPT(F) inlet with coupler and extension 200389	
224872	Includes 30 in (76.2 cm) whip hose (109148), Z-Swivel (202577), and grease valve (242056)	

### **Swivel**

	Part Number	Description
THE PERSON NAMED IN COLUMN TO PERSON NAMED I	202577	Z-Swivel allows non-binding movement for hard-to-reach locations, 1/4-18 NPT



# Fewer Strokes and Longer Pump Life

The GT 750 pump was engineered to perform in challenging applications and changing environments. The large 7.5-inch air motor and pump lower combination allows the GT 750 pump to move the same amount of grease with up to four times fewer pump strokes.



**GT** 750

### Efficient Air Motor

Use less air to move more grease.

### **High Flow Rates**

Up to 32 lb/min of grease.

### High Volume Per Stroke

Pump more grease without having to drive pump too quickly to damage seals.

# Proven Pump Technology

Based on Graco NXT[™] pump technology.

# Multiple Tank Options

Available in 35, 120 and 400 lb down tube lengths.

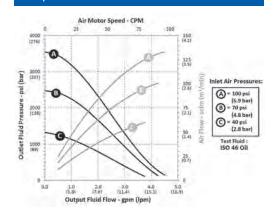
### **Typical Applications**

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

### Typical Fluids Handled

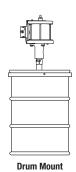
• Grease up to NLGI #2

### **Pump Performance**



hnical Specifications	
Fluid Pressure Ratio	36:1
Air Pressure Operating Range	40-100 psi (3-7 bar)
Maximum Working Pressure	3,600 psi (248 bar)
Maximum Recommended Continuous Pump Speed	60 cycles per minute
Air Motor Effective Diameter	7.5 in (190 mm)
Stroke	4.75 in (121 mm)
Air Inlet	1/2 in NPT
Fluid Outlet	1 in NPT
Maximum Delivery	32 lb/min (13.6 kg/min)
Pump Weight	59 lb (26.8 kg)
Wetted Parts	Steel, brass, Buna-N, urethane ductile iron, aluminum
Sound Power (measured at 70 psi [4.8 bar], 20 CPM per ISO-9414-2)	77.2 dBa
Sound Pressure (tested at 3.28 ft [1 m] from equipment)	70.5 dBa
Pump Cycles Per Pound	3 cycles
Pump Cycles Per KG	6 cycles
Warranty	Five years overall and 1 year wear parts
Instruction Manual	3A5363











Ordering Information

# **GT 750 36:1 Grease Pumps**

_	Part Number	Description
	24W498	GT 750, 36:1 Grease Pump, stubby length
	25D116	GT 750, 36:1 Grease Pump, 120 lb length
	24W337	GT 750, 36:1 Grease Pump, 400 lb length
	25P544	GT 750, 36:1 Grease Pump, 400 lb length inductor

### **Accessories**

### **Cam Lock Adapters**

	Part Number	Description
100	131380	Male Cam Lock Adapter – 3 in
	131394	Female Cam Lock Adapter – 3 in

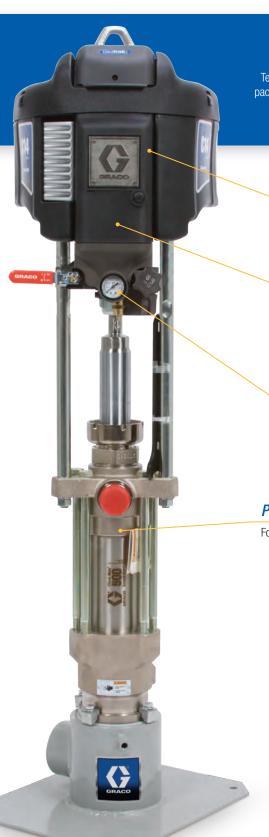
### **Drum Covers**

	Part Number	Description
14:00:00	204574	Cover for 120 lb (54 kg) drums
	200326	Cover for 400 lb (182 kg) drums
	160754	Bung Adapter Plate (used to mount pump to drum cover) – 2 in

# **Follower Plates**

	Part Number	Description
	223700	Follower plate for 120 lb (54 kg) drums
	223701	Follower plate for 400 lb (182 kg) drums





# **Move Large Amounts of Grease Fast**

Tested to outperform and outlast all other pumps on the market – with its long-life packing design and intuitive, easy-to-use controls – the NXT™ High-Flo pump is the best value for the money. Fewer parts, faster repairs, and long-lasting durability.

### **NXT Air Motor**

Modular design for easier maintenance with rugged body armor that won't rust or dent.

### Modular Air Valves

Easy-to-repair valve eliminates stalling and contains deicing controls.

### Integrated Air Controls

Easy-turn, lockable regulator is front-mounted for easy access. Compact and modular with built-in filtration.

# Piston Valve with Floating Piston Seal

For maximum pressure balance over a range of material viscosities.

### Typical Applications

- · Fleet services facilities
- In-plant
- Mining

### Typical Fluids Handled

• Grease up to NLGI #2



### **Pump Performance**

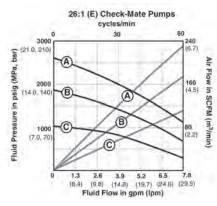


TEST FLUID: No. 10 Weight Oil

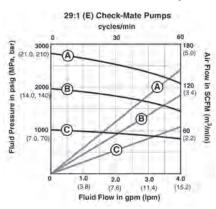
### **NXT 14:1 Check-Mate Pumps**

### 14:1 (E) Check-Mate Pumps cycles/min 30 1600 (11.2, 112) 180 (4.5) Fluid Pressure in psig (MPa, bar) Air Flow in SCFM (m3/min) 120 1200 A 800 (5.6, 56) B 400 (2.8, 28 5.2 (6.4) (9.8) (14.8) (19.7) (24.6) (29.5) Fluid Flow in gpm (lpm)

# **NXT 26:1 Check-Mate Pumps**



### **NXT 29:1 Check-Mate Pumps**



hnical Specifications			
	NXT Check-Mate 14:1	NXT Check-Mate 26:1	NXT Check-Mate 29:1
Fluid Pressure Ratio	14:1	26:1	29:1
Air Motor	NXT 3400	NXT 6500	NXT 3400
Air Motor Effective Diameter	7.5 in (191 mm)	10.4 in (264 mm)	7.5 in (191 mm)
Pump Lower	L500CS	L500CS	L250CS
Maximum Fluid Working Pressure	1,400 psi (97 bar / 9.7 MPa)	2,600 psi (179 bar / 17.9 MPa)	2,900 psi (200 bar / 20 MPa)
Output per Cycle	15.4 oz (435 g)	15.4 oz (435 g)	7.7 oz (218 g)
Air Inlet	3/4 in NPT(F)	3/4 in NPT(F)	3/4 in NPT(F)
Fluid Outlet	1-1/2 in NPT(M)	1-1/2 in NPT(M)	1 in NPT(F)
Air Operation Range	0 psi to 100 psi (0 bar 7 bar)	0 psi to 100 psi (0 bar to 7 bar)	0 psi to 100 psi (0 bar to 7 bar)
Max Recommended Pump Speed	20 cpm	20 cpm	20 cpm
Cycles per Pound	1.0 cpp	1.0 cpp	2.1 cpp
Cycles per Kg	2 cpk	2 cpk	5 cpk
Wetted Parts	303, 304, 316 and 17-4PH grades of stainless steel; ductile iron and carbon steel, electroless nickel plated; carbon steel, zinc and electroless nickel plated; E52100 and ETD 150 alloy steel; PTFE; UHMWPE; carbon-filled PTFE; acetal	303, 304, 316 and 17-4PH grades of stainless steel; ductile iron and carbon steel, electroless nickel plated; carbon steel, zinc and electroless nickel plated; E52100 and ETD 150 alloy steel; PTFE; UHMWPE; carbon-filled PTFE; acetal	ETD 150, 41L40, and 4140 alloy steel; 304, 316, 17-4PH and 440C grades of stainless steel; acetal; carbon-filled PTFE; carbor steel; ductile iron; electroless nickel, zinc and chrome plating; PTFE; UHMWPE
Sound Pressure Level	77 dB(A)	80 dB(A)	77 dB(A)
Sound Power Level	87 dB(A)	90 dB(A)	87 dB(A)
Approximate Weight	152 lb (69 kg)	169 lb (77 kg)	128 lb (58 kg)
Instruction Manual	System – 312863 Pump – 312376 Pump Lower – 312375 Air Motor – 311238	System – 312863 Pump – 312376 Pump Lower – 312375 Air Motor – 311238	System - 312863 Pump - 312376 Pump Lower - 312375 Air Motor - 311238



### **Pump Performance**







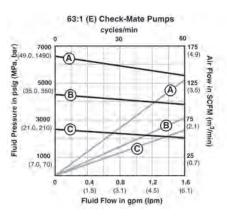


TEST FLUID: No. 10 Weight Oil

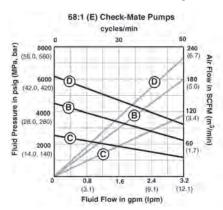
### **NXT 55:1 Check-Mate Pumps**

# 55:1 (E) Check-Mate Pumps cycles/min Linid Pressure in psign (MPa, ba) (42.0, 420) (MPa, ba) (28.0, 280) (14.0, 140) (14.0, 140) Air Flow in SCFM (m3/min) (A) B (B) 2.0

### **NXT 63:1 Check-Mate Pumps**



### **NXT 68:1 Check-Mate Pumps**



hnical Specifications			
	NXT Check-Mate 55:1	NXT Check-Mate 63:1	NXT Check-Mate 68:1
Fluid Pressure Ratio	55:1	63:1	68:1
Air Motor	NXT 6500	NXT 3400	NXT 6500
Air Motor Effective Diameter	10.4 in (264 mm)	7.5 in (191 mm)	10.4 in (264 mm)
Pump Lower	L250CS	L100CS	L200CS
Maximum Fluid Working Pressure	5,500 psi (379 bar / 37.9 MPa)	4,500 psi (310 bar / 31 MPa)	5,300 psi (366 bar / 36.6 MPa
Output per Cycle	7.7 oz (218 g)	3.1 oz (87 g)	6.1 oz (174 g)
Air Inlet	3/4 in NPT(F)	3/4 in NPT(F)	3/4 in NPT(F)
Fluid Outlet	1 in NPT(F)	3/4 in NPT(M)	1 in NPT(F)
Air Operation Range	0 psi to 100 psi (0 bar to 7 bar)	0 psi to 72 psi (0 bar to 4.9 bar)	0 psi to 78 psi (0 bar to 5.4 bar
Max Recommended Pump Speed	20 cpm	20 cpm	20 cpm
Cycles per Pound	2.1 cpp	5.2 cpp	2.6 cpp
Cycles per Kg	5 cpk	11 cpk	6 cpk
Wetted Parts	ETD 150, 41L40 and 4140 alloy steel; 304 and 17-4PH grades of stainless steel; acetal; carbon- filled PTFE; CS; ductile iron; eNi, Zn and chrome plating; UHMWPE	ETD 150, 41L40 and 4140 alloy steel; 304 and 17-4PH grades of stainless steel; acetal; carbon- filled PTFE; CS; ductile iron; eNi, Zn and chrome plating; UHMWPE	ETD 150, 41L40 and 4140 allo steel; 304, 316 and 17-4PH grades of stainless steel; aceta carbon-filled PTFE; CS; ductile iron; eNi, Zn and chrome plating PTFE; UHMWPE
Sound Pressure Level	80 dB(A)	87 dB(A)	80 dB(A)
Sound Power Level	90 dB(A)	87 dB(A)	90 dB(A)
Approximate Weight	145 lb (66 kg)	101 lb (46 kg)	145 lb (66 kg)
Instruction Manual	System — 312863 Pump — 312376 Pump Lower — 312375 Air Motor — 311238	System — 312863 Pump — 312376 Pump Lower — 312375 Air Motor — 311238	System — 312863 Pump — 312376 Pump Lower — 312375 Air Motor — 311238



# **Pump Packages**

Package Number	24E006	24E007	24E008	24E009	24E010	24E011
Ratio	14:1	26:1	29:1	55:1	63:1	68:1
Pump	P14DCS	P26DCS	P29DCS	P55DCS	P63DCS	P68DCS
Mounting Type	Floor Standing					
Mounting Number	223952	223952	223952	223952	223952	223952
3/4 in x 6 ft Air Hose	208610	208610	208610	208610	208610	208610
1 in x 6 ft Fluid Hose	115042	244657	244657	244657	244657	244657

### **Accessories**

# **DataTrak**[™] **Conversion Kits**

For converting NXT air motors to include the DataTrak module with runaway protection. Refer to manual 311486 for more details.

	Part Number Description	
NXT306 Conversion kit for NXT3400 motors. Use with 14:1, 29:1 and 63:1 pumps.		Conversion kit for NXT3400 motors. Use with 14:1, 29:1 and 63:1 pumps.
	NXT606	Conversion kit for NXT6500 motors. Use with 26:1, 55:1 and 68:1 pumps.





# **RAM Pump Packages with DataTrak**

Package Number	247979	247980	247981
Ratio	14:1	63:1	68:1
RAM System	CM53BN	CM17BN	CM2RBN
3/4 in x 6 ft Air Hose	208610	208610	208610
1 in x 6 ft Fluid Hose	115042	244657	244657

# **RAM Pump Packages without DataTrak**

Package Number	24E780	24E781	24E782
Ratio	14:1	63:1	68:1
RAM System	CM515N	CM155N	CM2L5N
3/4 in x 6 ft Air Hose	208610	208610	208610
1 in x 6 ft Fluid Hose	115042	244657	244657





### Accessory Ordering Information

### **Seal Kit**



Part Number	Description
25\$071	Nitrile seal kit for 400 lb (180 kg) drums





# Field-Proven, Energy-Efficient

Hydraulic Dyna-Star pumps provide reliable, quiet, ice-free performance at maximum pressure and low-flow rates and are up to three times more energy efficient than comparable compressed-air systems.

### **Built-In Reliability**

Self-lubricating vertical design for long life and reliable operation in high-vibration environments.

### Quiet Hydraulic Motor

No need for add-on mufflers.

### **High-Efficiency Motor**

Uses less hydraulic oil.

### **Typical Applications**

- Service shops
- · Heavy-duty dealerships
- Fleet services facilities
- In-plant
- Lube trucks
- Mining

### Typical Fluids Handled

• Grease up to NLGI #2

Technical Specifications		
Fluid Pressure Ratio	5:1	10:1
Pump Number	224912 – 35 lb (16 kg) 224751 – 120 lb (55 kg) 224752 – 400 lb (180 kg)	2008088 - 60 lb (27 kg) 247443 - 120 lb (55 kg) 247450 - 400 lb (180 kg)
Applications	Grease Dispensing	Grease Dispensing
Maximum Input Pressure	1,500 psi (102 bar)	600 psi (41 bar)
Maximum Fluid Input Volume	3 gpm (11.4 lpm)	3 gpm (11.4 lpm)
Maximum Output Flow Rate	4 lb/min (1.8 kg)	1.1 lb/min (0.5 kg)
Maximum Recommended CPM	60	60
Maximum Fluid Output Pressure	7,500 psi (517 bar)	7,500 psi (517 bar)
Hydraulic Supply Inlet	3/8 in NPT	3/4 to 16 in JIC (37° Flare)
Hydraulic Return Outlet	3/4 in NPT	3/4 in NPT
Fluid Outlet	1/2 in NPT	1/2 in NPT
Maximum Incoming Fluid Temp.	130°F (54°C)	200°F (93°C)
Wetted Parts	Steel, copper, polyurethane, Buna-N, polyester elastomer	Steel, copper, polyurethane, Buna-N, polyester elastomer
Sound Pressure Level	77 dB(A)	77 dB(A)
Approximate Weight	224912 – 32.5 lb (14.7 kg) 224751 – 37.5 lb (17 kg) 224752 – 42 lb (19.1 kg)	2008088 – 41 lb (18.6 kg) 247443 – 43.5 lb (19.7 kg) 247450 – 48 lb (21.8 kg)
Instruction Manual	308156	312350

# **Dyna-Star® Hydraulic Pumps**



# Ordering Information

# **Dyna-Star Hydraulic Pumps**

Part Number	Description
224912	5:1 Grease pump for 35 lb (16 kg) pails
224751	5:1 Grease pump for 120 lb (55 kg) drum
224752	5:1 Grease pump for 400 lb (180 kg) drum
247450	10:1 Grease pump for 35 lb (16 kg) pails
247443	10:1 Grease pump for 120 lb (55 kg) drum
247450	10:1 Grease pump for 400 lb (180 kg) drum

### Accessories

### **Drum Covers**



Part Number	Description
224915	Cover for 35 lb (16 kg) pail
204574	Cover for 120 lb (55 kg) drum
200326	Cover for 400 lb (180 kg) drum

### **Follower Plates**



Part Number	Description	
224916	Follower plate for 35 lb (16 kg)	
223700	Follower plate for 120 lb (55 kg)	
223701	Follower plate for 400 lb (180 kg)	

### **Hydraulic Fluid Controls**

Required for each pump



Part Number	Description
236864	Dyna-Star Fluid Controls [1,500 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.

### **Tie-Down Covers**



Part Number	Description
222060*	Dyna-Star, 5:1 tie-down cover for 120 lb (55 kg)
207366**	Dyna-Star, 5:1 tie-down cover for 400 lb (180 kg)

^{*}Use with hold-down kit 222061. **Use with hold-down kit 207361.



### **Manual Dispense from Bulk Containers**



³⁰⁶⁴⁵⁵ * 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.

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

*** Dispense kit 203703 can be used for direct greasing applications (must be ordered separately).

306436

Instruction Manual

306455

306436

# **Graco Dispense Valves and Guns Selection Guide**



### Greace Valves

Grease valves							
	Fluid	Туре	Maximum Working Pressure	Maximum Flow Rate	Intended Use	Warranty	Reference Pages
Accu-Shot™	NLGI #2	Metered	8,000 psi (552 bar)	2 lb/min 1 kg/min	Indoor/ Outdoor	1 year	159
Pro Shot™	Grease up to NLGI #2	Non- Metered	8,000 psi (552 bar)	2 lb/min 1 kg/min	Indoor/ Outdoor	1 year	160
Power Shot™	Grease up to NLGI #2	Booster	Supply 5,000 psi (345 bar) Output 18,000 psi (1,242 bar)	N/A	Indoor/ Outdoor	1 year	161

Grease Guns							
	Fluid	Style	Maximum Working Pressure	Loading	Intended Use	Warranty	Reference Pages
Manual	Grease up to NLGI #2	Lever	6,000 psi to 10,000 psi (414 bar to 690 bar)	Cartridge/ bulk fill/ loader fill/ suction	Indoor/ Outdoor	1 year	162
Pneumatic	Grease up to NLGI #2	Pistol	6,000 psi (414 bar)	Bulk fill/ loader fill	Indoor/ Outdoor	1 year	162
Booster	Grease up to NLGI #2	Pistol	10,000 psi (690 bar)	Loader fill	Indoor/ Outdoor	1 year	162





### Typical Applications

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

### Typical Fluids Handled

• Grease up to NLGI #2

maraniani wonang moodaro	5,555 ps. (6.15 2d.)
Metering System	Oval gears
Accuracy	± 3% with grease consistency (grade NLGI) 2/3
Repeatability (typical)	± 1% with grease consistency (grade NLGI) 2/3
Storage Temperature Range	-4°F to 158°F (-20°C to 170°C)
Operating Temperature Maximum	95 (%RU)
Battery	Standard alkaline batteries 2 x 1.5 Volt Size AA
Battery Life	18 to 24 months (depends on usage)
Dimensions (without extension)	8.8 in L x 1.8 in W x 4.4 H (22.4 cm L x 4.6 cm W x 11.2 cm H)
Weight	2.2 lb (1.0 kg)

One year

309454

### Ordering Information

Part Number	Description	Includes
233807	U.S. measurement, includes extension and hydraulic coupler	Standard nozzle extension (200389) and 1/4 in NPT inlet
233933	Metric measurement, includes extension and hydraulic coupler	Standard nozzie extension (200369) and 174 in NFT inlet

Warranty

Instruction Manual



### For Heavy-Duty Applications Designed to perform in heavy-equipment shops, fleet maintenance shops, municipal garages and higher-volume in-plant applications with longer plumbing runs and larger fluid usage.





Protected by rigid guard.

Pressure-Assisted Trigger

For ease of operation.

### Easy Top Adjustment

With locking nut.

Rugged Design

For harsh environments.

### **Typical Applications**

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

### Typical Fluids Handled

• Grease up to NLGI #2

Tec	Technical Specifications				
	Maximum Working Pressure	8,000 psi (552 bar)			
	Inlet Size	1/4 in or 3/8 in			
	Wetted Parts	Chrome vanadium, polyurethane, brass, carbon steel, alloy steel			
	Warranty	One year			
	Instruction Manual	309032			

### Ordering Information

	Description	NPT		
	Description	1/4 in	3/8 in	
1	Non-metered grease valve with standard nozzle extension (200389)	242056	242058	
1	Bare non-metered grease valve only	242055	242057	
1	Non-metered grease valve package. Includes Grease Valve (242056), Z-Swivel (202577) and Whip Hose (109148).			
1	Non-metered grease valve package. Includes Grease Valve (242055), coupler (200325) and Whip Hose (109145).	26C184	-	





### **Typical Applications**

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

### Typical Fluids Handled

• Grease up to NLGI #2

ес	echnical Specifications				
	Maximum Input Pressure	5,000 psi (34 MPa, 345 bar)			
	Maximum Delivery Pressure	Up to 18,000 psi (124 MPa, 1241 bar)			
	Inlet Size	1/8 NPT female			
	Wetted Parts	Alloy steel, carbon steel, chrome alloy, copper, leather			
	Weight	3 lb (1.4 kg)			
	Height	7 in (178 mm)			
	Length	11.675 in (296 mm)			
	Warranty	One year			
	Instruction Manual	306271			

# Ordering Information

Part Number	Description
202600	1/8 NPT(F) Power Shot booster Valve. Includes nozzle (200389)

### **Accessories**

Part Number	Description
202579	Hose swivel (must be ordered separately)





# Lever-Action and Pistol-Style Grease Dispensing Guns

Durable design for years of trouble-free use in demanding environments. Reduces downtime and is easy to load – two- or three-way loading capability makes it easy to keep on greasing.



## **Ordering Information**

	Part Number	Style	Gun Type	Pressure psi (bar)	Loading	Includes											
	112196	Pneumatic	Pistol	6,000 (414)	Bulk fill/ loader fill	Rigid extension and hydraulic coupler											
	203697	Booster	Pistol	10,000 (690)	Loader fill	Rigid extension											
	110218				6,000 (414)	Cartridge/bulk fill	Rigid extension and hydraulic coupler										
	110216	Manual	Manual	Manual	Manual	Manual	Lever -	Lever	Level	Pistol				20101			Rigid extension, hydraulic coupler and air bleeder valve
×.	110203						Manual	Manual						10,000 (690)	Cartridge/ bulk fill/ loader fill	Rigid extension, hydraulic coupler and air bleeder valve	
29	110202		PISTOI	PISIOI	PISIOI	PISIOI	PISTOI	PISTOI	PISTOI					12 in (30.4 cm) flexible extension, hydraulic coupler and air bleeder valve			
	110201		Suction	_	Suction	12 in (30.4 cm) clear plastic hose											



# **Z-Swivels**

	IV F
1	

Maximum Working Pressure psi (bar)	Inlet	Outlet	Thread	Part Number
6,500 (450)	1/8 in	1/4 in	NPT	202579
6,500 (450)	1/4 in	1/4 in	NPT	202577
6,500 (450)	3/8 in	3/8 in	NPT	224569
6,000 (414)	1/2 in	1/2 in	NPT	207948

# **Straight Swivels**



Maximum Working	N	Part Number	
Pressure psi (bar)	Inlet	Outlet	Part Number
8,000 (500)	1/8 in	1/8 in	204082
8,000 (500)	1/4 in	1/8 in	204083
8,000 (500)	1/4 in	1/4 in	204084
6,000 (414)	1/2 in	1/2 in	207947
5,000 (345)	3/8 in	1/2 in	214926
5,000 (345)	1/2 in	1/2 in	207946

### $360^{\circ}$ Swivels



Part Number -	Includes	
	Fitting	Coupler
203597	203198	200325
203198	203198	_

# **Nozzles**

Part Number	Pr Description	
200389	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 nose co (200325). Coupler has 360° swivel adapter (203198) for added convenience.		
204897	Swivel nozzle. Includes straight 12 in (30.4 cm), 1/8 NPT(M) extension tube (155836) and tapered nose coupler (200325). Coupler has 360° swivel adapter (203198) for added convenience.	
204204 [★] Flexible 12 in (30.4 cm) hose nozzle. 1/8 NPT(M) includes tapered-nose coupler (200325).		
203504*	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 in (30.4 cm) hose nozzle without coupler.	
112255  18 in (45.8 cm) hose nozzle without coupler.  30 in (76.2 cm) hose nozzle without coupler, has 1/8 NPT(M) both ends. Use as alternate for rigid nozzle tapered-nose coupler 200325.		







### **Couplers**

Part Number	Description
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 8,000 psi (551 bar).	
202650 1/8 NPT(F) inlet standard straight-nose grease coupler for manual operated grease guns only.  Maximum working pressure 3,000 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**

Adapters have lock-sleeve quick-connector; works with any grease nozzle with a tapered-nose coupler.

Part Number	Description	
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.	
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 hozzle connector (203504).		







# Tapered Thread Grease Fittings, 10,000 psi (690 bar) (steel; ball check)

Part Number	Shank	Description
100054	9/32	1/8 NPT straight
101277	1-9/32	1/8 NPT straight
100970	9/32	1/8 NPT 30° angle
100834	9/32	1/8 NPT 45° angle
100971	9/32	1/8 NPT 65° angle
100833	9/32	1/8 NPT 90° angle
100848	3/8	1/4 NPT 67° angle
100846	3/16	1/4-28 tapered SAE-LT straight
100847	13/64	1/4-28 tapered SAE-LT 45° angle
101283	3/16	1/4-28 tapered SAE-LT 90° angle
101281	11/32	1/4-28 tapered SAE-LT straight
110702	19/64	1/4-28 tapered SAE-LT 65° angle
100835	12/32	1/4 NPT straight











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### 1/4 in Tapered Thread-Forming Grease Fittings, 10,000 psi (690 bar) (steel; ball check)

Part Number	Shank	Description
110703	13/64	1/4-28 straight
110705	13/64	1/4-28 90° angle

### **Drive-Type Grease Fittings (steel)**

		•
Part Number	Shank	Description
110706	3/32	3/16 drill straight
110709	7/32	3/16 drill 65° angle
110713	1/4	3/16 drill straight without ball check
101312	7/32	3/16 drill straight with ball check
110710	1/4	5/16 drill straight with ball check
101287	17/64	1/4 drill straight without ball check



### **Standard Button-Head Grease Fitting (steel)**

1/4 in Tapered Thread Grease Fittings (steel; ball check)

Part Number	Shank	Description
100837	7/16	1/4 NPT straight
101297	33/64	3/8 NPT straight
110711	35/64	1/2 NPT straight



### **Giant Button-Head Grease Fitting (steel)**

Part Number	Shank	Description
110712	9/16	3/8 NPT straight
100854	1/2	1/4 NPT straight



### **Easy-Outs**

Part Number	Description
101604	3/8 NPT straight
101605	1/4 NPT straight



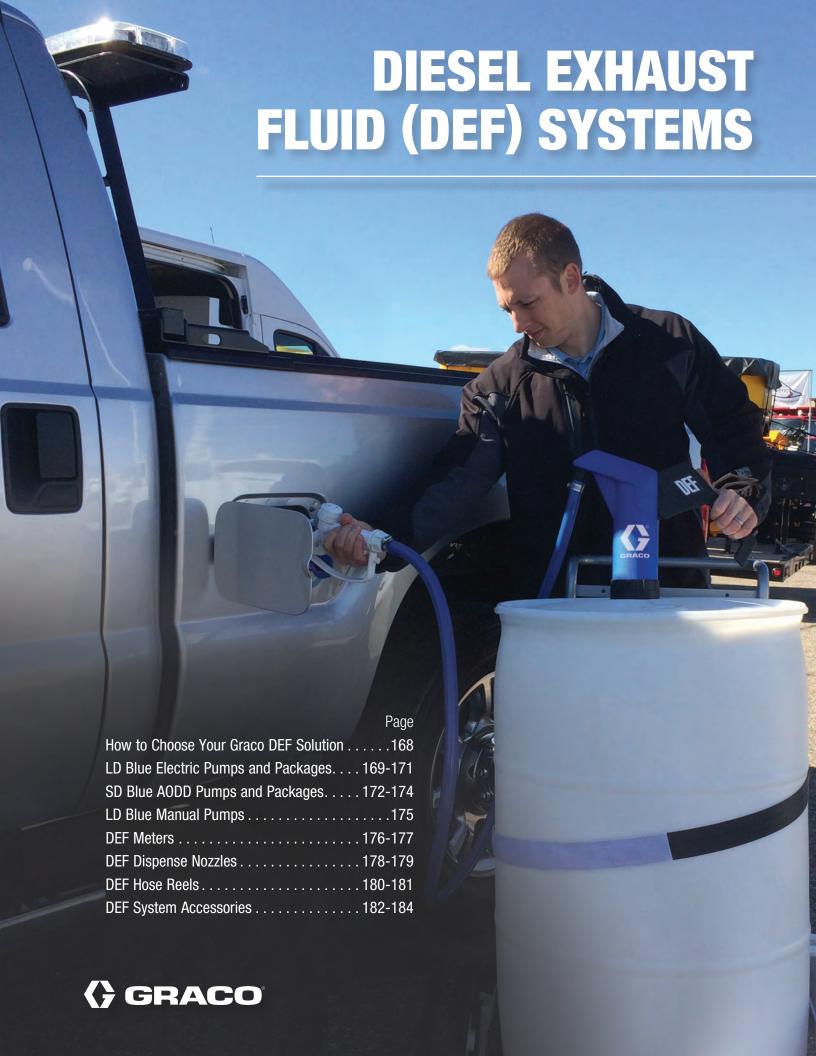
### **Grease Accessory Packages**

Convenient storage box contains the following threaded fittings in the quantities listed:

Part Number	Package Includes			
	Quantity	Grease Fitting No.	Shank	Description
	30	100054	9/32	1/8 NPT straight
	10	100970	9/32	1/8 NPT 30° angle
202654	10	100833	9/32	1/8 NPT 90° angle
	20	100846	3/16	1/4-28 straight
	10	100847	13/64	1/4-28 45° angle



Notes		



# Flexible Installation – Solutions for Every Application

Choose from configured packages or build a custom DEF system specific to your application with individual pumps and components. From the economical hand pumps to the high-performance electric or air-operated double diaphragm (AODD) packages, Graco has you covered. Every solution is designed with the highest-quality components for trouble-free operation.







# **How to Choose Your Graco DEF Solution:**



# **Identify your power supply**

Choose the pump that's right for your application. Choose the lightweight and reliable manual hand pump for small applications. The LD Blue electric pumps are recommended for applications up to 50 ft, or upgrade to the SD Blue AODD pump for longer applications, up to 200 ft.







# **Determine your container size***

Whether dispensing from a drum or a tote container, Graco has the package that fits your needs. Fifty-five gallon drums are ideal for one or two truck operations, and for larger fleets choose 275 or 330 gallon IBC totes.

*Tote and drum not for sale from Graco



# **Choose your accessories**

Graco offers a full line of high-quality DEF accessories to complement your installation. Select from automatic or manual dispense nozzles, closed-system couplers, in-line meters, hose reels, mounting brackets, fittings, and dispense and suction hoses.





# A Reliable Industrial Pump with Self-Priming Capabilities

Whether you own a small garage, large dealership or heavy equipment maintenance facility, Graco has a complete line of diesel exhaust fluid (DEF) products for every application. Our electric, pneumatic or manual products are engineered specifically for the advanced needs of DEF fluid and are designed to minimize downtime and dispense materials quickly without compromising chemical integrity.



### **Built-In Safety and Reliability**

Automatic shut-off timer (6.5 min) incorporated into the 120V pump. Prevents the pump from running past the duty cycle and maximizes the life of the pump.

### Stay Up and Running Longer

Reduce downtime and get more work done with the LD Blue systems – up to twice the life of competitive pumps.



Features a self-priming membrane pump that has no need for a dynamic seal, reducing the need for maintenance.

### **Typical Applications**

- · Automotive and heavy-duty dealerships
- Agriculture
- · Service and fast lube centers
- Fleet service facilities

### Typical Fluids Handled

Diesel exhaust fluid

Tec	Technical Specifications			
		120V	12V	
	Maximum Flow Rate	9 gpm	9.5 gpm	
	Maximum Fluid Pressure	50 psi	50 psi	
	RPM	1,750	2,600	
	Watts	500	260	
	Voltage	120V / 60hz	12V	
	Maximum Amperage	4.5A	22A	
	Duty Cycle	20 min ON/OFF	20 min ON/OFF	
	Listings	cETLus	CE	

# >>> Ordering Information

### **Pump Only**

Part Number	Description	
127642	120V AC electric pump, 3/4 in barbed hose tail	
127643	12V DC electric pump, 3/4 in barbed hose tail	

# **LD Blue Electric Pump Packages**



### Ordering Information

### **LD Blue Electric Pump Packages**





# **LD Blue Electric Pump Packages**







Package 24V646 installed on tote (not included in package).



# **Superior-Performing AODD Pump** Capable of Higher Output Over Longer Runs

Whether for a small garage, large dealership or heavy equipment maintenance facility, our pneumatic pumps are engineered specifically for the advanced needs of DE fluid and are designed to minimize downtime and dispense materials quickly without compromising chemical integrity.

### Modular Air Valve

Stall-free, low-pulsation air valve provides smooth and rapid changeover for increased efficiency and minimizes downtime.

### Robust Design

Bolt-through fluid cover design eliminates leaks and provides better safety and more reliability.

### Versatility

The Husky 515 pump delivers up to 15 gpm and works on as little as 30 psi.

# Rugged Construction

Resists corrosion for reliable performance and long life.

### **Typical Applications**

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

### Typical Fluids Handled

· Diesel exhaust fluid

Technical Specifications			
	Maximum Flow Rate	15 gpm	
	Maximum Fluid Pressure	50 psi	
	Air Operating Range	30-50 psi	
	Air Inlet	1/4 in NPT(F)	
	Pump Inlet	3/4 in BSPP(F)	
	Hose Inlet	3/4 in BSPP(F)	
	Pump Outlet	3/4 in BSPP(F)	
	Maximum Air Consumption	28 scfm	

### Ordering Information

Part Number	Description	Inlet/Outlet
24G745	SD Blue Husky 515 pump	3/4 in BSPP





# **SD Blue Pump Tote Packages**









	Deluxe		Sta	ndard
Package Number	24F531	24F878	24V677	24V678
Mount Type	Tote/Wall	Tote/Wall	Tote/Wall	Tote/Wall
Type of Nozzle	Automatic	Automatic	Automatic	Automatic
Air-Operated Pump	24G745	24G745	24G745	24G745
Mounting Bracket	24F870	24F870	24W186	24W186
Valve/Nozzle	24F529	24F529	127649	127649
Meter	24G738	-	127663	-
Drum Quick Connect Kit	24F532	24F532	-	-
Air Regulator and Gauge	110147	110147	-	-
Air Shut-Off Ball Valve, Vented	110223	110223	-	-
50 psi Air Safety Valve	124963	124963	116306	116306
Dispense Hose	124603	124603	24W161	24W161
Dispense Hose Length	20 ft	20 ft	20 ft	20 ft
Suction Hose	124581	124581	24W149	24W149
Suction Hose Length	6 ft	6 ft	5 ft	5 ft
Fittings (2)	3/4 in BSPP(MBE)	3/4 in BSPP(MBE)	SST Clamps	SST Clamps

Package 24V677 installed on a 275 gallon tote (tote and coupler not included in package).





# **SD Blue Pump Drum Packages**









	Deluxe		Star	ndard
Package Number	24F947	24M499	24V679	24V686
Mount Type	Drum	Drum	Drum	Drum
Type of Nozzle	Manual	Automatic	Manual	Automatic
Air-Operated Pump	24G745	24G745	24G745	24G745
Mounting Bracket	24F679	24F679	24W185	24W185
Valve/Nozzle	125078	24F529	125078	127649
Meter	-	24H293	_	127663
Drum Quick Connect Kit	24F532	24F532	_	_
Air Regulator and Gauge	110147	110147	_	-
Air Shut-Off Ball Valve, Vented	110223	110223	-	-
50 psi Air Safety Valve	124963	124963	116306	116306
Dispense Hose	125079	124671	24W154	24W154
Dispense Hose Length	12 ft	12 ft	12 ft	12 ft
Suction Hose	124875	124875	24W148	24W148
Suction Hose Length	2 ft	2 ft	2 ft	2 ft
Fittings (2)	3/4 in BSPP(M)	3/4 in BSPP(M)	SST Clamps	SST Clamps





- Lightweight, reliable and cost-effective solution for dispensing DEF from 55 gallon drums
- Quick drum installation and change-out with integrated 2 inch bung adapter
- Fast delivery capable of 11 oz per stroke
- Adjustable telescoping downtube

### Typical Applications

- Automotive and heavy-duty dealerships
- Agriculture
- Service and fast lube centers
- Fleet service facilities
- In-plant

### Typical Fluids Handled

• Diesel exhaust fluid

### **Technical Specifications**

Maximum Flow Rate 11 oz per stroke

# >>> Ordering Information

Part Number	Description
127647	DEF hand pump with drum-length adjustable downtube (125479)
24G636	DEF hand pump (127647), 6 ft dispense hose with ball valve (125478), drum length adjustable downtube (125479)
127875	DEF hand pump (127647), 6 ft dispense hose with ball valve (125478), drum length adjustable downtube (125479), LD manual nozzle (125078)

### **Accessories**

Part Number	Description
125479	Drum length adjustable downtube for hand pump





### **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

### **Features and Benefits**

- Tracks totals in two modes reset for periodic history and non-reset for meter life
- Durable design for rugged use
- Easy to use dispenses pints, quarts, liters or gallons
- 0.5 gpm to 15 gpm flow rate
- 1500 psi maximum pressure, 1/2 in NPT inlet

Technical Specifications		
Flow Range	0.5 gpm to 15 gpm (1.9 lpm to 57 lpm)	
Maximum Working Pressure	1,500 psi (103 bar)	
Units of Measure	Quarts, pints, gallons, liters (factory-set to quarts)	
Weight	1.8 lb (0.8 kg)	
Accuracy	± 2.5%	
Inlet/Outlet	1/2 in BSPP	
Maximum Totalizer	99,999	
Maximum Recorded Dispense	999.99	
Operating Temperature Range	-4°F to 122°F (-20°C to 50°C)	
Storage Temperature Range	-13°F to 122°F (-25°C to 50°C)	
Outdoor Use	No	
Battery	2 AA alkaline	
Wetted Parts	Stainless steel, PBT (polybutylene terephthalate), nickel, fluoroelastomer	
Meter Pressure Loss	22 psi (1.5 bar) @ 14 gpm (53 lpm)	
Instruction Manual	313048	

# Ordering Information

	Part Number	Description
24G738 SDI15 DEF meter, 1/2 in BSPP(F/F), 1,500 psi, 0.5 to 15 gpm		SDI15 DEF meter, 1/2 in BSPP(F/F), 1,500 psi, 0.5 to 15 gpm
	24H293	SDI15 meter kit with fittings for SST auto nozzle. Includes SDI15 Meter (24G738), Swivel (124964), Nipple Fitting (24H292), Adapter Fitting (16G760) and Elastomeric Seal (124965).





### **Typical Applications**

- Automotive and heavy-duty dealerships
- Service and fast lube centers
- · Fleet service facilities
- In-plant

### Typical Fluids Handled

• Diesel exhaust fluid

# **Features and Benefits**

- Easy to install use in-line or at the end of the dispense hose
- Impulse signals single channel or reed switch
- 1.3 gpm to 26.4 gpm flow rate
- Rotatable display 4 positions
- 1 in BSPP(M) inlet and outlet. Includes 1 in BSPP(F) coupler.

Tec	hnical Specifications	
	Flow Range	1.3 gpm to 26.4 gpm (4.9 lpm to 100 lpm)
	Maximum Working Pressure	145 psi (10 bar)
	Units of Measure	Quarts, pints, gallons, liters (factory-set to quarts)
	Weight	0.6 lb (0.25 kg)
	Accuracy	± 1.0%
	Inlet/Outlet	1 in BSPP(M)
	Maximum Totalizer	99,999
	Maximum Recorded Dispense	999.99
	Operating Temperature Range	14°F to 122°F (-10°C to 50°C)
	Storage Temperature Range	-4°F to 158°F (-20°C to 70°C)
	Outdoor Use	No
	Battery	2AAA alkaline
	Wetted Parts	SST, plastic, rubber
	Meter Pressure Loss	5 psi (0.3 bar) @ 26.4 gpm (100 lpm)
	Instruction Manual	333467

# Ordering Information

Part Number	Description
127663	LD digital in-line turbine meter, LCD display

### **Accessories**

<b>3</b>	Part Number	Description
	127800	Adapter – SD auto nozzle connection to LD meter





- Easy break-away system for low-cost repairs if the spout becomes detached
- Choose with or without built-in meter
- 4 gpm to12 gpm flow rate
- 50 psi maximum pressure
- · Optional mis-filling system to prevent mis-fills
- Stainless steel spout

echnical Specifications		
	Automatic Shut-Off Nozzle	Automatic Shut-Off Nozzle with Meter
Flow Range	4 gpm to 12 gpm (15 lpm to 45 lpm)	4 gpm to 12 gpm (15 lpm to 45 lpm)
Maximum Working Pressure	50 psi (3.5 bar)	50 psi (3.5 bar)
Units of Measure	_	Quarts, pints, gallons, liters (factory-set to quarts)
Weight	1.3 lb (0.6 kg)	1.8 lb (0.8 kg)
Accuracy	_	± 1%
Inlet	1 in BSP or 3/4 in hose barb	1 in BSP or 3/4 in hose barb
Maximum Totalizer	_	999,999
Maximum Recorded Dispense	_	99,999
Operating Temperature Range	-4°F to 130°F (-20°C to 55°C)	14°F to 122°F (-10°C to 50°C)
Storage Temperature Range	-40°F to 140°F (-40°C to 60°C)	-4°F to 158°F (-20°C to 70°C)
Outdoor Use	Yes	No
Battery	_	2AA alkaline
Wetted Parts	SST, rubber, plastic	SST, rubber, plastic
Meter Pressure Loss	13 psi (0.9 bar) @ 9.3 gpm (35 lpm)	13 psi (0.9 bar) @ 9.3 gpm (35 lpm)
Instruction Manual	333468	333469

### **Typical Applications**

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

### Typical Fluids Handled

· Diesel exhaust fluid

# Ordering Information

	Part Number	Description
127649 LD a		LD automatic nozzle with stainless steel breakaway spout
	127650	LD automatic nozzle with built-in electronic turbine meter, with stainless steel breakaway spout

### **Accessories**

	Part Number	Description
	127651	Spout replacement kit for LD nozzles 127649 and 127650
	127652	Magnetic mis-fill spout kit for LD automatic nozzles
0	127654	Magnetic adapter for mis-fill kit





- · Heavy-duty design
- Automatic shut-off valve with stainless steel nozzle
- . 11 gpm flow rate
- 50 psi maximum pressure
- 3/4 in BSPP inlet

### **Typical Applications**

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

### Typical Fluids Handled

· Diesel exhaust fluid

## >>> Ordering Information

Part Number	Description
124398	SD automatic shut-off SST nozzle without swivel, 3/4 in BSPP(F)
24F529	SD automatic shut-off SST nozzle with swivel, 3/4 in BSPP(F)
127655	SD automatic shut-off SST nozzle, 3/4 in hose barb

# **LD Blue Manual Nozzle**

### **Typical Applications**

- · Automotive and heavy-duty dealerships
- · Service and fast lube centers
- Fleet service facilities
- In-plant

### Typical Fluids Handled

• Diesel exhaust fluid

### **Features and Benefits**

- Manual shut-off valve with stainless steel nozzle
- High 20 gpm flow rate
- 50 psi maximum pressure
- 3/4 in BSPP inlet
- Lightweight under 1 lb

# >>> Ordering Information









- For use with SD and LD pumps (LD pump with manual nozzle only)
- Stainless steel fluid section with open porting ensures high fluid flow with minimal pressure loss
- Flexible positioning of guide arm for mounting on bench, overhead, wall, tote or utility truck
- 150 psi maximum pressure
- 1/2 in x 45 ft inlet hose with 1/2 in BSPT(M) swivel connection to provide leak-free connection

### **Typical Applications**

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

### Typical Fluids Handled

· Diesel exhaust fluid

Fechnical Specifications		
	Operating Temperature Range	-40°F to 158°F (-40°C to 70°C)
	Wetted Parts	Hybrid polymer, brass, nitrile rubber
	Sound Pressure Level	80 dB(A)
	Sound Power Level	87 dB(A)
	Instruction Manual	3A8216

# Ordering Information

### **Hose Reels**

Part Number	Description
HEL015	LDX Series, DEF, 1/2 in (13 mm) inlet, 1/2 in x 45 ft (13 mm x 14 m) hose, BSPT

### **Accessories**

Part Number	Description
25U370	Inlet kit
18F444	1/2 in BSPT to 3/4 in hose barb adapter
18F445	1/2 in to 3/4 in adapter, BSPT





#### **Features and Benefits**

- For use with SD and LD pumps (LD pump with manual nozzle only)
- Stainless steel fluid section with open porting ensures high fluid flow with minimal pressure loss
- Flexible positioning of guide arm for mounting on bench, overhead, wall, tote or utility truck
- 50 psi maximum pressure
- 3/4 in x 50 ft inlet hose with 3/4 in BSPP(M) swivel connection to provide leak-free connection

#### **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

Technical Specifications				
12°F to 140°F (-11°C to 60°C)				
50 psi (3.5 bar)				
Zinc plated steel, polyurethane, steel				
98 lb (44.5 kg)				
85.8 dB (A)				
94.9 dB (A)				
3A1767				

#### Ordering Information

#### **Hose Reels**

Part Number	Description
HSDD5B	XD 30 DEF hose reel, 3/4 in x 50 ft, blue, BSPP
HSDD5F	XD 30 DEF hose reel, 3/4 in x 50 ft, yellow, BSPP
HSDDDB	XD 30 DEF hose reel, bare, blue, BSPP
HSDDDF	XD 30 DEF hose reel, bare, yellow, BSPP

#### **Hose Reel Inlet Kits**

A hose inlet kit is required when ordering an XD reel.

Part Number	Description
24W250	2 ft DEF inlet hose kit for XD 30 reels. 3/4 in BSPP(F) x cut end and 90° elbow.
24W251	6 ft DEF inlet hose kit for XD 30 reels. 3/4 in BSPP(F) x cut end and 90° elbow.
124875	2 ft DEF hose, 3/4 in BSPP(M) x cut end (inlet hose)
124581	6 ft DEF hose, 3/4 in BSPP(M) x cut end (inlet hose)



#### Ordering Information

#### **Mounting Brackets**



Part Number	Description
24F870	AODD tote/wall mounting bracket with nozzle holder
24F679	AODD drum mounting bracket with nozzle holder
124541	AODD nozzle bath holder

#### **Dispense and Suction Hoses**



	Part Number	Description
	24W148	2 ft suction hose kit with (2) hose clamps
5	24W149	5 ft suction hose kit with (2) hose clamps
Standard	24W190	6 ft dispense hose kit with (2) hose clamps
St	24W154	12 ft dispense hose kit with (2) hose clamps
	24W161	20 ft dispense hose kit with (2) hose clamps
	124875	2 ft suction hose, 3/4 in BSPP(M) x cut end (inlet hose)
	124581	6 ft suction hose, 3/4 in BSPP(M) x cut end (inlet hose)
	124671	12 ft dispense hose, 3/4 in BSPP x 3/4 in BSPP
Deluxe	125079	12 ft dispense hose, 3/4 in BSPP x cut end
	124603	20 ft dispense hose, 3/4 in BSPP x 3/4 in BSPP
	125074	20 ft dispense hose, 3/4 in BSPP x cut end
	125242	50 ft dispense hose, 3/4 in BSPP x 3/4 in BSPP



#### >>> Ordering Information

## **Fittings**

rittiigs	Part Number	Description
	127656	1 in BSP(F) elbow fitting, black
	127657	1 in BSP(F) x 3/4 in barb hose tail, black
	127720	1 in BSP(F) x 1 in BSP(F) linear socket, black
	127804	3/4 in x 1 in BSPP(F) swivel fitting with seals
anna anna	127805	1 in BSPP(F) x 1 in BSPP(F) coupler
	127806	1 in BSPP(M/F) swivel, white
	127815	3/4 in BSP x 3/4 in barb SST swivel hose tail
	127823	1 in BSP x 3/4 in barb elbow, white
	116306	1/4 in NPT, 50 psi air safety valve for Standard AODD pump packages
	124963	1/8 in NPT, 50 psi air safety valve for Deluxe AODD pump packages
	24F524	3/4 in BSPP(M) x 3/4 in BSPP(F) SST swivel

## **Closed-System Coupler Accessories**



#### Ordering Information

Maintaining fluid purity is essential to the longevity of your equipment and maintaining selective catalytic reduction (SCR) engines. With a closed-system design you can minimize fluid contamination and prevent spills. Choose from a variety of industry-accepted closed-system inlet kits to best suit your needs.

#### Colder

DrumQuick® PRO Quick Connect Coupler System. Economical polypropylene assembly can withstand thousands of quick and fast connections.

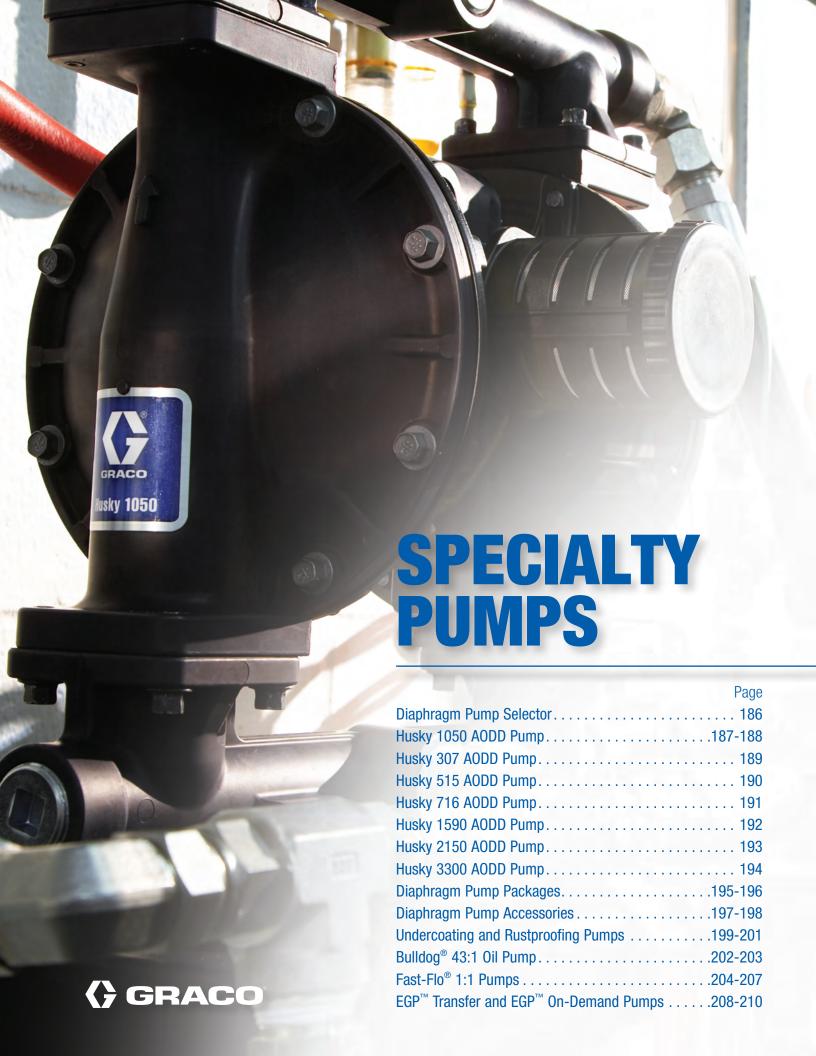
	Part Number	Description	
	24F532	Colder closed-system coupler kit – includes drum coupler (124548), drum insert (124549) and downtube (124550)	
	124548	Colder closed-system drum coupler	
0	124549	Colder closed-system drum insert	
)	125014	Colder closed-system drum insert with buttress thread	
	124550	Colder closed-system 47 in downtube	

DrumQuick® is a registered trademark of Colder Products Company.

#### **Micro Matic**

Reusable Stainless Valve (RSV) is ideal for multi-use applications and is simple to integrate with drums, totes and custom packages.

	Part Number	Description	
N. d.	17C908	Micro Matic RSV dispense coupler, 3/4 in barbed outlet, 4 pin, stainless steel	
E	127637	Micro Matic RSV container valve, 2.5 in x 5 in, 4 cam, stainless steel valve, EPDM seals	
	2008242	DEF Downtube	



# **Diaphragm Pump Selection Guide**











Husky Series	Part Number	Pump Description	Fluids	Listings	Max PSI	Reference Pages
Husky 307	D31255	Husky 307 Acetal – 3/8 in Acetal/TPE	Oil evacuation Oil transfer Water Antifreeze Windshield wash fluid	-	100 psi (6.9 bar)	191
Husky 515	243669	Husky 515 Acetal Split Inlet – 3/4 in Acetal/Buna Dual Inlet	50/50 windshield wash solution     Water     Antifreeze	-	100 psi (6.9 bar)	192
Husky 716	241906	Husky 716 Aluminum — 3/4 in Aluminum/Buna-N	Oil evacuation Oil transfer Water Antifreeze Windshield wash fluid	-	100 psi (6.9 bar)	193
Husky 1050	647016	Husky 1050 Aluminum – 1 in Aluminum/TPE	Water     Antifreeze     Fuel transfer     Gasoline (up to 10% ethanol)	UL	100 psi (6.9 bar)	189-190
Husky 1050	647731	Husky 1050 Aluminum – 1 in Aluminum/Buna-N	Oil evacuation     Oil transfer	UL	100 psi (6.9 bar)	189-190
Husky 1050	647648	Husky 1050 Aluminum – 1 in Aluminum/TPE	Fuel dispense     Gasoline (up to 10% ethanol)	UL	50 psi (3.5 bar)	189-190
Husky 1590	DB3525	Husky 1590 Aluminum – 1.5 in Aluminum/TPE	Oil evacuation Oil transfer Water Antifreeze	-	120 psi (8.3 bar)	194
Husky 2150	DF3525	Husky 2150 Aluminum – 2 in Aluminum/TPE	Oil evacuation Oil transfer Water Antifreeze	-	120 psi (8.3 bar)	195
Husky 3300	652002	Husky 3300 Aluminum – 3 in Aluminum/TPE	<ul><li>Oil evacuation</li><li>Oil transfer</li><li>Water</li><li>Antifreeze</li></ul>	-	125 psi (8.6 bar)	196













### Efficiency, Performance and Best-in-Class Engineering

Husky pneumatic double-diaphragm pumps feature a stall-free, low-pulsation air valve, which provides a smooth and rapid changeover. Typical applications include oil transfer and evacuation, fuel dispense and transfer, windshield wash solution dispense, and water and antifreeze dispense. Some models UL-approved for use in pumping gasoline and gasoline/alcohol blends up to 10% ethanol, diesel fuel, fuel oil and lubricating oil.



#### Modular Air Valve

Stall-free, low-pulsation operation provides smooth and rapid changeover

#### One-Piece Center Section

Eliminates air leaks for more efficient operation

#### Longer Diaphragm Life

Up to 5x longer diaphragm life for less maintenance and downtime

#### Four-Bolt Joint Design

Bolted design provides even sealing pressure for leak-free operation

#### **Multiple Ports**

Increased number of ports for installation flexibility

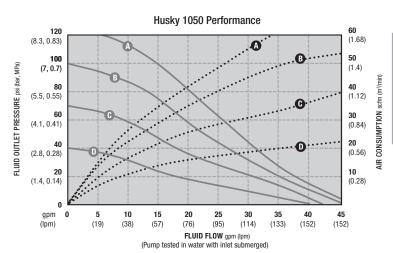
#### **Typical Applications**

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

#### Typical Fluids Handled

- Oil
- Fuel
- Water
- Antifreeze
- Washer fluid

#### **Pump Performance**



# AIR PRESSURE (A) = at 125 psi (8.3 bar, 0.83 MPa) (B) = at 100 psi (7 bar, 0.7 MPa) (C) = at 70 psi (4.8 bar, 0.48 MPa) (D) = at 40 psi (2.8 bar, 0.28 MPa) LEGEND Air Consumption Fluid Pressure



# **Husky 1050 AODD Pump**











nnical Specifications	
Maximum fluid working pressure	
Transfer Pump	100 psi (6.9 bar, 0.69 MPa)
Fuel Dispense Pump	50 psi (3.5 bar, 0.35 MPa)
Air pressure operating range	
Transfer Pump	20 psi to 100 psi (1.4 bar to 6.9 bar, 0.14 MPa to 0.69 MPa
Fuel Dispense Pump	0 psi to 50 psi (1.4 bar to 3.5 bar, 0.14 MPa to 0.35 MPa)
Air consumption at 70 psi (0.48 MPa, 4.8 bar), 20 gpm (76 lpm)	25 scfm
Air consumption at 50 psi (0.35 MPa, 3.5 bar), full flow	25 scfm
Fluid displacement per cycle	0.17 gal (0.64 l)
Maximum values with water as media under submerged inlet conditions at ambient temperature:	
Maximum air consumption	64 scfm
Maximum free-flow delivery	
Transfer Pump	50 gpm (189 lpm)
Fuel Dispense Pump	38 gpm (144 lpm)
Maximum pump speed	
Transfer Pump	275 cpm
Fuel Dispense Pump	210 cpm
Maximum suction lift (varies widely based on ball/seat selection and wear, operating speed, material properties and other variables)	16 ft (4.9 m) dry, 29 ft (8.8 m) wet
Maximum-size pumpable solids	1/8 in (3.2 mm)
Recommended cycle rate for continuous use	93 cpm to 140 cpm
Recommended cycle rate for circulation systems	20 cpm
Sound Power*	
at 70 psi (0.48 MPa, 4.8 bar) and 50 cpm	78 dB(A)
at 100 psi (0.7 MPa, 7.0 bar) and full flow	90 dB(A)
Sound Pressure**	
at 70 psi (0.48 MPa, 4.8 bar) and 50 cpm	84 dB(A)
at 100 psi (0.7 MPa, 7.0 bar) and full flow	96 dB(A)
Operating temperature range	10°F to 150°F (-12°C to 65°C)
Air inlet size	1/2 in NPT(F)
Fluid inlet size	1 in NPT(F)
Fluid outlet size	1 in NPT(F)
Weight	23 lb (10.5 kg)
Wetted parts	Aluminum, TPC-ET, acetal, PTFE, Buna-N
Non-wetted external parts	Aluminum, coated carbon steel
Instruction manual	313597

^{*}Sound power measured per ISO-9614-2.

## >>> Ordering Information

#### **Husky 1050 AODD Pumps**

Part Number	Description	Maximum Fluid Working Pressure	Fluids Handled
647016	Husky 1050 Aluminum Pump – 1 in, Aluminum/TPE	100 psi (6.9 bar)	Water / antifreeze / fuel transfer
647731	Husky 1050 Aluminum Pump – 1 in, Aluminum/Buna-N	100 psi (6.9 bar)	Oil evacuation / oil transfer
647648	Husky 1050 Aluminum Pump – 1 in, Aluminum/TPE	50 psi (3.5 bar)	Fuel dispense

^{**}Sound pressure was tested 3.28 ft (1 m) from equipment.











#### **Husky 307 AODD Pump**

- 3/8 in fluid connections
- Fluid delivery up to 7 gpm (26.5 lpm)
- Operate as low as 20 psi up to 100 psi for max flow
- Maximum working pressure of 100 psi for long line runs
- End porting available
- High-efficiency air valve operates at maximum of 6 scfm
- Groundable to reduce risk of static and electric shock

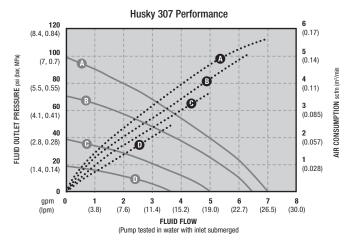
Technical Specifications				
Maximum fluid working pressure	100 psi (6.9 bar, 0.69 MPa)			
Maximum free-flow delivery*	7.0 gpm (26.5 lpm)			
Maximum pump speed	330 cpm			
Fluid displacement per cycle**	0.02 gal (0.076 l)			
Maximum suction lift	12 ft (3.7 m) dry			
Maximum-size pumpable solids	0.06 in (1.5 mm)			
Maximum ambient operating temperature***	180°F (82.2°C)			
Maximum diaphragm operating temperature***	150°F (65.6°C)			
Typical sound level at 50 psi (3.5 bar, 0.35 MPa) air @ 50 cpm	75 dB(A)			
Maximum air consumption	6 scfm (0.17 m³/min)			
Air pressure operating range	20 psi to 100 psi (1.4 bar to 6.9 bar, 0.14 MPa to 0.69 MPa)			
Air inlet size	1/4 NPT(F) or BSPT(F)			
Fluid inlet size	3/8 NPT(F)			
Fluid outlet size	3/8 NPT(F)			
Weight	5.2 lb (2.4 kg)			
Wetted parts	Acetal with stainless steel fibers, PTFE			
Instruction manual	308553			
*Flow rates are with muffler and do not vary based on diaphragm materia	*Flow rates are with muffler and do not vary based on diaphranm material. **Displacement per cycle may vary based on suction			

^{*}Flow rates are with muffler and do not vary based on diaphragm material. **Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type. ***Actual pump performance may be affected by prolonged usage at temperature.

### Ordering Information

#### **Husky 307 AODD Pump**

Part Number	Description
D31255	Husky 307 Acetal Pump – 3/8 in, Acetal/TPE















#### **Husky 515 AODD Pump**

- 1/2 in fluid connections
- Fluid delivery up to 15 gpm (56.7 lpm)
- Operate as low as 30 psi up to 100 psi for max flow
- Maximum working pressure of 100 psi for long line runs
- Center and end porting options available
- High-efficiency air valve operates at maximum of 28 scfm
- Groundable to reduce risk of static and electric shock

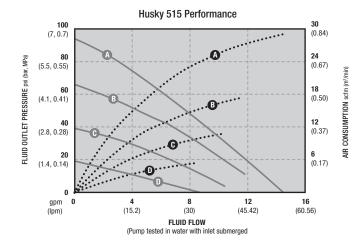
Technical Specifications	
Maximum fluid working pressure	100 psi (6.9 bar, 0.69 MPa)
Maximum free-flow delivery*	15 gpm (57 l/min)
Maximum pump speed	400 cpm
Fluid displacement per cycle**	0.04 gal (0.15 l)
Maximum suction lift	15 ft (4.5 m) dry, 25 ft (7.6 m) wet
Maximum-size pumpable solids	3/32 in (2.5 mm)
Maximum ambient operating temperature***	180°F (82.2°C)
Maximum diaphragm operating temperature***	180°F (82.2°C)
Typical sound level at 70 psi (4.8 bar, 0.48 MPa) air @ 50 cpm	77 dB(A)
Maximum air consumption	28 scfm (0.672 m³/min)
Air pressure operating range	30 psi to 100 psi (2.1 bar to 6.9 bar, 0.21 MPa to 0.69 MPa)
Air inlet size	1/4 NPT(F)
Fluid inlet size	3/4 in NPT(F)
Fluid outlet size	1/2 and 3/4 in NPT(F)
Weight	7.8 lb (3.5 kg)
Wetted parts	Groundable acetal, Buna-N, PTFE
Instruction manual	309204
*Flourestee are with muffler and do not your based on disphrage materia	al **Displacement per avale may you been an avertice

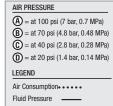
*Flow rates are with muffler and do not vary based on diaphragm material. **Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type. ***Actual pump performance may be affected by prolonged usage at temperature.

## Ordering Information

#### **Husky 515 AODD Pump**

р		
	Part Number	Description
	243669	Husky 515 Acetal Split Inlet – 3/4 in Acetal/Buna Dual Inlet















#### **Husky 716 AODD Pump**

- 3/4 in fluid connections
- Fluid delivery up to 16 gpm (60.6 lpm)
- Operate as low as 30 psi up to 100 psi for max flow
- Maximum working pressure of 100 psi for long line runs
- Center and end porting options available
- High-efficiency air valve operates at maximum of 28 scfm
- Groundable to reduce risk of static and electric shock

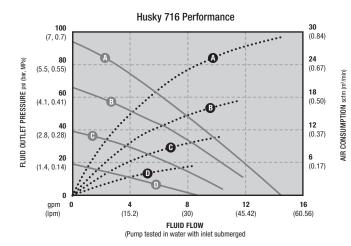
hnical Specifications		
Maximum fluid working pressure	100 psi (6.9 bar, 0.69 MPa)	
Maximum free-flow delivery*	16 gpm (61 l/min)	
Maximum pump speed	400 cpm	
Fluid displacement per cycle**	0.04 gal (0.15 l)	
Maximum suction lift	15 ft (4.5 m) dry, 25 ft (7.6 m) wet	
Maximum-size pumpable solids	3/32 in (2.5 mm)	
Maximum ambient operating temperature***	180°F (82.2°C)	
Maximum diaphragm operating temperature***	180°F (82.2°C)	
Typical sound level at 70 psi (4.8 bar, 0.48 MPa) air @ 50 cpm	77 dB(A)	
Maximum air consumption	28 scfm (0.672 m³/min)	
Air pressure operating range	25 psi to 100 psi (1.8 bar to 6.9 bar, 0.18 MPa to 0.69 MPa)	
Air inlet size	1/4 NPT(F)	
Fluid inlet size	3/4 in NPT(F)	
Fluid outlet size	3/4 in NPT(F)	
Weight	8.5 lb (3.9 kg)	
Wetted parts	Buna-N, acetal, aluminum, stainless steel, PTFE, zinc-plated steel	
Instruction manual	308573	
*Flow rates are with muffler and do not vary based on diaphragm material. **Displacement per cycle may vary based on suction		

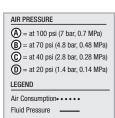
^{*}Flow rates are with muffler and do not vary based on diaphragm material. **Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type. ***Actual pump performance may be affected by prolonged usage at temperature.

## >>> Ordering Information

#### **Husky 716 AODD Pump**

Part Number	Description
241906	Husky 716 Aluminum – 3/4 in, Aluminum/Buna-N

















#### **Husky 1590 AODD Pump**

- 1-1/2 in fluid connections
- Fluid delivery up to 90 gpm (340.7 lpm)
- Operate as low as 20 psi up to 120 psi for max flow
- Maximum working pressure of 120 psi for long line runs
- End porting available
- High-efficiency air valve operates at maximum of 125 scfm
- Groundable to reduce risk of static and electric shock

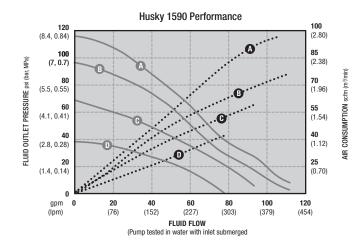
echnical Specifications	
Maximum fluid working pressure	120 psi (8.4 bar, 0.84 MPa)
Maximum free-flow delivery*	100 gpm (378.5 l/min)
Maximum pump speed	200 cpm
Fluid displacement per cycle**	0.5 gal (1.96 l)
Maximum suction lift	20 ft (6.1 m) dry
Maximum-size pumpable solids	0.19 in (4.8 mm)
Maximum ambient operating temperature***	150°F (65.5°C)
Maximum diaphragm operating temperature***	150°F (65.5°C)
Typical sound level at 70 psi (4.8 bar, 0.48 MPa) air @ 125 cpm	77 dB(A)
Maximum air consumption	125 scfm (3.5 m³/min)
Air pressure operating range	20 psi to 100 psi (1.4 bar to 6.9 bar, 0.14 MPa to 0.69 MPa)
Air inlet size	1/2 NPT(F)
Fluid inlet size	1-1/2 NPT(F) or BSPT(F)
Fluid outlet size	1-1/2 NPT(F) or BSPT(F)
Weight	33.5 lb (15.2 kg)
Wetted parts	Acetal, aluminum, TPE, PTFE
Instruction manual	308441
*Class and a second	-1 **Diselectors to a surface service hazard as a 1971

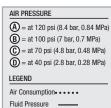
^{*}Flow rates are with muffler and do not vary based on diaphragm material. **Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type. ***Actual pump performance may be affected by prolonged usage at temperature.

## Ordering Information

#### **Husky 1590 AODD Pump**

Part Number	Description
DB3525	Husky 1590 Aluminum – 1.5 in, Aluminum/TPE















#### **Husky 2150 AODD Pump**

- 2 in fluid connections
- Fluid delivery up to 150 gpm (567.8 lpm)
- Operate as low as 20 psi up to 120 psi for max flow
- Maximum working pressure of 120 psi for long line runs
- End porting available
- High-efficiency air valve operates at maximum of 175 scfm
- Groundable to reduce risk of static and electric shock

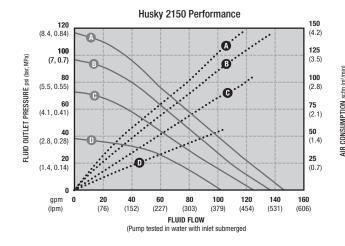
echnical Specifications			
Maximum fluid working pressure	120 psi (8.4 bar, 0.84 MPa)		
Maximum free-flow delivery*	150 gpm (568 l/min)		
Maximum pump speed	145 cpm		
Fluid displacement per cycle**	1.03 gal (3.9 l)		
Maximum suction lift	20 ft (6.1 m) dry		
Maximum-size pumpable solids	0.25 in (6.3 mm)		
Maximum ambient operating temperature***	150°F (65.5°C)		
Maximum diaphragm operating temperature***	150°F (65.5°C)		
Typical sound level at 70 psi (4.8 bar, 0.48 MPa) air @ 125 cpm	78 dB(A)		
Maximum air consumption	175 scfm (4.9 m³/min)		
Air pressure operating range	20 psi to 120 psi (1.4 bar to 8.4 bar, 0.14 MPa to 0.84 MPa)		
Air inlet size	1/2 NPT(F)		
Fluid inlet size	2 in NPT(F)		
Fluid outlet size	2 in NPT(F)		
Weight	58 lb (26.3 kg), 62 lb (28.1 kg) – Extended		
Wetted parts	Acetal, aluminum, TPE, PTFE		
Instruction manual	308368		
*Flaurestee are with muffler and do not your based an disphrage materia	**Displacement per evels may vary based an austion		

^{*}Flow rates are with muffler and do not vary based on diaphragm material. **Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type. ***Actual pump performance may be affected by prolonged usage at temperature.

## >>> Ordering Information

#### **Husky 2150 AODD Pump**

Part Number	Description
DF3525	Husky 2150 Aluminum – 2 in, Aluminum/TPE















#### **Husky 3300 AODD Pump**

- 3 in fluid connection
- Fluid delivery up to 300 gpm (1,135.6 lpm)
- Operate as low as 20 psi up to 125 psi for max flow
- Maximum working pressure of 125 psi for long line runs
- Rotatable center porting available
- High-efficiency air valve operates at maximum of 335 scfm
- · Groundable to reduce risk of static and electric shock

Technical Specifications				
Maximum fluid working pressure	125 psi (8.4 bar, 0.84 MPa)			
Maximum free-flow delivery*	300 gpm (1,135 l/min)			
Maximum pump speed	103 cpm			
Fluid displacement per cycle**	2.9 gal (11 l)			
Maximum suction lift	8 ft (2.4 m) dry, 28 ft (8.5 m) wet			
Maximum-size pumpable solids	0.5 in (13 mm)			
Maximum ambient operating temperature***	150°F (65.5°C)			
Maximum diaphragm operating temperature***	150°F (65.5°C)			
Typical sound level at 50 psi (3.4 bar, 0.34 MPa) air @ 50 cpm	92 dB(A)			
Maximum air consumption	335 scfm (9.5 m³/min)			
Air pressure operating range	20 psi to 125 psi (1.4 bar to 8.6 bar, 0.14 MPa to 0.86 MPa)			
Air inlet size	3/4 NPT(F)			
Fluid inlet size	3 in (76.2 mm) NPT or BSPT with ANSI/DIN flange			
Fluid outlet size	3 in NPT(F) or BSPT(F)			
Weight	150 lb (68 kg)			
Wetted parts	Acetal, aluminum, carbon-coated steel, TPE			
Instruction manual	3A0410			

^{*}Maximum values with water as media at ambient temperature. Water level is approximately 3 ft above pump inlet.

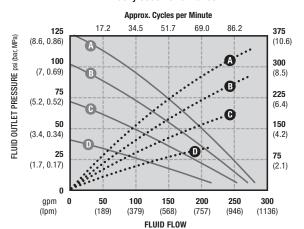
### Ordering Information

#### **Husky 3300 AODD Pump**

Part Number	Description
652002	Husky 3300 Aluminum – 3 in, Aluminum/TPE

#### **Pump Performance**

#### Husky 3300 Performance



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^{**}Startup pressures and displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type.

***Sound power measured per ISO-9614-2. Sound pressure was tested 3.28 ft (1 m) from equipment.





#### Ordering Information

# **Pre-Mixed Windshield Wash Solvent and Coolant Dispense**



	Package Number	237161
	Pump Type	Husky 307
Pump	D31255	
	Installation Kit	237160
	Air Filter	110146
sapr	Air Gauge	108190
Installation Kit Includes	Air Regulator	110318
n Kit	Fluid Connect Hose – 4 ft	220596
allatic	Air Connect Hose – 6 ft	109125
Insta	Mounting Bracket	190125
	Suction Kit	223888
	Wall Bracket Kit	224835
	Instruction Manual	308426







## **Bulk Antifreeze and Windshield Solvent Transfer Packages**









Package Number	244679	244680	244681	244682
Pump Type	Husky 1050 – Dual Inlet	Husky 1050 – Single Inlet	Husky 515 – Dual Inlet	Husky 716 – Single Inlet
Pump	647016	647016	243669	241906
Air Regulator	244844	244844	110147	110147
Fluid Connect Hose	115042	115042	109105	109105
Air Connect Hose	205418	205418	109125	109125
Air Shut-Off Valve	110225	110225	110223	110223
Wall Mount Bracket	24C637	24C637	224835	224835
Dual Inlet Manifold	24D147	-	-	-
Suction Kit	(2) 236054	236054	(2) 236054	236054
Thermal Relief Kit	238428	238428	238428	238428
Instruction Manual	309353	309353	309353	309353

#### **Air Line Filters**

	Husky Pump	307	515/716	1050	1590	2150	3300
The second secon	Part Number	110146	110146	106148	106149	106150	106150

#### **Air Regulator and Gauge**

Husky Pump	307	515/716	1050	1590	2150	3300
Part Number	110147	110147	244844	202858	206199	207651

#### **Air Quick-Connect Coupler**

	Husky Pump	307	515/716	1050	1590	2150	3300
	Part Number	208536	208536	110199	110199	110199	110200

#### **Air Quick-Connect Nipple**

Alluna	Husky Pump	307	515/716	1050	1590	2150	3300
	Part Number	169970	169970	110196	110196	110196	110197

#### **Bleed-Type Air Valve**

0_0_0	Husky Pump	307	515/716	1050	1590	2150	3300
	Part Number	110223	110223	110224	110225	110225	110226

#### **Dual-Inlet Manifold**

	Husky Pump	307	515	1050	1590	2150	3300
A CONTRACTOR OF THE PARTY OF TH	Part Number	237211	194347	24D205	-	-	-

#### **Grounding Wire and Clamp**

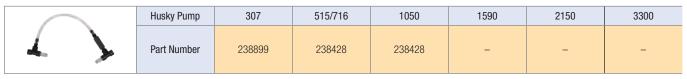
Husky Pump	307	515/716	1050	1590	2150	3300
Part Number	222011	222011	238909	222011	238909	238909

#### **Suction Hose Kit**

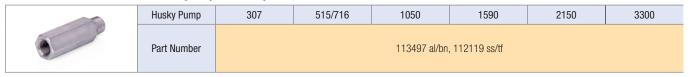
D	Husky Pump	307	515/716	1050	1590	2150	3300
	Part Number	236054	236054	236054	222916	222916	-

# **Diaphragm Pump Accessories**

#### **Thermal Relief Kit**



#### Thermal Relief Valves - 150 psi (10.3 bar)



#### **Wall Bracket**

Husky Pump	307	515/716	1050	1590	2150	3300
Part Number	224835	224835	24C637	-	-	-

#### **Air-Operated Double-Diaphragm Transfer Pumps Replacement Parts**

	0								À
Pump Number	D31255	243669	241906	647016	647731	647648	DB3525	DF3525	652002
Air Valve Replacement Kit	239952	241657	241657	24B768	24B768	24B768	236273	236273	24K860
Seats	D03200	D05200	D05200	24B634	24B632	24B634	D0B500	D0F500	24K932
Balls	D03050	D05070	D05070	24B639	24B639	24B639	D0B020	D0F020	24K937
Diaphragm Kit	D03005	D05007	D05007	24B624	24B624	24B624	D0B005	D0F005	24K901
Fluid Repair Kit (Ball, Seats, Diaphragm)	D03255	D05277	D05277	25A857	_	25A857	D0B525	D0F525	25A874





#### Ideal for Undercoating and Rustproofing Application in Medium-Sized Shops

Utilizing the durable Fire-Ball® 300 pump, these kits are designed for use in medium-volume undercoating and rustproofing dispense applications. A three-inch differential air motor ensures smooth pumping, and the double-acting pump design provides reliable material flow and accurate dispense.

#### **Durable**

Thick cast aluminum air motor housing offers unmatched durability.

#### Superior Material Handling

Double-acting pump ensures smooth fluid flow.

#### Extended Seal Life

In-line pump design aligns the air motor piston and fluid piston rods to maximize seal life.

#### Wetted-Parts Options

Available in carbon steel for petroleum-based or SST for water-based materials.

#### Corrosion-Resistant

Corrosion-resistant design utilizes liquid nitriding, nickel plating, stainless steel, aluminum and chrome on key components for longer life.

#### **Typical Applications**

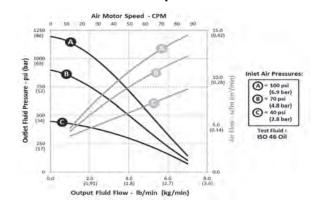
- Undercoating, rustproofing and sound-deadening materials
- Automotive and heavy-duty vehicle dealerships
- Fast lube centers and service shops
- Fleet service facilities

#### Typical Fluids Handled

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

#### Pump Performance

#### Fire-Ball 300 15:1 Pumps



## **Undercoating and Rustproofing Pump Packages**



Technical Specifications	
Fluid Pressure Ratio	15:1
Air Motor Effective Diameter	3 in (76.2 mm)
Annual Usage	Up to 10,000 lb (4,535 kg)
Maximum Fluid Working Pressure	2,700 psi (186 bar / 18.6 MPa)
Approximate Free-Flow Rate @ 100 psi	7.5 lb/min (3.4 kg/min)
Output per Cycle	1.29 oz (36.6 g)
Continuous-Duty Flow Rate	0.7 lb/min (0.32 kg/min)
Approximate Air Use and Flow @ 100 psi (80 cpm)	14 @ 6.5 lb/min (0.40 @ 2.9 kg/min)
Air Inlet	3/8 in NPT(F)
Fluid Outlet	1/4 in NPT(F)
Air Operation Range	40 psi to 180 psi (2.8 bar to 12.5 bar)
Max Recommended Pump Speed	66 cpm
Cycles per Pound	12.4 cpp
Cycles per Kg	27 cpk
Wetted Parts	CS, AL, leather, PTFE, rubber
Sound Pressure Level	77.8 dB(A)
Sound Power Level	85.6 dB(A)
Approximate Weight	22 lb (10 kg)
Instruction Manual	306531

#### Ordering Information

#### **Undercoating Packages**



^{*}Dispense kit includes Air Regulator (110234), Air Gauge (100960), Spray Gun (234237)





#### Ordering Information

#### **Application Gun**

4	
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Part Number	Description
234237	Four-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 in (mbe) hose.

#### **Bung Adapter**



Part Number	Description
239966	Bung adapter compatible with Fire-Ball 300, 15:1 pump

#### **Filter**



Part Number	Description
214570	60-mesh aluminum filter, 3/8 NPT(F) inlet, 1/4 NPT(F) outlet. Maximum working pressure 3,000 psi (210 bar).

#### **Nozzle Extension**



	Part Number	Description
-	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.

### **Replacement Screen Elements (SST)**

		Part Number		
		30 Mesh	60 Mesh	100 Mesh
	3-Pack	224458	224459	224469
	25-Pack	238436	238438	238440

#### **Swivel**



Part Number	Description
202577	Z-swivel allows non-binding movement for hard-to-reach locations. Order 155570 adapter separately to accommodate 234237 gun.











#### **Reliable Operation in the Harshest Environments**

With its efficient, large-ported air valve, the Bulldog 43:1 air-powered pump is the highest-performing in its class. Downtime is minimized by an air motor design that has been developed and tested for more than 10 million cycles of operation.



Grounded lug prevents static buildup.

#### Easy Installation

Compact, low-profile design makes installation easier.

#### Corrosion-Resistant

Lightweight aluminum construction.

#### **Built-In Reliability**

Tested to 10 million cycles without failure.

#### **Typical Applications**

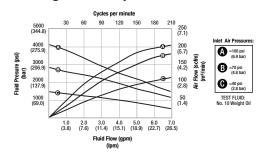
· Supplies hydraulic oil to accumulators in oil rig blowout prevention systems.

#### Typical Fluids Handled

Hydraulic oil

#### **Pump Performance**

#### **Bulldog 43:1 Pumps**











Technical Specifications		
Fluid Pressure Ratio	43:1	
Maximum Fluid Working Pressure	4,300 psi (301 bar / 30.1 MPa)	
Maximum Air Input Pressure	100 psi (7 bar)	
Air Inlet	3/4 in NPSM(F)	
Fluid Inlet	1 in NPT(F)	
Fluid Outlet	3/4 in NPT(F)	
Wetted Parts	Carbon steel, stainless steel, chrome plating, zinc plating, nickel plating, brass, Buna-N	
Instruction Manual	309966	



#### Ordering Information

#### **Bulldog 43:1 Pumps**

Pari	t Number	Description
2	18334	43:1 Bulldog hydraulic supply pump

#### **Accessories**

#### **Air Pressure Regulators**

Part Number	Description
206197	1/2 in NPT inlet and outlet
207755	3/4 in NPT inlet and outlet

#### **Air Line Filters**

Part Number	Description
106149	1/2 in NPT inlet and outlet
106150	3/4 in NPT inlet and outlet

#### **Air Line Lubricators**

Part Number	Description	
214848	1/2 in NPT inlet and outlet	
214849	3/4 in NPT inlet and outlet	

#### **Grounding Clamp and Wire**

Part Number	Description
103538	Grounding clamp
222011	Ground wire

#### **Bleed-Type Master Air Valve**

Part Number	Description
107142	1/2 in NPT inlet and outlet

#### **Repair Kits**

Part Number	Description Pump lower repair kit	
24U227		
24U228	Air motor repair kit	
24W515	Pump and air motor repair kit	













#### **Used for Low-Volume Dispense** of a Variety of Fluids

This air-operated piston pump is ideal for pumping various fluids and provides a continuous-duty flow rate of up to 5 gpm.

#### High-Quality Air Motor

Differential air motor ensures smooth pumping.

#### Lightweight Design

Allows for easy transport and drum insertion.

#### Easily Controlled Flow Rate

Simple regulation of air supply controls flow rate.

#### Submersible Suction Tube

Stubby and drum length suction tubes eliminate the need for suction pipe or tube.

#### Corrosion Resistance

Available stainless steel models offer protection in harsh environments.

#### **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

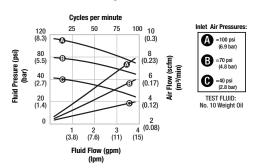
#### Typical Fluids Handled

- Water
- Antifreeze
- · Windshield wash fluid

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

#### **Pump Performance**

#### **Fast-Flo 1:1 Pumps**



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chnical Specifications				
Fluid Pressure Ratio	1:1			
Air Motor Effective Diameter	1.4 in (35.6 mm)			
Maximum Fluid Working Pressure	180 psi (12 bar/1.2 Mpa)			
Approximate Free-Flow Rate @ 100 psi (80 cpm)	5 gal/min (19 liters/min)			
Output per Cycle	151 cc			
Approximate Air Use and Flow @ 100 psi (80 cpm)	7 csfm @ 3.1 gpm (0.2 m³/mm @ 11.71 lpm)			
Air inlet	1/4 in NPT(F)			
Fluid Inlet	1-1/2 in NPT(F)			
Fluid Outlet	3/4 in NPT(F)			
Air Operations Range	40 psi to 180 psi (2.8 bar to 12 bar)			
Maximum Pump Speed	100 cpm			
Cycles per Gallon	25 cpg			
Cycles per Liter	6.6 cpl			
Wetted Parts	See ordering info			
Sound Pressure Level	72 dB(A)			
Sound Power Level	82 dB(A)			
Instruction Manual	307427			

# >> Ordering Information

#### Fast-Flo 1:1 Pumps

Includes motor and pump lower assembly.

Fluid	Length	Tube Material	Seal Material	Approvals	Part Number
Antifreeze, Windshield	Drum	Stainless Steel	Polyethylene	ETL, CE, EX	226942
Washer Solvent, ATF, Oil	Universal	Stainless Steel	Polyethylene	ETL, CE, EX	226945

# **Fast-Flo 1:1 Pump Accessories**

## >>> Ordering Information

## **Hose and Fitting Kits**

	Part Number	Part Number Description		Includes	
	Fait Nullibei		Air Hose / Swivel Elbow	Fluid Hose / Swivel Elbow	
222118  18 in (0.5 m) for connecting wall-mounted Fast-Flo 1:1 pumps to piping			109123 / 155541	109108 / 160327	
	222119	6 ft (1.8 m) for use with drum-mounted Fast-Flo 1:1 pumps	109125 / 155541	109105 / 160327	

#### **Bung Adapters**

Part Number	Description
214583	Allows direct mounting of full-length Fast-Flo 1:1 pumps into standard 2 in NPT drum bung (included).
217359	Sealed bung adapter for Fast-Flo pumps; can be used with suction kit 236054.

#### **Installation Kits**

Part Number	Description
218316	Includes regulator (104815), gauge (104655) and fittings (169969/114558) as necessary for normal installation.
210881	Wall mounting bracket for Fast-Flow 1:1 Pumps

#### **Suction Kit**

	Part Number	Description	Includes		
	rait Nullibei		Bung Adapter	Bushing Pipe	6 ft Hose
	236054	6 ft (1.8 m) suction kit for 55 gal (200 l) drums. For use with Fast-Ball, Mini Fire-Ball and Fire-Ball universal pumps.	188845	101496	109105

#### Ordering Information

#### **Drum Covers**

	Part Number	Description
	204574	Drum cover for 10 gal (40 l) and 16 gal (60 l) sized containers. Drum cover mounts on top of an open drum with mounting house for a 1:1 pump. Includes thumb screws and a rubber gasket.
•	200326	Drum cover for a 55 gal (200 I) container. Drum cover mounts on top of an open drum, with mounting for a 1:1 pump.

#### **Air Line Filter**

	Part Number	Description
T	106149	1/2 in NPT inlet and outlet

#### **Air Line Lubricator**

-	Part Number	Description
	214848	1/2 in NPT inlet and outlet









#### **Electric Convenience**

There's an easier, more efficient way to pump fluid to your critical equipment. Graco's all-electric EGP pumps reduce operating costs without compromising the durability you expect from the industry leader in pumping solutions. Add convenience and peace of mind to your everyday operations.

#### **EGP Transfer Pumps**

Use the EGP Transfer Pump in locations where compressed air is unavailable or too cumbersome for short-distance fluid transfer.



#### **Electrical Flexibility**

Available in 12 VDC and 115 VAC power options.

#### Smooth Fluid Flow 8 gpm (30 lpm)

Output flow is continuous and non-pulsating up to 8 gpm (30 lpm).

#### Heavy-Duty Motor with Long Life

Industrial-grade electric motors with over-temperature protection on 115 VAC models.

#### Consistent Pressure

Built-in fluid bypass valve protects pump and downstream components.

#### **Pump Protection**

Includes inlet strainer to keep larger debris out of pump housing and extend pump life.

#### Plug and Play

Self-priming, precision-machined pump design.

#### **Typical Applications**

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

#### **EGP On-Demand Pumps**

Install the EGP On-Demand Pump in a variety of applications including workshops, mobile trucks and industrial plants. Use it as an energy-efficient option to standard pneumatic pumps.



#### Electrical Flexibility

Available in 12 VDC and 115 VAC power options.

#### Smooth Fluid Flow 4 gpm (15 lpm)

Output flow is continuous and non-pulsating up to 4 gpm (15 lpm).

#### Heavy-Duty Motor with Long Life

Industrial-grade electric motor with over-temperature protection on 115 VAC model.

#### Fluid Flow When Needed

On-demand pressure sensing technology starts and stops the pump during the dispense.

#### **Pump Reliability**

Internal inlet and outlet checks keep pump section flooded to maintain prime for reliable performance.

#### Simultaneous Dispenses

Pump long distances and supply fluid to multiple dispense points.

#### Typical Fluids Handled

- Petroleum- and synthetic-based oils (motor, gear and ATF)
- Waste oil
- Hydraulic fluids
- · Cutting oils
- · Non-flammable oil-based solvents
- Oil-based herbicide carriers

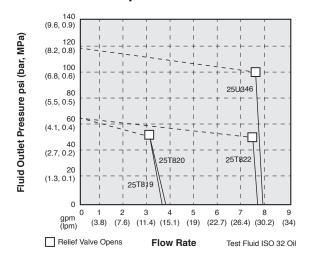




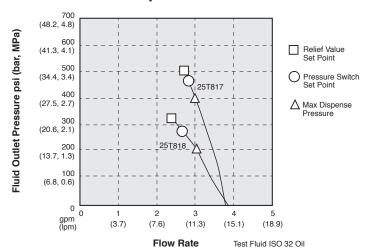




#### **EGP Transfer Pumps Performance Chart**



#### **EGP On-Demand Pumps Performance Chart**



#### Ordering Information

	EGP Transfer Pump Models				EGP On-Demand Pump Models		
Package Part Number	25T819	25T820	25T822	-	-	-	-
Pump Part Number	-	-	-	2005948	25U346	25T817	25T818
Voltage	12 VDC	115 VAC	115 VAC	115 VAC	115 VAC	115 VAC	12 VDC
Hertz	_	60 Hz	60 Hz	60 Hz	60 Hz	60 Hz	_
Motor Type	TENV	ODP	ODP	ODP	TENV - IP55	TENV - IP55	TENV
Horsepower	1/2	1/2	3/4	3/4	1.0	1.5	3/4
Maximum Current (Amps)	30	8.7	9.9	9.9	9.1	14.4	60
Maximum Free Flow Rate gpm (Ipm)	3.8 (14.4)	3.9 (14.8)	7.7 (29.1)	7.7 (29.1)	8.0 (30.3)	3.7 (14.0)	3.8 (14.4)
Maximum Pressure psi (bar)	65 (4.5)	65 (4.5)	65 (4.5)	65 (4.5)	120 (8.3)	500 (34.5)	325 (22.4)
Automatic Relief Setting psi (bar)	65 (4.5)	65 (4.5)	65 (4.5)	65 (4.5)	120 (8.3)	500 (34.5)	325 (22.4)
Inlet	1 in NPT	1 in NPT	1 in NPT	1 in NPT	1 in NPT	3/4 in NPT	3/4 in NPT
Outlet	3/4 in NPT	3/4 in NPT	3/4 in NPT	3/4 in NPT	3/4 in NPT	1/2 in NPT	1/2 in NPT
Bung Adapter				260061			
Dispense Kit		133376		_	-	_	_
Suction Kit		133375		-	_	_	_
Wetted Parts	Carbon steel with zinc plating, stainless aluminum, nitrile, rubber, PVC,			eel, galvanized steel, VC cement		stainless steel,	rith zinc plating, galvanized steel, nitrile, rubber
Weight lb (kg)	25 (11)	22 (10)	25 (11)	25 (11)	25 (11)	36 (16.3)	36 (16.3)
Manual	3A8569	3A8568	3A8568	3A8568	3A8568	3A8570	3A8571

# **EGP[™] Transfer and EGP On-Demand**





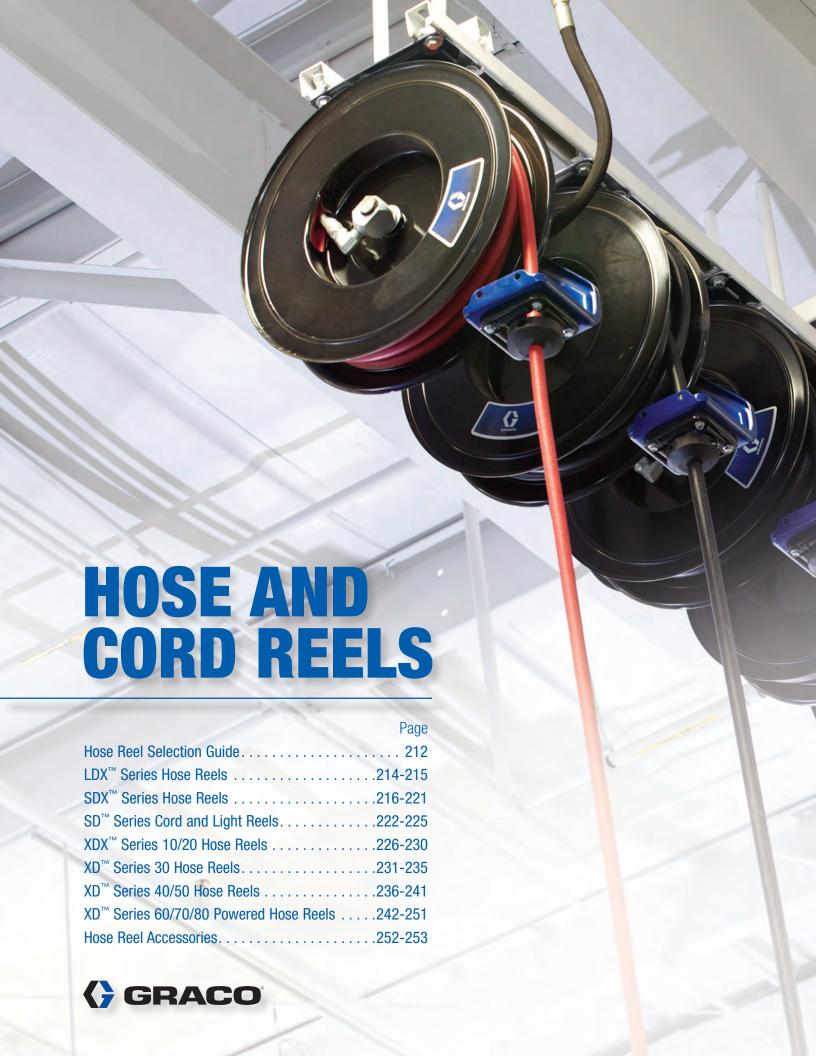




#### >>> Ordering Information

#### **Accessories**

Part Number		Description		
	133412	Wall mounting bracket, fits all transfer models		
	260238	"Y" strainer with 3/4 in NPT female in-line strainer for used oil transfer		
9	133377	Suction filter		
	260124	55 in (1.3 m) PVC suction tube with inlet check valve		
	133376	Dispense valve kit		
	133375	Suction tube kit, 3/4 in PVC		



## **Graco Hose and Cord Reel Selection Guide**

	Typical Application	Typical Fluid	Hose/Cord Length Options	Enclosed	Reference Pages
LDX™ Series	Small maintenance shops     Tire maintenance shops     Small fast lubes     Independent repair facilities     Industrial manufacturing facilities	Petroleum- and synthetic-based oils Air Water Grease Antifreeze Windshield washer fluid Diesel exhaust fluid (DEF)	• 45 ft (14 m) – DEF only • 50 ft (15 m)	No	216-217
SDX™ 10 / 20 Series	Car dealerships Light-/medium-duty truck dealers Fleet maintenance Public works garages Construction vehicle maintenance Light-utility service trucks	Petroleum- and synthetic-based oils Air Water Grease Antifreeze Windshield washer fluid	• 35 ft (11 m) • 50 ft (15 m) • 65 ft (20 m)	Optional	218-223
SD™ Series Cord Reels	Automotive dealerships     Fast lube centers     Service shops     Heavy-duty dealerships     Fleet services facilities     In-plant     Lube trucks     Mining	_	• 35 ft (11 m) • 50 ft (15 m) • 95 ft (29 m)	Optional	224-227
XDX [™] 20 Series	Heavy-duty truck dealers Fleet maintenance Mining maintenance Public works garage Construction vehicle maintenance Heavy-duty mobile service trucks Mining Lube trucks	Petroleum- and synthetic-based oils Air Water Grease Antifreeze Windshield washer fluid	• 50 ft (15 m) • 65 ft (20 m)	Optional	228-232
XD™ 30 Series	Heavy-duty truck dealers     Fleet maintenance     Mining maintenance     Public works garage     Construction vehicle maintenance     Heavy-duty mobile service trucks     Mining     Lube trucks	Petroleum- and synthetic-based oils Diesel fuel Air Water Grease Antifreeze Windshield washer fluid Pressure wash Waste oil evacuation Diesel exhaust fluid (DEF)	• 35 ft (11 m) • 50 ft (15 m) • 65 ft (20 m) • 75 ft (23 m)	No	233-237
XD™ 40 / 50 Series	Heavy-duty truck dealers Fleet maintenance Mining maintenance Public works garages Construction vehicle maintenance Heavy-duty mobile service trucks Agriculture Lube trucks	Petroleum- and synthetic-based oils Diesel fuel Air Water Antifreeze Waste oil evacuation	• 35 ft (11 m) • 50 ft (15 m) • 75 ft (23 m) • 100 ft (30 m)	No	238-243
XD™ 60 / 70 / 80 Series	Heavy-duty truck dealers     Fleet maintenance     Mining maintenance     Public works garages     Construction vehicle maintenance     Heavy-duty mobile service trucks     Agriculture     Lube trucks	Petroleum- and synthetic-based oils Diesel fuel Air Water Grease Waste oil evacuation	• 50 ft (15 m) • 75 ft (23 m) • 100 ft (30 m) • 150 ft (46 m)	No	244-251













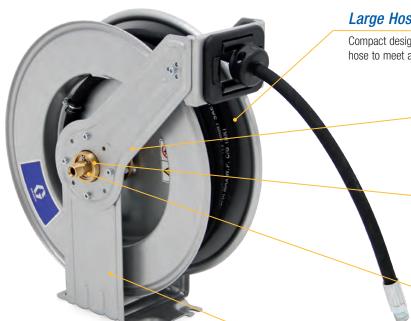






#### The Ultimate Industrial-Grade Hose Reel

Designed with an all-metal frame and specially crafted components; Graco LDX hose reels ensure smooth release and retraction to optimize confidence in cost-conscious smaller garages, independent repair facilities and industrial manufacturing environments.



#### Large Hose Capacity with Small Profile

Compact design accommodates up to a 50 foot (15 meter) hose to meet a wide variety of application requirements.

#### Adjustable Arm

Easily change to one of six arm positions to fit your application.

#### **Ball Bearing Swivel**

Swivel designed with internal ball bearings reduces friction and ensures smooth operation.

#### External Swivel Housing

Quickly access swivel seal for faster repairs.

#### Dual Pedestal Frame

Ribbed metal for increased stability and robustness.

#### **Typical Applications**

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

#### Typical Fluids Handled

- · Petroleum- and synthetic-based oils (motor, gear and ATF)
- Air
- Water
- Grease
- Antifreeze
- · Windshield washer fluid
- Diesel exhaust fluid (DEF)

#### **Technical Specifications**

Operating Temperature Range					
	Air/Water/Antifreeze/Windshield Washer Fluid	14.5°F to 149°F (-26°C to 65°C)			
	DEF	-40°F to 158°F (-40°C to 70°C)			
	Oil	-40°F to 212°F (-40°C to 100°C)			
	Grease	-40°F to 212°F (-40°C to 100°C)			
We	etted Parts				
	Air/Water/Antifreeze/Windshield Washer Fluid Reels	EPDM, stainless steel, fluorocarbon (FKM)			
	DEF Reels	Hybrid polymer, brass, nitrile rubber			
	Oil Reels	Zinc-plated steel, brass, polyurethane, nitrile rubber			
	Grease Reels	Zinc-plated steel, brass, nitrile rubber			
Soi	und Pressure Level	80 dB(A)			
Soi	und Power Level	87 dB(A)			
Ins	truction Manual	3A8216			







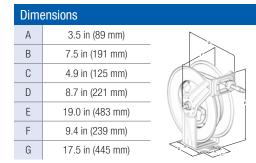


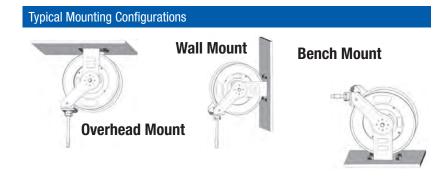












#### Ordering Information

#### **LDX Reels**

Part Number Fluid		Hose		Connection Size		Maximum
Part Number	riuid	ID (in)	Length (ft)	Inlet (in)	Outlet (in)	Pressure PSI
HEL010	Air/Water/Antifreeze/Windshield Washer Fluid	3/8	50	3/8 NPT	3/8 NPT	300
HEL012	Air/Water/Antifreeze/Windshield Washer Fluid	3/8	50	3/8 NPT	1/4 NPT	300
HEL015	DEF	1/2	45	1/2 BSPT	1/2 BSPT	150
HEM004	Oil	1/2	50	1/2 NPT	1/2 NPT	1,500
HEH006	Grease	3/8	50	3/8 NPT	3/8 NPT	4,060

#### **Inlet Kits**

Part Number	Fluid
25U369	Air/Water/Antifreeze/Windshield Washer Fluid
25U370	DEF
25U371	Oil
25U372	Grease

#### **Accessories**

Part Number	Description
18F444	1/2 in BSPT to 3/4 in hose barb adapter
18F445	1/2 in to 3/4 in adapter, BSPT

















#### **High-Quality Performance and Versatility**

Improve performance along with the look of any environment with Graco's flagship SDX hose reel. Built with specially crafted components, including a rigid metal frame and spool and effortless retraction swivels, it's available in five colors. An easy-to-service swivel cartridge design simplifies maintenance. Retraction and recoil are uniform and consistent every time.



Easily change to one of six arm positions to fit your application.

#### **Durable Finish**

Baked-on enamel finish (five colors available) protects reel from corrosion.

#### Large Hose Capacity with Small Profile

Compact pedestal and spool fits into tight spaces and can accommodate 35-65 foot (10.7-19.8 meters) hose (NPT air/water) capacity for a wide variety of applications.

#### Heavy-Duty Spring

Powerful retraction performance ensures recoils are uniform and consistent every time.

#### **Full-Flow Swivel**

Maximize material flow with minimal pressure drop for faster fills to get more vehicles through your shop.



Reel arm shown in tank/bench mount position.

#### Low-Friction Cartridge Swivel

Provides smooth reel performance with an easy-to-replace swivel cartridge, simplifying repairs.

#### **Typical Applications**

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

#### Typical Fluids Handled

- · Petroleum- and synthetic-based oils (motor, gear and ATF)
- Air
- Water
- Grease
- · Antifreeze/coolant
- · Windshield washer fluid

echnical Specifications		
Operating Temperature Range		
Air/Water/Antifreeze/Windshield Washer Fluid Reels	-20°F to 190°F (-28°C to 87°C)	
Oil Reels	-20°F to 190°F (-28°C to 87°C)	
Grease Reels	-40°F to 200°F (-40°C to 93°C)	
Wetted Parts		
Air/Water/Antifreeze/Windshield Washer Fluid Reels	Zinc-plated steel, stainless steel, anodized aluminum, nitrile rubber	
Oil Reels	Zinc-plated steel, anodized aluminum, nitrile rubber	
Grease Reels	Zinc-plated steel, nitrile rubber, steel	
Weight	52 lb (23.5 kg)	
Sound Pressure Level	80 dB(A)	
Sound Power Level	87 dB(A)	
Instruction Manual	3A8626	







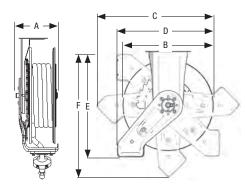




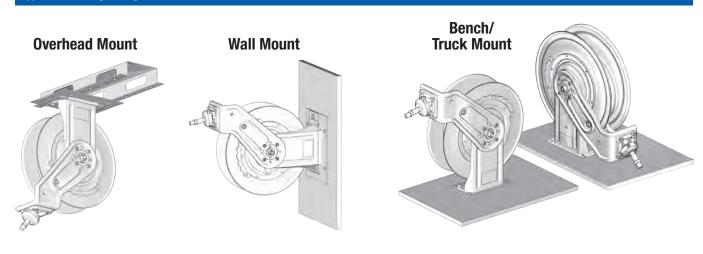








# **Typical Mounting Configurations**





SDX20 Only





















Ordering Information

# SDX 10/20 Reel Assembly Ordering Guide

SDX Series reels are available in five colors. Use the chart below to determine the correct part number to order. The last character of each part number indicates the hose reel color.

Reel Color	Identifier
White	А
Metallic Blue	В
Red	С
Black	D
Yellow	F

**Order Example:** 

Arm in overhead mount position, SDX 20, oil, 1/2 in ID hose, 50 ft hose length

Select your reel position:

SDM65#



**Select your reel color:** (from Reel Assembly Ordering

Metallic Blue = "B"

Guide – opposite)

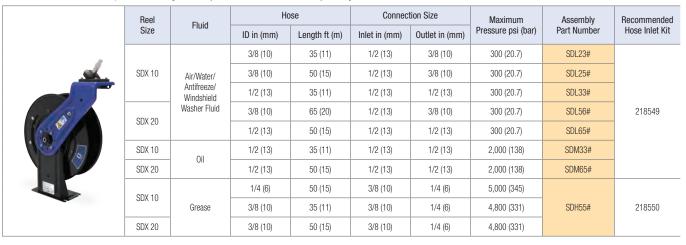
**Order Part Number:** 

SDM65B



### **Arm in Overhead Mount Position**

Assembled with hose, ball stop kit and roller guide. Required hose inlet kit sold separately.



### **Arm in Tank/Bench Mount Position**

Assembled with hose, ball stop kit and roller guide. Required hose inlet kit sold separately.

R	Reel	Reel Fluid –	Ho	Hose		Connection Size		Assembly	Recommended
	Size		ID in (mm)	Length ft (m)	Inlet in (mm)	Outlet in (mm)	Pressure psi (bar)	Part Number	Hose Inlet Kit
SD		Air/Water/ Antifreeze/	3/8 (10)	65 (20)	1/2 (13)	3/8 (10)	300 (20.7)		
	SDX 20 Windshield Washer Fluid Oil		1/2 (13)	50 (15)	1/2 (13)	1/2 (13)	300 (20.7)	SDM6HB	218549
		Oil	1/2 (13)	50 (15)	1/2 (13)	1/2 (13)	2,000 (138)	JUNION	
		Grease	3/8 (10)	50 (15)	3/8 (10)	1/4 (6)	4,800 (331)		218550

















# **Bare Reels**

# **Arm in Overhead Mount Position**

Required hose inlet kit sold separately. Fluid hose not included.

	Reel Size Fluid	Eluid	Hose (Not Included)		Connection Size		Maximum	Assembly	Recommended
		ID in (mm)	Length ft (m)	Inlet in (mm)	Outlet in (mm)	Pressure psi (bar)	Part Number	Hose Inlet Kit	
1/8		Air/Water/ Antifreeze/	3/8 (10)	65 (20)	1/2 (13)	1/2 (13)	300 (20.7)	SDL6D#	
	SDX 20	Windshield Washer Fluid	1/2 (13)	50 (15)	1/2 (13)	1/2 (13)	300 (20.7)	SDL6D#	218549
	SDX 20	Oil	1/2 (13)	50 (15)	1/2 (13)	1/2 (13)	2,000 (138)	SDM6D#	
	SDX 20	Grease	3/8 (10)	50 (15)	3/8 (10)	3/8 (10)	5,000 (345)	SDH5D#	218550

# **SDX 10 Oil Reel Packages**

Reel Size	Fluid	Value Time	Enclosure	Package		Package	Includes		
Reel Size	Fluid	Valve Type	Eliciosure	Number	Reel Assembly	Enclosure	Hose Inlet Kit	Meter	
		SDM8 Manual Meter	No	24E001	SDM33B	-	218549	25M404	
		with Rigid Extension	Yes	24D996	SDM33B	24A217	218549	25M404	
SDX 10 Oil	SDM8 Manual Meter	No	24E002	SDM33B	-	218549	25M406		
3DA 10	OII	with Flexible Extension	Yes	24D997	SDM33B	24A217	218549	25M406	
			None	Yes	24D995	SDM33B	24A217	218549	-

















# Ordering Information

# **SDX 10 Air/Water Reel Packages**

	Reel Size	Fluid	Valve Type	Enclosure	Package			Package Includes	3	
	Neel Size	Tiulu	valve type	Liidosuie	Number	Reel Assembly	Enclosure	Hose Inlet Kit	Valve	Fitting
				No	24D999	SDL23B	-	218549	180685	150287
		Water	Water Bib Dispense Valve		24D993	SDL23B	24A217	218549	180685	150287
				Yes	24D994	SDL33B	24A217	218549	180685	159842
		Air	Tire Chuck	No	24D998	SDL23B	-	218549	218545	-
	SDX 10	U All	Valve	Yes	24D992	SDL23B	24A217	218549	218545	-
					24D989	SDL23B	24A217	218549	-	-
		Air/Water	None	Yes	24D990	SDL25B	24A217	218549	-	-
					24D991	SDL33B	24A217	218549	-	-

### **Accessories**

### **Enclosure Kits for One Reel**

Open mounting accommodates up to six reels. Includes all parts necessary to mount on wall or overhead. Requires mounting channel.

	Reel Size	White	Metallic Blue	Red	Black	Dark Blue	Yellow	Required End-Caps (set of 2)
	SDX 10	24A217	24A940	24A941	24A942	24A943	24A944	24A950
	SDX 20	24A218	24A945	24A946	24A947	24A948	24A949	24A951

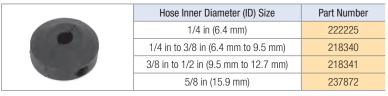
### **Hose Inlet Kits**

A hose inlet kit is required when ordering an SDX reel.

	Maximum Working Pressure psi (bar)	Size in (mm)	Length ft (m)	Part Number
	2,000 (137)	1/2 (13)		218549
10	4,000 (276)	3/8 (10)	2 (0.6)	218550
	5,000 (345)	1/4 (6)		224417

### **Ball Stop Kits**

SDX reel packages include ball stop kits. Items below are available for bare reels and as replacement parts.





















# **Mounting Channels**

Accommodates up to six reels. Includes all parts necessary to mount on wall or overhead.

	Description	1 Reel	2 Reels	3 Reels	4 Reels	5 Reels	6 Reels
	Enclosed Reel Mounting Channel	203521	203522	203523	203524	203525	203526
7	Open Reel Mounting Channel	24A934	24A935	24A936	24A937	24A938	24A939
	I-Beam Mounting Bracket*		204741 (x 2)			204741 (x 3)	

 $^{^{\}star}$ Secures mounting channel to I-beam without drilling -2 are required for 1-3 reels, and 3 are required for 4-6 reels.

# **Swivel Mounting Bracket**

Allows reel to swivel 120° with two lockable positions.

Part Number	Description
24N444	Swivel mounting bracket for installing SDX 10 reels

# **Easy Slide-In Mount**

Allows reel to slide in and out of mount for easy installation.

Part Number	Description
24H193	Overhead or wall slide-in mount for SDX 10 or SDX 20 reels

# **Retrofit Adapter Kits**

Part Number	Description
24C100	Includes all parts to mount an SDX 10 hose reel to an existing 250 series mounting pattern with enclosure

# **SD Series Cord and Light Reels**

# **Quality Cord and Light Reels**

Organize your work space for a safer, more productive work environment. Make Graco your single source for your entire reel bank.



# **Durable Frame in Two Sizes**

Choose from the heavy-duty steel construction of the SD Series 5 or 10.

# Multiple Cord Lengths

Choose from 35, 50 and 95 foot (11, 15, 29 meter) options to fit your shop perfectly. Features a 5 foot lead-in cable.

### Adjustable Arm

Easily change the arm position to fit more applications. Works on walls, overhead or bench mounts.

# Heavy-Duty Pedestal

High-strength steel construction with rolled edges and ribbed stress points that won't flex or twist.

# Multiple Configurations Available

Comes with or without receptacles so you can configure it for your specific needs. Light reels come in your choice of fluorescent or LED with optional tool tap receptacle.

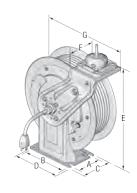


### **Typical Applications**

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

Dir

m	nensions									
		SD Series 5	SD Series 10							
	Α	3.5 in (89 mm)	3.5 in (89 mm)							
	В	6.38 in (162 mm)	7.5 in (191 mm)							
	С	4.7 in (120 mm)	4.7 in (120 mm)							
	D	7.48 in (190 mm)	9 in (229 mm)							
	Е	14.8 in (376 mm)	19.5 in (498 mm)							
	F	6.6 in (168 mm)	7 in (177 mm)							
	G	13.84 in (352 mm)	17.5 in (445 mm)							



### **Technical Specifications**

Ope	Operating Temperature Range				
	Cord	l Reels	-22°F to 122°F (-30°C to 50°C)		
	Ligh	t Reels	-4°F to 104°F (-20°C to 40°C)		
Wei	ght wi	thout Accessories			
		16 AWG, Length 35 ft	25.4 lb		
	5	16 AWG, Length 50 ft	27.6 lb		
120V	SD	12 AWG, Length 35 ft	28.2 lb		
12		12 AWG, Length 50 ft	32.0 lb		
	SD 10	16 AWG, Length 95 ft	46.3 lb		
		12 AWG, Length 95 ft	51.8 lb		
Instr	uction	n Manual	3A2592		



# SD Cord and Light Reels - 120 Volt

120 volt cord and light reels have a black finish and are ETL approved to US and CSA standards.

	Accessory	Reel Size	AWG	Amp	Cord Length	Insulation	Part Number
		SD 5	12	12 20 50 ft (15 m) SJ00W	24Y859		
	No Accessory – Cord Only	SD 10	12	18	95 ft (29 m)	SJOOW	24Y880
		SD 5 16 13 50 ft (15 m)	SJTOW	24Y861			
		SD 5	12	20	35 ft (11 m)	SJ00W	24Y862
	Single Industrial Receptacle	SD 5	12	20	50 ft (15 m)	SJ00W	24Y863
	·	SD 10	12	18	95 ft (29 m)	SJ00W	24Y882
	Tri-Plug GFCl Industrial Receptacle	SD 5	12	15	50 ft (15 m)	SJ00W	24Y864
-		SD 10	12	15	95 ft (29 m)	SJ00W	24Y883
	Fluorescent Light	SD 5	16	<1	35 ft (11 m)	SJT0W	24Y865
() Elver		SD 5	16	<1	50 ft (15 m)	SJT0W	24Y866
3		SD 10	16	<1	95 ft (29 m)	SJT0W	24Y884
C store	Fluorescent Light with Single Tool Tap Plug	SD 5	16	10	50 ft (15 m)	SJTOW	24Y868
		SD 5	16	<1	35 ft (11 m)	SJTOW	24Y869
C to torino	LED Light	SD 5	16	<1	50 ft (15 m)	SJTOW	24Y870
2		SD 10	16	<1	95 ft (29 m)	SJTOW	24Y886
		SD 5	16	12	35 ft (11 m)	SJTOW	24Y871
€ Blow	LED Light with In-line Tool Tap	SD 5	16	12	50 ft (15 m)	SJTOW	24Y872
	'	SD 10	16	10	95 ft (29 m)	SJTOW	24Y887

# **SD Series Cord and Light Reel Accessories**

# Ordering Information

### **Enclosure Kits**

Includes an enclosure for one reel. A set of end-caps are required per single or bank of reels. Requires you to order Enclosed Reel Mounting Channel separately. For mounting SD 5 or SD 10 reels in size 20 enclosures, please see Adapter Kits on page 227.



Reel Size	White	Metallic Blue	Red	Black	Dark Blue	Yellow	Required End-Caps (set of 2)
SD 5 with size 10 enclosure	24N690	24N682	24N683	24N684	24N691	24N685	24A950
SD 10 with size 10 enclosure	24A217	24A940	24A941	24A942	24A943	24A944	24A950

# **Mounting Channels**

Accommodates up to six reels. Includes all parts necessary to mount on wall or overhead.

_	Description	Reel Size	1 Reel	2 Reels	3 Reels	4 Reels	5 Reels	6 Reels
	Enclosed Reel Mounting Channel	SD 5 and SD 10	203521	203522	203523	203524	203525	203526
	Open Reel	SD 5	24N674	24N675	-	-	-	-
	Mounting Channel	SD 10	24A934	24A935	24A936	24A937	24A938	24A939
	I-Beam Mounting Bracket*	SD 5 and SD 10	204741 (x 2)		204741 (x 3)			

^{*}Secures mounting channel to I-beam without drilling - 2 are required for 1-3 reels, and 3 are required for 4-6 reels.



# **Swivel Mounting Bracket**

Allows reel to swivel 120° with two lockable positions.



Reel Size	Part Number	Description
SD 5	24N814	Swivel mounting bracket for installation
SD 10	24N444	Swivel mounting bracket for installation

# **Wall/Overhead Mounting Bracket**

Allows you to slide the reel in and out for easy installation.

	Reel Size	Part Number	Description
1	SD 5	24N686	Wall/overhead easy mount plate kit
	SD 10	24H193	Wall/overhead easy mount plate kit

# **Adapter Kits**



Part Number	Description
24P164	Spacer bracket for mounting a size 5 reel to an existing size 10 enclosure
24P880	Spacer bracket for mounting a size 5 reel to an existing size 20 enclosure
24P881	Spacer bracket for mounting a size 10 reel to an existing size 20 enclosure
16N883	Clamping plate to mount a size 5 reel to an existing SD Series open channel

# **Hands-Free Magnetic Clip**

Non-marring cover won't scratch vehicle finish. Snap onto light tube for hands-free operation.

Part Number	Description
16P999	Magnetic clip for light tube















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# Performance in the Most Demanding Applications

The heavy-duty XDX hose reels are designed to handle fluid delivery tasks in the harshest, most challenging environments. Built with specially crafted components to extend performance for many years, the hose reel includes a robust heavy-gauge, dual-pedestal metal frame; steel spool; sealed components; and unique swivel design to transport fluids consistently and safely without fail.



Powerful retraction performance that allows you to easily increase or decrease spring tension while the reel is pressurized with fluid.

### **Full-Flow Swivel**

Maximize material flow with minimal pressure drop for faster fills to get more vehicles through your shop.

# Low-Friction Cartridge Swivel

Provides smooth reel performance with an easy-to-replace swivel cartridge, simplifying repairs.

### Optional Adjustable Arm

Easily change to one of six arm positions to fit your application. Order with arm (XD models) or without (XN models).

### **Durable Finish**

Baked-on enamel finish (four colors available) protects reel from corrosion.

# Large Hose Capacity with Small Profile

Compact pedestal and spool fits into tight spaces and can accommodate 35-65 foot (10.7-19.8 meters) hose capacity for a wide variety of applications.

### **Typical Applications**

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

# Typical Fluids Handled

- Petroleum- and synthetic-based oils (motor, gear and ATF)
- Air
- Water
- Grease
- Antifreeze/coolant
- Windshield washer fluid

# **Technical Specifications**

Operating Temperature Range					
Air/Water/Antifreeze/ Windshield Washer Fluid	-20°F to 190°F (-28°C to 87°C)				
Oil	-20°F to 190°F (-28°C to 87°C)				
Grease	-40°F to 200°F (-40°C to 93°C)				
Wetted Parts					
Air/Water/Antifreeze/ Windshield Washer Fluid	Zinc plated steel, stainless steel, anodized aluminum, nitrile rubber				
Oil	Zinc plated steel, anodized aluminum, nitrile rubber				
Grease	Zinc plated steel, polyurethane, steel				
Weight (Without Hose)					
HS Models (With Adjustable Arm)	59 lb (26.5 kg)				
HN Models (Without Arm)	52 lb (23.5 kg)				
Sound Pressure Level	78 dB(A)				
Sound Power Level	88 dB(A)				
Instruction Manual	3A8626				

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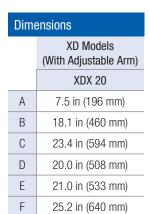


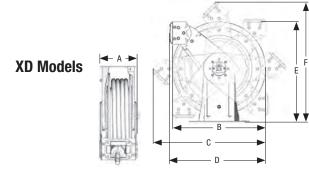












# **Typical Mounting Configurations**

**Overhead Mount** 



**Wall Mount** 



Bench/ Truck Mount





























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# **XDX 20 Reel Assembly Ordering Guide**

XDX Series reels are available in three colors. Use the chart below to determine the correct part number to order. The last character of each part number indicates the hose reel color.

Reel Color	Identifier	
White	А	
Metallic Blue	В	
Black	D	
Yellow	F	

**Order Example:** 

Arm in bench/truck mount position, XDX 20, oil, 1/2 in ID hose, 50 ft hose length

**Select your reel position:** 

XDM65#



**Select your reel color:** (from Reel Assembly Ordering

Black = "D"

Guide – opposite)

**Order Part Number:** 





# XD Models (with Adjustable Arm)

### **Reel Assemblies**

Assembly includes hose, ball stop kit and roller guide. Required hose inlet kit sold separately.



	Reel		Hose (In	ncluded)	Connect	tion Size	Maximum	Assembly	Recommended	
	Size	Fluid	ID in (mm)	Length ft (m)	Inlet	Outlet	Pressure psi (bar)	Part Number	Hose Inlet Kit	
		Air/Water/Antifreeze/	3/8 (10)	65 (20)	1/2 NPSM(M)	3/8 NPT(M)	300 (20.7)	XDL56#		
	XDX 20	Windshield Washer Fluid	1/2 (13)	50 (15)	1/2 NPSM(M)	1/2 NPT(M)	300 (20.7)	XDL65#	218549	
	ADA 20	Oil	1/2 (13)	50 (15)	1/2 NPSM(M)	1/2 NPT(M)	2,000 (138)	XDM65#		
		Grease	3/8 (10)	50 (15)	3/8 NPSM(M)	1/4 NPT(M)	4,800 (331)	XDH55#	218550	

### **Bare Reels**

Required hose inlet kit sold separately. Fluid hose not included.



Reel		Fluid Hose (Not Included) Connection Size  ID Length in (mm) ft (m) Inlet Outlet		Maximum	Part	Recommended		
Size	Fluid			Inlet	Outlet	Pressure psi (bar)	Number	Hose Inlet Kit
	Air/Water/Antifreeze/ Windshield Washer Fluid	1/2 (13)	50 (15)	1/2 NPSM(M)	1/2 NPSM(F)	300 (20.7)	XDL6D#	218549
XDX 20	Oil	1/2 (13)	50 (15)	1/2 NPSM(M)	1/2 NPSM(F)	2,000 (138)	XDM6D#	210349
	Grease	3/8 (10)	50 (15)	3/8 NPSM(M)	3/8 NPSM(F)	8,000 (552)	XDH5D#	218550

















# **Accessories**

# **Ball Stop Kits**

XDX HS models include ball stop kits. Order separately if ordering a bare reel or if needed with HN models.



Part Number	Description
222225	For 1/4 in (6 mm) ID hose (not compatible with XD 30, 700 or 750)
218340	For 1/4 in to 3/8 in (6 mm to 10 mm) ID hose (not for use with XD 30, 700 or 750)
218341	0.782 in ID used for 3/8 in and 1/2 in (10 mm and 13 mm) hose (not compatible with XD 30, 700 or 750)
237872	1.0 in ID used for 5/8 in (16 mm) hose
237873	1.123 in ID used for 3/4 in (19 mm) hose
237874	1.374 in ID used for 1 in (25 mm) hose
24D132	For 3/8 in (10 mm) ID hose
24D133	For 1/2 in (13 mm) ID hose

# **Hose Inlet Kits**

A hose inlet kit is required when ordering an XDX reel.

	Maximum Working Pressure psi (bar)	Size in (mm)	Length ft (m)	Part Number
	2,000 (137)	1/2 (13)		218549
10	4,000 (276)	3/8 (10)	2 (0.6)	218550
	5,000 (345)	1/4 (6)		224417

# **Mounting Channels**

Accommodates up to six reels. Includes all parts necessary to mount on wall or overhead.

Description	1 Reel	2 Reels	3 Reels	4 Reels	5 Reels	6 Reels
Enclosed Reel Mounting Channel	24N323	24N324	24N325	24N326	24N327	24N328
Open Reel Mounting Channel	24A219	24A220	24A221	24A222	24A222	24A222
I-Beam Mounting Bracket*		204741 (x 2)			204741 (x 3)	

 $^{^\}star$ Secures mounting channel to I-beam without drilling – 2 are required for 1-3 reels, and 3 are required for 4-6 reels.

# **XDX Series Hose Reel Accessories**















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# >>> Ordering Information

### **Enclosure Kits for One Reel**

Open mounting accommodates up to six reels. Includes all parts necessary to mount on wall or overhead. Requires Enclosed Reel Mounting Channel.



Reel Size	White	Metallic Blue	Red	Black	Yellow	Required End-Caps (set of 2)
XDX 10	_	24N332	_	24N334	24N336	24A950
XDX 20	24N337	24N339	24N340	24N341	24N343	24A951

# **Retrofit Adapter Kit**



Part Number	Description
24A224	Includes all parts to mount hose reel to existing 500 series mounting pattern without enclosure
24P914	Includes all parts to convert XDX 20 hose reels to fit existing 500 series enclosures

# **Valve Hanger Kit**



Part Number	Description
224444	Mounts to side of reel to allow hanging of non-metered and high-flow dispensing valves

# **Self-Adhesive Identification Label Set**



Part Number	Description
180698	Set includes: 1 in x 5 in (25.4 mm x 127 mm) hose reels labels for Antifreeze, Water, SAE 5-40, SAE 10-40, SAE 20W, Hydraulic, Gear, SAE 10W, SAE 10-30, SAE 30W, Dexron, Air, Chassis, ATF























30 / 30 HN



# **High Capacity Reel**

Used in applications requiring longer-range dispense and higher capacity than the standard XDX 20 series. Ideal for use on mobile service trucks, heavy construction and industrial plants.



Increase or decrease spring tension while reel is pressurized with fluid.

### **Full-Flow Swivel**

Maximize material flow with minimal pressure drop for faster fills to get more vehicles through your shop.

# Optional Adjustable Arm

Easily change to one of seven arm positions to fit your application. Order with arm (HS models) or without (HN models).

### **Durable Finish**

Baked-on enamel finish (four colors available) protects reel from corrosion.

# Large Hose Capacity with Small Profile

Compact pedestal and spool fits into tight spaces and can accommodate 30-75 foot (9.1-22.8 meters) hose capacity for a wide variety of applications.

### **Typical Applications**

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

# Typical Fluids Handled

- Petroleum- and synthetic-based oils (motor, gear and ATF)
- Diesel fuel
- Air
- Water
- Grease
- Antifreeze
- Windshield washer fluid
- Pressure wash
- · Waste oil evacuation
- · Diesel exhaust fluid (DEF)

### **Technical Specifications**

illical opecifications						
Operating Temperature Range						
Air/Water/Antifreeze/ Windshield Washer Fluid	-40°F to 180°F (-40°C to 82°C)					
Oil	-40°F to 180°F (-40°C to 82°C)					
Grease	-40°F to 180°F (-40°C to 82°C)					
Pressure Wash	-20°F to 225°F (-28°C to 107°C)					
Fuel/Evacuation	-40°F to 120°F (-40°C to 49°C)					
Diesel Exhaust Fluid (DEF)	12°F to 140°F (-11°C to 60°C)					
Wetted Parts (Bare Reel Only)						
Air/Water/Antifreeze/ Windshield Washer Fluid Reels	Nickel plated carbon steel, aluminum, Buna-N rubber, UHMWPE					
Oil	Nickel plated carbon steel, aluminum, Buna-N rubber, UHMWPE					
Grease	Nickel plated stainless steel, Buna-N rubber, UHMWPE					
Pressure Wash	Nickel plated stainless steel, Buna-N rubber, UHMWPE					
Fuel/Evacuation	Nickel plated carbon steel, aluminum, Buna-N rubber, UHMWPE					
Diesel Exhaust Fluid (DEF)	Zinc plated steel, polyurethane, steel					
Weight (Without Hose)	98 lb (44.5 kg)					
Sound Pressure Level	85.8 dB(A)					
Sound Power Level	94.9 dB(A)					
Instruction Manual	3A0138					





















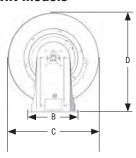
30 / 30 HN

Dime	Dimensions							
	HS Models (with Adjustable Arm)	HN Models (without Arm)						
Α	9.0 in (229 mm)	7.5 in (196 mm)						
В	21.5 in (546 mm)	18.1 in (460 mm)						
С	26.0 in (659 mm)	23.4 in (594 mm)						
D	22.1 in (562 mm)	20.0 in (508 mm)						
Е	23.1 in (588 mm)	21.0 in (533 mm)						
F	27.6 in (701 mm)	25.2 in (640 mm)						

# **HS Models**



**HN Models** 



# **Typical Mounting Configurations**























30 / 30 HN



# **XD 30 Reel Assembly Ordering Guide**

XD Series reels are available in three colors. Use the chart below to determine the correct part number to order. The last character of each part number indicates the hose reel color.

Reel Color	Identifier
Metallic Blue	В
Yellow	F
Black*	D

*Black not available in HN models

**Order Example:** 

Arm in overhead mount position, XD 30, oil, 3/4 in ID hose, 50 ft hose length

1

**Select your reel position:** 

HSMD5#

Metallic Blue = "B"

2

Select your reel color:

(from Reel Assembly Ordering Guide — opposite)

**Order Part Number:** 

HSMD5B



# HS Models (with Adjustable Arm)

### **Reel Assemblies**

Assembly includes hose, ball stop kit and roller guide. Required hose inlet kit sold separately.

		Hose (Included)		Connection Size		Maximum	Reel, Hose and	Recommended
	Fluid	ID in (mm)	Length ft (m)	Inlet	Outlet	Pressure psi (bar)	Ball Stop Assembly Part Number	Hose Inlet Kit
	Air/Water/Antifreeze/	1/2 (13)	75 (23)	1/2 NPSM(M)	1/2 NPT(M)	300 (20.7)	HSLC8#	218549
	Windshield Washer Fluid 3/4 (19) 50 (15) 3/4 NPSM(M) 3/4 NPT(M) 300 (20.7)	300 (20.7)	HSLD5#	24E284				
	O:I	1/2 (13)	75 (23)	1/2 NPSM(M)	1/2 NPT(M)	1,500 (103)	HSMC8#	218549
	Oil	3/4 (19)	50 (15)	3/4 NPSM(M)	3/4 NPT(M)	1,250 (86)	HSMD5#	24E284
	Grease	50 (15)	1/2 NPSM(M)	1/2 NPT(M)	5,000 (345)	HSHC5#	24E283	
		3/8 (10)	75 (23)	1/2 NPSM(M)	3/8 NPT(F)	5,000 (345)	HSHB7#	24E283
	Pressure Wash	3/8 (10)	75 (23)	1/2 NPSM(M)	3/8 NPT(M)	4,000 (276)	HSPB8#	24E283
	DEF	3/4 (19)	50 (15)	3/4 BSPP(M)	3/4 BSPP ORB	50 (3.4)	HSDD5#	24W250 (BSPP)

# **Bare Reels**

Required hose inlet kit sold separately.



	Hose (Not	Included)	Connect	tion Size	Maximum		Recommended	
Fluid	ID in (mm)	Length ft (m)	Inlet in (mm)	Outlet in (mm)	Pressure psi (bar)	Part Number	Hose Inlet Kit	
Oil	1/2 (13)	75 (23)	1/2 (13) (m)	1/2 (13) (m)	2,000 (138)	HSMCF#	218549	
Oil	3/4 (19)	50 (15)	3/4 (19) (m)	3/4 (19) (m)	2,000 (138)	HSMDD#	24E284	
Grease	1/2 (13)	50 (15)	1/2 (13) (m)	1/2 (13) (m)	5,000 (345)	HSHCD#	24E283	
Pressure Wash	3/8 (10)	75 (23)	1/2 (13) (m)	3/8 (10) (m)	4,000 (276)	HSHFF#	24E283	
DEF	3/4 (19)	50 (15)	3/4 (19) (m)	3/4 (19) ORB	50 (3.4)	HSDDD#	24W250 (BSPP)	
Fuel/Oil Evacuation	1 (13)	30 (9)	3/4 (19) (m)	1 (13) (m)	125 (8.6)	HSLEE#	24E285	





















30 / 30 HN



# >>> Ordering Information

# HN Models (without Adjustable Arm)

### **Reels with Hose**

Required hose inlet kit sold separately.



	Hose (Ir	ncluded)	Connect	tion Size	Maximum	Reel and Hose	Recommended
Fluid	ID in (mm)	Length ft (m)	Inlet	Outlet	Pressure psi (bar)	Assembly Part Number	Hose Inlet Kit
Air/Water/Antifreeze/	1/2 (13)	75 (23)	1/2 NPSM(M)	1/2 NPT(M)	300 (20.7)	HNLC8#	218549
Windshield Washer Fluid	3/4 (19)	50 (15)	3/4 NPSM(M)	3/4 NPT(M)	300 (20.7)	HNLD5#	24E284
Oil	1/2 (13)	75 (23)	1/2 NPSM(M)	1/2 NPT(M)	1,500 (103)	HNMC8#	218549
Oil	3/4 (19)	50 (15)	3/4 NPSM(M)	3/4 NPT(M)	1,250 (86)	HNMD5#	24E284
Grease	3/8 (10)	75 (23)	1/2 NPSM(M)	3/8 NPT(F)	5,000 (345)	HNHB7#	24E283
Pressure Wash	3/8 (10)	75 (23)	1/2 NPSM(M)	3/8 NPT(M)	4,000 (276)	HNPB8#	24E283
Fiessule Wasii	1/2 (13)	50 (15)	1/2 NPSM(M)	1/2 NPT(M)	4,500 (310)	HNPC5#	24E283

### **Bare Reels** Required hose inlet kit sold separately.

	Hose (Not	Included)	Connect	tion Size	Maximum		Recommended	
Fluid	ID Length Inlet in (mm) ft (m) in (mm)		Outlet in (mm)	Pressure psi (bar)	Part Number	Hose Inlet Kit		
Oil	3/4 (19)	50 (15)	3/4 (19) (m)	3/4 (19) (m)	2,000 (138)	HNMDD#	24E284	
Grease	1/2 (13)	50 (15)	1/2 (13) (m)	1/2 (13) (m)	5,000 (345)	HNHCD#	24E283	
Pressure Wash	3/8 (10)	75 (23)	1/2 (13) (m)	3/8 (10) (m)	4,000 (276)	HNHFF#	24E283	

### **Ball Stop Kits**

XD HS models include ball stop kits. Order separately if ordering a bare reel or if needed with HN models.



Part Number	Description
222225	For 1/4 in (6 mm) ID hose (not compatible with XD 30, 700 or 750)
218340	For 1/4-3/8 in (6-10 mm) ID hose (not for use with XD 30, 700 or 750)
218341	0.782 in ID used for 3/8 in and 1/2 in (10 mm and 13 mm) hose (not compatible with XD 30, 700 or 750)
237872	1.0 in ID used for 5/8 in (16 mm) hose
237873	1.123 in ID used for 3/4 in (19 mm) hose
237874	1.374 in ID used for 1 in (25 mm) hose
24D132	For 3/8 in (10 mm) ID hose
24D133	For 1/2 in (13 mm) ID hose















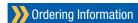






# **XD Series Hose Reel Accessories**

30 / 30 HN



### **Hose Inlet Kits**

A hose inlet kit is required when ordering an XD reel.

	Part Number	Description
	218549	1/2 in (13 mm) hose inlet kit for air/water and oil. 2,000 psi (137 bar), 1/2 in NPT hose inlet ID, 24 in (610 mm) long
	24E284	3/4 in (19 mm) hose inlet kit for air/water and oil. 1,250 psi (86 bar), 3/4 in NPT hose inlet ID, 24 in (610 mm) long
	24E283	1/2 in (13 mm) hose inlet kit for grease or pressure wash. 5,000 psi (345 bar), 1/2 in NPT hose inlet ID, 24 in (610 mm) long
The same of the sa	24E285	1/2 in (13 mm) hose inlet kit for fuel. 125 psi (8.6 bar), 1/4 in NPT hose inlet ID, 24 in (610 mm) long
	24W250	2 ft DEF inlet hose kit for XD 30 reels. 3/4 in BSPP(F) x cut end and 90° elbow
	24W251	6 ft DEF inlet hose kit for XD 30 reels. 3/4 in BSPP(F) x cut end and 90° elbow
	124875	2 ft DEF hose, 3/4 in BSPP(M) x cut end (inlet hose)
	124581	6 ft DEF hose, 3/4 in BSPP(M) x cut end (inlet hose)

# **Valve Hanger Kit**

Part Number	Description
224444	Mounts to side of reel to allow hanging of non-metered and high-flow dispensing valves

# **Self-Adhesive Identification Label Set**

C anti-regard C orrespond	Part Number	Description
C MAC GAM C DOCUMENTS  C MAC SHO C CONCESSES  C MAC SHO C MACHEN  C SAC 2007 C SAAN  C SAC 2007 C AIR	180698	Set includes: 1 in x 5 in (25.4 mm x 127 mm) hose reels labels for Antifreeze, Water, SAE 5-40, SAE 10-40, SAE 20W, Hydraulic, Gear, SAE 10W, SAE 10-30, SAE 30W, Dexron, Air, Chassis, ATF















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# **Built-In Toughness**

Engineered to take a beating and still reliably perform in harsh environments so it's ready when you need it. Choose from more colors, thread types and hoses or choose the bare reel so you can customize it with your hose. You get a professional look, easier fit and better-performing equipment.

# Extensive Hose Offering

Standard models come complete with factory-installed hoses on the reel. Large selection of optional reels to fit various applications.

### **Full-Flow Swivel**

Maximize material flow with minimal pressure drop for faster fills to get more vehicles through your shop.

# Rugged and Durable Body

Heavy-duty welded spool and ribbed frame for extra strength and toughness over the long haul.

### Meets Worldwide Needs

Built standard with 90° elbow with NPT, BSPP or BSPT threads. 1-1/2 in models also include 2 in Victaulic[™]*-style groove. Accessories attach without the need for adapters.

### **Typical Applications**

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

### Typical Fluids Handled

- Petroleum- and synthetic-based oils (motor, gear and ATF)
- Diesel fuel
- Air
- Water
- Antifreeze
- · Waste oil evacuation

Tec	hnical Specifications	
	Operating Temperature Range	
	Oil Reels – 1 inch	-20°F to 180°F (-28°C to 82°C)
	All Other Reels	-40°F to 180°F (-40°C to 82°C)
	Wetted Parts	Carbon steel, nickel plated cast iron, Buna-N rubber, FKM UHMWPE
	Maximum Recommended Mounting Height	15 ft (4.6 m)
	Sound Pressure Level	77.6 dB(A)
	Sound Power Level	86.8 dB(A)

# How to Select an XD 40/50 Hose Reel

# 2 Ways to Order!

# **Option 1** – Reel with Hose

(Pages 241-242)

All models include the hose, hose guide and ball stop kit.



# **Option 2** – Bare Reel

(Pages 241-242)

Bare reel models do not include hose and ball stop kit.



### **Choose Your Accessories (Pages 243)**



### **Hose Inlet Kit**

A hose inlet is required for installation. They are appropriately sized for the hose reels based on type of fluid, hose size and pressure.



# **Support Arm**

For additional support, add arm brackets to the reel. Required for overhead mounting applications.



# **Mounting Kit**

Overhead mounting options available for XD 40 reels.



### **Hose Kit**

Large selection of hoses appropriately sized for the hose reels based on type of fluid, hose size and pressure.



### **Hose Inlet Kit**

A hose inlet is required for installation. They are appropriately sized for the hose reels based on type of fluid, hose size and pressure.



### **Ball Stop Kit**

When the ball stop comes in contact with the hose guide, the hose is prohibited from rewinding.



# **Support Arm**

For additional support, add arm brackets to the reel. Required for overhead mounting applications.



### **Mounting Kit**

Overhead mounting options available for XD 40 reels.







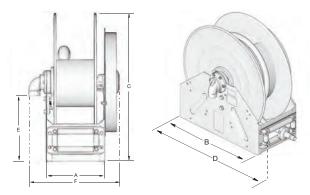








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Dimensions											
Model	Inlet/Outlet Size	Dimensions in (mm)*									
	NPT(F)	А	В	С	D	Е	F				
XD 4010 – Spring C/D	1 in/1 in	11.83 (300)	24 (610)	26.13 (664)	26.4 (671)	10.91 (277)	16.54 (420)				
XD 4010 – Spring A/B	1 in/1 in	11.83 (300)	24 (610)	26.13 (664)	26.4 (671)	10.91 (277)	17.47 (444)				
XD 5010	1 in/1 in	11.83 (300)	28.5 (724)	30.13 (765)	29.4 (747)	10.91 (277)	17.4 (444)				
XD 5015	1-1/2 in/ 1-1/2 in	11.83 (300)	28.5 (724)	30.13 (765)	29.4 (747)	10.91 (277)	18.24 (463)				

^{*}For complete list of dimensions, see Graco product manual 3A2990.

# **Typical Mounting Configurations**



















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### **XD 40 Reels with Hose**

Includes hose, ball stop kit and hose guide. Required hose inlet kit sold separately.

	Reel		Но	se	Connect	ion Size	Maximum		Truck/ Bench	Part Nu	umber by Re	el Color	Hose Inlet Kit (Order Separately)
	Size	Fluid	ID in (mm)	Length ft (m)	Inlet NPT(F)	Outlet NPT(M)	Pressure psi (bar)	Spring	Mount Only	Metallic Blue	Yellow	White	
			1/2 (13)	100 (30)	1	1/2	300 (21)	D		24P327	24P328	24P329	
		Air/Water	3/4 (19)	75 (23)	1	3/4	300 (21)	D		24P330	24P331	24P332	
		All/Water	3/4 (19)	100 (30)	1	3/4	300 (21)	С		24P333	24P334	24P335	
			1 (25)	50 (15)	1	1	300 (21)	D		24P336	24P337	24P338	
		Antifreeze	3/4 (19)	100 (30)	1	3/4	300 (21)	А		24P984	24P985	24P986	
			1/2 (13)	100 (30)	1	1/2	2,000 (138)	А		24P339	24P340	24P341	24R111
133	XD 4010		3/4 (19)	75 (23)	1	3/4	1,500 (103)	С	•	24P342	24P343	24P344	
		Oil	3/4 (19)	75 (23)	1	3/4	1,500 (103)	В		24R857	24R859	24R860	
		Oll	3/4 (19)	100 (30)	1	3/4	1,500 (103)	А		24P345	24P346	24P347	
			1 (25)	50 (15)	1	1	1,275 (88)	С	•	24P348	24P349	24P350	
			1 (25)	50 (15)	1	1	1,275 (88)	В		24R861	24R862	24R863	
		Waste Oil Evacuation	1 (25)	50 (15)	1	1	250 (17)	С		24P351	24P352	24P353	24R112
		Diesel Fuel	1 (25)	50 (15)	1	1	250 (17)	С		24P354	24P355	24P356	24R115

### **XD 40 Bare Reels**

	Reel	Fluid	Hose Length Capacity (in x ft (m))			Connection Size		Maximum		Truck/ Bench	Part Number by Reel Color			Hose Inlet Kit
	Size		1/2	3/4	1	Inlet NPT(F)	Outlet NPT(F)	Pressure psi (bar)	Spring	Mount Only	Metallic Blue	Yellow	White	(order separately)
		Air/Water	100 (30)	75 (23)	50 (15)	1	1	600 (41)	D		24P313	24P315	24P316	
		Aii/Water	-	100 (30)	-	1	1	600 (41)	С		24P317	24P318	24P319	
		Antifreeze	-	100 (30)	50 (15)	1	1	600 (41)	D		26A140	26A141	26A142	24R111
		Oil	-	75 (23)	50 (15)	1	1	2,000 (138)	С	•	24P320	24P322	24P323	24n111
	XD 4010		_	75 (23)	50 (15)	1	1	2,000 (138)	В		24R854	24R855	24R856	
			100 (30)	100 (30)	-	1	1	2,000 (138)	А		24P324	24P325	24P326	
		Waste Oil Evacuation	_	_	75 (23)	1	1	600 (41)	С		24P317	24P318	24P319	24R112
		Diesel Fuel	-	-	50 (15)	1	1	600 (41)	С		24P317	24P318	24P319	24R115



















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### Ordering Information

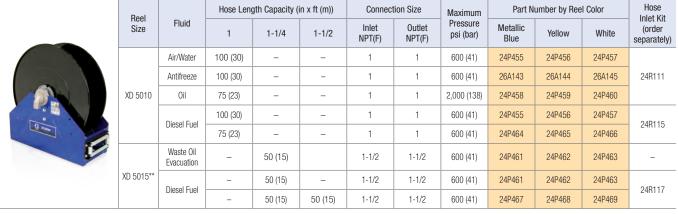
### **XD 50 Reels with Hose**

Includes hose, ball stop kit and hose guide. Required hose inlet kit sold separately.

	Reel		Ho	se	Connect	tion Size	Maximum	Part N	umber by Ree	l Color	Hose Inlet Kit
	Size	Fluid	ID in (mm)	Length ft (m)	Inlet NPT(F)	Outlet NPT(M)	Pressure psi (bar)	Metallic Blue	Yellow	White	(Order Separately)
		Air/Water	1 (25)	75 (23)	1	1	300 (21)	24P470	24P471	24P472	
		All/Water	1 (25)	100 (30)	1	1	300 (21)	24P473	24P474	24P475	040111
	XD 5010	Antifreeze	1 (25)	100 (30)	1	1	300 (21)	24P987	24P988	24P989	- 24R111 -
Sea and the	XD 5010	Oil	1 (25)	75 (23)	1	1	1,275 (88)	24P476	24P477	24P478	
A1 ( 3)		Diesel Fuel	1 (25)	75 (23)	1	1	250 (17)	24P485	24P486	24P487	- 24R115
6			1 (25)	100 (30)	1	1	250 (17)	24P488	24P489	24P490	
i		Waste Oil	1-1/4 (32)	35 (11)	1-1/2	1-1/4	200 (14)	24P479	24P480	24P481	_
		Evacuation	1-1/4 (32)	50 (15)	1-1/2	1-1/4	200 (14)	24P482	24P483	24P484	
	XD 5015**		1-1/4 (32)	35 (11)	1-1/2	1-1/4	250 (17)	24P491	24P492	24P493	24R117
		Diesel Fuel	1-1/4 (32)	50 (15)	1-1/2	1-1/4	250 (17)	24P494	24P495	24P496	
			1-1/2 (38)	50 (15)	1-1/2	1-1/2	150 (10)	24P497	24P498	24P499	

^{**}Standard 2 inch Vitaulic™-style groove on inlet.

### **XD 50 Bare Reels**



^{**}Standard 2 inch Vitaulic™-style groove on inlet.

























# >>> Ordering Information

# **Ball Stop Kits**



Part Number	Description
237873	Ball stop kit used for 3/4 in (19 mm) hose
237874	Ball stop kit used for 1 in (25 mm) hose
24R060	Ball stop kit used for a 1-1/4 in (32 mm) hose
24R061	Ball stop kit used for a 1-1/2 in (38 mm) hose

# **Hose Guides**



Part Number	Description
24R072	Roller guide kit with bracket for XD 40 and XD 60
24R074	Roller guide kit with bracket for XD 50

# **Support Arm Kits**



Part Number	Description
24R076	Support arm kit for XD 40
24R077	Support arm kit for XD 50

# **Mounting Kit**



Part Number	Description
237932	Overhead or wall mounting kit for XD 40. Includes all parts needed for overhead mounting one reel.

# **Hose Inlet Kits**



Part Number	Description
24R111	1 in (25 mm) hose inlet kit for air/water and oil. 1,275 psi (88 bar), 1 in NPT hose inlet ID, 28 in (710 mm) long
24R112	1 in (25 mm) hose inlet kit for waste oil evacuation. 250 psi (17 bar), 1 in NPT hose inlet ID, 28 in (710 mm) long
24R115	1 in (25 mm) hose inlet kit for diesel fuel. 250 psi (17 bar), 1 in NPT hose inlet ID, 28 in (710 mm) long
24R117	1-1/2 in (38 mm) hose inlet kit for diesel fuel. 150 psi (10 bar), 1.5 in NPT hose inlet ID, 28 in (710 mm) long

# **Self-Adhesive Identification Label Set**

.50	ment in a little	龙	HISTORY
50	285 1046	-50	ATT
2	BAR 10-30	2	SERMON
C	base	2	CHARLES.
C/	SAL OR	42	WATER
G	SAE 20W	0	BEAR
0	MAR NOW	0	400

Part Number	Description
180698	Set includes: 1 in x 5 in (25.4 mm x 127 mm) hose reels labels for Antifreeze, Water, SAE 5-40, SAE 10-40, SAE 20W, Hydraulic, Gear, SAE 10W, SAE 10-30, SAE 30W, Dexron, Air, Chassis, ATF

# **XD Series Powered Bare Hose Reels**















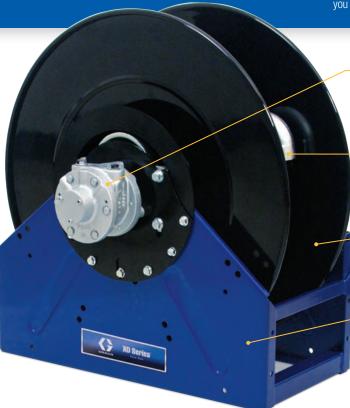


60 / 70 / 80



# Safe, Versatile Powered Hose Reels

We like to think of the XD motor rewind reels as super-powered. The innovative design is packed with features to help you work safer, smarter and faster. We demand extensive product testing, often exceeding industry standards to ensure you get the best product on the market.



### Safe, Reliable Direct Drive and Gear Motors

Drive unit is clean and lubricated for life. No need to worry about greasy, exposed drive chains that need maintenance and can be dangerous to operators.

### Easy System Integration

Easily change the inlet and motor direction to give you the option of a right- or left-hand flow orientation.

# Heavy-duty Welded Spool

Built to handle the weight of heavy hoses. Designed to surround and protect the drive unit from the elements to promote longer-lasting, safer operation.

# Rugged and Durable Body

Heavy-duty one piece welded frame is engineered to flex under extreme operating conditions and is stronger than bolted frames that can loosen with use. Individually painted and powder-coated components have superior corrosion resistance over assembled and painted products.

### **Typical Applications**

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

### Typical Fluids Handled

- Petroleum- and synthetic-based oils (motor, gear and ATF)
- Diesel fuel
- Air
- Water
- Grease
- · Waste oil evacuation

# **Technical Specifications**

Operating Temperature Range	
Motorless Reels	-40°F to 180°F (-40°C to 82°C)
Air/Water Applications	-40°F to 180°F (-40°C to 82°C)
Waste Oil Evacuation Applications	-40°F to 180°F (-40°C to 82°C)
Oil Applications	-40°F to 180°F (-40°C to 82°C)
Grease Applications	0°F to 180°F (-18°C to 82°C)
Diesel Fuel Applications	-40°F to 140°F (-40°C to 60°C)
Wetted Parts	Nickel plated cast iron, cast iron, Buna-N rubber, polyethylene
Electric and Hydraulic Motors Sound Pressure Level	<80 dB(A)
Pneumatic Motors Sound Pressure Level	84.6 dB(A)
Pneumatic Motors Sound Power Level	89.9 dB(A)
Instruction Manual	332630







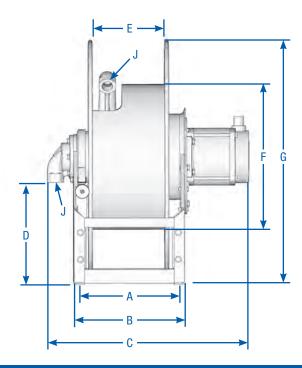








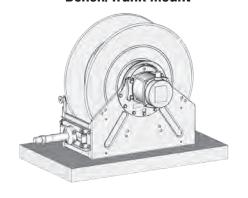




### **Dimensions** Reference dimension "D" for specific motor type Dimensions in (mm) Inlet/Outlet Α С Model Size (J) (Mounting В D Ε F G NPT(F) Hydraulic Pneumatic Electric Holes) 21.6 (547) XD 6010 1 in/1 in 10.45 (256) 11.8 (300) 20.4 (519) 15.7 (400) 10.9 (277) 7.8 (198) 15.5 (394) 26.1 (663) XD 7010 1 in/1 in 18.2 (463) 12.95 (329) 14.3 (363) 22.9 (583) 24.1 (611) 10.9 (277) 10 (254) 10 (254) 26.1 (663) 1-1/2 in/ XD 7015 12.95 (329) 14.3 (363) 23.7 (603) 19 (483) 24.8 (631) 10.9 (277) 10 (254) 10 (254) 26.1 (663) 1-1/2 in XD 7020 2 in/2 in 12.95 (329) 14.3 (363) 24.1 (613) 19.4 (493) 25.2 (641) 10.2 (259) 10 (254) 10 (254) 26.1 (663) XD 8010 1 in/1 in 20.68 (525) 22.1 (561) 30.7 (779) 26 (659) 31.8 (807) 13.4 (340) 18 (457) 15.5 (394) 30.1 (765) 1-1/2 in/ XD 8015 32.5 (827) 20.68 (525) 22.1 (561) 31.4 (799) 26.7 (679) 13.4 (340) 18 (457) 15.5 (394) 30.1 (765) 1-1/2 in XD 8020 27.1 (689) 18 (457) 2 in/2 in 20.68 (525) 22.1 (561) 33 (837) 12.7 (323) 15.5 (394) 30.1 (765) 31.9 (809)

### **Typical Mounting Configurations**

# **Bench/Trunk Mount**



# Truck Mount with Remote Mounted Roller Guide



# **How to Select an XD Powered Bare Hose Reel**

# A Complete Family of Motor Rewind Hose Reels

The innovative design of the XD reel family is packed with features to help you work safer, smarter and faster. Direct-drive motor options include hydraulic, pneumatic and electric for air, water, oil, grease, fuel dispense and waste oil evacuation applications. Use this selection chart to configure the XD reel to suit your needs.







# Specify the Hose Fluid Type and Capacity

Determine your fluid type and capacity before selecting your reel.

Fluid Type □ Air/Water □ Antifreeze

□ Petroleum- and Synthetic-Based Oils

☐ Waste Oil □ Diesel Fuel Hose ID Hose Length in (mm) ft (m)

□ 1/2 (13) □ 50 (15) □ 1 (25) □ 75 (23)

□ 100 (30) □ 1-1/2 (38) □ 2 (51) □ 150 (46)

# Select Your Drive Type and Frame

Reels can be ordered with a motor or without. If you choose a model without a motor, you must purchase the motor separately.

- ☐ Order Reel with Motor Included (Pages 248-250)
- ☐ Order Reel and Motor Separately (Page 251)
  - □ Pneumatic Motor
  - ☐ Hydraulic Motor
  - □ Electric Motor
- □ 12 VDC, 1/2 HP □ 24 VDC, 2/3 HP □ 12 VDC, 2/3 HP
- □ 24 VDC, 1/2 HP
- □ 115 VAC, 0.40 HP



□ XD 60 □ XD 70 □ XD 80

### **Choose Your Reel Color**

Select from Blue, Yellow or White.

☐ Blue

☐ Yellow ■ White

# Choose Your Controls (Pages 252)



☐ Pneumatic 2-position, 3-way valve

### ☐ Hydraulic Motor

- ☐ 12 VDC electric control of hydraulic motor, 3-position,
- □ 12 VDC electric control of hydraulic motor with switch, 3-position, 4-way valve
- ☐ 24 VDC electric control of hydraulic motor, 3-position,
- ☐ 24 VDC electric control of hydraulic motor with switch, 3-position, 4-way valve

### □ Electric Motor

- □ Hazardous location on/off button
- □ 12 VDC intermittent-duty solenoid
- □ 24 VDC intermittent-duty solenoid
- ☐ Manual reset button circuit breaker (25 or 50 amp)

# FOR INSTALLATION

REQUIRED

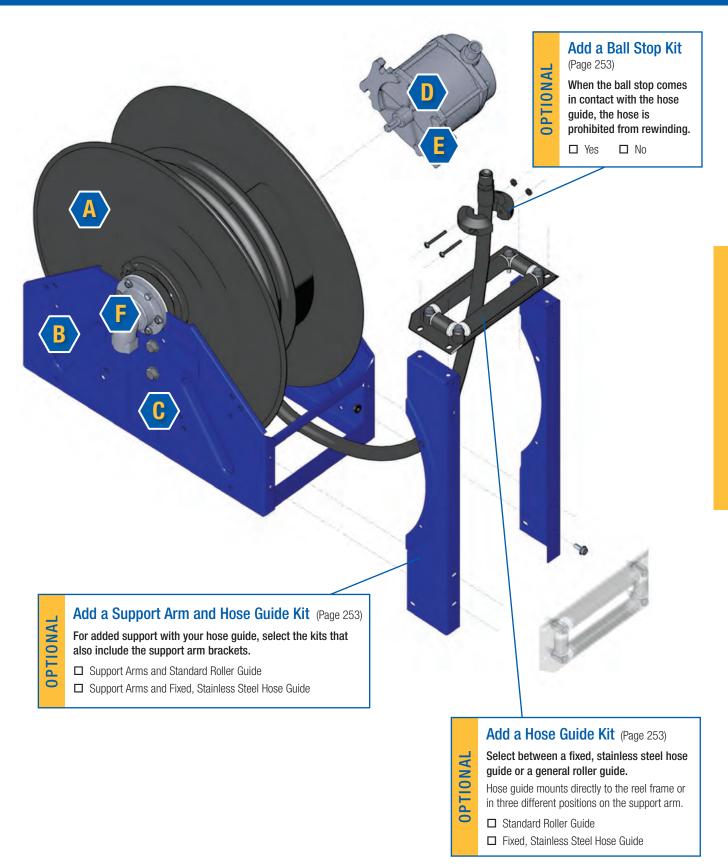
# Hose Inlet Kit (Page 253)

A hose inlet is required for installation. They are appropriately sized for the hose reels based on type of fluid, hose size and pressure.

Note: All 1-1/2 in (38 mm) hose reels include a 2 in (51 mm) Victaulic-style groove on inlet. If you are using these reels, it is recommended to order an inlet kit from Graco.

- ☐ Yes (required for installation)
- ☐ No (will supply my own hose inlet kit)





# **XD Series Bare Hose Reels**















60 / 70 / 80



### Ordering Information

# Reel with Motor - 1 in (25 mm) Inlet/Outlet XD 60 Reels































60 / 70 / 80



# Reel with Motor – 1 in (25 mm) Inlet/Outlet XD 70 / XD 80 Reels

F	Reel	Florid	Male	Hose Capacity of Reel ft (m)	Maximum	Weight	Inlet/ Outlet	Reel Pa	rt Number t	y Color		lose Accessories be ordered separately)	
S	Size	Fluid	Motor	Hose ID 1 in (25 mm) Pressure psi (bar)		lb (kg)	Size NPT(F)	Metallic Blue	Yellow	White	Hose Inlet Kit	Hose	
			Pneumatic	100 (30)	600 (41)	122 (55)		24R449	24R450	24R451		126363 – 1 in x 75 ft (25 mm x 23 m)	
			Hydraulic	100 (30)	600 (41)	100 (45)	1 in/1 in	24R446	24R447	24R448			
		Air/ Water	12 VDC Electric, 1/2 HP	100 (30)	600 (41)	132 (60)	(25 mm/	24R437	24R438	24R439		126364 – 1 in x 100 ft	
		· rator	24 VDC Electric, 1/2 HP	100 (30)	600 (41)	132 (60)	25 mm)	24R440	24R441	24R442		(25 mm x 30 m)	
			115 VAC Electric	100 (30)	600 (41)	132 (60)		24R443	24R444	24R445	24R111		
			Pneumatic	100 (30)	3,000 (207)	100 (56)		24R464	24R465	24R466	24KIII		
			Hydraulic	100 (30)	3,000 (207)	102 (46)	1 in/1 in	24R461	24R462	24R463		126504 – 1 in x 75 ft	
XD	7010	Oil	12 VDC Electric, 1/2 HP	100 (30)	3,000 (207)	133 (60)	(25 mm/	24R452	24R453	24R454		(25 mm x 23 m)	
			24 VDC Electric, 1/2 HP	100 (30)	3,000 (207)	133 (60)	25 mm)	24R455	24R456	24R457		126505 – 1 in x 100 ft (25 mm x 30 m)	
			115 VAC Electric	100 (30)	3,000 (207)	133 (60)		24R458	24R459	24R460		. ,	
			Pneumatic	100 (30)	600 (41)	122 (55)	1 in/1 in (25 mm/ 25 mm)	24R449	24R450	24R451	24R115	24R103 – 1 in x 75 ft (25 mm x 23 m) 24R106 – 1 in x 100 ft (25 mm x 30 m)	
		Diesel Fuel	Hydraulic	100 (30)	600 (41)	100 (45)		24R446	24R447	24R448			
			12 VDC Electric, 1/2 HP	100 (30)	600 (41)	132 (60)		24R437	24R438	24R439			
			24 VDC Electric, 1/2 HP	100 (30)	600 (41)	132 (60)		24R440	24R441	24R442			
			115 VAC Electric	100 (30)	600 (41)	132 (60)		24R443	24R444	24R445			
		Air/ Water	Pneumatic	150 (46)	600 (41)	164 (74)		24R531	24R532	24R533		-	
			Hydraulic	150 (46)	600 (41)	142 (64)	1 in/1 in	24R528	24R529	24R530			
			12 VDC Electric, 1/2 HP	150 (46)	600 (41)	173 (78)	(25 mm/	24R519	24R520	24R521			
			24 VDC Electric, 1/2 HP	150 (46)	600 (41)	173 (78)	25 mm)	24R522	24R523	24R524			
			115 VAC Electric	150 (46)	600 (41)	173 (78)		24R525	24R526	24R527	0.404.44		
			Pneumatic	150 (46)	3,000 (207)	165 (75)		24R546	24R547	24R548	24R111		
			Hydraulic	150 (46)	3,000 (207)	143 (65)	1 in/1 in	24R543	24R544	24R545			
XD	8010	Oil	12 VDC Electric, 1/2 HP	150 (46)	3,000 (207)	175 (79)	(25 mm/	24R534	24R535	24R536		-	
			24 VDC Electric, 1/2 HP	150 (46)	3,000 (207)	175 (79)	25 mm)	24R537	24R538	24R539			
			115 VAC Electric	150 (46)	3,000 (207)	175 (79)		24R540	24R541	24R542	-		
			Pneumatic	150 (46)	600 (41)	164 (74)		24R531	24R532	24R533			
			Hydraulic	150 (46)	600 (41)	142 (64)	1 in/1 in	24R528	24R529	24R530			
		Diesel Fuel	12 VAC Electric, 1/2 HP	150 (46)	600 (41)	173 (78)	(25 mm/	24R519	24R520	24R521	24R115	24T252 — 1 in x 150 ft (25 mm x 46 m)	
		1 461	24 VAC Electric, 1/2 HP	150 (46)	600 (41)	173 (78)	25 mm)	24R522	24R523	24R524			
			115 VAC Electric	150 (46)	600 (41)	173 (78)		24R525	24R526	24R527			



# **XD Series Bare Hose Reels**













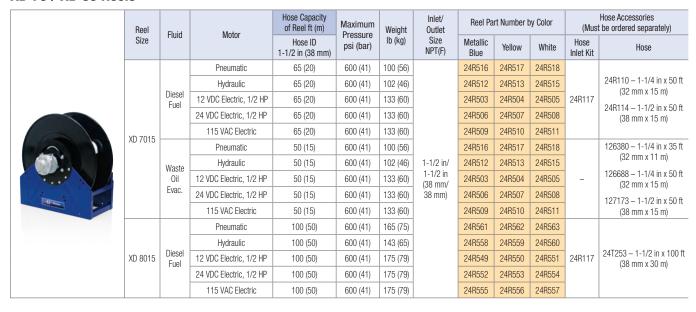


60 / 70 / 80



### Ordering Information

# Reel with Motor – 1-1/2 in (38 mm) Inlet/Outlet XD 70 / XD 80 Reels



# Reel with Motor - 2 in (51 mm) Inlet/Outlet XD 70 / XD 80 Reels

	Reel	Fluid	Fluid	Fluid	Motor	Hose Capacity of Reel ft (m)	Maximum Pressure	Weight	Inlet/ Outlet	Reel Pa	rt Number t	y Color		Hose Accessories be ordered separately)
	Size		IVIOTOI	Hose ID 2 in (51 mm)	psi (bar)	lb (kg)	Size NPT(F)	Metallic Blue	Yellow	White	Hose Inlet Kit	Hose		
			Pneumatic	33 (10)	600 (41)	128 (58)		24T023	24T024	24T025				
		Diesel Fuel	Hydraulic	33 (10)	600 (41)	106 (48)		24T020	24T021	24T022	24R118 ·	127167 – 2 in x 33 ft (51 mm x 10 m)		
	XD 7020		12 VDC Electric, 1/2 HP	33 (10)	600 (41)	137 (62)	241 2 in/2 in 241	24T011	24T012	24T013				
			24 VDC Electric, 1/2 HP	33 (10)	600 (41)	137 (62)		24T014	24T015	24T016				
			115 VAC Electric	33 (10)	600 (41)	137 (62)		24T017	24T018	24T019				
0-	XD 8020		Pneumatic	50 (15)	600 (41)	169 (76)	(51 mm/ 51 mm)	24R576	24R577	24R578				
			Hydraulic	50 (15)	600 (41)	147 (67)		24R573	24R574	24R575				
			12 VDC Electric, 1/2 HP	50 (15)	600 (41)	179 (81)		24R564	24R565	24R566		24T254 – 2 in x 50 ft (51 mm x 15 m)		
			24 VDC Electric, 1/2 HP	50 (15)	600 (41)	179 (81)		24R567	24R568	24R569		(5 · x 10 iii)		
			115 VAC Electric	50 (15)	600 (41)	179 (81)		24R570	24R571	24R572				





























# **Reel Frames Only**

# XD 60 / XD 70 / XD 80 Reels

Motor is not included and must be purchased separately.

	Reel			Hose Ca	pacity of Re	eel ft (m)		Maximum	Weight	Inlet/ Outlet	Reel Part Number by Color		
	Size			Но	se ID in (m	m)		Pressure psi (bar)	lb (kg)	Size	Metallic	Yellow	White
			1/2 (13)	3/4 (19)	1 (25)	1-1/2 (38)	2 (51)	por (bar)		NPT(F)	Blue	Tellow	wille
		Air/Water/ Diesel Fuel	100 (30)	100 (30)	50 (15)	-	-	600 (41)	87 (39)		24T104	24T105	24T106
	XD 6010	Oil	100 (30)	100 (30)	50 (15)	-	-	3,000 (207)	88 (40)		24T107	24T108	24T109
		Waste Oil Evac.	_	_	50 (15)	-	-	600 (41)	87 (39)		24T104	24T105	24T106
		Grease	-	_	50 (15)	-	-	3,000 (207)	88 (40)	1 in/1 in (25 mm/25 mm)	24T107	24T108	24T109
	XD 7010	Air/Water/ Diesel Fuel	-	-	100 (30)	-	-	600 (41)	86 (39)		24T110	24T111	24T112
0		Oil	_	_	100 (30)	_	-	3,000 (207)	87 (39)		24T113	24T114	24T115
	XD 8010	Air/Water/ Diesel Fuel	-	_	150 (46)	-	-	600 (41)	127 (58)		24T122	24T123	24T124
		Oil	_	_	150 (46)	_	-	3,000 (207)	129 (58)		24T125	24T126	24T127
	XD 7015	Waste Oil Evac.	-	-	-	50 (15)	-	600 (41)	87 (39)	1-1/2 in/	24T116	24T117	24T118
	VD /012		-	-	-	65 (20)	-	600 (41)	87 (39)	1-1/2 in	24T116	24T117	24T118
	XD 8015	Diesel Fuel	-	-	-	100 (30)	-	600 (41)	129 (58)	(38 mm/38 mm)	24T128	24T129	24T130
	XD 7020	Diesel Fuel	-	_	-	-	33 (10)	600 (41)	91 (41)	2 in/2 in	24T119	24T120	24T121
	XD 8020		-	-	-	-	50 (15)	600 (41)	133 (60)	(51 mm/51 mm)	24T131	24T132	24T133

# **Motor Assemblies – Pair with Frame-Only Models**

	Part Number	Description
	24T892	Pneumatic motor assembly, reversible type. For installing motor to bare XD reel.
	24T891	Hydraulic motor assembly, reversible type. For installing motor to bare XD reel.
	24T886	12 VDC, 1/2 HP motor assembly, reversible type. For installing motor to bare XD frame.
	24T910	12 VDC, 2/3 HP motor assembly, reversible type. For installing motor to bare XD frame.
	24T888	24 VDC, 1/2 HP motor assembly, reversible type. For installing motor to bare XD frame.
3	24T911	24 VDC, 2/3 HP motor assembly, reversible type. For installing motor to bare XD frame.
	24T889	115 VAC, 0.40 HP motor assembly, reversible type. For installing motor to bare XD frame.



# **XD Series Bare Hose Reel Accessories**

















# >>> Ordering Information

# **Motor Controls (Required)**

•	Part Number	Description
Grand Control	127271	Pneumatic valve to control XD 60/70/80 pneumatic powered hose reels. 2-position, 3-way valve.
(D)	24T875	Hydraulic control module for electric over hydraulic control of XD 60/70/80 hydraulic powered hose reels, 12 VDC. 3-position, 4-way valve.
	24T876	Hydraulic control module for electric over hydraulic control of XD 60/70/80 hydraulic powered hose reels, 24 VDC. 3-position, 4-way valve.
	127224	Hydraulic control module for electric over hydraulic control of XD 60/70/80 hydraulic powered hose reels, 12V, includes switch. 3-position, 4-way valve.
NA CONTRACTOR OF THE PROPERTY	127225	Hydraulic control module for electric over hydraulic control of XD 60/70/80 hydraulic powered hose reels, 24V, includes switch. 3-position, 4-way valve.
	127214	Momentary push-button on/off switch with red rubber cap. Use for 12 or 24 VDC.
	127217	Hazardous-location push-button on/off switch. Use for 12 and 24 VDC.
	127223	Hazardous-location push-button on/off switch. Use for 115 and 220 VAC.
	127218	Hazardous-location junction box
in to	127219	12 VDC intermittent-duty solenoid recommended for activating rewind on 12 VDC motor
	127220	24 VDC intermittent-duty solenoid recommended for activating rewind on 24 VDC motor
	127221	Manual-reset push-button circuit breaker, 50 amp rating
	127222	Manual-reset push-button circuit breaker, 25 amp rating



















# **Ball Stop Kits**

	Part Number
	Part Nulliber
	237873
	237874
	24R060
	24R061

Part Number	Description	
237873	Ball stop kit used for 3/4 in (19 mm) hose	
237874	Ball stop kit used for 1 in (25 mm) hose	
24R060	Ball stop kit used for 1.25 in (32 mm) hose	
24R061	Ball stop kit used for 1.5 in (38 mm) hose	

# **Hose Guide**

	Part Number	Description
-1	24T327	Stainless steel hose guide for XD 60
	24T328	Stainless steel hose guide for XD 70
	24T329	Stainless steel hose guide for XD 80
	24R072	Roller guide kit with bracket for XD 40 and XD 60
	24T330	Roller guide kit with bracket for XD 70
1	24T331	Roller guide kit with bracket for XD 80

# **Support Arm Kit with Hose Guide**

	Part Number	Description
	24T332	Arm kit with stainless steel hose guide for XD 60 (24T327)
1 1	24T333	Arm kit with stainless steel hose guide for XD 70 (24T328)
	24T334	Arm kit with stainless steel hose guide for XD 80 (24T329)
	24T335	Arm kit with roller guide for XD 60 (24R072)
	24T336	Arm kit with roller guide for XD 70 (24T330)
11	24T337	Arm kit with roller guide for XD 80 (24T331)

# **Hose Inlet Kits**

Part Number	Description
24R111	1 in (25 mm) hose inlet kit for air/water and oil 1,275 psi (88 bar), 1 in NPT hose inlet ID, 28 in (710 mm) long
24R112	1 in (25 mm) hose inlet kit for waste oil evacuation 250 psi (17 bar), 1 in NPT hose inlet ID, 28 in (710 mm) long
24R115	1 in (25 mm) hose inlet kit for diesel fuel 250 psi (17 bar), 1 in NPT hose inlet ID, 28 in (710 mm) long
24R117	1-1/2 in (38 mm) hose inlet kit for diesel fuel 150 psi (10 bar), 1-1/2 in NPT hose inlet ID, 28 in (710 mm) long
24R118	2 in (51 mm) hose inlet kit for diesel fuel 150 psi (10 bar), 2 in NPT hose inlet ID, 28 in (710 mm) long
24T858	1-1/2 in (38 mm) hose inlet kit for waste oil evacuation 150 psi (10 bar), 1-1/2 in NPT hose inlet ID, 28 in (710 mm) long

# **Self-Adhesive Identification Label Set**

C AND POWER C CONTROL OF CONTROL	Part Number	Description
	180698	Set includes: 1 in x 5 in (25.4 mm x 127 mm) hose reels labels for Antifreeze, Water, SAE 5-40, SAE 10-40, SAE 20W, Hydraulic, Gear, SAE 10W, SAE 10-30, SAE 30W, Dexron, Air, Chassis, ATF

# **Hose Reel Accessories**

















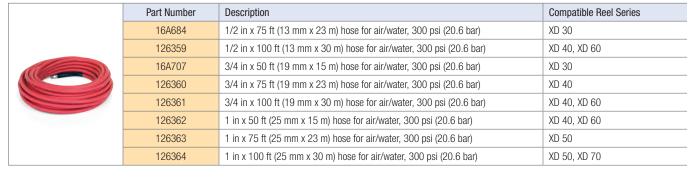




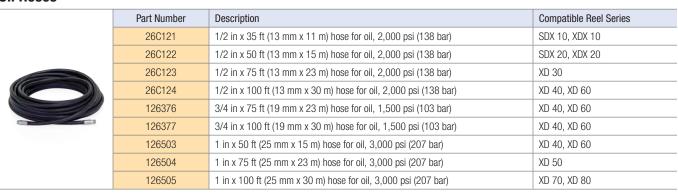


### Ordering Information

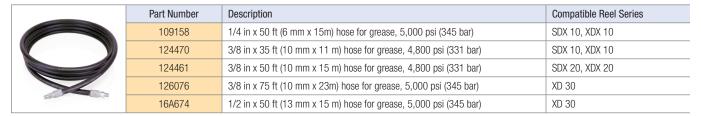
### Air/Water/Antifreeze Hoses



### **Oil Hoses**



### **Grease Hoses**



### **Waste Oil Evacuation Hoses**

	Part Number	Description	Compatible Reel Series
	16A686	1 in x 30 ft (25 mm x 9 m) hose for waste oil or fuel, 125 psi (9 bar)	XD 30
	126379	1 in x 50 ft (25 mm x 15 m) hose for waste oil, 250 psi (17 bar)	XD 40, XD 60
	126380	1 1/4 in x 35 ft (32 mm x 10.5 m) hose for waste oil, 200 psi (13.8 bar)	XD 50
	126688	1 1/4 in x 50 ft (32 mm x 15 m) hose for waste oil, 200 psi ( 13.8 bar)	XD 50
	127173	1 1/2 in x 50 ft (38 mm x 15 m) hose for waste oil, 200 psi (13.8 bar)	XD 50

























## **Diesel Fuel Hoses**

Part Number	Description	Compatible Reel Series
16A686	1 in x 30 ft (25 mm x 9 m) hose for waste oil or fuel, 125 psi (9 bar)	XD 30
24R102	1 in x 50 ft (25 mm x 15 m) hose for diesel fuel, 250 psi (17 bar)	XD 40, XD 60
24R103	1 in x 75 ft (25 mm x 23 m) hose for diesel fuel, 250 psi (17 bar)	XD 50
24R106	1 in x 100 ft (25 mm x 30 m) hose for diesel fuel, 250 psi (17 bar)	XD 50, XD 70
24T252	1 in x 150 ft (25 mm x 46 m) hose for diesel fuel, 250 psi (17 bar)	XD 80
24R108	1 1/4 in x 35 ft (32 mm x 10.5 m) hose for diesel fuel, 250 psi (17 bar)	XD 50
24R110	1 1/4 in x 50 ft (32 mm x 15 m) hose for diesel fuel, 250 psi (17 bar)	XD 50
24R114 1 1/2 in x 50 ft (38 mm x 15 m) hose for diesel fuel, 150 psi (11 t	1 1/2 in x 50 ft (38 mm x 15 m) hose for diesel fuel, 150 psi (11 bar)	XD 50
24T253	1 1/2 in x 100 ft (38 mm x 30 m) hose for diesel fuel, 150 psi (11 bar)	XD 80
127167	2 in x 33 ft (51 mm x 10 m) hose for diesel fuel, 150 psi (11 bar)	XD 80
24T254	2 in x 50 ft (51 mm x 15 m) hose for diesel fuel, 150 psi (11 bar)	XD 80

## **Diesel Exhaust Fluid (DEF) Hoses**

Part Number	Description	Compatible Reel Series
125242	3/4 in x 50 ft (19 mm x 15 m) hose for DEF fluid, 50 psi (3 bar)	XD 30

## **Pressure Wash Hoses**

Part Number	Description	Compatible Reel Series
16A688	3/8 in x 75 ft (10 mm x 23m) hose for pressure wash, 4,000 psi (276 bar)	XD 30

Notes	









#### **Convenient Used-Oil Receiver**

Oil King is designed with the busy shop in mind. With oversized tires and push-pull handles it allows for smooth maneuvering. The large funnel can collect fluids from both a drain plug and a filter port at the same time.



#### Large Offset Collection Pan

This funnel can be raised to a maximum height of 72 in (183 cm) and is equipped with a filter screen to prevent debris from entering the tank.

### Filter Drain Tray

Used filters are able to drain separately from the collection pan.

#### Convenient Tool Tray

Built-in holding bins for new or used filters, wrenches and rags all at your fingertips.

#### Liquid Sight Gauge

A full-length liquid level sight gauge lets you know when the tank is full.

## Large 25-Gallon (94.6 I) Capacity Receiver

Made from a heavy-duty, durable UV stabilized polymer. Dent-, rust- and corrosion-resistant.

#### **Oversized Tires**

Easily maneuver over hose and rough floors.

## Two Evacuation Port Options

Choose from the gravity drain valve at the bottom or suction evacuation at the top.

#### **Typical Applications**

- Automotive dealerships
- Fast lube centers
- · Service shops
- · Heavy-duty dealerships
- · Fleet services facilities

#### Typical Fluids Handled

Used oil

Technical Specifications		
Fluid	Used Oil	
Fluid Capacity	25 gal (95 l)	
Evacuation	Bottom – Gravity / Top – Suction	
Receiver Material	Polyethylene	
Length	24 in (60 cm)	
Width	24 in (60 cm)	
Height	45 to 72 in (1.1 to 1.8 m)	
Funnel Size	22 x 24 in (50 x 56 cm)	
Dry Weight	54 lb	
Instruction Manual	308667	

## **Ordering Information**

Part Number	Description
238866	25 gal (95 l) used-oil receiver with used-filter tray, tool holders and sight gauge. Must use wall mount package (224873) for topside evacuation.

Must ship via truck.







5 Year Warranty!

#### **Durable Receiver**

Coolant King is designed with the busy shop in mind.
With oversized tires and push-pull handles it allows
for smooth maneuvering. The full-length sight gauge
lets you know when the tank is full.

#### Large Offset Collection Pan

This funnel can be raised to a maximum height of 72 in (183 cm) and is equipped with a filter screen to prevent debris from entering the tank.

## Convenient Tool Tray

Built-in holding bins for shop tools at your fingertips.

### Liquid Sight Gauge

A full-length liquid-level sight gauge lets you know when the tank is full.

#### Large 25-Gallon (94.6 I) Capacity Receiver

Made from a heavy-duty, durable UV stabilized polymer. Dent-, rust-and corrosion-resistant. Color specific for easy fluid identification.

#### **Oversized Tires**

Easily maneuver over hose and rough floors.

#### Two Evacuation Port Options

Choose from the gravity drain valve at the bottom or suction-evacuation at the top.

#### **Typical Applications**

- Automotive dealerships
- · Fast lube centers
- Service shops
- Heavy-duty dealerships
- · Fleet services facilities

#### Typical Fluids Handled

Used antifreeze

Fechnical Specifications		
	Fluid	Antifreeze
	Fluid Capacity	25 gal (95 l)
	Evacuation	Bottom – Gravity / Top – Suction
	Receiver Material	Polyethylene
	Length	24 in (60 cm)
	Width	24 in (60 cm)
	Height	45 to 72 in (1.1 to 1.8 m)
	Funnel Size	22 x 24 in (50 x 56 cm)
	Dry Weight	54 lb
	Instruction Manual	308667

## >>> Ordering Information

Part Number	Description
248632	25 gal (95 l) used-antifreeze receiver with used-filter tray, tool holders and sight gauge. Must use wall mount package (224873) for topside evacuation.

Must ship via truck.



**☆** Oil A

## **Pressurized Oil Drain**

Drain, evacuate and transfer used oil reliably, quickly and in the most cost-effective manner.



## Large Offset Collection Pan

23 inch (58 cm) diameter offset collection bowl gives you a 31 inch (79 cm) total reach.

#### Superior Maneuverability

Wider and thicker handle for comfort.

#### Easy to Drain

Pressurize using shop air for easy oil evacuation.

### Large 24-Gallon (90 I) Capacity Receiver

Perfect for small to large shops without an evacuation system.

#### Liquid Sight Gauge

Easy-to-read tank-level gauge lets you know when the tank is full.

#### Large Casters

Easily move around rough shop floors.

#### **Typical Applications**

- Automotive dealerships
- · Fast lube centers
- · Service shops
- · Heavy-duty dealerships
- Fleet services facilities

#### Typical Fluids Handled

Used oil

# **Technical Specifications**

Fluid	Used oil
Fluid Capacity	24 gal (91 l)
Evacuation	Pressurized
Receiver Material	Steel
Length	24 in (60 cm)
Width	16 in (40.6 cm)
Height	56 to 80 in (143.5 to 203 cm)
Funnel Size	24 in (61 cm) diameter
Dry Weight	74 lb
Instruction Manual	310864

## **Ordering Information**

Part Number	Description
119577	24 gal (90 l) steel-tank pressurized oil drain



## Vacuum-Assisted Oil Collection System

Large-capacity collection systems make removing drain plugs a thing of the past. Oil Ace models with optional sight chamber offer the technician a visual indication of the waste fluid quantity. This technology reduces the threat of costly damages caused by over- or under-torquing or cross-threading drain plugs.

## Large Offset Collection Pan

Wide offset collection bowl prevents splashing.

#### Vacuum Gauge

Ensure peak performance with easy-to-read vacuum gauge.

#### Sight Glass

Inspect oil quality via large, clear evacuation chamber and verify amount extracted.



## Easy to Drain

Pressurize using shop air for easy oil evacuation.

#### Vacuum Probes

Variety of flexible suction attachments and adapters included.

## Large 24 Gallon (90 I) Capacity Receiver

Perfect for small to large shops without an evacuation system.

#### Typical Applications

- Automotive dealerships
- Fast lube centers
- · Service shops
- Heavy-duty dealerships
- · Fleet services facilities

#### Typical Fluids Handled

Used oil

echnical Specifications			
	Fluid	Used oil	
	Tank Capacity	24 gallon (90 l)	
	Evacuation	Pressurized	
	Receiver Material	Steel	
	Length	24 in (61 cm)	
	Width	16 in (40.6 cm)	
	Height	39 to 70.8 in (99 to 180 cm)	
	Funnel Size	23.8 in (60 cm)	
	Dry Weight	50.7 to 73.2 lbs (23 to 33.2 kg)	
	Instruction Manual	310864	



## >>> Ordering Information

Part Number	Description
26C061	24 gal (90 I) steel tank with suction probes and adapters
26C062	24 gal (90 l) steel tank with suction probes, adapters and sight glass
26C063	24 gal (90 l) steel tank with suction probes, adapters and oil drain funnel
26C064	24 gal (90 l) steel tank with suction probes, adapters, sight glass and oil drain funnel





#### **Typical Applications**

- Automotive dealerships
- · Heavy-duty dealerships
- · Fast lube centers
- Service shops
- Fleet services facilities

## Typical Fluids Handled

Used oil

Fechnical Specifications		
Fluid	Used oil	
Fluid Capacity	16 gal (61 l)	
Evacuation	Gravity	
Receiver Material	Steel (239302 does not include drum)	
Manual	306449	
Length	26 in (66 cm)	
Width	23 in (58 cm)	
Height	42 to 70 in (107 to 177 cm)	
Funnel Size	23 x 23 in (58 x 58 cm)	
Dry Weight	40 lb (18 kg)	

## >>> Ordering Information

Part Number Description	
239301*	16 gal (60 l) Oil receiver with steel drum oil receiver
239302	16 gal (60 l) Oil receiver without drum

 $^{^*}$ Use with evacuation kit 224873 or 24E166. 240832 can be ordered separately for existing diaphragm pump evacuation systems.

#### **Accessories**

## **Funnel Kit**

Part Number	Description
243650	Use with 238866, 239301, 239302 and 248632. Includes tray and pipe.

#### **Wall-Mounted Funnel Drain**

Part Number	r Description	
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**

	Part Number Description	
156789 drum. Funnel drain has 2 in NPT bung fitting for use with 55 gal (210 l) or 16 gal (60 l) drui		Use with Pedestal Receiver 225272 to open automatic check-valve and drain used oil into standard drum. Funnel drain has 2 in NPT bung fitting for use with 55 gal (210 l) or 16 gal (60 l) drums or 275 gallon (1,100 l) tanks.

#### **ATF Drain Funnel**

Part Number	Description
208009	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.







## **Typical Applications**

- Truck maintenance facility
- · Heavy-duty dealerships
- · Fleet services facilities

#### Typical Fluids Handled

- Antifreeze
- Used oil

Tec	Technical Specifications		
	Fluid	Antifreeze / Oil	
	Fluid Capacity	26 gal (98.4 l)	
	Evacuation	Gravity	
	Receiver Material	Steel	
	Length	42 in (106.7 cm)	
	Width	30 in (76.2 cm)	
	Height	9 to 11 in (22.9 to 27.9 cm)	
	Instruction Manual	309194	

## Ordering Information

Part Number Description	
244055*	Big Hauler truck drain specially designed for truck maintenance facilities

*Use with evacuation kit 224873 or 24E166. 240832 can be ordered separately for existing

## **Track Receivers**





## **Typical Applications**

- · Fast lube centers
- Fleet services facilities

#### Typical Fluids Handled

Used oil

Technical Specifications				
Part Number	218969	235346		
Fluid	Oil	Oil		
Fluid Capacity	30 gal (113 l)	27 gal (102 l)		
Evacuation	Gravity	Gravity		
Receiver Material	Steel	Steel		
Extension Range	37.5 to 46 in (0.95 to 1.17 m)	34.1 to 42.6 in (0.87 to 1.08 m)		
Instruction Manual	307727	307727		
	Part Number Fluid Fluid Capacity Evacuation Receiver Material Extension Range	Part Number 218969 Fluid Oil Fluid Capacity 30 gal (113 l) Evacuation Gravity Receiver Material Steel Extension Range 37.5 to 46 in (0.95 to 1.17 m)		

#### Ordering Information

Part Number Description	
218969 Specially designed for car and truck fast lube facilities where speed an mobility are important. Adjustable steel rollers fit track widths.	
Narrow rolling used-oil receiver, specially designed for car and truck fas facilities where speed and mobility are important. Adjustable steel rollers track widths. Same as 218969 except track width range.	



## Typical Applications

- Automotive dealerships
- Fast lube centers
- Service shops
- Heavy-duty dealerships
- Fleet services facilities

## Typical Fluids Handled

• Used oil



313597



echnical Specifications			
	Husky 716	Husky 1050	
Maximum Fluid Working Pressure	100 psi (7.0 bar / 0.7 MPa)	100 psi (7.0 bar / 0.7 MPa)	
Approximate Free Flow Rate @ 100 psi	16 gal/min (61 l/min)	50 gal/min (189 l/min)	
Output per Cycle	0.04 gal (0.15 l)	0.17 gal (0.64 l)	
Air Inlet	1/4 in	1/2 in	
Fluid Inlet	3/4 in	1 in	
Fluid Outlet	3/4 in	1 in	
Maximum Pump Speed	400 cpm	275 cpm	
Cycles per Gallon	25 cpg	5.9 cpg	
Cycles per Liter	6.7 cpl	1.6 cpl	
Wetted Parts	Buna-N, acetal, aluminum, stainless steel, PTFE, zinc-plated steel	Aluminum, TPC-ET, acetal, PTFE, Buna-N	
Sound Pressure Level	85 dB(A)	96 dB(A)	
Sound Power Level	95 dB(A)	90 dB(A)	
Approximate Weight	8.5 lb (3.9 kg)	23 lb (10.5 kg)	

308573

## Ordering Information

Instruction Manual

Part Number	Description
241906	Husky 716 Evacuation Pump
647731	Husky 1050 Evacuation Pump





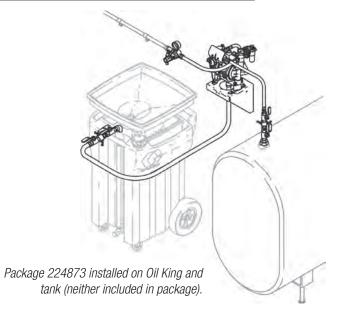


## >>> Ordering Information

## **Wall Mount Packages**



Package Number	24E166	25T815	224873	
Diaphragm Pump	1050A (1 in) UL-listed	1050A (1 in) UL-listed	716 (3/4 in)	
Pump Part Number	647731	647016	241906	
Mounting Type	Wall Bracket	Wall Bracket	Wall Bracket	
Mounting Part Number	24C637	24C637	224835	
Fluid	Oil	Antifreeze	Antifreeze / Oil	
Evacuation	Drum Adapter	Drum Adapter	Drum Adapter	
Evacuation Part Number	240832	240832	240832	
Air Installation Kit	240684	240684	240684	
Fluid Installation Kit	240685	240685	240685	
Instruction Manual	313597	313597	308719	
Listings	UL, CE	UL, CE	-	





## Ordering Information

#### **Base Pump Packages**

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.



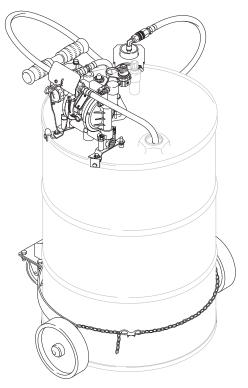


## >>> Ordering Information

## **Fas-Vac Mobile Packages**



Package Number	224700	224701	
Cart	224665	111470	
Compatible Drum Size (Not included)	16 gal (60 l)	55 gal (200 l)	
Pump	716 (3/4 in)	716 (3/4 in)	
Pump Package	224667	224667	
Fluid	Oil, Gear Lube	Oil, Gear Lube	
<b>Evacuation Kit</b> 224669 / 224666		224702 / 224666	
<b>4-Way Valve</b> 187359		187359	
Port Size 1/2 NPT(F)		1/2 NPT(F)	
Instruction Manual 308154		308154	
Must be ordered separately (Not Included)			
Filter Regulator Lubricator (FRL)	110149	110149	
FRL Mounting Kit	224759	224759	



Package 224701 installed on oil drum (Drum and filter regulator not included in package)

266

## >>> Ordering Information

#### **4-Way Evacuation Valve**

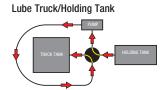
Directional control valve used to simplify the filling and emptying of tanks



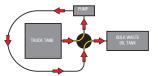
#### **Features and Benefits**

- Simplifies installation by eliminating need for multiple valves
- Unrestricted flow no pressure or volume loss
- · Two-position tank fill and emptying control
- Tapered, self-seating valve spool for superior sealing performance

Part Number		Description
	120581	1 in NPT(F) 4-Way Evacuation Valve
	120601	1-1/2 in NPT(F) 4-Way Evacuation Valve



Lube Truck/Bulk Waste Tank



#### **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).

	Part Number	Description
	110318	1/4 NPT(FBE)
	110147	1/4 NPT(FBE) with gauge
	110234	3/8 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)
0	244844	1/2 NPT(FBE) with gauge
•	207755	3/4 NPT(FBE)
	244845	3/4 NPT(FBE) with gauge

## **Fluid Reclaim Accessories**

## Ordering Information

## **Air Filters and Drains**

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.

Part Number	Description
110146	1/4 NPT(FBE) Air Filter. Manual drain.
106148	3/8 NPT(FBE) Air Filter. Auto-drain.
106149	1/2 NPT(FBE) Air Filter. Manual drain.
106150	3/4 NPT(FBE) Air Filter. Manual drain.
106151	Automatic filter drain float-type, 1/4 NPT(M). Use with 106150, 112859 and 217074.
127711	Automatic filter drain float-type. Use with 106148 and 106149. Sold in NA only.

#### **Installation Kits**

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

Part Number	Description
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

## Accessories Ordering Information

## **Additional Accessories**

	Part Number	Description	
ente O	221146	10 ft (3.04 m) suction hose and quick coupler with four interchangeable 15 in (38.1 cm) suction wands. OD options: 3/16 in, 1/4 in, 3/8 in, 1/2 in. For use with Husky 716 or 1050 gear oil evacuation systems.	
6666	223696	Four interchangeable 15 in (38.1 cm) suction wands. OD options: 3/16 in, 1/4 in, 3/8 in, 1/2 in. For use with part 223695 evacuation pump.	
	224702	32 in suction wand. 1/2 in OD.	
	224762	48 in (121.9 cm) suction wand kit with four interchangeable wands. OD options: 3/16 in, 1/4 in, 3/8 in, 1/2 in.	
Ť	224666	36 in suction wand storage kit	
III ( 100	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.	
200	221007	Swing-Arm Drain Kit, 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 ca (108203) and male adapter (108202).	
	116229	Oil Tank Monitor. Shuts off air to the pump when tank is full.	
Q.	223888	6 ft (1.8 m) suction hose for ATF and antifreeze. Includes filter screen. Use with 223695.	
	222011	Grounding clamp for all used-oil handling systems. Includes 25 ft (7.6 m) grounding wire.	
	187359	4-way valve 1/2 NPT(F) ports	

Notes	



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SORIES

AIR ACCESSO

1042**66 300** PSI 211 MAX WPR





#### Ordering Information

#### **Air Filter-Regulator**



#### **FRL Combination Units**

Each includes filter, regulator, pressure gauge, lubricator and connection fittings.

	Part Number	Inlet
	110149	1/4 in NPT(FBE)
	110150	3/8 in NPT(FBE)
	217072	1/2 in NPT(FBE)
	217073	3/4 in NPT(FBE)

#### Bleed-Type Air Shut-Off Valves

Closes air inlet to pump and relieves trapped air pressure down line from valve. Recommended for each pump drop line. Note: Be certain to install correctly. If installed backwards air will constantly escape from the valve. Maximum pressure of 250 psi (17 bar).

<b>5 6</b>	Thread	1/4 in	3/8 in	1/2 in	3/4 in
	NPT(FBE)	110223	110224	110225	110226
	NPT(MXF) inlet x outlet	-	-	107142	107141

## **Ball Valve-Type Air Shut-Off Valve - Non-Pressure Relieving**

	Part Number	Inlet	Maximum Working Pressure
II D	208390	1/4 in NPT(MBE)	500 psi
Constant III	208393	3/8 in NPT(MBE)	500 psi
1	208630	1/2 in NPT(M) x 3/8 in NPT(F)	500 psi
	109077	3/4 in NPT(FBE)	600 psi
	118464	1 NPT(FBE)	600 psi



## >>> Ordering Information

#### **Air Needle Valve**

Controls pump speed by restricting air flow to pump or other air-operated equipment.

	Part Number	Inlet	Outlet	
	205090	1/4 in NPSM(M)	1/4 in NPSM(F)	
18	206264	1/4 in NPT(M)	1/8 in NPT(F)	

#### **Air Pressure Relief Valve**

Prevents pump from operating beyond recommended working pressure by opening at a pre-set maximum air pressure.

Part Number	Maximum Pressure Rating	Thread
110065	60 psi (4 bar)	1/4 in NPT(M)
103347	100 psi (6.9 bar)	1/4 in NPT(M)

#### **Air Pressure Gauge**

Allows visual check of air pressure being supplied to the pump. Rated to 200 psi (14 bar)

	Part Number	Inlet	Color
and the second s	110319	1/8 in NPT(M)	Black
	100960	1/4 in NPT(M)	Black
	101180	1/4 in NPT(M)	Chrome

#### **Air Manifold**

Supply several pumps from one supply line. Larger port delivery ensures adequate air flow to all pumps.

	Part Number	Inlet Ports	Inlet Thread	Outlet Thread	Maximum Pressure Rating
1000	158990	2	1/2 in NPT(F)	3/8 in NPT(F)	5,000 psi

#### **Runaway Valve**

Prevents pump damage by automatically closing the air line to stop the pump when a runaway pump condition occurs.

*	Part Number	Inlet
40	224040	3/4 in NPT(FBE)

## **Hose Fittings**





## >>> Ordering Information

#### **Blow Guns**

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.

Part Number	Description	Inlet
236211	Air blow gun	1/4 in NPT(F)

#### **Tire Inflators**

	Part Number	Description		Inclu	udes	
	Part Number	rt Number Description		Swivel Dual-Foot Chuck	Straight-On Chuck	Pop-Out Gauge
	236205	Heavy-Duty Tire-Inflator	Yes	Yes	-	Yes
	236206	Passenger Car Tire Inflator	Yes	-	Yes	Yes
911	218545	Tire Chuck with 1/4 in NPT(F) inlet	-	-	-	-

#### **Water Valve**

Water/Antifreeze Bib is a durable, full-volume dispense nozzle for water, antifreeze and windshield washer fluid. Nitrile rubber seals.

	Part Number	Inlet	Pressure Rating
100	180685	1/4 in NPT(F)	100 psi (7 bar)











## **Heavy-Duty Reinforced Lubrication Hoses**

For use with grease, oil and undercoating material. Hoses are black, male connections at both ends. Lubrication hoses listed are grounded for static electrical discharge.

	ID Inch	Max PSI	lloog I swath	Fitt	ting	Down November
	(mm)	(bar)	Hose Length	End 1 Thread NPT(M)	End 2 Thread NPT(M)	Part Number
			12 in (0.3 m)	1/0	1./0	109145
			30 in (0.8 m)	1/8	1/8	109148
			24 in (0.8 m)	3/8	3/8	109147
			48 in (1.2 m)			109149
			72 in (1.8 m)		4/4	109150
	1/4	5,000	12 ft (3.6 m)		1/4	109151
	(6.44)	(345)	15 ft (4.6 m)			109152
			20 ft (6.1 m)	1/4	3/8	109153
			25 ft (7.6 m)		1/4	109154
			35 ft (10.6 m)			109156
			40 ft (12.2 m)		3/8	109157
			50 ft (15.3 m)			109158
			12 in (0.3 m)	1/4	1/2	109160
			24 in (0.62 m)	3/8	3/8	109161
3/8 (9.5)			48 in (1.2 m)			109162
	4,000	72 in (1.8 m)	_		109163	
	(9.5)	(276)	15 ft (4.6 m)	1/4	1/4	109165
			40 ft (12.2 m)		3/8	109169
			50 ft (15.3 m)			109170
•			15 in (0.4 m)		1/2	110069
			18 in (0.5 m)			220598
			54 in (1.4 m)	-		220600
			72 in (1.8 m)			220591
			10 ft (3.1 m)			220590
	1/2 (12.7)	3,000 (207)	16 ft (4.9 m)	1/2		220592
	(12.1)	(201)	20 ft (6.1 m)	1		220593
			25 ft (7.6 m)			220608
			40 ft (12.2 m)		-	221092
			50 ft (15.3 m)	1		221093
			75 ft (22.9 m)		3/4	237861
			18 in (0.4 m)			109108
	3/4	2,250 (155)	72 in (1.8 m)	3/4	3/4	109105
	(19.1)	(100)	10 ft (3.0 m)			111010







## >>> Ordering Information

## **Air/Water Hoses**

For use with low pressure air and water. Hoses are male NPT at both ends.

	ID Inch	Max PSI	Hose Length	Fitt	ting	Part Number
	(mm)	(bar)	Hose Length	End 1 Thread NPT(M)	End 2 Thread NPT(M)	Fait Number
			18 in (0.5 m)			109123
			4 ft (1.2 m)		1/4	109124
	Fabric-Reinforced		6 ft (1.8 m)	1/4	1/4	109125
	1/4	180 (12.4)	10 ft (3.1 m)	1/4		109126
	(6.44)	(12.1)	25 ft (7.6 m)		1/0	109127
			40 ft (12.2 m)		1/2	109128
			40 ft (12.2 m)	3/8	1/4	218491
			18 in (0.5 m)			204560
		180 (12.4)	4 ft (1.2 m)	2/0	3/8	109130
			6 ft (1.8 m)	3/8		203320
	3/8		10 ft (3.1 m)			109131
	(9.5)		16 ft (4.9 m)	1/4	3/8	110326
			25 ft (7.6 m)	3/8	1/2	109132
			40 ft (12.2 m)			109134
			60 ft (18.3 m)			109135
			22 in (0.56 m)		1/2	218093
	1/2	180	4 ft (1.2 m)	1/2		110046
	(12.7)	(12.4)	6 ft (1.8 m)			205418
			10 ft (3.1 m)			214656
	1/2	300	25 ft (7.6 m)	1/0	1/0	248312
	(12.7)	(20.7)	50 ft (15.2 m)	1/2	1/2	248313
			18 in (0.5 m)			110047
			4 ft (1.2 m)			15B554
	3/4 (19.1)	180 (12.4)	6 ft (1.8 m)	3/4	3/4	208610
	(,	()	10 ft (3.1 m)			214955
			25 ft (7.6 m)			208611



## >>> Ordering Information

#### **Quick-Connect Coupler**

Permits quick, convenient attachment of air supply hoses.



Part Number	Inlet	Body Size
208536	1/4 in NPT(F)	1/4 in
110198	3/8 in NPT(F)	1/4 in
110199	1/2 in NPT(F)	3/8 in
110200	3/4 in NPT(F)	1/2 in

## **Quick-Connect Nipple**

Allows quick attachment of air supply hoses to pump motor.



Part Number	Inlet	Body Size
169967	1/4 in NPT(F)	1/4 in
169970	1/4 in NPT(M)	1/4 in
169971	3/8 in NPT(M)	1/4 in
110196	1/2 in NPT(M)	3/8 in
110197	3/4 in NPT(M)	1/2 in













## Ordering Information

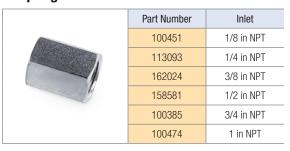
## **Bushings and Pipe Adapters – Reducing, Standard and Expanding**

	Outlet			In	let		
	Outlet	1/8 in NPT	1/4 in NPT	3/8 in NPT	1/2 in NPT	3/4 in NPT	1 in NPT
	1/8 in NPT	150171	159840	156580	-	_	-
	1/4 in NPT	100030	-	150287	159842	-	-
All the same of th	3/8 in NPT	-	159841	150286	156022	-	-
Minute 1	1/2 in NPT	-	100206	100081	-	168595	-
	3/4 in NPT	-	100615	100505	100896	-	-
	1 in NPT	-	-	-	100380	158586	_

## **Street Elbows**



## Coupling – Standard



## **Hex Nipples – Standard and Reducing**

	Male End 2			Male End 1		
Allin	IVIAIE EIIU Z	1/4 in NPT	3/8 in NPT	1/2 in NPT	3/4 in NPT	1 in NPT
	1/8 in NPT	151519	156296	159239	_	-
38 1	1/4 in NPT	156971	165198	162449	_	-
	3/8 in NPT	-	156849	-	194048	-
	1/2 in NPT	-	-	158491	157191	-
	3/4 in NPT	-	-	-	175013	158555





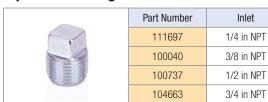






## Ordering Information

## **Square Head Plug**



## **Swivel Adapters***











Rigid End	Swivel End	Straight Swivel Adapter (m x f)	Straight Swivel Adapter (f x f)	90° Swivel Adapter (f x f)	90° Swivel (m x f)	45° Swivel Adapter (m x f)
1/8 in	1/4 in	208434	-	-	-	-
1/4 in	1/4 in	156823	155570	157676	155541	-
1/4   1	3/8 in	157705	-	-	-	-
	1/4 in	-	159153	-	155495	-
3/8 in	3/8 in	155665	156173	155677	155494	161889
	1/2 in	162505	-	159801	217430	-
	1/4 in	-	155653	-	-	-
1/2 in	3/8 in	158256-257	161077	-	161037	-
	1/2 in	156684	155865	157416	155470	-
3/4 in	3/4 in	157785	156172	156589	160327	105281
1 in	3/4 in	202965	-	-	-	-
1 in	1 in	160022	158383	-	-	-

^{*}Not a "live" swivel, position is stationary after tightened.

#### Tube Fittings

Maximum pressure rating of 3,000 psi (207 bar) with appropriate tubing wall thickness.

Description	Inlot	Tube	e OD
Description	Inlet	5/8 in	7/8 in
Tube Union Flow 90° Elbow	-	101012	101376
Straight Tube Union	=	101009	101340
Male Connector	3/4 in NPT	_	101339
Straight Female Connector	1/2 in NPT	101008	_
Tube Tee with Female Branch	5/8 in NPT	101013	-

# **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 (12) 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 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, hoses, 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 Vehicle Service Equipment Group 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 distributor. Graco will, for a period as defined in the table on the opposite page 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.

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 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 one (1) year post the warranty period.

GRACO MAKES NO WARRANTY, AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IN CONNECTION WITH ANY ACCESSORIES, EQUIPMENT, MATERIALS OR COMPONENTS SOLD BUT NOT MANUFACTURED BY GRACO.

These items sold but not manufactured by Graco (such as electric motors, switches, 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.

#### FOR GRACO CANADA CUSTOMERS

The parties acknowledge that they have required that the present document, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English.

Les parties reconnaissent avoir convenu que la rédaction du présente document sera en Anglais, ainsi que tous documents, avis et procédures judiciaries exécutés, donnés ou intentés à la suite de ou en rapport, directement ou indirectement, avec les procedures concernées.

# **Graco Vehicle Service Equipment Group Extended Warranty** (cont.)

		Warranty Period
	Oil King, Coolant King, and Oil Ace	5 Years
	Pulse Fluid Management Hubs, TLMs, PACs and Extenders	2 Years
	Cord and Light Reels	2 Years
	Electrical Components	1 Year
	LD Series Hose Reels	5 Years
	Wear Parts, including but not limited to hose, seals, swivel seats and roller guides	1 Year
S	SDX Series Hose Reels	7 Years
H	Power Springs	3 Years
	Wear Parts, including but not limited to hose, seals, swivel seats and roller guides	1 Year
	XD Series Hose Reels	7 Years
	Power Springs	3 Years
	Wear Parts, including but not limited to hose, seals, swivel seats, roller guides and motors	1 Year
	Mechanical Meters	5 years
	Wear parts, including but not limited to o-rings, seals and valves	1 Year
	LD Preset Meters	5 years
	Electronics	2 Years
S	Wear parts, including but not limited to o-rings, seals and valves	1 Year
ETER	SD Meters and Valves	5 Years
Σ	Electronics	3 Years
	Wear parts, including but not limited to o-rings, seals and valves	1 Year
	EM Meters and Valves / Pulse Meters and Valves	5 Years
	Electronics	3 Years
	Wear parts, including but not limited to o-rings, seals, valves and trigger locks	1 Year
	LD Oil/Grease Pumps	5 Years
	Wear Parts, including but not limited to o-rings, packings and seals	1 Year
	Hoses with pump packages	1 Year
	AODD Pumps	5 Years
	Wear Parts, including but not limited to o-rings, packings and seals	1 Year
	Hoses with pump packages	1 Year
PS	Mini Fire-Ball 225 and Fire-Ball 300 Oil and Grease Pumps	7 Years
<b>_</b>	Wear Parts, including but not limited to o-rings, packings and seals	1 Year
Pulse Fluid Management Hubs, TLMs, PACs and Extende  Cord and Light Reels  Electrical Components  LD Series Hose Reels  Wear Parts, including but not limited to hose, seals, swivel seats and SDX Series Hose Reels  Power Springs  Wear Parts, including but not limited to hose, seals, swivel seats and XD Series Hose Reels  Power Springs  Wear Parts, including but not limited to hose, seals, swivel seats, roll  Mechanical Meters  Wear parts, including but not limited to o-rings, seals and valves  LD Preset Meters  Electronics  Wear parts, including but not limited to o-rings, seals and valves  SD Meters and Valves  Electronics  Wear parts, including but not limited to o-rings, seals and valves  Electronics  Wear parts, including but not limited to o-rings, seals, valves and trig  LD Oil/Grease Pumps  Wear Parts, including but not limited to o-rings, packings and seals Hoses with pump packages  AODD Pumps  Wear Parts, including but not limited to o-rings, packings and seals Hoses with pump packages  Mini Fire-Ball 225 and Fire-Ball 300 Oil and Grease Pump	Hoses with pump packages	1 Year
	Fire-Ball 425 Oil and Grease Pumps	10 Years
	Wear Parts, including but not limited to o-rings, packings and seals	1 Year
	Hoses with pump packages	1 Year
	Fast-Ball and Fast-Flo Oil Pumps	5 Years
	LD Blue and SD Blue Diesel Exhaust Fluid Pumps	2 Years

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