



Vehicle Service Equipment Buyer's Guide

Fluid Handling Equipment for Industrial and Commercial Applications







Construction | Fleets and Transportation | Industrial | Mining | Energy | Agriculture

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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.





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

Stay up-to-date with the newest information from Graco by downloading the Graco Sales Book App.

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



FLUID MANAGEMENT SYSTEMS

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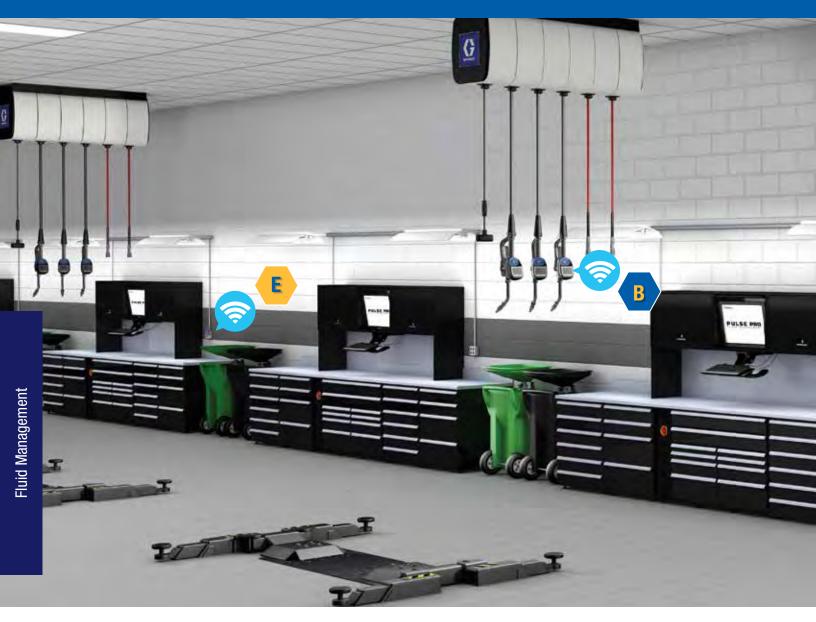




Choosing a Graco Fluid Management Solution

FEATURE	Traditional Box	Pulse FC	Pulse Pro
Control. Regulate the amount of fluid that's dispen	sed to reduce spillage and wa	aste.	
Allow control of dispenses	→	✓	✓
Restrict the quantity of fluid	✓	✓	✓
Ensure correct amount of fluid	✓	✓	✓
Meters. Put control into the hands of your technicis	ans so they can be more proc	luctive, accurate and ac	countable.
Works with petroleum, synthetic based oils, antifreeze	→	✓	✓
Works with windshield wash solvent	✓		✓
Meter displays quantity dispensed		✓	✓
Fluid measured at dispense point (highly accurate)		✓	✓
Installation. Seamless integration simplifies dispe	nses without compromising w	orkflows or productivity	<u>'</u> .
Works with oil bar	→	✓	✓
Wire-free installation		✓	✓
Wireless communication			✓
Pump air control (PAC)	✓		✓
Flexibility. Accommodate emerging demands to m	naintain or expand productivity	y and profitability.	
Works with mobile roll-around packages		✓	✓
Easy expansion with additional fluids		✓	✓
Easy upgrade to comprehensive fluid management		✓	N/A
User Interface. Access the information necessary	to make more informed decis	sions quickly.	
Simple PC-based software		✓	
No software to install			✓
Accessible from any PC, phone or tablet			✓
Fluid Management. Improve accountability for yo	ur entire operations.		
Track dispenses by invoice or work order			✓
Track dispenses by technician			✓
Record fluid type and quantity dispensed			✓
Keeps technician in service bay			✓
Fluid Inventory. Simplify how you re-order and sto	ore inventory to minimize dela	lys.	
Monitor tank levels (TLM)			✓
Dealer Management Solution (DMS) integration			✓
Reporting. Capture critical information and insight	s to simplify decision-making		
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.



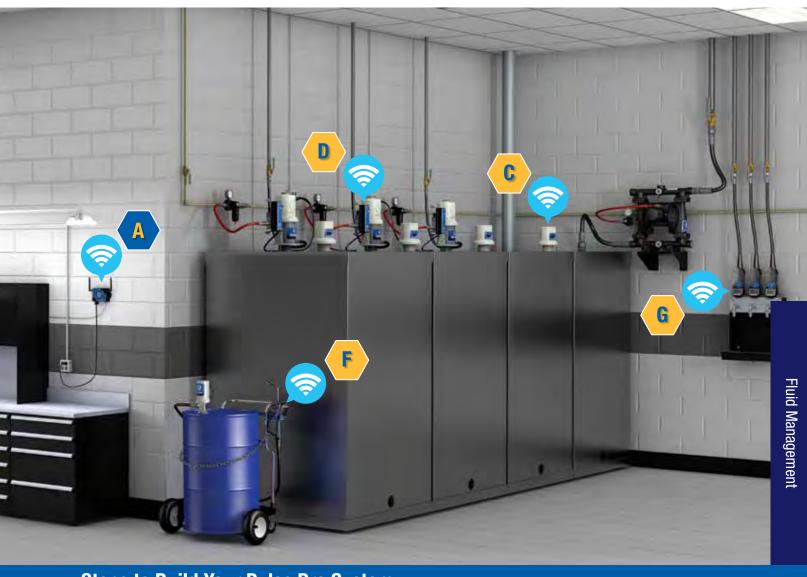
Portability. Pair with mobile dispense units and drums easily to reduce extra steps and hassles for technicians.



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











Pulse® Pro Fluid Management



Pulse Hub





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.

No PC Software to Install

Pulse software delivered via web pages to any PC, tablet or phone.

Status Lights

Quickly verify Hub status.

Ethernet and Wi-Fi

LAN connection for flexible installations.

Built-In Backup

Includes SD card for database backup and restore.

Wireless Communication

Communicates with Pulse devices.



Easily Updates

Automatic updates through internet connection.

Built-In Computer

Runs custom operating system to eliminate common PC operating system issues.

Universal **Power Connections**

Facilitates installation using 100-240 VAC electrical outlets.

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 1.0 lb (454 gm) **Power Supply** 100-240 VAC line voltage (0.05 A) Input Power To Hub 5 VDC (0.5 amps)

Two years electronics

Ordering Information

Warranty

Part Number	Description
24Z978	Hub for non-European 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			

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.



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			
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.

[&]quot;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
0.11	Flexible	Automatic Quick-Close		25M319
Oil	Rigid		anual 1/2	25M317
Antifunana	Flexible	Manual Antifreeze		25M320
Antifreeze	Rigid			25M318
Gear Lube	Gear Lube	Manual		25M326
Windshield Wash	Rigid	None		25M328

18 gpm (68 lpm) Meters

Fluid	Extension	Nozzle	Size (in)	Part Number
Oil / Antifreeze	Flexible	Manual High-Flow	1/2	25M324
	Rigid			25M323
	Flexible	Manual High-Flow	3/4	25M330
	Rigid			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
B		Oil/Antifreeze	High-flow, non-drip, quick-close	255857	Pulse 18 gpm
1	Rigid	Gear lube	Non-drip, quick-close	255854	Pulse 8 gpm
-		Oil	Automatic, non-drip, quick-close	255853	Pulse 8 gpm
- Carlotte Annual Control	Flexible	Antifreeze	Non-drip, quick-close	26C268	Pulse 8 gpm
		Oil/Antifreeze	High-flow, non-drip, quick-close	255858	Pulse 18 gpm
		Oil	Automatic, non-drip, quick-close	17R220	Pulse 8 gpm
	Nozzle Only	Antifreeze	Non-drip, quick-close	17T207	Pulse 8 gpm
		Oil/Antifreeze	High-flow, non-drip, quick-close	255461	Pulse 18 gpm
9	Nozzle Only	Gear lube	Non-drip, quick-close	255470	Pulse 8 gpm
	Flexible	Oil/Antifreeze	Extension only, 2 ft length	131733	Pulse 8 gpm
	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.

Hose Identification Wraps

Vinyl hose wrap for easy identification of meter fluid.

	Part Number	Description
Q GRACO	17S659	Red
GOUNCO	17S660	Blue
O MACO	17S661	Green
O ORACO	17S662	Yellow
O careca	17S663	White

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 Meter Filter Kits

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

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)

nnical 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 Number	Description	
24Z728	NPT with NEMA 5-15 plug	

Technical Specifications 36 psi (0.25 MPa, 2.5 bar) Minimum Operating Pressure 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, outlet, exhaust) Model 24Z676, 24Z728 3/8 in NPT 3/8 BSPP Model 24Z677 14°F to 122°F (-10°C to 50°C) Operating Temperature Range -40°F to 185°F (-40°C to 85°C) Storage Temperature Range 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.



ес	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			

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.

Electrical Power

Includes plug-in power adapter.



Pulse"

Remote

Extender

recnnical Specifications	
Connections	Ethernet or Wi-Fi
Ethernet	10/100Base-T
Wi-Fi	802.11 b/g/n
Operating Temperature	32°F to 104°F (0°C to 40°C)
Length	3 in (7.62 cm)
Width	3 in (7.62 cm)
Height	1 in (2.54 cm)
Warranty	Two years electronics

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	Evtonoiono	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.

olomalia.	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

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

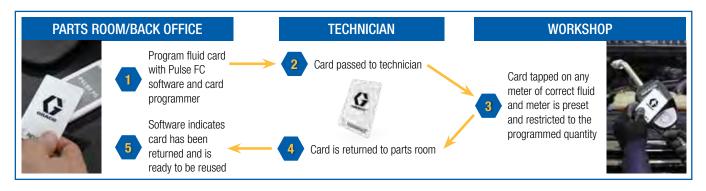
Pulse FC is a fluid control system that utilizes SD Preset meters. When put into Pulse FC mode, SD Preset meters will only dispense fluid when authorized with Fluid Cards. These included cards are programmed using the Pulse FC Software and Card Programmer. Once programmed, the cards are simply tapped 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** 











#### 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 Quick Start

Easy-to-follow instructions for quick system setup.

#### 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











### 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

#### 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.

#### **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

echnical 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
			Oil -	Rigid	1/2	26C384
				UII	Flexible	1/2
SDP8	Preset 0.25–8 (Pulse FC enabled) (1–30)	A L'. C	Rigid	1/2	26C385	
0,		(1. 33)	Antifreeze	Flexible	1/2	26C355
			Gear lube	Rigid	1/2	26C358
				Rigid	1/2	26C356
SDP18	Preset	0.25–18	Oil	Flexible	1/2	26C357
	(Pulse FC enabled) (1–68)	OII ,	Rigid	3/4	26C360	
			Flexible	3/4	26C361	

#### **Nozzle and Extension Kits**

	Extension	Fluid	Nozzle Description	Part Number	Compatible Meters
		Oil	Automatic, non-drip, quick-close	255852	SDP8
	Rigid	Antifreeze	Non-drip, manual open/close	26C267	SDP8
**		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
F	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	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**

1000	Part Number	Description
Q	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

#### **Hose Identification Wraps**

Vinyl hose wrap for easy identification of meter fluid.

	Part Number	Description
Q GRACE	17S659	Red
GOUACO	17S660	Blue
O MIACO	17S661	Green
G ORACO	17S662	Yellow
O GREEK	17S663	White

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

			1
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

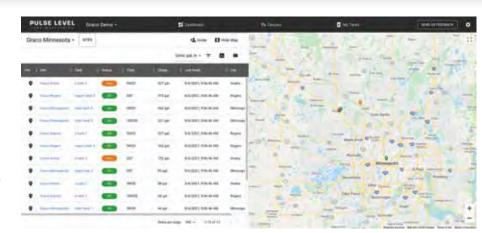
	Ultrasonic Wi-Fi TLM	Ultrasonic Cellular TLM	Pressure Cellular TLM	
Compatible Fluids	Oil, kerosene, diesel, lubricants, additives, DEF/AdBlue, coolants, water, waste oil, waste water	Oil, kerosene, diesel, lubricants, additives, DEF/AdBlue, coolants, water, waste oil, waste water	Oil, kerosene, diesel, 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





### **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**

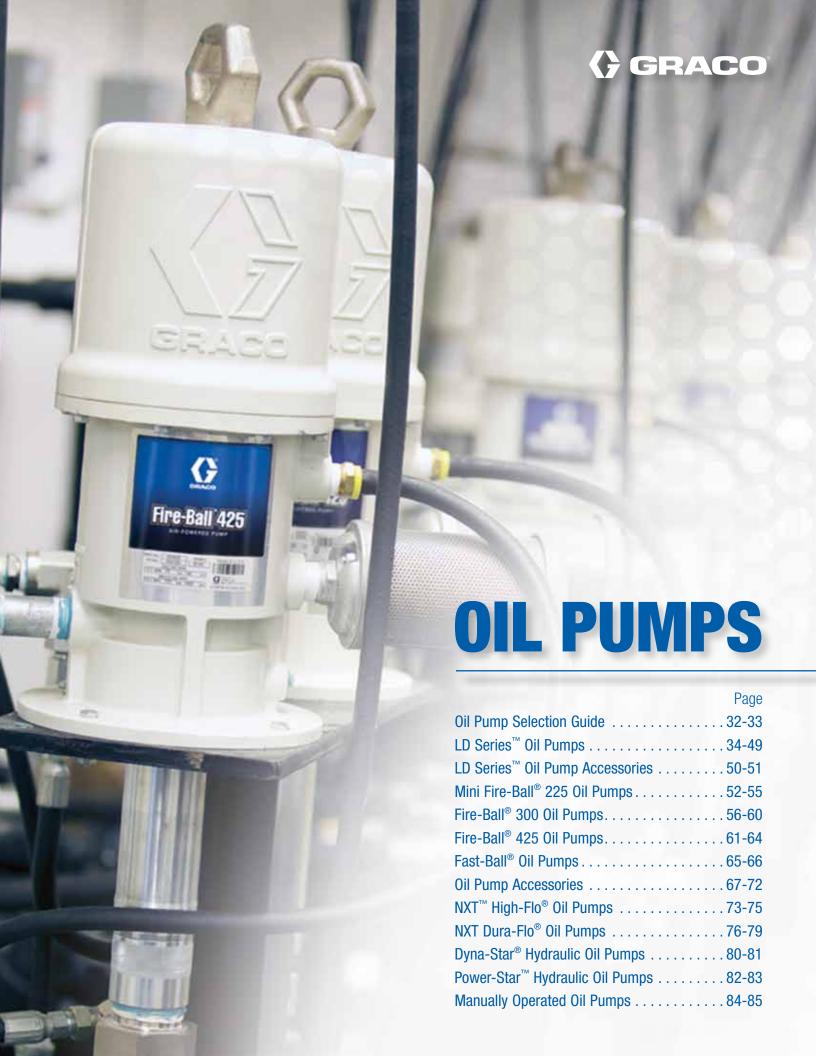
Part Number	Description
218588	Ready-light kit, signals operator when dispensing can begin. Includes "ready to dispense" indicator light (239019), strainer (240417), fluid solenoid valve (215487) and hardware.
238996	Ready-light with junction box (no solenoid or strainer)
239019	Ready-to-dispense indicator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

Pump Family and Fluid Pressure Ratio	Typical Applications	Annual Usage	Line Length	Simultaneous Dispense Points	Approx. Free Flow Rate @ 100 psi	Air Inlet	Fluid Inlet	Fluid Outlet	Air Operation Range	Reference Page
Fast-Ball, 1:1	Automotive dealerships     Fast lube centers     Fleet service facilities     Heavy-duty dealerships     In-plant     Lube trucks     Lubricant transfer     Mining     Service shops	5,000 gal (19,00 l)	< 100 ft (30 m)	1 (no reels)	5 gpm (19 lpm)	1/4 NPT(F)	1-1/2 NPT(F)	3/4 NPT(F)	40-80 psi (2.7-12.5 bar)	66
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)	34
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)	34
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)	52
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)	56
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)	61
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)	61
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)	61

### **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)	73
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)	73
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)	73
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)	75
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)	76
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)	76
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)	76

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)	80
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)	80
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)	82









**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**

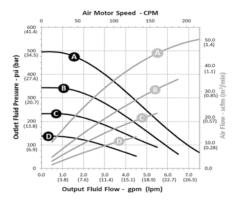
- · Automotive dealerships
- · Fast lube centers
- Service shops

#### Typical Fluids Handled

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

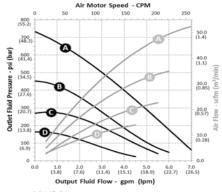
#### **Pump Performance**

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



### (10.3 bar) (B) = 100 psi (6.9 bar) (C) = 70 psi (4.8 bar) (D) = 40 psi Test Fluid :

#### LD Series 5:1 Pumps











hnical 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, nitrile 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**





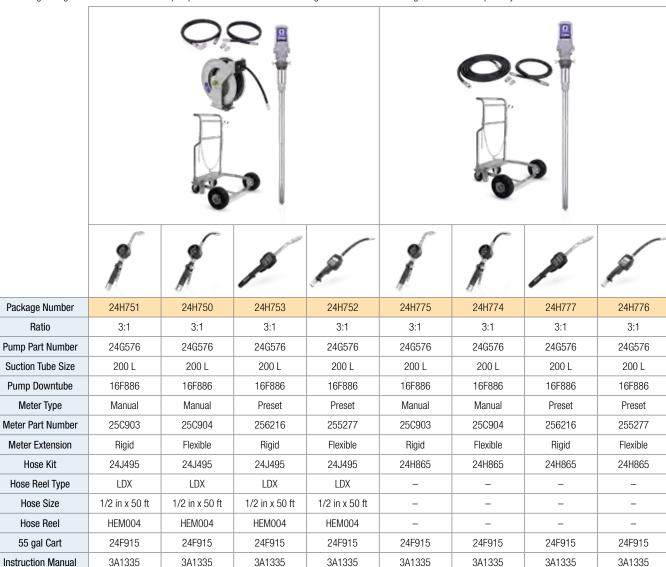


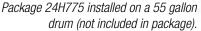


**Ordering Information** 

#### 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.



		The second second
Package Number	24H689	24H695
Ratio	3:1	3:1
Pump Part Number	24G576	24G576
Suction Tube Size	55 gal drum	275 gal tote
Suction Hose Kit	24F935	24H666
Hose Kit	_	24H859
Wall Mount Bracket	24F910	24F910
Instruction Manual	3A1335	3A1335



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.

	1	1		PER
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**







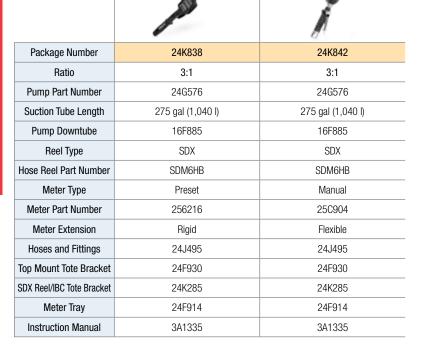


**Ordering Information** 

# **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.













## **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.



42



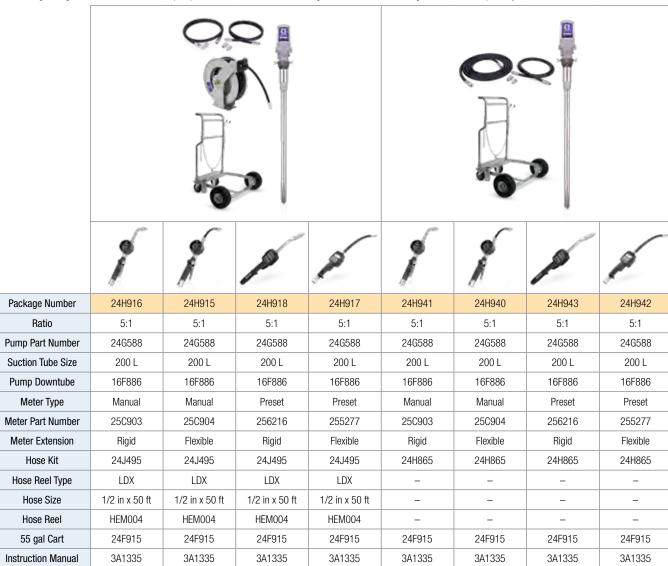




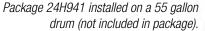


#### **Mobile Oil Packages – Cart**

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**

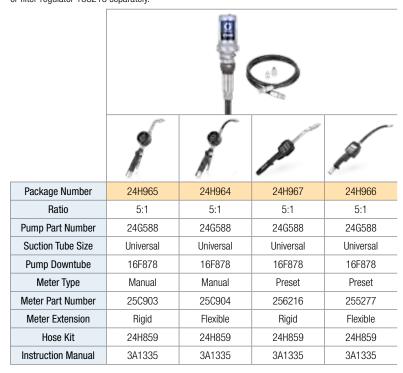
Self-relieving air regulator must be used for LD pump thermal relief function. Order regulator 24H420 or filter-regulator 133215 separately.



Package Number	24H836	24H842
Ratio	5:1	5:1
Pump Part Number	24G588	24G588
Suction Tube Size	55 gal drum	275 gal tote
Suction Hose Kit 24F935		24H666
Hose Kit	-	24H859
Wall Mount Bracket	24F910	24F910
Instruction Manual	3A1335	3A1335

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

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





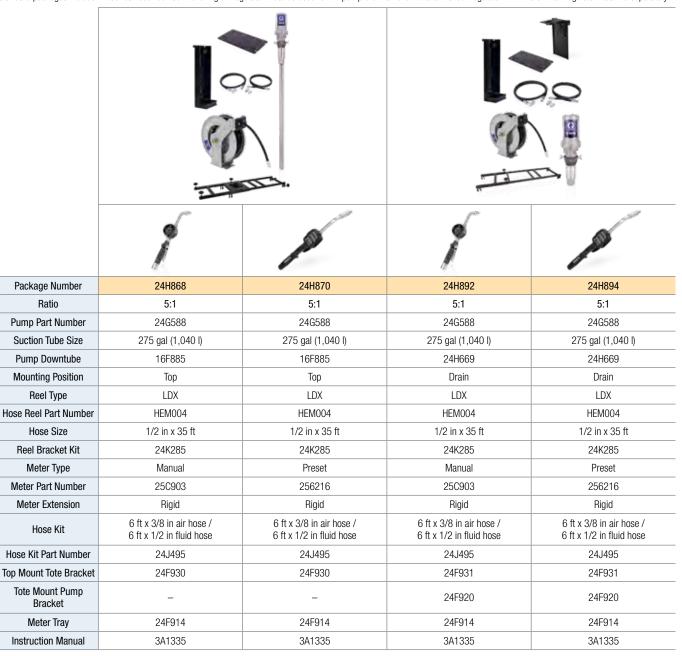




**Ordering Information** 

#### 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.







		Mary Control of the C
Package Number	24K839	24K843
Ratio	5:1	5:1
Pump Part Number	24G588	24G588
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
Hose Reel Bracket	24K285	24K285
Meter Type	Preset	Manual
Meter Part Number	256216	25C904
Meter Extension	Rigid	Flexible
Hoses and Fittings	24J495	24J495
Top Mount Tote Bracket	24F930	24F930
Meter Tray	24F914	24F914
Instruction Manual	3A1335	3A1335

# **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**







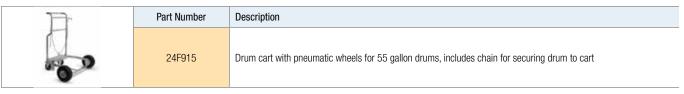


# Ordering Information

# **Air Regulators**

	Part Number	Description
	24H420	Mini air pressure regulator with gauge, 1/4 in NPT x 3/8 in NPT, self-relieving
THE STATE OF THE S	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			
Part Number	Description	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







# >>> Ordering Information

# **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
	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**

	3.5	Part Number	Description
į		24F910	LD Series pump wall mounting bracket
-5		24F918	Bung adapter

# **Tote Mount Accessories**

18	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)
Ti NA	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.
1	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 separately)









# 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

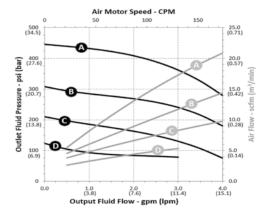
- · Automotive dealerships
- · Fast lube centers
- Service shops
- Heavy-duty dealerships
- · Fleet services facilities
- In-plant
- · Lube trucks
- Mining

#### Typical Fluids Handled

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

## **Pump Performance**

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













echnical 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 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.

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# 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

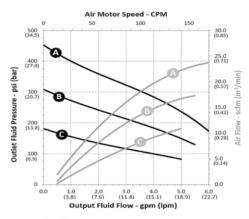
- Automotive dealerships
- · Fast lube centers
- Service shops
- Heavy-duty dealerships
- · Fleet services facilities
- In-plant
- · Lube trucks
- Mining

#### Typical Fluids Handled

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

## **Pump Performance**

#### Fire-Ball 300 5:1 Pumps



#### Inlet Air Pressures:











chnical 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
203857	5:1 Oil pump, 55 gal (400 lb) drum size, for cover mount
204254	5:1 Oil pump, 55 gal (400 lb) drum size, bung mount
222087	5:1 Oil pump, 275 gal (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**



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

218549

Hose Reel Inlet Kit

(Not Included)



218549

bulk tank (not included in package).

218549

218549

# Fire-Ball 300 5:1 Oil Pump Packages









# **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 (2001) 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)
<b>Cover</b> 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 higher-volume 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

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)

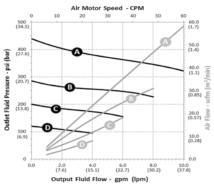




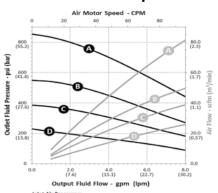


#### **Pump Performance**

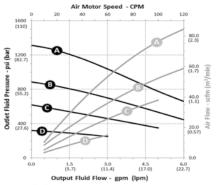
## Fire-Ball 425 3:1 Pumps



# Fire-Ball 425 6:1 Pumps



# Fire-Ball 425 10:1 Pumps







(A)	= 150 psi
$\sim$	(10.3 bar
B	= 100 psi
$\overline{}$	(6.9 bar)
ര	= 70 psi
$\overline{}$	(4.8 bar)
ര	= 40 psi
•	(2.8 bar)

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.









Inlet Air Press

=100 psi (6.9 bar)

B =70 psi (4.8 bar)

(2.8 bar)

TEST FLUID: No. 10 Weight Oil

# Fast-Ball 1:1 Oil Pumps







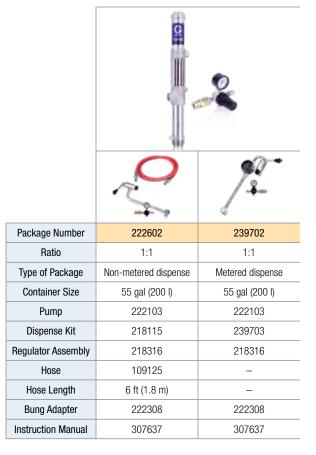
Fechnical Specifications				
Fluid Pressure Ratio	1:1			
Air Motor Effective Diameter	1.4 in (35.6 mm)			
Maximum Fluid Working Pressure	180 psi (12.5 bar / 1.25 MPa)			
Approximate Free Flow Rate @ 100 psi	5 gal/min (19 liters/min)			
Output per Cycle	151 cc			
Approximate Air Use and Flow @ 100 psi (80 cpm)	7 scfm @ 3.1 gpm (0.20 m³/min @ 11.7 lpm)			
Air Inlet	1/4 in NPT(F)			
Fluid Inlet	1-1/2 in NPT(F)			
Fluid Outlet	3/4 in NPT(F)			
Air Operation Range	40 psi to 180 psi (2.8 bar to 12.4 bar)			
Maximum Recommended Pump Speed	100 cpm			
Cycles per Gallon	25 cpg			
Cycles per Liter	6.6 cpl			
Wetted Parts	CS, polyurethane			
Sound Pressure Level	74.9 dB(A)			
Sound Power Level	83.5 dB(A)			
Approximate Weight	8 lb to 14 lb (3 kg to 7 kg)			
Instruction Manual	307906			

# Ordering Information

#### **Pumps**



# **Pump Packages**



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

# **Oil Pump Mounting and Accessory Guide**

Pump	Fast-Ball 1:1	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
Connection Hose Kit	222118 (18 in / 4537 cm) 222119 (72 in / 182.8 cm)	222062 (18 in / 45.7 cm) 222063 (72 in / 182.8 cm)	222062 (18 in / 45.7 cm) 222063 (72 in / 182.8 cm)	238246 (24 in / 60.9 cm)	238246 (24 in / 60.9 cm)	222068 (18 in / 4537 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**

0 0	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**

			Compatible	Includes				
	Part Number	Description	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 1:1 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
2	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**

Paris, and a second	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 n	Part Number	Description	Compatible Pumps
	203156	Used to hold pump securely to the edge of an open top drum	Fast-Ball 1:1 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

~^	Part Number	Description	Hose Length	Includes			
	Fait Number	Description	nose Lengin	Fluid Hose	Manual SD Gear Lube Valve	Manual	
$\Theta$	237075	Use with portable lubricators powered by Fire-Ball 300 Pump	6 ft	220591	255349	307884	



#### **Downtube – Universal**

ſ	Part Number	Description
	150502	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**

	Part Number	Container Size	Compatible Pumps	
	200326	55 gal (200 l)	Mini Fire-Ball 225 3:1 Fire-Ball 300 5:1 Fire-Ball 425 10:1	
	24R350	16 gal (60 l)	Fast-Ball 1:1 Mini Fire-Ball 225 3:1 Fire-Ball 300 5:1 Fire-Ball 425 3:1, 6:1, 10:1	
	222058	5 gal (20 l)	Fast-Ball 1:1 Mini Fire-Ball 225 3:1 Fire-Ball 300 5:1, 15:1	
	160754	55 gal (200 l) 16 gal (60 l) 5 gal (20 l)	Bung-mounted pumps	

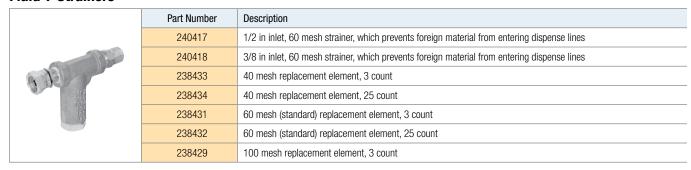
#### **Drum Elevator**

3a.	Part Number	Description	Includes			
	Fait 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

	Part Number	Description
	108458	1/2 in NPT
	108537	3/4 in NPT
	110314	1 in NPT

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



# Ordering Information

# **Fluid Y-Strainers**



Part Number	Description			
110877	2 in NPT inlet/outlet strainer, which filters material before entering the pump			
110906	in NPT inlet/outlet strainer, replacement screen			
101078	/4 in NPT inlet/outlet strainer, which filters material before entering the pump			
180199	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			
72	Part Number	Description Conflection 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
90	222063	Use with drum-mounted pumps	6 ft	203320	155494	220591	155470

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



	Hose				Ho		Package Includes				
Part Number	Description	Length	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				

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# **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
5 6	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.

7	Part Number	Inlet
pos	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		
I \	Part 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		Type of Mount	Compatible Pumps	Includes			
Fait Number	Container Size	Type of Mount	iii Compatible Fumps	Extension Size	Extension	Foot Spacer	
238592	16 gal (60 l)	Cover-mounted	E 10 11 1	14-1/2 in	191126	110127	
238593	55 gal (200 l)	Cover-mounted	Fast-Ball 1:1 Mini Fire-Ball 225 3:1 Fire-Ball 300 5:1 Fire-Ball 425 10:1	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		36 in	191131	110127	

# **Thermal Relief Valve Kits**



	Part Number Pressure Rating Compatible Pumps		Compatible Dumps	Includes			
			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 1:1 Mini Fire-Ball 300 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

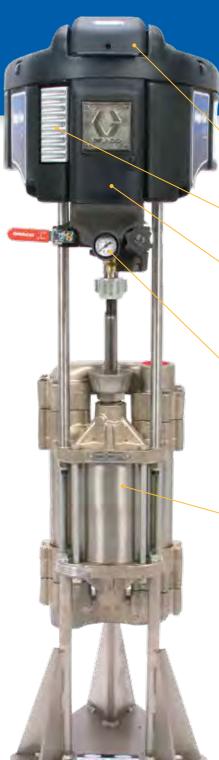
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Tested to outperform and outlast all other pumps on the market — with its long-life design and intuitive, easy-to-use controls — the NXT High-Flo pump is the best value for the money. Fewer parts, faster repairs and long-lasting durability.

## Optional DataTrak™ Control

Move Large Amounts of Oil Fast

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)

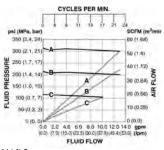






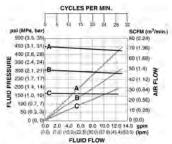
#### **Pump Performance**

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





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





nnical 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, leath
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

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# Ordering Information

# Oil Pump Packages with DataTrak

Package Number with DataTrak	247888	247889
Ratio	3.5:1	4.5:1
Mounting	255143 (Wall)	255143 (Wall)
Pump with DataTrak and Thermal Relief Kit	24D590	24D591
Output per Cycle	2,000 cc	1,500 cc
Output at 60 CPM	31.5 gpm (119.2 lpm)	23.2 gpm (87.8 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	110048	110048
6 ft x 1 in Fluid Hose	115042	115042
Instruction Manual	309351	309351

# Oil Pump Packages without DataTrak

Package Number without DataTrak	24D602	24D603
Ratio	3.5:1	4.5:1
Mounting	255143 (Wall)	255143 (Wall)
Pump without DataTrak and Thermal Relief Kit	24D596	24D597
Output per Cycle	2,000 cc	1,500 cc
Output at 60 CPM	31.5 gpm (119.2 lpm)	23.2 gpm (87.8 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	110048	110048
6 ft x 1 in Fluid Hose	115042	115042
Instruction Manual	309351	309351











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.

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

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

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For maximum pressure balance over a range of material viscosities.

#### **Typical Applications**

- · Fleet service facilities
- In-plant
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#### Typical Fluids Handled

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

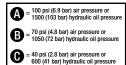






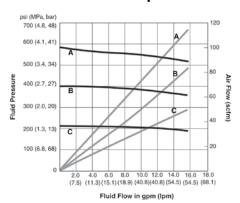
#### Pump Performance

#### Inlet Pressures:

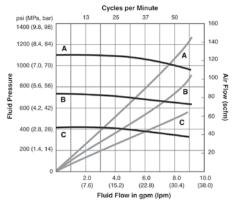


TEST FLUID: No. 10 Weight Oil

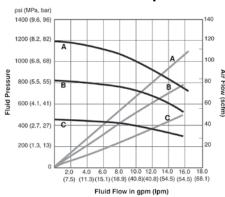
#### **NXT Dura-Flo 6:1 Pumps**



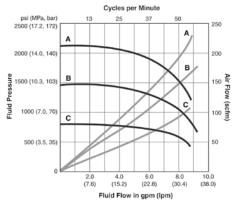
#### **NXT Dura-Flo 12:1 Pumps**



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



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



# **NXT Dura-Flo Pumps**







hnical 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 – 311825 Motor – 311238

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# 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)
Pump with DataTrak and Thermal Relief Kit	24D592	24D595	24D593	-
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	110048	110048	110048	110048
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	110048	110048	110048
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)

echnical 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 l) 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.

2.87	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.
355	237904	1:1 Dyna-Star thermal relief valve, 1,600 psi (110 bar)

# **Wall-Mounting Brackets**

A CONTRACTOR
No. of the last

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











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

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

energy efficient than comparable compressed-air systems.

## **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









**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.



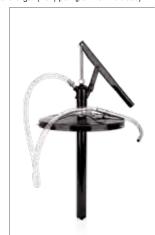






#### Pail-Dispensing Package for 5 gal (20 I) Pails

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.



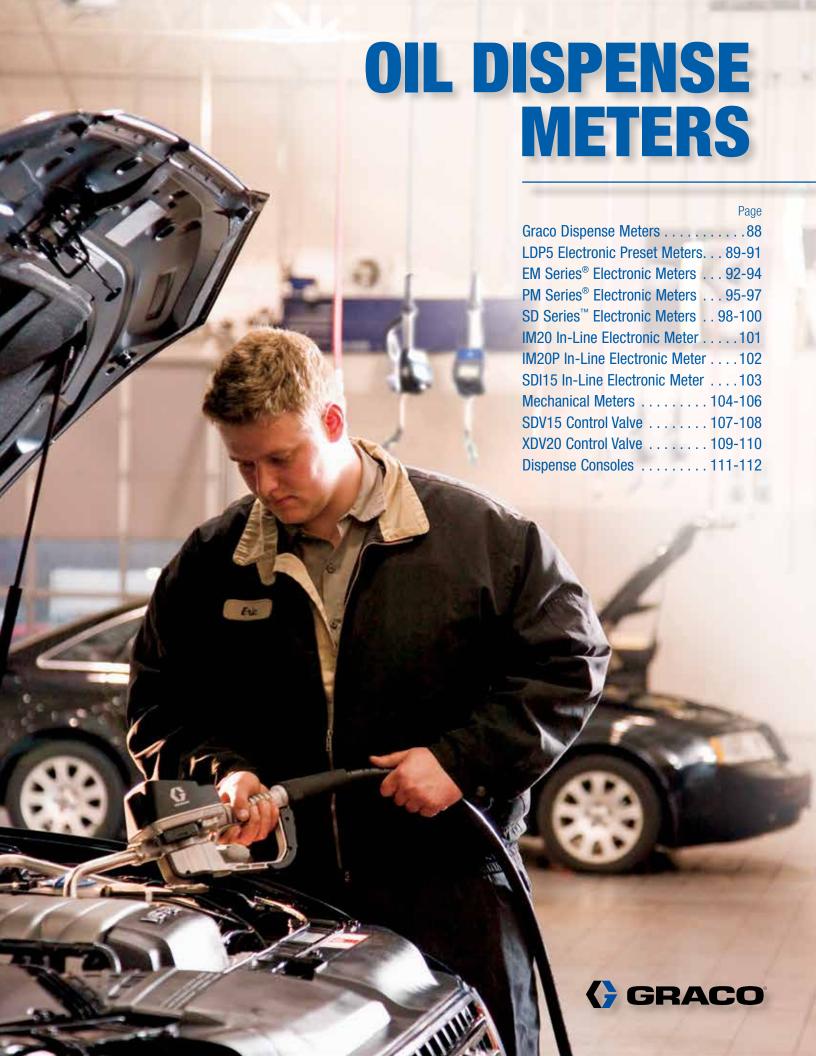
Package Number	114829	226290	
Type of Pump	Lever ⁽¹⁾	Rotary ⁽²⁾	
Fluids Handled	Petroleum-based products, antifreeze	Petroleum-based products	
Delivery Rate	0.1 gal (0.4 l) per downstroke	1 gal (3.7 l) per 18 cycles	
Fluid Hose	-	-	
Instruction Manual	-	306876	

^{*}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)	89-91
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)	92-94
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)	95-97
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)	98-100
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)	101
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	102
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)	103
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	104-106
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	107-108
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	109-110











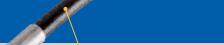
For use in small service shops, fast lubes and low-volume in-plant applications.



Keeps dispenses precise.

### **Operator Controls**

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



#### Fluid Extension Kits

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

recrimical opecifications	
Flow Range*	

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

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

Fluid Swivel

1/2 inch fluid inlet.

^{**}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	Inlot in (mm)	Part Number	Package Includes		
	EXTENSION	Inlet in (mm)	Part Number	Trigger Guard	Swivel Cover	
B	Flexible		258694	Yes	Yes	
	Rigid	1/2 (13)	256216	Yes	Yes	
P	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
ivozzie Offiy	Oil/Antifreeze/Gear lube	Automatic	238371











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

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

#### **Accessories**

 Part Number	Description
240416	Inlet swivel
114017	Inlet filter, 80 mesh
 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
ORAÇO	191294	Black
CHACO	191287	Red
CHAPO	191288	Blue
CRACO	191289	Green
6	191295	Yellow

## **Hose Identification Wraps**

Vinyl hose wrap for easy identification of meter fluid.

	Part Number	Description
Q BRACO	17S659	Red
Q GRACO	17S660	Blue
Q GRACU	17S661	Green
Ognaco	17S662	Yellow
0 GRACE	17S663	White

# **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

Technical 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	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 NPT		
Outlet	3/4 straight thread O-ring boss	7/8 straight thread O-ring boss		
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 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	lectronics 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.









# **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
		i lexible		Automatic, non-drip, quick-close	26C526
EM8		Rigid		Non-drip, manual open/close	25C903
		Rigid		Automatic, non-drip, quick-close	26C525
		Gear		Non-drip, quick-close	25C905
		Flexible	1/2 (13)	High-flow, non-drip, quick-close	25C915
EM20		I IGAIDIG	3/4 (19)	THYTHOW, HOTHUTH, QUICK-CLOSE	25C918
EN	EW	8: 11	1/2 (13)	High flavor and drive milety also	25C916
		Rigid	3/4 (19)	High-flow, non-drip, quick-close	25C919

		Inlet in (mm)	Part Number
EM8		1/2 (13)	25D433
EM20	A	1/2 (13)	25D436
EM	To and the second	3/4 (19)	25D437

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











# >>> Ordering Information

## **Nozzle and Extension Kits**

	Extension	Fluid	Nozzle Description	Part Number	Compatible Meters
1		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
The state of the s	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
3	Nozzle Only	Gear lube	Non-drip, quick-close	255470	EM8
	Flexible	Oil/Antifreeze	Extension only, 2 ft length	131733	EM8

## **Hose Identification Wraps**

Vinyl hose wrap for easy identification of meter fluid.

	Part Number	Description
O BRACO	17S659	Red
O GRACO	17S660	Blue
OGRACO	17S661	Green
Oonwoo	17S662	Yellow
OGRACO	17S663	White

## **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

hnical 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 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 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 e	lectronics 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	Flevible	0.25-8 (1-30) Rigid 0.25-5 (1-19)	1/2 (13)	273157
	B	Antifreeze	TIGAIDIC			25U086
PM8		Oil	Rigid			273156
Pľ		Antifreeze	- Kigia			25U085
		Gear Lube	Rigid			273158
		Oil	Flexible	0.25-20	1/2 (13)	273166
PM20	B		Tiexie		3/4 (19)	273168
			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	
d	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
The state of the s	Flexible	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
3	Nozzle Only	Gear lube	Non-drip, quick-close	255470	PM8
e	Flexible	Oil/Antifreeze	Extension only, 2 ft length	131733	PM8

# **Hose Identification Wraps**

Vinyl hose wrap for easy identification of meter fluid.

	Part Number	Description
GBRACO	17S659	Red
0 GRACO	17S660	Blue
OGRACO	17S661	Green
Oannea	17S662	Yellow
OGRACO	17S663	White

## **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  $^{\text{\tiny TM}}$  FC and upgradeable to Pulse  $^{\text{\tiny TM}}$  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

echnical 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
	(,	(* 23)	Antineeze	Flexible	1/2	26C355
			Gear lube	Rigid	1/2	26C358
				Flexible	1/2	26C357
SDP18	Preset	0.25–18	Oil	Flexible	3/4	26C361
S	(Pulse FC-enabled)	(1–68)	Oii	Rigid	3/4	26C360
				Rigid	1/2	26C356
			Oil	Flexible	1/2	25M406
				Rigid	1/2	25M404
SD M8	Manual	0.25–8	Antifreeze	Flexible	1/2	25M407
SD	iviariuai	(1–30)	Antineeze	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
SDI	iviaituai	(1–68)		Flexible	1/2	25M411
				Rigid	1/2	25M410

## **Nozzle and Extension Kits**

	Extension	Fluid	Nozzle Description	Part Number	Compatible Meters
E Section 1		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
F	Nozzle Only	Oil	Automatic, non-drip, quick-close	17R220	SDM8/SDP8
4	Nozzle Only	Gear lube	Non-drip, quick-close	255470	SDM8/SDP8
	Nozzle Only	Oil/Antifreeze	Non-drip, manual open/close	17T207	SDM8/SDP8
60	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**

and the	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
15T370	Yellow

# **Impact Protection**

	Part Number	Description
0	131226	Pulse/SD meter boot

## **Hose Identification Wraps**

Vinyl hose wrap for easy identification of meter fluid.

	Part Number	Description
GERACO	17S659	Red
O GRACO	17\$660	Blue
Q GRACU	17S661	Green
O onwoo	17S662	Yellow
0 GRACE	17S663	White









# **High-Flow In-Line Meter**

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

Technical	Specifications

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 Number	Description
25C841	IM20 high-flow, high-pressure in-line meter











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

#### High Flow

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	

Claus Dange*	0.05 gapes to 00 gapes (0.05 Japes to 75.7 Japes)		
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



# Rugged Stainless Steel Body

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

# Large, Easy-to-Read LCD

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

chnical 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

Technical Spe	ecifications	
Flow Ra	nge*	0.28 gpm (1.0 lpm) to 8 gpm (30.2 lpm)
Maximu	m Working Pressure	1,500 psi (103 bar)
Units of	Measure	Quarts, gallons, liters
Accurac	cy .	± 1%
Inlet		1/2 in NPT
Outlet		3/4-16 straight thread 0-ring boss
Maximu	m Totalizer	99,999 units
Maximu	m Recorded Dispense	60 gallons
Operatir	ng Temperature Range	-50°F to 160°F (-45°C to 70°C)
Outdoor	Use	Yes
Wetted I	Parts	Brass, aluminum, SST, TPE
Meter P	ressure Loss*	30 psi (2.1 bar) @ 4 gpm (15 lpm)
Dimensi	ions	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 H)
Weight		3.5 lb (1.6 kg)
Warrant	у	Five years
Instructi	on 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
		4/16 Quart	24U959

# **Manual Meter Packages**

	Extension	Model Description	Part Number	Replacement Nozzle/Extension Kit
<b>9</b>	Flexible	4/16 Liter	24V043	255853
		4/16 Quart	24V034	255853
	Rigid	4/16 Liter	24V046	255852
		4/16 Quart	24V037	255852
	Coor Lubo	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
			Part Number	Nozzle Extension
		60 Gallon	24Z129	255853
	Flexible	60 Liter	24Z132	255853
To de		60 Quart	24Z126	255853
		60 Gallon	24Z128	255852
The same	Rigid	60 Liter	24Z131	255852
To the		60 Quart	24Z125	255852
	Short Rigid	60 Gallon	24V055	24W641
		60 Liter	24V058	24W641
To the		60 Quart	24V052	24W641
	Gear Lube	60 Gallon	24Z130	255854
OF THE		60 Liter	24Z133	255854
15.1		60 Quart	24Z127	255854

# **Nozzle Extensions**

_	Fluid	Extension	Compatible Meter	Part Number
		Flexible	Manual	255853
W	Oil	Rigid	Manual	255852
CO.		Short Rigid	Preset	24W641
(C)	Antifreeze	Flexible	Manual/Preset	24W306
	Antineeze	Rigid	Manual/Preset	255855
0	Oil/Antifreeze	Flexible (extension only – 2 ft)	Manual/Preset	131733
	Gear lube	Rigid	Manual	255854

# **Accessories**

	Part Number	Description
-0	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

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 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, 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
Instruction Manual	312789

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













# Ordering Information

## **SDV15 Control Valve**

75.	Fluid	Extension	Inlet in (mm)	Part Number
1	Oil	Rigid		247712
A	Oll	Flexible		247713
A	Antifraces	Rigid	1/2 (13)	247715
	Antifreeze	Flexible		247716
1	Gear	Gear		247714

## **SDV15 Bare Control Valve**

	Inlet in (mm)	Part Number
ON PROPERTY.	1/2 (13)	247717

# **High Flow Nozzles with Extension**

Extension	Part Number
Rigid	255857
Flexible	255858

## **Filter Kit**

	Description	Part Number
0 10	Strainer filter kit	256164

#### **Quick Close Nozzle**

Extension sold separately.

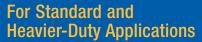
	Fluid	Part Number
F	Oil	17R220
F	Antifreeze	255460
3	Gear lube	255470
	Oil/Antifreeze (high-flow)	255461











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

ес	chnical 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				

 $^{^{\}star}$ 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
and the same of th	Pigid	1/2 (13)	247718
1	Rigid	3/4 (19)	247722
1	Flovible	1/2 (13)	247721
N.	Flexible	3/4 (19)	247723

# **XDV20 Bare Control Valve**

- Con	Inlet in (mm)	Part Number	
1	1/2 (13)	247724	
1 1	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.

17777	Part Number Description		Package Includes		
44449	Fait Number	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

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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() GRACO

# **Grease Pump Selection Guide**

				Simultaneous	Approx.				
Pump Family and Fluid Pressure Ratio	Typical Applications	Annual Usage	Line Length	Dispense Points	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)	116-122
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)	123-126 141-144
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)	127-129 141-144
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)	127-138 130-134 141-144
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)	135-136 142-144
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)	135-137 139-145
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)	134-136 138-145
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)	146-147

# **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)	148-149 151-152
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)	148-149 152
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)	148-149 152
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)	148 150-152
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)	148 150-152
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)	148 150-152

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)	153-154
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)	153-154
Viscount II 2.4:1	Fleet service facilities     Heavy-duty dealerships     In-plant     Lube trucks     Lubricant transfer     Mining     Service shops	54 lb/min (20.4 kg/min)	2,300 psi (159 bar)	3/4 in NPT(F)	1 in NPT(F)	1-1/2 in NPT(F)	1,500 psi (102 bar)	155-156





**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**

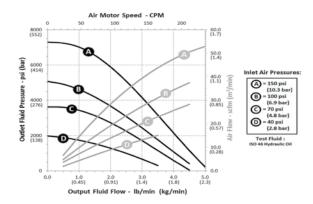
- Automotive dealerships
- · Fast lube centers
- · Service shops
- · Lube trucks

#### Typical Fluids Handled

• Grease up to NLGI #2

#### **Pump Performance**

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





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)				
	35 lb drum – 11.2 lb (5.1 kg)				
Approximate Weight	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**



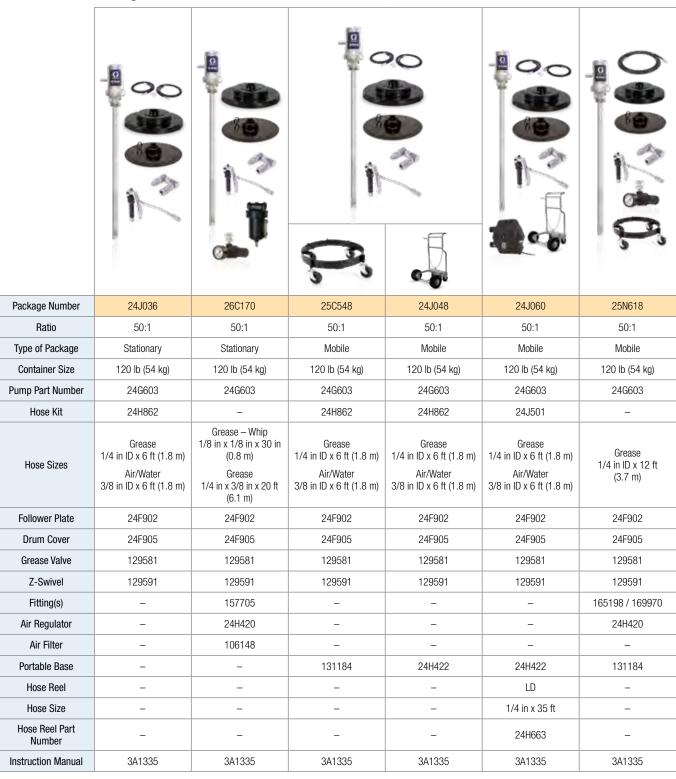
#### Ordering Information

## 35 lb Grease Packages





#### 120 lb Grease Packages





#### 400 lb Grease Packages





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



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

# Ordering Information

Part Numb	er	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) Inlet Size 1/4 in



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**

D	Part Number	Description
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
500	131183	Drum Dolly, 35 lb (16 kg)
	131184	Drum Dolly, 120 lb (54 kg)
	129645	Drum Dolly, 400 lb (182 kg)

## **Follower Plates**

0	Part Number	Description
89	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	Description	Includes				
			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**

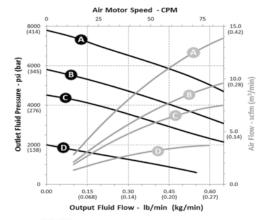
- · Automotive dealerships
- · Fast lube centers
- Service shops
- Heavy-duty dealerships
- · Fleet services facilities
- In-plant
- · Lube trucks
- Mining

#### Typical Fluids Handled

Grease up to NLGI #2

#### **Pump Performance**

#### Mini Fire-Ball 225 Pumps







# Mini Fire-Ball® 225 Grease Pumps



echnical 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	
253361	For 35 lb (16 kg) pail, without handle	
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
Type of Package		Portable pail dispenser	Stationary pail dispenser	Cart-mounted pail dispenser
Container Size 35 lb to 50 lb		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
se	12 ft Hose	109151	109151	109151
Includ	Air Coupler	114558	114558	114558
Dispense Kit Includes	Air Fitting	169971	169971	169971
sense	Z-Swivel	202577	202577	202577
Disi	Pro-Shot Valve	242056	242056	242056
Follower Plate		24F901	**	**
	Drum Cover	222059	24R350	24R350
	Portable Base	-	-	203650
Instruction Manual 30996		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

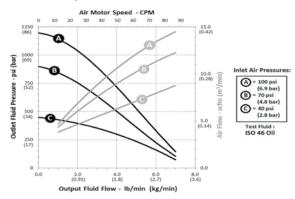
· Grease up to NLGI #2



## Pump Performance

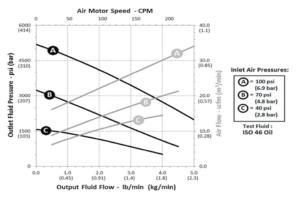
#### Fire-Ball 300 15:1 Pumps

#### **Pump Performance Curve**



#### Fire-Ball 300 50:1 Pumps

#### **Pump Performance Curve**



	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	
Type 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	ımp 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.

^{**}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	-
clud	Air Coupler	_	-
Ķ	Air Fitting	-	-
Dispense Kit Includes	Z-swivel	-	-
	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
Dispense Kit Includes	Hose Part Number	109150	109150
6 ft Coupled Hose		203320	-
善 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		222085*	222071*
Type of Package		Lube truck	Lube truck
	Ratio	50:1	50:1
	Container Size	120 lb (55 kg)	400 lb (180 kg)
Pι	ımp 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.

Ratio



## 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

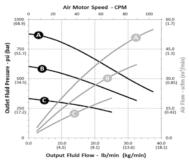
• Grease up to NLGI #2





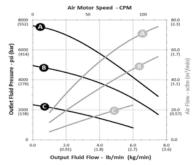
#### **Pump Performance**

#### Fire-Ball 425 10:1 Pumps



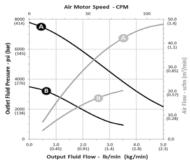


#### Fire-Ball 425 50:1 Pumps





#### Fire-Ball 425 75:1 Pumps





nical Specifications			
	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/n
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 b
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 Ratio		223108*	225781*	226018*	
		Stationary Supply	Stationary Supply	Stationary Supply Topper-Inductor	
		50:1	50:1	50:1	
	Container Size	120 lb (55 kg)	400 lb (180 kg)	400 lb (180 kg)	
Pι	ımp Part Number	205394	205395	205395	
	Dispense Kits	222076	222076	205102	
sapr	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  Elevator  Inductor Plate		-	-	204461	
		-	_	204385	
		-	-	205699	
	Base	-	-	205339	
In	struction Manual	307880	307880	306556	

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



# 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
ndes	Fluid Hose	3/8 in x 6 ft	3/8 in x 6 ft	3/8 in x 6 ft
Hose Part Number		109163	109163	109163
Dispense Kit Includes	6 ft Coupled Hose	205418	205418	-
Disp	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 Inductor Plate		-	-	204385
		_	_	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

Pa	ickage Number	223107*	222075*	243817*	243818**
Ty	pe 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)
Pur	mp Part Number	205394	205395	239729	239730
I	Dispense Kits	222076	222076	222076	222076
səpr	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
Dispense Kit Includes	Hose Part Number	109163	109163	109163	109163
ense K	6 ft Coupled Hose	205418	205418	205418	205418
Dispe	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
F	Follower Plate	223344	223846	223344	223846
H	Hold Down Kit	222061	207361	222061	207361
Ins	truction Manual	307880	307880	307880	307880

^{*}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.



# **Grease Pump RAM Packages**





Part 257435	(Ram	Assembly)	not	showr
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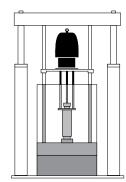
n Part 257435 (Ram Assembly) not shown

		Part 257435 (Ram Assembly) not shown	Part 25/435 (Ram Assembly) not shown	
Package Number Type of Package Ratio		244905	244906	
		Stationary Ram	Stationary Ram	
		50:1	75:1	
	Container Size	400 lb (180 kg)	400 lb (180 kg)	
Pı	ump Part Number	Fire-Ball 425 – 205395	Fire-Ball 425 – 239730	
	Dispense Kits	222076	222076	
sapn	Fluid Hose	3/8 in x 6 ft	3/8 in x 6 ft	
Dispense Kit Includes	Hose Part Number	109163	109163	
ense k	6 ft Coupled Hose	205418	205418	
Dispe	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.

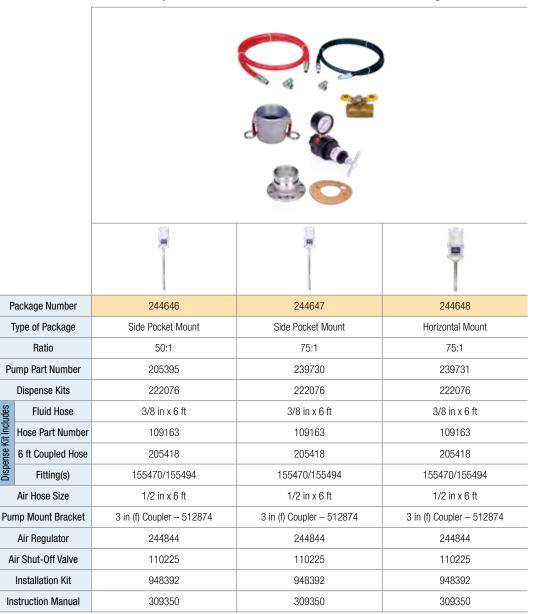
#### RAM-Mount

- 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







# **Air Regulators**

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**



		Includes							
Part Number	Compatible Pump(s)	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	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**

 Part Number	Description	Includes		
		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**

673	Part Number	Description
	948393	Flange Adapter (male) for Fire-Ball 300 Pumps
<b>3</b>	948392	Flange Adapter (male) for Fire-Ball 425 Pumps
100	512874	Coupler (female), 3 in thread



## **Follower Plates**

1 Onowor 1 lates				
	Part Number	Container Size	Flexible Wiper	Compatible Pumps
•	24F901	35 lb (16 kg)	16F769	LD 50:1 Mini Fire-Ball 225, 50:1 Fire-Ball 300, 15:1 Fire-Ball 300, 50:1
	24F902	70 lb (32 kg) 120 lb (55 kg)	16F781	LD 50:1 Mini Fire-Ball 225, 50:1 Fire-Ball 300, 15:1 Fire-Ball 300, 50:1
	24F903	400 lb (180 kg)	16F784	LD 50:1 Mini Fire-Ball 225, 50:1 Fire-Ball 300, 15:1 Fire-Ball 300, 50:1
	220653	35 lb (16 kg)	183241	Mini Fire-Ball 225, 50:1 Fire-Ball 300, 15:1 Fire-Ball 300, 50:1
	220654	70 lb (32 kg) 120 lb (55 kg)	183243	Mini Fire-Ball 225, 50:1 Fire-Ball 300, 15:1 Fire-Ball 300, 50:1
	223845	400 lb (180 kg)	186463	Mini Fire-Ball 225, 50:1 Fire-Ball 300, 15:1 Fire-Ball 300, 50:1
	204130	400 lb (180 kg)	_	Mini Fire-Ball 225, 50:1 Fire-Ball 300, 15:1 Fire-Ball 300, 50:1
	223344	120 lb (55 kg)	183243	Fire-Ball 425, 50:1 Fire-Ball 425, 75:1
	223700	120 lb (55 kg)	183243	Dyna-Star 5:1
	223701	400 lb (180 kg)	186463	Dyna-Star 5:1 Fire-Ball 425 10:1
	223846	400 lb (180 kg)	186463	Fire-Ball 425, 50:1 Fire-Ball 425, 75:1
	205337	400 lb (180 kg)	-	Fire-Ball 425, 50:1 Fire-Ball 425, 75:1

# **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

# **Lincoln-to-Graco Adapter Kit**

	Part Number	Description	Compatible Pump
	241246	For replacing a Series 20 Lincoln	Fire-Ball 300, 50:1



### **Portable Bases**

	Part Number	Description
9,	131183	Drum dolly, 35 lb (16 kg)
Ş	131184	Drum dolly, 120 lb (54 kg)
	129645	Drum dolly, 400 lb (182 kg)
	203622	Caster base for 120 lb (54 kg) drums

#### **Carts**

Para Co	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)	
47	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
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.



#### 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.

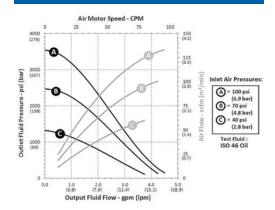
#### **Typical Applications**

- 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
100	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
	131380	Male Cam Lock Adapter – 3 in
	131394	Female Cam Lock Adapter – 3 in

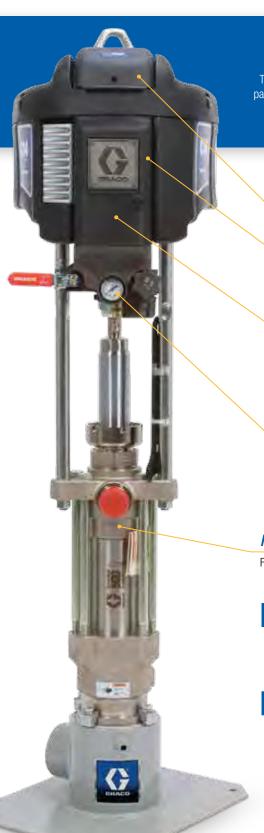
### **Drum Covers**

Part Number	Description
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.

#### Optional DataTrak Control

Intuitive, easy-to-use  $\mathsf{DataTrak}^{^\mathsf{TM}}$  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 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



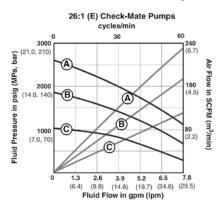
#### **Pump Performance**



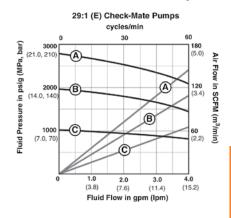
#### **NXT 14:1 Check-Mate Pumps**

#### 14:1 (E) Check-Mate Pumps cycles/min 30 1600 (11.2, 112) Fluid Pressure in psig (MPa, bar) Air Flow in SCFM (m3/min) 1200 (8.4, 84) 120 (3.4) 800 B (5.6, 56) 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**



	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 allo steel; 304, 316, 17-4PH and 440C grades of stainless steel; acetal; carbon-filled PTFE; carbo 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



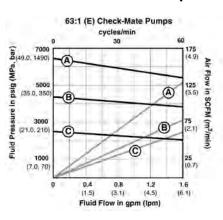
#### **Pump Performance**



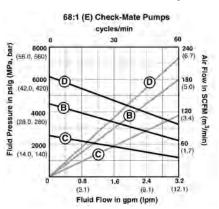
### **NXT 55:1 Check-Mate Pumps**

## 55:1 (E) Check-Mate Pumps cycles/min 30 5000 (42.0, 420) post of (42.0, 420) (42.0, 420) post of (28.0, 260) (28.0, 260) (14.0, 140) **(A)** Flow in SCFM (m3/min) (B) 3.0

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



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



chnical 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 Effective Diameter	10.4 in (264 mm)	7.5 in (191 mm)	10.4 in (264 mm)			
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 срр			
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 alloy steel; 304, 316 and 17-4PH grades of stainless steel; acetal; 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 with DataTrak**

Package Number	247973	247976	247974	247977	247975	247978
Ratio	14:1	26:1	29:1	55:1	63:1	68:1
Pump with DataTrak	P14MCS	P26MCS	P29MCS	P55MCS	P63MCS	P68MCS
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

### **Pump Packages without DataTrak**

Package Number	24E006	24E007	24E008	24E009	24E010	24E011
Ratio	14:1	26:1	29:1	55:1	63:1	68:1
Pump without DataTrak	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





### **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



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

chnical 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)	247540 - 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)	247540 – 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**

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.





## Field-Proven, Energy-Efficient

When paired with any of Graco's priming piston pumps, the Viscount II hydraulic motor offers exceptional cost savings by operating on 20% of the energy used by a pneumatic motor.

#### **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

echnical Specifications	
Fluid Pressure Ratio	2.4:1
Pump Number	222902 - 400 lb (180 kg)
Applications	Grease Dispensing
Maximum Input Pressure	1,500 psi (103.5 bar)
Maximum Fluid Input Volume	12 gpm (45.4 lpm)
Maximum Output Flow Rate	7.5 gpm (28.5 lpm)
Maximum Recommended CPM	60
Maximum Fluid Output Pressure	2,300 psi (159 bar)
Hydraulic Supply Inlet	3/4 in NPT
Hydraulic Return Outlet	1 in NPT
Fluid Outlet	1-1/2 in NPT
Maximum Incoming Fluid Temp.	130°F (54°C)
Wetted Parts	Carbon steel; chrome, zinc and electroless nickel plating; 304 and 17-4 PH grades of stainless steel; E52100 alloy steel; ductile iron; acetal; PTFE; ultra-high-molecular weight polyethylene
Sound Pressure Level	< 70 dB(A)
Approximate Weight	196 lb (89 kg)
Instruction Manual	308149

## **Viscount® II Pumps**



### >>> Ordering Information

### **Viscount II Pumps**

Part Nu	mber	Description
2229	102	2.4:1 Grease Pump for 400 lb (180 kg) drum

#### **Accessories**

### **Hydraulic Fluid Controls**

Required for each pump



Part Number	Description
236865	Viscount II 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.



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



³⁰⁶⁴³⁶ * 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

306436

306436

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



### **Grease Valves**

Grease valves							
	Fluid	Type	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





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

#### Typical Fluids Handled

• Grease up to NLGI #2

Technical Specifications					
Maximum Working Press	sure	5,000 psi (345 bar)			
Metering System		Oval gears			
Accuracy		$\pm$ 3% with grease consistency (grade NLGI) 2/3			
Repeatability (typical)		$\pm$ 1% with grease consistency (grade NLGI) 2/3			
Storage Temperature Ra	nge	-4°F to 158°F (-20°C to 170°C)			
Operating Temperature I	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 exte	ension)	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)			
Warranty		One year			
Instruction Manual		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



## 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.



### **Adjustment Nut**

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	N	PT
	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).	224872	-
1	Non-metered grease valve package. Includes Grease Valve (242055), coupler (200325) and Whip Hose (109145).	26C184	-





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

#### Typical Fluids Handled

• Grease up to NLGI #2

Тес	Technical 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				Lever -		Level	Level			Rigid extension, hydraulic coupler and air bleeder valve
K	110203	Manual	Pistol	Pistol			10,000 (690)	Cartridge/ bulk fill/ loader fill	Rigid extension, hydraulic coupler and air bleeder valve		
2	110202								12 in (30.4 cm) flexible extension, hydraulic coupler and air bleeder valve		
	110201		Suction	-	Suction	12 in (30.4 cm) clear plastic hose					

#### **Accessories**

Part Number	Description
109145	12 in (30.4 cm) clear plastic hose without coupler
112255	18 in (45.8 cm) clear plastic hose without coupler



### **Z-Swivels**



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	NI	Part Number	
Pressure psi (bar)	Inlet	Outlet	Fait 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	Inclu	udes
Fait Number	Fitting	Coupler
203597	203198	200325
203198	203198	_

### **Nozzles**

Part Number	Part Number Description	
200389	Standard nozzle. Includes straight 6 in (15.2 cm), 1/8 NPT(M) extension tube (197471) and tapered nose coupler (200325).	
204072	Swivel nozzle. Includes straight 6 in (15.2 cm), 1/8 NPT(M) extension tube (197471) and tapered nose coupler (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.	
109148* 30 in (76.2 cm) hose nozzle without coupler, has 1/8 NPT(M) both ends. Use as alternate for rig 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 standar 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 al grease guns with 1/8 NPT(F).	
204929	Grease loader valve. For use with lever-operated, high-volume grease pumps. Permits quick bulk filling of hand-operated grease lever guns equipped with easy-fill valve 236171.	
205592	Hydraulic adapter assortment package. Contains needle adapter (205568), plug adapter (205554), push adapter (201881), nylon needle adapter (205582), hydraulic-to-steel needle adapter (205532) and whip hose nozzle connector (203504).	











### 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



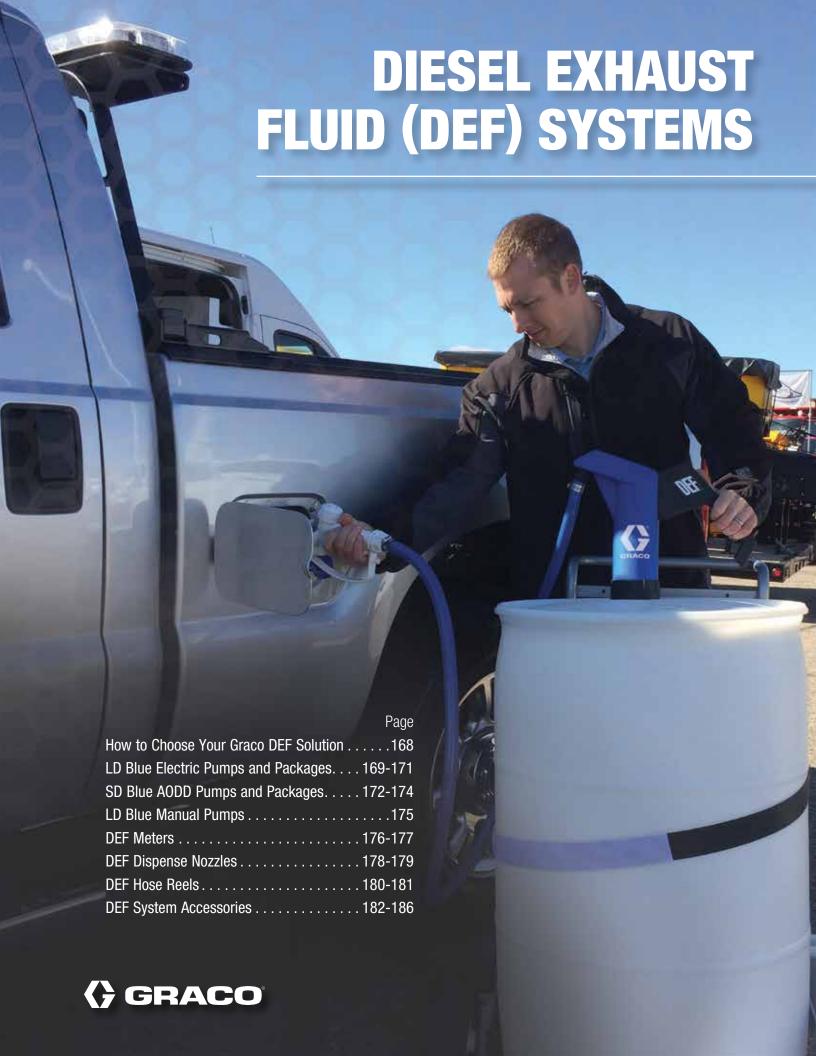
#### **Grease Accessory Packages**

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.



reducing the need for maintenance.



## 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.



### **Typical Applications**

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

#### Typical Fluids Handled

· Diesel exhaust fluid

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	CRU US	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**





### **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		Standard	
Package Number	Package Number 24F531		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		Standard	
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

Package 24V686 installed on 55 gallon drum (not included in package).



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### **Features and Benefits**

- 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
125478	6 ft dispense hose with ball valve





- 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	Part Number Description	
24G738	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).	





- · 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.

Тес	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

Technical 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

- 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 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
127654	Magnetic adapter for mis-fill kit





#### **Features and Benefits**

- · 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
- Mining
- · 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



Part Number	Description
125078	LD manual DEF nozzle with SST spout







### **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
- 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

Technical 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

180





# **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				
Operating Temperature Range	12°F to 140°F (-11°C to 60°C)			
Maximum Working Pressure	50 psi (3.5 bar)			
Wetted Parts (Bare Reel Only)	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	3A1767			

# >>> Ordering Information

### **Hose Reels**

Part Number	Description
HSDD5A	XD 30 DEF hose reel, 3/4 in x 50 ft, white, BSPP
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
HSDDDA	XD 30 DEF hose reel, bare, white, 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
S	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)
40	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

# **Pump Handle**



Part Number	Description
127646	Black handle for 12V DC pump



# >>> Ordering Information

# **Fittings**

ritungs	Part Number	Description
	127656	1 in BSP(F) elbow fitting, black
8	127657	1 in BSP(F) x 3/4 in barb hose tail, black
86	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
The same of	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
-0	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
124549	Colder closed-system drum insert
125014	Colder closed-system drum insert with buttress thread
124550	Colder closed-system 47 in downtube

 $\label{eq:decompany} \operatorname{DrumQuick}^{\tiny{\textcircled{\tiny{\$}}}} \text{ is a registered trademark of Colder Products Company}.$ 



# >>> Ordering Information

### **Micro Matic**

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

**Economic Plastic Valve** (EPV^{III}) is designed for one-way, single-use applications. Engineered for use when operations require the container package to be used once, emptied and recycled.

and recycled.			
	Part Number	Description	
	17C907	Micro Matic EPV dispense coupler, 3A orange, 3/4 in barbed outlet, EPDM seals	
	127634	Micro Matic EPV container valve, 3A orange, 2.5 in x 5 buttress, EPDM Seals	
	127793	Micro Matic EPV downtube for 55 gal drum	
	127794	Micro Matic EPV center downtube for 275 gal IBC tote	
	127635	Micro Matic EPV center downtube for 330 gal IBC tote	
	17C908	Micro Matic RSV dispense coupler, 3/4 in barbed outlet, 4 pin, stainless steel	
	127637	Micro Matic RSV container valve, 2.5 in x 5 in, 4 cam, stainless steel valve, EPDM seals	
	127795	Micro Matic RSV downtube for 55 gal drum	
Ů	127796	Micro Matic RSV center downtube for 275 gal IBC tote	
ů	127639	Micro Matic RSV center downtube for 330 gal IBC tote	
	127640	Micro Matic RSV fill coupler, 1 in NPT(M) inlet x 1/4 in NPT(F) outlet, 4 pin, stainless steel	

 $\mathsf{EPV}^{^\mathsf{TM}}$  is a trademark of Micro Matic USA, Inc.



# **Closed-System Coupler Accessories**

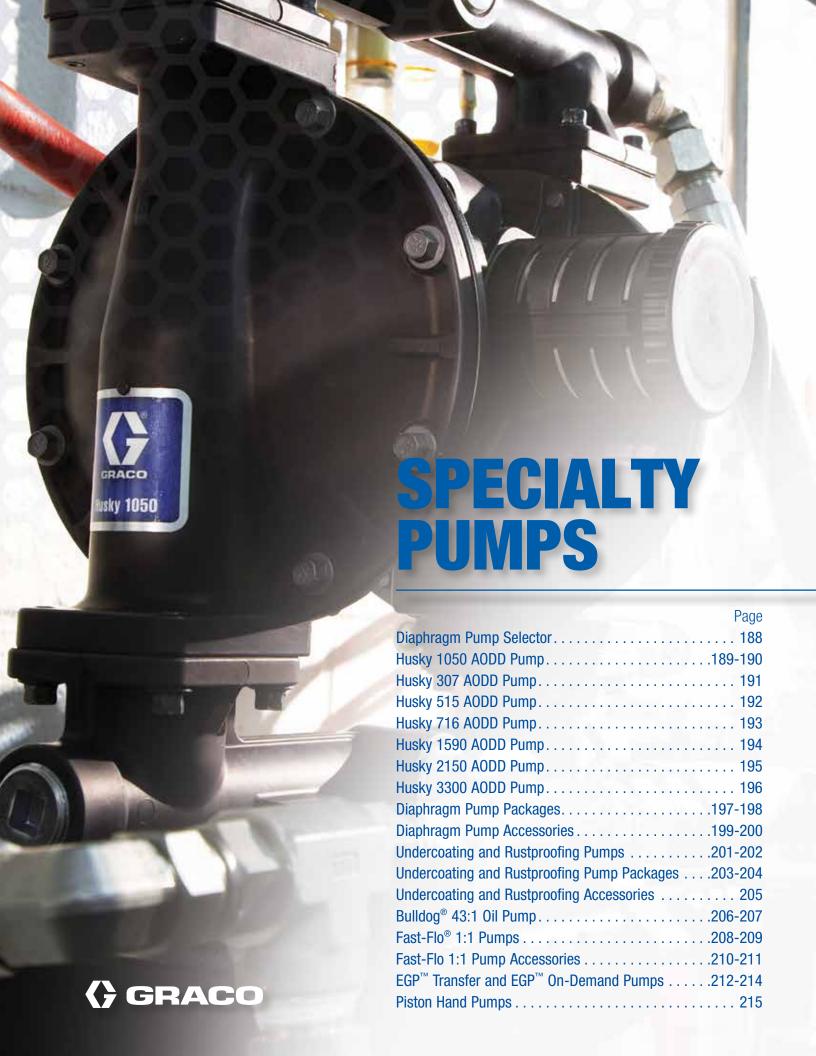


# Ordering Information

# **Micro Matic Packages**

Includes coupler, valve and downtube.

 Part Number	Description
24W142	Micro Matic EPV suction package – coupler (17C907), container valve (127634), 55 gal downtube (127793)
24W141	Micro Matic EPV suction package – coupler (17C907), container valve (127634), 275 gal downtube (127794)
24W140	Micro Matic EPV suction package – coupler (17C907), container valve (127634), 330 gal downtube (127635)
24W145	Micro Matic RSV suction package – coupler (17C908), container valve (127637), 55 gal downtube (127795)
24W144	Micro Matic RSV suction package – coupler (17C908), container valve (127637), 275 gal downtube (127796)
24W143	Micro Matic RSV suction package – coupler (17C908), container valve (127637), 330 gal downtube (127639)



# **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)	193
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)	194
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)	195
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)	191-192
Husky 1050	647731	Husky 1050 Aluminum – 1 in Aluminum/Buna-N	Oil evacuation     Oil transfer	UL	100 psi (6.9 bar)	191-192
Husky 1050	647648	Husky 1050 Aluminum – 1 in Aluminum/TPE	Fuel dispense     Gasoline (up to 10% ethanol)	UL	50 psi (3.5 bar)	191-192
Husky 1590	DB3525	Husky 1590 Aluminum – 1.5 in Aluminum/TPE	Oil evacuation Oil transfer Water Antifreeze	-	120 psi (8.3 bar)	196
Husky 2150	DF3525	Husky 2150 Aluminum – 2 in Aluminum/TPE	Oil evacuation Oil transfer Water Antifreeze	-	120 psi (8.3 bar)	197
Husky 3300	652002	Husky 3300 Aluminum – 3 in Aluminum/TPE	Oil evacuation Oil transfer Water Antifreeze	-	125 psi (8.6 bar)	198













# 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

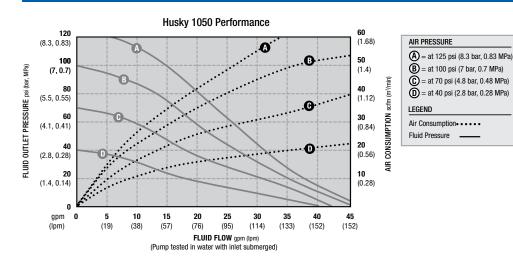
Increased number of ports for installation flexibility

### **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



# **Husky 1050 AODD Pump**











100 psi (6.9 bar, 0.69 MPa)
50 psi (3.5 bar, 0.35 MPa)
si (1.4 bar to 6.9 bar, 0.14 MPa to 0.69 MPa
(1.4 bar to 3.5 bar, 0.14 MPa to 0.35 MPa)
25 scfm
25 scfm
0.17 gal (0.64 l)
64 scfm
50 gpm (189 lpm)
38 gpm (144 lpm)
275 cpm
210 cpm
ft (4.9 m) dry, 29 ft (8.8 m) wet
1/8 in (3.2 mm)
93 cpm to 140 cpm
20 cpm
78 dB(A)
90 dB(A)
84 dB(A)
96 dB(A)
0°F to 150°F (-12°C to 65°C)
1/2 in NPT(F)
1 in NPT(F)
1 in NPT(F)
23 lb (10.5 kg)
num, TPC-ET, acetal, PTFE, Buna-N
luminum, coated carbon steel
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

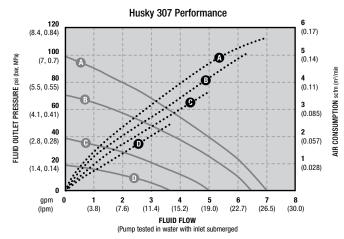
Technical Specifications			
Maximum fluid working pressure	100 psi (6.9 bar, 0.69 MPa)		
Maximum free-flow delivery*	7.0 gpm (26.5 lpm)		
Maximum pump speed	330 cpm		
Fluid displacement per cycle**	0.02 gal (0.076 l)		
Maximum suction lift	12 ft (3.7 m) dry		
Maximum-size pumpable solids	0.06 in (1.5 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 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**

_		<u>-</u>
	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

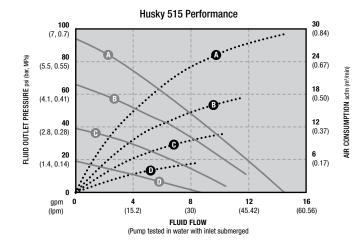
Technical Specifications				
Maximum fluid working pressure	100 psi (6.9 bar, 0.69 MPa)			
Maximum free-flow delivery*	15 gpm (57 l/min)			
Maximum pump speed	400 cpm			
Fluid displacement per cycle**	0.04 gal (0.15 l)			
Maximum suction lift	15 ft (4.5 m) dry, 25 ft (7.6 m) wet			
Maximum-size pumpable 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			
+F1	1401			

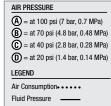
*Flow rates are with muffler and do not vary based on diaphragm material. **Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type. ***Actual pump performance may be affected by prolonged usage at temperature.

# Ordering Information

### **Husky 515 AODD Pump**

-		•	
	Part Number	Description	
	243669	Husky 515 Acetal Split 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

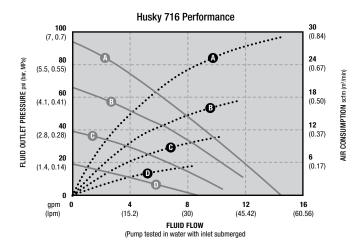
	100 1/001 00015
Maximum fluid working pressure	100 psi (6.9 bar, 0.69 MPa)
Maximum free-flow delivery*	16 gpm (61 l/min)
Maximum pump speed	400 cpm
Fluid displacement per cycle**	0.04 gal (0.15 l)
Maximum suction lift	15 ft (4.5 m) dry, 25 ft (7.6 m) wet
Maximum-size pumpable solids	3/32 in (2.5 mm)
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

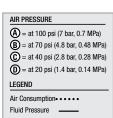
^{*}Flow rates are with muffler and do not vary based on diaphragm material. **Displacement per cycle may vary based on suction condition, discharge head, air pressure and fluid type. ***Actual pump performance may be affected by prolonged usage at temperature.

# 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

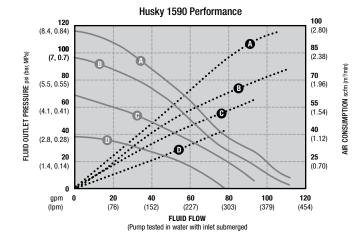
Technical Specifications		
Maximum fluid working pressure	120 psi (8.4 bar, 0.84 MPa)	
Maximum free-flow delivery*	100 gpm (378.5 l/min)	
Maximum pump speed	200 cpm	
Fluid displacement per cycle**	0.5 gal (1.96 l)	
Maximum suction lift	20 ft (6.1 m) dry	
Maximum-size pumpable solids	0.19 in (4.8 mm)	
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	

^{*}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

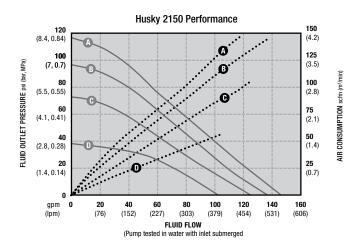
chnical Specifications	
Maximum fluid working pressure	120 psi (8.4 bar, 0.84 MPa)
Maximum free-flow delivery*	150 gpm (568 l/min)
Maximum pump speed	145 cpm
Fluid displacement per cycle**	1.03 gal (3.9 l)
Maximum suction lift	20 ft (6.1 m) dry
Maximum-size pumpable solids	0.25 in (6.3 mm)
Maximum ambient 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
*Class rates are with muffler and do not year, based on disphraem materi	1 #P'-1

^{*}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.

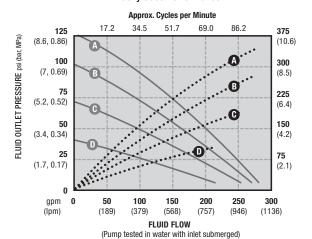
# Ordering Information

# **Husky 3300 AODD Pump**

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

### **Pump Performance**

### Husky 3300 Performance



Fluid Pressure -



^{**}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		
sapi	Air Gauge	108190		
Installation Kit Includes	Air Regulator	110318		
on Kit	Fluid Connect Hose – 4 ft	220596		
allatic	Air Connect Hose – 6 ft	109125		
Inst	Mounting Bracket	190125		
	Suction Kit	223888		
	Wall Bracket Kit	224835		
	Instruction Manual	308426		







>>> Ordering Information

# **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**

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

# **Air Regulator and Gauge**

2	Husky Pump	307	515/716	1050	1590	2150	3300
	Part Number	110147	110147	246946	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**

All transmission of the second	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**

. 15	Husky Pump	307	515	1050	1590	2150	3300
AL COMPANY	Part Number	237211	194347	24D205	-	-	-

# **Grounding Wire and Clamp**

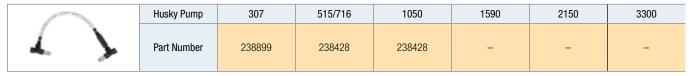
Husky Pump	307	515/716	1050	1590	2150	3300
Part Number	222011	222011	238909	222011	238909	238909

# **Suction Hose Kit**

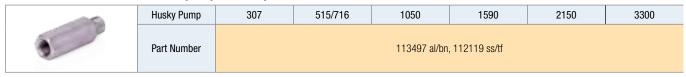
D	Husky Pump	307	515/716	1050	1590	2150	3300
	Part Number	236054	236054	236054	222916	222916	-

# **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**

			N						A
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

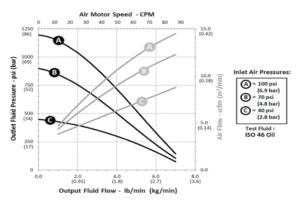
 Undercoating and rustproofing (Verify chemical compatibility for pump's wetted components with undercoating material supplier or contact Graco directly at 1-800-533-9655)

# **Undercoating and Rustproofing Pumps**



# Pump Performance

# Fire-Ball 300 15:1 Pumps



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**



Package Number	222077	226342	226269
Type of Package	Stationary	Portable Dolly-Mounted	Stationary
Ratio	15:1	15:1	15:1
Container Size	35 lb (16 kg)	120 lb (54 kg)	400 lb (180 kg)
Pump Part Number	206405	206699	206700
Dispense Kit*	222079	222079	222082
Tip	286517	286517	286517
Hose Length	15 ft (4.6 m)	15 ft (4.6 m)	25 ft (7.6 m)
Drum Cover	222058	204574	200326
Portable Base	_	204144	-
Instruction Manual	307879	307879	307879

^{*}Dispense kit includes Air Regulator (110234), Air Gauge (100960), Spray Gun (234237)

# **Undercoating and Rustproofing Pump Packages**



>>> Ordering Information

# **Spray Masking Package**



Package Number	224826
Type of Package	Bung Mounted Stationary
Ratio	15:1
Container Size	400 lb (180 kg)
Pump Part Number	224825 (SST pump)
Flexible Downtube	224022*
Dispense Kit**	224023
Tip	286211/286621
Hose Length	25 ft (7.6 m)
Instruction Manual	308069

*224022 is long enough for 400 lb (180 kg) container, but can be trimmed to accommodate smaller containers. **Dispense kit includes Flex Plus™ spray gun (235457).



# >>> Ordering Information

# **Application Gun**

4	
<b>7</b> \> <b>/</b>	

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**

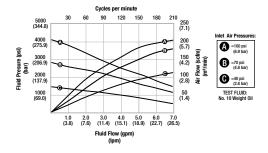
· Supplies hydraulic oil to accumulators in oil rig blowout prevention systems.

### 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**

Part Number	Description	
218334	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	
24U227	Pump lower repair kit	
24U228	Air motor repair kit	
24W515	Pump and air motor repair kit	

GRACO FAST-FLO

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# **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

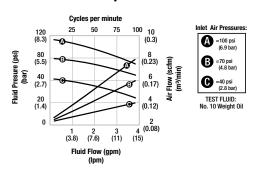
### Typical Fluids Handled

- Water
- Antifreeze
- · Windshield wash fluid

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

### **Pump Performance**

### **Fast-Flo 1:1 Pumps**











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
			Buna-N	CE	226947
			Buna-N	CE	226951*
			Leather	CE, EX	237133
	Drum	Carbon Steel	PTFE	CE, EX	237134
	Drum		Leather	ETL, CE, EX	226940
			Polyethylene	ETL, CE, EX	226941
		Stainless Steel	Buna-N	CE	226953
Oil			PTFE	CE, EX	237129
	Universal	Carbon Steel	Buna-N	CE	226948
			Leather	CE, EX	237130
			PTFE	CE, EX	237131
			Leather	ETL, CE, EX	226943
			Polyethylene	ETL, CE, EX	226944
		Stainless Steel	Buna-N	CE	226952
			PTFE	CE, EX	237132

^{*}Adjustable downtube length between 18 in (457 mm) and 46.4 in (1,180 mm)

# **Fast-Flo 1:1 Pump Accessories**

# >>> Ordering Information

# **Hose and Fitting Kits**

	Part Number	Description	Includes	
	rait Nullibei	Description	Air Hose / Swivel Elbow	Fluid Hose / Swivel Elbow
133	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**

A	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		
	Fait Number	Description	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 l) container. Drum cover mounts on top of an open drum, with mounting for a 1:1 pump.

# **Air Line Filter**

(min)	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
- Antifreeze
- · Hydraulic fluids
- Cutting oils
- Non-flammable oil-based solvents
- Oil-based herbicide carriers



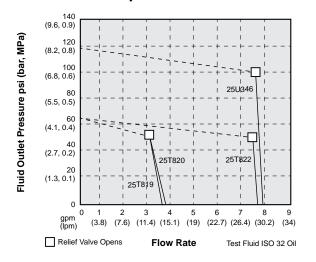




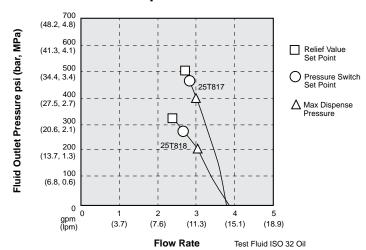




### **EGP Transfer Pumps Performance Chart**



### **EGP On-Demand Pumps Performance Chart**



## Ordering Information

	EGP Transfer Pump Models			EGP On-Demar	EGP On-Demand Pump Models		
Package Part Number	25T819	25T820	25T822	-	-	-	
Pump Part Number	-	-	-	25U346	25T817	25T818	
Voltage	12 VDC	115 VAC	115 VAC	115 VAC	115 VAC	12 VDC	
Hertz	_	60 Hz	60 Hz	60 Hz	60 Hz	_	
Motor Type	TENV	ODP	ODP	TENV — IP55	TENV - IP55	TENV	
Horsepower	1/2	1/2	3/4	1.0	1.5	3/4	
Maximum Current (Amps)	30	8.7	9.9	9.1	14.4	60	
Maximum Free Flow Rate gpm (lpm)	3.8 (14.4)	3.9 (14.8)	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)	120 (8.3)	500 (34.5)	325 (22.4)	
Automatic Relief Setting psi (bar)	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	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	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 steel, galvanized steel, aluminum, nitrile, rubber, PVC, PVC cement				Carbon steel with zinc galvanized steel, alu	plating, stainless steel, minum, nitrile, rubber	
Weight lb (kg)	25 (11)	22 (10)	25 (11)	25 (11)	36 (16.3)	36 (16.3)	
Manual	3A8569	3A8568	3A8568	3A8568	3A8570	3A8571	

# **EGP[™] Transfer and EGP On-Demand**









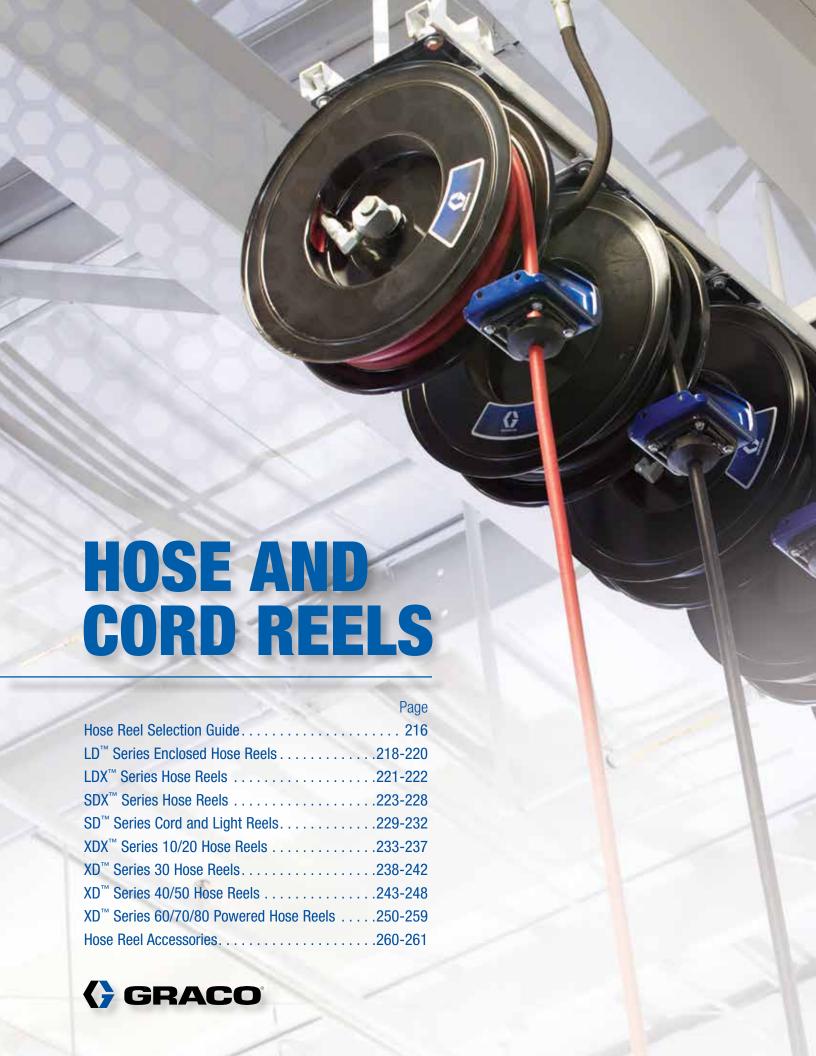




# >>> Ordering Information

# **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
8	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
LD™ 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	• 35 ft (11 m) • 45 ft (14 m) • 50 ft (15 m)	Yes	218-220
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	221-222
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	223-228
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	229-232
XDX™ 10 / 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	• 35 ft (11 m) • 50 ft (15 m) • 65 ft (20 m)	Optional	233-237
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	238-242
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	243-248
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	250-259



### **LD Series Enclosed Hose Reels**

















**Economical Enclosed Hose** Reels Get You Up and Running Fast

Reduce clutter and increase workplace safety with a Graco one-piece enclosed hose reel. Designed for light-duty applications in dealerships, service garages, collision repair and industrial manufacturing facilities.

### Large Fluid Porting

Maximizes fluid flow with minimal pressure drop

### Simple Spring Tension Adjustment

Ability to increase or decrease spring tension while reel is pressurized

### Multiple Mounting Options

Wall, overhead, bench, or tank configurations (wall mount pictured)

#### Full Enclosure

Tough, dent-proof, corrosion-resistant enclosure

### **Typical Applications**

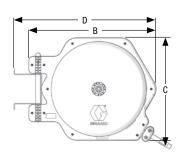
- Small maintenance shops
- Tire maintenance shops
- Small fast lubes
- · Independent repair facilities
- · Industrial manufacturing facilities

### Typical Fluids Handled

- · Petroleum- and synthetic-based oils (motor, gear and ATF)
- Air
- Water
- Grease
- Antifreeze
- · Windshield washer fluid

Dime	ensions
Α	7.1 in (180 mm)
В	23.0 in (585 mm)
С	18.5 in (470 mm)
D	25.6 in (650 mm)





Technical Specifications	chnical Specifications							
Operating Temperature Range								
Air-Only Reels	14°F to 140°F (-10°C to 60°C)							
Water Applications	32°F to 140°F (0°C to 60°C)							
All-Other Applications	0°F to 140°F (-18°C to 60°C)							
Wetted Parts								
Air Only Reels	Aluminum, Buna-N rubber, PVC							
Air/Water/Antifreeze/Windshield Washer Fluid Reels	Aluminum, Buna-N rubber							
Oil Reels	Carbon steel, Buna-N rubber, PTFE							
Grease Reels	Carbon steel, Buna-N rubber							
Sound Pressure Level	69.3 dB(A)							
Sound Power Level	75.3 dB(A)							
Instruction Manual	313938							



















### **LD Series Reel Packages**

Includes hose with ball stop kit and hose guide, mounting bracket and hose inlet kit.

Type of		Ho	se	Connec	tion Size	Maximum	Package	F	Package Includes		
Mount	Fluid	ID in (mm)	Length ft (m)	Inlet in (mm)	Outlet in (mm)	Pressure psi (bar)	Part Number	Reel Assembly	Mount Kit	Inlet Kit	
		3/8 (10)	35 (11)	1/2 (13)	3/8 (10)	250 (17.2)	24F737	24H657			
	Air/Water/ Antifreeze/	3/8 (10)	50 (15)	1/2 (13)	3/8 (10)	250 (17.2)	24F738	24H658			
	Windshield Washer Fluid	1/2 (13)	35 (11)	1/2 (13)	1/2 (13)	250 (17.2)	24F739	24H659		24C44	
0 4	Washer Flata	1/2 (13)	50 (15)	1/2 (13)	1/2 (13)	250 (17.2)	24F740	24H660	24G866		
	Oil	3/8 (10)	35 (11)	1/2 (13)	3/8 (10)	1,800 (124)	24F741	24H661		24053	
Overhead (Mell	Oil	1/2 (13)	35 (11)	1/2 (13)	1/2 (13)	1,800 (124)	24F742	24H662		24053	
Overhead/Wall Swivel Mount	Grease	1/4 (6)	35 (11)	3/8 (10)	1/4 (6)	5,000 (345)	24F743	24H663		24053	
	Air/Water/ Antifreeze/ Windshield Washer Fluid	3/8 (10)	35 (11)	1/2 (13)	3/8 (10)	250 (17.2)	24F755	24H657	24G865	24C444	
VIO.		3/8 (10)	50 (15)	1/2 (13)	3/8 (10)	250 (17.2)	24F756	24H658			
		1/2 (13)	35 (11)	1/2 (13)	1/2 (13)	250 (17.2)	24F757	24H659			
		1/2 (13)	50 (15)	1/2 (13)	1/2 (13)	250 (17.2)	24F758	24H660			
		3/8 (10)	35 (11)	1/2 (13)	3/8 (10)	1,800 (124)	24F759	24H661		24053	
Oversite and AMAII		1/2 (13)	35 (11)	1/2 (13)	1/2 (13)	1,800 (124)	24F760	24H662		24053	
Overhead/Wall Stationary Mount	Grease	1/4 (6)	35 (11)	3/8 (10)	1/4 (6)	5,000 (345)	24F761	24H663		24053	
Ì		3/8 (10)	35 (11)	1/2 (13)	3/8 (10)	250 (17.2)	24F773	24H657			
	Air/Water/ Antifreeze/	3/8 (10)	50 (15)	1/2 (13)	3/8 (10)	250 (17.2)	24F774	24H658		24C44	
	Windshield Washer Fluid	1/2 (13)	35 (11)	1/2 (13)	1/2 (13)	250 (17.2)	24F775	24H659		24044	
		1/2 (13)	50 (15)	1/2 (13)	1/2 (13)	250 (17.2)	24F776	24H660	240772		
C	Oil	3/8 (10)	35 (11)	1/2 (13)	3/8 (10)	1,800 (124)	24F777	24H661		24053	
	UII	1/2 (13)	35 (11)	1/2 (13)	1/2 (13)	1,800 (124)	24F778	24H662		24053	
Bench Swivel Mount	Grease	1/4 (6)	35 (11)	3/8 (10)	1/4 (6)	5,000 (345)	24F779	24H663		24053	

### **LD Series Enclosed Hose Reels**

















### Ordering Information

### **LD Series Reel**

Includes hose. Mounting hardware and hose inlet kit sold separately.



Fluid	Ho	se	Connect	tion Size	Maximum Pressure	Part Number	Hose Inlet Kit (order separately)	
	ID in (mm)	Length ft (m)	Inlet in (mm)	Outlet in (mm)	psi (bar)	Fait Number		
	3/8 (10)	35 (11)	1/2 (13)	3/8 (10)	250 (17.2)	24H657	24C444	
Air/Water/ Antifreeze/	3/8 (10)	50 (15)	1/2 (13)	3/8 (10)	250 (17.2)	24H658	24C444	
Windshield Washer Fluid	1/2 (13)	35 (11)	1/2 (13)	1/2 (13)	250 (17.2)	24H659	24C444	
	1/2 (13)	50 (15)	1/2 (13)	1/2 (13)	250 (17.2)	24H660	24C444	
Oil	3/8 (10)	35 (11)	1/2 (13)	3/8 (10)	1,800 (124)	24H661	24C537	
Oii	1/2 (13)	35 (11)	1/2 (13)	1/2 (13)	1,800 (124)	24H662	24C538	
Grease	1/4 (6)	35 (11)	3/8 (10)	1/4 (6)	5,000 (345)	24H663	24C539	

#### **Hose Inlet Kits**

A hose inlet kit is included in LD reel packages but must be ordered separately with standalone LD reel assemblies.



	Fluid Type	Maximum Working Pressure psi (bar)	Size In (mm)	Inlet Configuration	Outlet Configuration	Part Number	Used with Hose Reel Model
	Air Only		1/4 (6)	1/4 NPT(M)	1/4 NPT(M)	24C443	24H655 / 24H656
	Air/Water	250 (17.2)		1/2 NPT(M) 3/8 NPT(M)		24C444	24H657 / 24H658
	All/Water		1/2 (13)	1/2 NPT(M)	1/2 NPT(M)	240444	24H659 / 24H660
,	0.1	1 000 (104)	3/8 (10)	1/2 NPT(M)	1/2 NPT(M)	24C537	24H661
	Oil 1,800 (124)		1/2 (13)	1/2 NPT(M)	1/2 NPT(M)	24C538	24H662
	Grease	5,000 (345)	1/4 (6)	1/4 NPT(M)	1/4 NPT(M)	24C539	24H663



















### 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)			
Wetted 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			
Sound Pressure Level	80 dB(A)			
Sound Power Level	87 dB(A)			
Instruction Manual	3A8216			





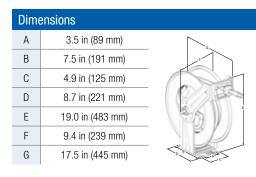




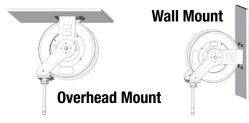








### **Typical Mounting Configurations**



### **Bench Mount**



### >>> Ordering Information

### **LDX Reels**

Part Number	Fluid	Ho	se	Connect	Maximum	
	Fluid	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

222



















### **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

o 190°F (-28°C to 87°C)
o 190°F (-28°C to 87°C)
o 200°F (-40°C to 93°C)
ated steel, stainless steel, anodized im, nitrile rubber
ated steel, anodized aluminum, ubber
ated steel, nitrile rubber, steel
23.5 kg)
A)
A)
3

### **SDX Series Hose Reels**





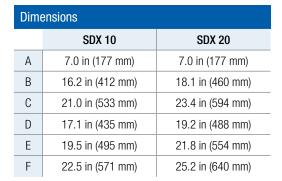


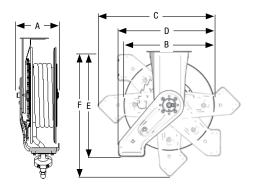




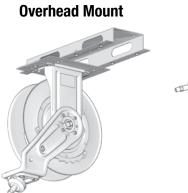


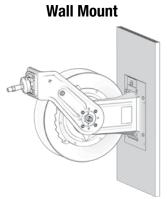


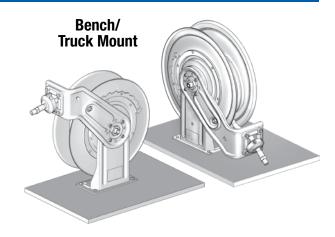




### **Typical Mounting Configurations**



































### 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:

Metallic Blue = "B"

(from Reel Assembly Ordering 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.

	Reel Fluid		Hose		Connection Size		Maximum	Assembly	Recommended
	Size	Fluiu	ID in (mm)	Length ft (m)	Inlet in (mm)	Outlet in (mm)	Pressure psi (bar)	Part Number	Hose Inlet Kit
			3/8 (10)	35 (11)	1/2 (13)	3/8 (10)	300 (20.7)	SDL23#	
A.	SDX 10	Air/Water/	3/8 (10)	50 (15)	1/2 (13)	3/8 (10)	300 (20.7)	SDL25#	
		Antifreeze/ Windshield	1/2 (13)	35 (11)	1/2 (13)	1/2 (13)	300 (20.7)	SDL33#	
	0DV 00	Washer Fluid	3/8 (10)	65 (20)	1/2 (13)	3/8 (10)	300 (20.7)	SDL56#	218549
6.27	SDX 20		1/2 (13)	50 (15)	1/2 (13)	1/2 (13)	300 (20.7)	SDL65#	
	SDX 10	Oil	1/2 (13)	35 (11)	1/2 (13)	1/2 (13)	2,000 (138)	SDM33#	
	SDX 20	) UII	1/2 (13)	50 (15)	1/2 (13)	1/2 (13)	2,000 (138)	SDM65#	
	0DV 40		1/4 (6)	50 (15)	3/8 (10)	1/4 (6)	5,000 (345)	SDH15#	
	SDX 10	Grease	3/8 (10)	35 (11)	3/8 (10)	1/4 (6)	4,800 (331)	SDH23#	218550
	SDX 20		3/8 (10)	50 (15)	3/8 (10)	1/4 (6)	4,800 (331)	SDH55#	

### **Arm in Tank/Bench Mount Position**

Assembled with hose, ball stop kit and roller guide. Required hose inlet kit sold separately.

	Reel Fluid		Hose		Connection Size		Maximum	Assembly	Recommended
	Size	Fluiu	ID in (mm)	Length ft (m)	Inlet in (mm)	Outlet in (mm)	Pressure psi (bar)	Part Number	Hose Inlet Kit
		Air/Water/ Antifreeze/	3/8 (10)	65 (20)	1/2 (13)	3/8 (10)	300 (20.7)	SDL5J#	
		Windshield Washer Fluid	1/2 (13)	50 (15)	1/2 (13)	1/2 (13)	300 (20.7)	SDL6H#	218549
		Oil	1/2 (13)	50 (15)	1/2 (13)	1/2 (13)	2,000 (138)	SDM6H#	
		Grease	3/8 (10)	50 (15)	3/8 (10)	1/4 (6)	4,800 (331)	SDH5H#	218550

















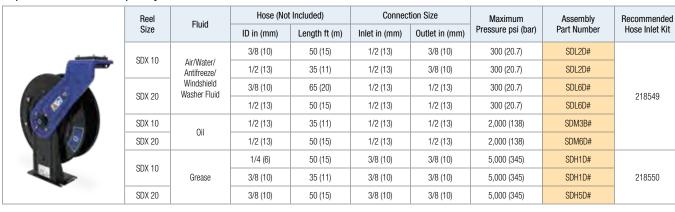


Ordering Information

#### **Bare Reels**

#### **Arm in Overhead Mount Position**

Required hose inlet kit sold separately. Fluid hose not included.



### **SDX 10 Oil Reel Packages**

	Deal City	Fluid	Value Ture	Fralsaure	Package		Package	Includes	
	Reel Size	Fluid	Valve Type	Enclosure	Number	Reel Assembly	Enclosure	Hose Inlet Kit	Meter
<b>5</b>			SDM8 Manual Meter	No	24E001	SDM33B	-	218549	25M404
			with Rigid Extension	Yes	24D996	SDM33B	24A217	218549	25M404
		Oil	Oil SDM8 Manual Meter	No	24E002	SDM33B	-	218549	25M406
	SDX 10	Oil	with Flexible Extension	Yes	24D997	SDM33B	24A217	218549	25M406
			None	Yes	24D995	SDM33B	24A217	218549	-

















### **SDX 10 Air/Water Reel Packages**

	Dool Cinc	Fluid	Volvo Tun-	Engloous	Package			Package Includes	S	
	Reel Size	Fluid	Valve Type	Enclosure	Number	Reel Assembly	Enclosure	Hose Inlet Kit	Valve	Fitting
				No	24D999	SDL23B	-	218549	180685	150287
<b>10 6</b>		Water	Water Bib Dispense Valve	Yes	24D993	SDL23B	24A217	218549	180685	150287
				165	24D994	SDL33B	24A217	218549	180685	159842
4		Air	Tire Chuck Valve	No	24D998	SDL23B	-	218549	218545	-
	SDX 10			Yes	24D992	SDL23B	24A217	218549	218545	-
			None		24D989	SDL23B	24A217	218549	-	_
	Air/Wate	Air/Water		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)
G	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)	4,000 (276) 3/8 (10)		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.

	Hose Inner Diameter (ID) Size	Part Number
	1/4 in (6.4 mm)	222225
	1/4 in to 3/8 in (6.4 mm to 9.5 mm)	218340
	3/8 in to 1/2 in (9.5 mm to 12.7 mm)	218341
	5/8 in (15.9 mm)	237872

### **SDX Series Hose Reel Accessories**

















### Ordering Information

### **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
P	Open Reel Mounting Channel	24A934	24A935	24A936	24A937	24A938	24A939
	I-Beam Mounting Bracket*	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.

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

### **Hose Identification Wraps**

Vinyl hose wrap for easy identification of meter fluid.

	Part Number	Description
GBRACO	17S659	Red
0 GRACO	17S660	Blue
OGRACO	17S661	Green
Oonaco	17S662	Yellow
OGRACO	17S663	White

### **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.

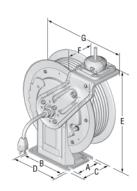
### Multiple Configurations Available

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

Dim	Dimensions								
		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)						



•	Timodi opositiodationo							
	Ope	rating	g Temperature Range					
		Cord	Reels	-22°F to 122°F (-30°C to 50°C)				
	Light Reels		t Reels	-4°F to 104°F (-20°C to 40°C)				
	Weig	ght wi	thout Accessories					
			16 AWG, Length 35 ft	25.4 lb				
	120V SD 5		16 AWG, Length 50 ft	27.6 lb				
		SD	12 AWG, Length 35 ft	28.2 lb				
	12		12 AWG, Length 50 ft	32.0 lb				
		10	16 AWG, Length 95 ft	46.3 lb				
		SD	12 AWG, Length 95 ft	51.8 lb				
	Instr	uction	Manual	3A2592				



**UL/CSA Approved** 

## **SD Series Cord and Light Reels**

>>> Ordering Information

### 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	20	50 ft (15 m)	SJOOW	24Y859
	No Accessory – Cord Only	SD 10	12	18	95 ft (29 m) SJ00W	24Y880	
		SD 5	16	13	50 ft (15 m)	SJTOW	24Y861
		SD 5	12	20	35 ft (11 m)	SJ00W	24Y862
1 20	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 GFCI 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)	SJTOW	24Y865
G and		SD 5	16	<1	50 ft (15 m)	SJTOW	24Y866
9		SD 10	16	<1	95 ft (29 m)	SJTOW	24Y884
<b>4.</b> 0 mm	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) many	LED Light	SD 5	16	<1	50 ft (15 m)	SJT0W	24Y870
		SD 10	16	<1	95 ft (29 m)	SJT0W	24Y886
		SD 5	16	12	35 ft (11 m)	SJTOW	24Y871
Gam	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



### Accessory 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 232.

<u>G</u>

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.

### **SD Series Cord and Light Reel Accessories**



### >>> Ordering Information

### **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
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





















### **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.



### Heavy-Duty Adjustable Spring

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

chinical 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

### **XDX Series Hose Reels**









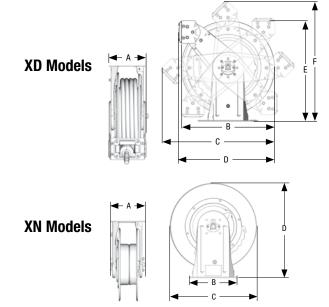






10 / 20 / 20 XN

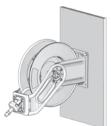
Dimensions						
	XD M (With Adjus	XN Models (Without Arm)				
	XDX 10	XDX 20	XDX 20			
Α	7.5 in (196 mm)	7.5 in (196 mm)	7.5 in (196 mm)			
В	16.2 in (412 mm)	18.1 in (460 mm)	18.1 in (460 mm)			
С	21.0 in (533 mm)	23.4 in (594 mm)	23.4 in (594 mm)			
D	18.0 in (457 mm)	20.0 in (508 mm)	20.0 in (508 mm)			
Е	18.5 in (470 mm)	21.0 in (533 mm)	_			
F	22.5 in (571 mm)	25.2 in (640 mm)	_			



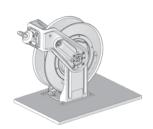
### **Typical Mounting Configurations**







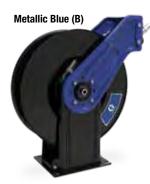
Bench/ Truck Mount



Truck Mount with Remote Mounted Roller Guide





























10 / 20 / 20 XN



### **XDX 10/20 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



XDM65# **Select your reel position:** 

**Select your reel color:** (from Reel Assembly Ordering

Black = "D"

**Order Part Number:** 

Guide - opposite)



### XD Models (with Adjustable Arm)

#### **Reel Assemblies**

Assembly includes hose, ball stop kit and roller guide. Required hose inlet kit sold separately.

	Reel		Hose (Included)		Connection 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)	50 (15)	1/2 NPSM(M)	3/8 NPT(M)	300 (20.7)	XDL25#		
	XDX 10	Windshield Washer Fluid	1/2 (13)	35 (11)	1/2 NPSM(M)	1/2 NPT(M)	300 (20.7)	XDL33#	218549	
		Oil	1/2 (13)	35 (11)	1/2 NPSM(M)	1/2 NPT(M)	2,000 (138)	XDM33#		
		Grease	1/4 (6)	50 (15)	3/8 NPSM(M)	1/4 NPT(M)	5,000 (552)	XDH15#	218550	
		Air/Water/Antifreeze/ Windshield Washer Fluid	3/8 (10)	65 (20)	1/2 NPSM(M)	3/8 NPT(M)	300 (20.7)	XDL56#		
			1/2 (13)	50 (15)	1/2 NPSM(M)	1/2 NPT(M)	300 (20.7)	XDL65#	218549	
		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	Hose (Not Included) Connection Size		tion Size	Maximum	Part	Recommended			
	Size	Fluid	ID in (mm)	Length ft (m)	Inlet	Outlet	Pressure psi (bar)	Number	Hose Inlet Kit	
		Air/Water/Antifreeze/ Windshield Washer Fluid	3/8 (10)	65 (20)	1/2 NPSM(M)	3/8 NPSM(F)	300 (20.7)	XDL2D#	218549	
1. 1	XDX 10	Oil	1/2 (13)	35 (11)	1/2 NPSM(M)	1/2 NPSM(F)	2,000 (138)	XDM3B#		
		Grease	3/8 (10)	35 (11)	3/8 NPSM(M)	3/8 NPSM(F)	8,000 (552)	XDH1D#	218550	
	XDX 20 Windshie	Air/Water/Antifreeze/ Windshield Washer Fluid	1/2 (13)	50 (15)	1/2 NPSM(M)	1/2 NPSM(F)	300 (20.7)	XDL6D#	218549	
		Oil	1/2 (13)	50 (15)	1/2 NPSM(M)	1/2 NPSM(F)	2,000 (138)	XDM6D#		
		Grease	3/8 (10)	50 (15)	3/8 NPSM(M)	3/8 NPSM(F)	8,000 (552)	XDH5D#	218550	

### **XDX Series Hose Reels**















10 / 20 / 20 XN



### Ordering Information

#### XN Models (without Adjustable Arm)

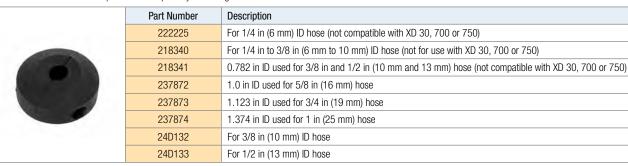
Includes hose guide kit. Required hose inlet kit sold separately.

		Hose (Included)		Connection Size		Maximum	Part Number	Hose	Recommended
Reel Size	Fluid	ID in (mm)	Length ft (m)	Inlet	Outlet	Pressure psi (bar)	Black	Guide Kit (Included)	Hose Inlet Kit
XDX 20 Antifreez Windshie Washer Fl	Air/Water/ Antifreeze/ Windshield Washer Fluid	3/8 (10)	65 (20)	1/2 NPSM(M)	3/8 NPT(M)	300 (20.7)	XNL56D		
		1/2 (13)	50 (15)	1/2 NPSM(M)	1/2 NPT(M)	300 (20.7)	XNL65D	15Y478	218549
	Oil	1/2 (13)	50 (15)	1/2 NPSM(M)	1/2 NPT(M)	2,000 (138)	XNM65D		
	Grease	3/8 (10)	50 (15)	3/8 NPSM(M)	1/4 NPT(M)	4,800 (331)	XNH55D		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.



#### **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)	

^{*}Secures mounting channel to I-beam without drilling - 2 are required for 1-3 reels, and 3 are required for 4-6 reels.



















10 / 20 / 20 XN



#### **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	Dark Blue	Yellow	Required End-Caps (set of 2)
(C)	XDX 10	24N331	24N332	24N333	24N334	24N335	24N336	24A950
	XDX 20	24N337	24N339	24N340	24N341	24N342	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**

6 6	Part Number	Description
E manual	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 Identification Wraps**

Vinyl hose wrap for easy identification of meter fluid.

	Part Number	Description
GERACO	17S659	Red
G GRACO	17S660	Blue
OGRACO	17S661	Green
Ocuvco	17\$662	Yellow
DORACO	17S663	White

### **XD Series Hose Reels**























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### **High Capacity Reel**

Used in applications requiring longer-range dispense and higher capacity than the standard XDX 10/20 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

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

























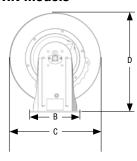
30 / 30 HN

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**



### **XD Series Hose Reels**





















30 / 30 HN



#### **XD 30 Reel Assembly Ordering Guide**

XD Series reels are available in four 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
Yellow	F
Desert Sand*	G

*Desert Sand not available on 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#

Select your reel color:
(from Reel Assembly Ordering

Metallic Blue = "B"

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.



#### **Bare Reels**

Required hose inlet kit sold separately.



Fluid	Hose (Not Included)		Connec	tion Size	Maximum		Recommended	
	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)	

























### 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	
0.11	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	
0	1/2 (13)	50 (15)	1/2 NPSM(M)	1/2 NPT(M)	5,000 (345)	HNHC5#	24E283	
Grease	3/8 (10)	75 (23)	1/2 NPSM(M)	3/8 NPT(F)	5,000 (345)	HNHB7#	24E283	
Dunanium Wash	3/8 (10)	75 (23)	1/2 NPSM(M)	3/8 NPT(M)	4,000 (276)	HNPB8#	24E283	
Pressure Wash	1/2 (13)	50 (15)	1/2 NPSM(M)	1/2 NPT(M)	4,500 (310)	HNPC5#	24E283	
Fuel/Oil Evacuation	1 (13)	30 (9)	3/4 NPSM(M)	1 NPT(M)	125 (8.6)	HNLE3#	24E285	

### **Bare Reels**

Required hose inlet kit sold separately.



Fluid	Hose (Not Included)		Connect	ion Size	Maximum		Recommended	
	ID in (mm)	Length ft (m)	Inlet 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.

1

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**





















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### **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
	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
In	224444	Mounts to side of reel to allow hanging of non-metered and high-flow dispensing valves

### **Self-Adhesive Identification Label Set**

S S	Part Number	Description
C sad on C person C sad on C cons	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 Identification Wraps**

Vinyl hose wrap for easy identification of meter fluid.

	Part Number	Description
GERACO	17S659	Red
GERACO	17S660	Blue
Q GRACU	17S661	Green
Ocuveo	17S662	Yellow
OGRACO	17S663	White

40 / 50



















### **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

#### **Technical Specifications** Operating Temperature Range -20°F to 180°F (-28°C to 82°C) Oil Reels – 1 inch All Other Reels -40°F to 180°F (-40°C to 82°C) Carbon steel, nickel plated cast iron, Buna-N rubber, Wetted Parts FKM UHMWPE Maximum Recommended 15 ft (4.6 m) Mounting Height 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 246-247)

All models include the hose, hose guide and ball stop kit.



### Option 2 - Bare Reel

(Pages 246-247)

Bare reel models do not include hose and ball stop kit.



#### **Choose Your Accessories (Pages 248)**



#### **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.



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.







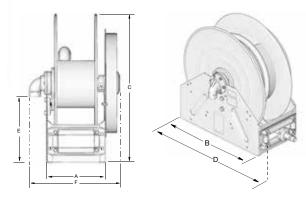












Dimensions										
Model	Inlet/Outlet Size		Dimensions in (mm)*							
	NPT(F)	Α	В	С	D	Е	F			
XD 4010 – Model 1	1 in/1 in	11.83 (300)	24 (610)	26.13 (664)	26.4 (671)	10.91 (277)	16.54 (420)			
XD 4010 - Model 2	1 in/1 in	11.83 (300)	24 (610)	26.13 (664)	26.4 (671)	10.91 (277)	17.47 (444)			
XD 5010	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**



### **XD Series Hose Reels**















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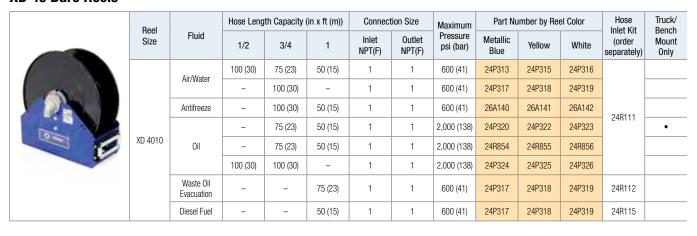
#### Ordering Information

#### **XD 40 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 Number by Reel Color			Hose Inlet Kit	Truck/Bench
	Size	Fluid	ID in (mm)	Length ft (m)	Inlet NPT(F)	Outlet NPT(M)	Pressure psi (bar)	Metallic Blue	Yellow	White	(Order Separately)	Mount Only
			1/2 (13)	100 (30)	1	1/2	300 (21)	24P327	24P328	24P329		
		Air/Water	3/4 (19)	75 (23)	1	3/4	300 (21)	24P330	24P331	24P332		
		All/Water	3/4 (19)	100 (30)	1	3/4	300 (21)	24P333	24P334	24P335		
			1 (25)	50 (15)	1	1	300 (21)	24P336	24P337	24P338		
	XD 4010	Antifreeze	3/4 (19)	100 (30)	1	3/4	300 (21)	24P984	24P985	24P986		
		Oil	1/2 (13)	100 (30)	1	1/2	2,000 (138)	24P339	24P340	24P341	24R111	
			3/4 (19)	75 (23)	1	3/4	1,500 (103)	24P342	24P343	24P344		•
1430			3/4 (19)	75 (23)	1	3/4	1,500 (103)	24R857	24R859	24R860		
			3/4 (19)	100 (30)	1	3/4	1,500 (103)	24P345	24P346	24P347	Ī	
			1 (25)	50 (15)	1	1	1,275 (88)	24P348	24P349	24P350		•
			1 (25)	50 (15)	1	1	1,275 (88)	24R861	24R862	24R863		
		Waste Oil Evacuation	1 (25)	50 (15)	1	1	250 (17)	24P351	24P352	24P353	24R112	
		Diesel Fuel	1 (25)	50 (15)	1	1	250 (17)	24P354	24P355	24P356	24R115	

#### **XD 40 Bare Reels**



#### **Remember to Order!**



















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#### **XD 50 Reels with Hose**

Includes hose, ball stop kit and hose guide. Required hose inlet kit sold separately.

	Reel		Но	Hose		Connection Size		Part Number by Reel 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/Watel	1 (25)	100 (30)	1	1	300 (21)	24P473	24P474	24P475	040111
2	XD 5010	Antifreeze	1 (25)	100 (30)	1	1	300 (21)	24P987	24P988	24P989	24R111
	XD 5010	Oil	1 (25)	75 (23)	1	1	1,275 (88)	24P476	24P477	24P478	
		Diesel Fuel	1 (25)	75 (23)	1	1	250 (17)	24P485	24P486	24P487	- 24R115
(a)			1 (25)	100 (30)	1	1	250 (17)	24P488	24P489	24P490	
		Waste Oil Evacuation	1-1/4 (32)	35 (11)	1-1/2	1-1/4	200 (14)	24P479	24P480	24P481	_
	XD 5015**		1-1/4 (32)	50 (15)	1-1/2	1-1/4	200 (14)	24P482	24P483	24P484	
			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**

p 181522	Reel Size	Fluid	Hose Length Capacity (in x ft (m))			Connection Size		Maximum	Part Number by Reel Color			Hose Inlet Kit
			1	1-1/4	1-1/2	Inlet NPT(F)	Outlet NPT(F)	Pressure psi (bar)	Metallic Blue	Yellow	White	(order separately)
		Air/Water	100 (30)	_	_	1	1	600 (41)	24P455	24P456	24P457	24R111
	XD 5010	Antifreeze	100 (30)	-	-	1	1	600 (41)	26A143	26A144	26A145	
Carried L		Oil	75 (23)	-	-	1	1	2,000 (138)	24P458	24P459	24P460	
		Diesel Fuel	100 (30)	_	_	1	1	600 (41)	24P455	24P456	24P457	- 24R115
			75 (23)	-	-	1	1	600 (41)	24P464	24P465	24P466	
		Waste Oil Evacuation	_	50 (15)		1-1/2	1-1/2	600 (41)	24P461	24P462	24P463	-
	XD 5015**		_	50 (15)	_	1-1/2	1-1/2	600 (41)	24P461	24P462	24P463	040447
		Diesel Fuel	-	50 (15)	50 (15)	1-1/2	1-1/2	600 (41)	24P467	24P468	24P469	24R117

^{**}Standard 2 inch Vitaulic™-style groove on inlet.

#### **Remember to Order!**



Victaulic is a trademark of Victaulic Company of America.



### **XD Series Hose Reel Accessories**















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### >>> 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**

- 61	100.00	-61	-
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46	mer.	-61	_
All.	bet let		- month
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	Add note:	6	-

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 Identification Wraps**

Vinyl hose wrap for easy identification of meter fluid

	Part Number	Description
GBRACO	17S659	Red
O GRACO	17S660	Blue
OGRACO	17S661	Green
Oanaco	17S662	Yellow
O GRACO	17S663	White

·	 	
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### **XD Series Powered Bare Hose Reels**













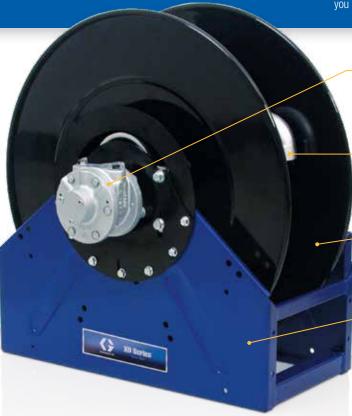


60 / 70 / 80



### 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







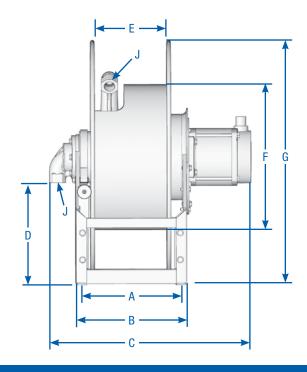








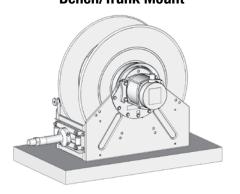




Dimensions Reference dimension "D" for specific motor type										
Model	Inlet/Outlet Size (J) NPT(F)	Dimensions in (mm)								
		A (Mounting Holes)	В	С			D	E	F	G
				Pneumatic	Hydraulic	Electric	U	Ľ	ı	d
XD 6010	1 in/1 in	10.45 (256)	11.8 (300)	20.4 (519)	15.7 (400)	21.6 (547)	10.9 (277)	7.8 (198)	15.5 (394)	26.1 (663)
XD 7010	1 in/1 in	12.95 (329)	14.3 (363)	22.9 (583)	18.2 (463)	24.1 (611)	10.9 (277)	10 (254)	10 (254)	26.1 (663)
XD 7015	1-1/2 in/ 1-1/2 in	12.95 (329)	14.3 (363)	23.7 (603)	19 (483)	24.8 (631)	10.9 (277)	10 (254)	10 (254)	26.1 (663)
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)
XD 8015	1-1/2 in/ 1-1/2 in	20.68 (525)	22.1 (561)	31.4 (799)	26.7 (679)	32.5 (827)	13.4 (340)	18 (457)	15.5 (394)	30.1 (765)
XD 8020	2 in/2 in	20.68 (525)	22.1 (561)	31.9 (809)	27.1 (689)	33 (837)	12.7 (323)	18 (457)	15.5 (394)	30.1 (765)

### **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 254-256)
- ☐ Order Reel and Motor Separately (Page 257)
  - □ Pneumatic Motor
  - ☐ Hydraulic Motor
  - □ Electric Motor
- □ 12 VDC, 1/2 HP □ 12 VDC, 2/3 HP
- □ 24 VDC, 2/3 HP □ 115 VAC, 0.40 HP

REQUIRED

□ 24 VDC, 1/2 HP



**Choose Your Reel Size** 

□ XD 60 □ XD 70 □ XD 80



**Choose Your Reel Color** 

Select from Blue, Yellow or White.

☐ Blue ☐ Yellow ■ White



### Choose Your Controls (Pages 258)

#### □ Pneumatic Motor

☐ 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, 4-way valve
- ☐ 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)





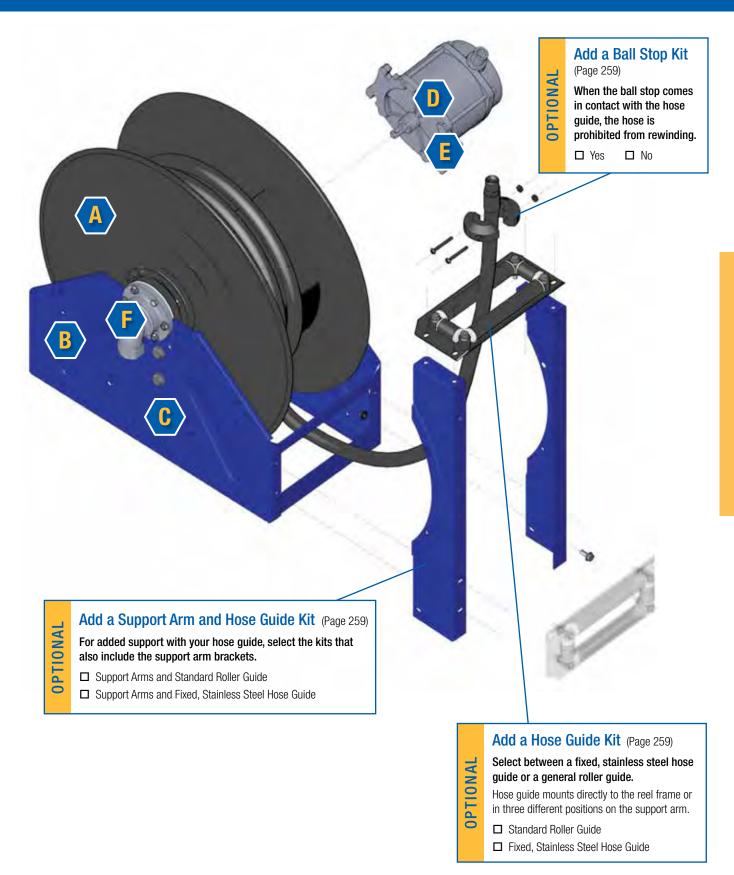
# Hose Inlet Kit (Page 259) FOR INSTALLATION

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**













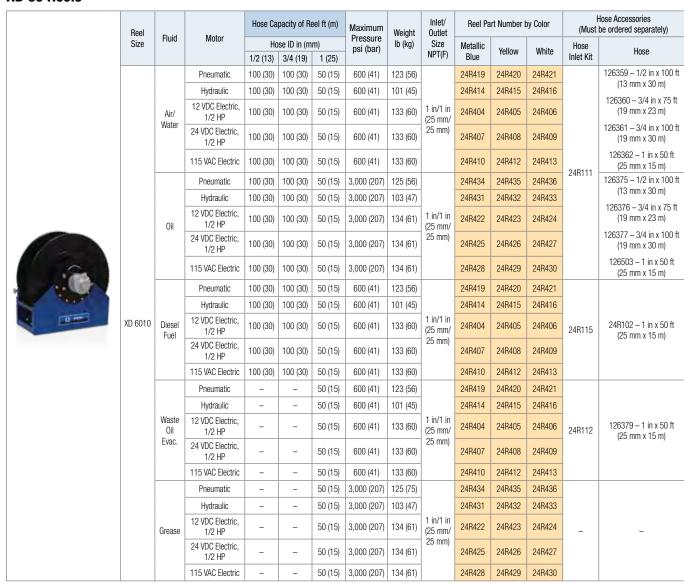


60 / 70 / 80



#### 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**

	Reel			Hose Capacity of Reel ft (m)	Maximum	Weight	Inlet/ Outlet	Reel Pa	ırt Number I	y Color		Hose Accessories be ordered separately)
Size	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
			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	24N111	
			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/ 25 mm) 24R45 (0) 24R45 (24R45)	24R452	24R453	24R454		(25 mm x 23 m) 126505 – 1 in x 100 ft (25 mm x 30 m)
			24 VDC Electric, 1/2 HP	100 (30)	3,000 (207)	133 (60)		24R455	24R456	24R457		
			115 VAC Electric	100 (30)	3,000 (207)	133 (60)		24R458	24R459	24R460		
			Pneumatic	100 (30)	600 (41)	122 (55)	24R44	24R449	24R450	24R451		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)	1 in/1 in	24R446	24R447	24R448	24R115	
١			12 VDC Electric, 1/2 HP	100 (30)	600 (41)	132 (60)	(25 mm/ 25 mm)	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		
			Pneumatic	150 (46)	600 (41)	164 (74)	24R52 1 in/1 in (25 mm/ 24R51	24R531	24R532	24R533		-
			Hydraulic	150 (46)	600 (41)	142 (64)		24R528	24R529	24R530		
		Air/ Water	12 VDC Electric, 1/2 HP	150 (46)	600 (41)	173 (78)		24R519	24R520	24R521		
		rato	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	24R111	
			Pneumatic	150 (46)	3,000 (207)	165 (75)		24R546	24R547	24R548	24NIII	
			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)
			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	Fluid	Motor	Hose Capacity of Reel ft (m)	Maximum Pressure	Weight	Inlet/ Outlet	Reel Pa	rt Number t	y Color		Hose Accessories t be ordered separately)	
	Size	i iuiu	IVIOTOI	Hose ID 1-1/2 in (38 mm)	psi (bar)	lb (kg)	Size NPT(F)	Metallic Blue	Yellow	White	Hose Inlet Kit	Hose	
			Pneumatic	65 (20)	600 (41)	100 (56)		24R516	24R517	24R518		24R110 – 1-1/4 in x 50 ft	
			Hydraulic	65 (20)	600 (41)	102 (46)		24R512	24R513	24R515			
		Diesel Fuel	12 VDC Electric, 1/2 HP	65 (20)	600 (41)	133 (60)	(60) 24R506	24R504	24R505	24R117	(32 mm x 15 m) 24R114 – 1-1/2 in x 50 ft		
		" "	24 VDC Electric, 1/2 HP	65 (20)	600 (41)	133 (60)		24R506	24R507	24R508		(38 mm x 15 m)	
	XD 7015	-	115 VAC Electric	65 (20)	600 (41)	133 (60)		24R509	24R510	24R511			
	XD 7015		Pneumatic	50 (15)	600 (41)	100 (56)		24R516	24R517	24R518		126380 – 1-1/4 in x 35 ft	
		Waste Oil	Hydraulic	50 (15)	600 (41)	102 (46)	1-1/2 in/	24R512	24R513	24R515		(32 mm x 11 m)	
			12 VDC Electric, 1/2 HP	50 (15)	600 (41)	133 (60)	1-1/2 in (38 mm/	24R503	24R504	24R505	-	126688 – 1-1/4 in x 50 ft (32 mm x 15 m)	
Dec. 15		Evac.	24 VDC Electric, 1/2 HP	50 (15)	600 (41)	133 (60)	38 mm)	24R506	24R507	24R508		127173 – 1-1/2 in x 50 ft	
			115 VAC Electric	50 (15)	600 (41)	133 (60)		24R509	24R510	24R511		(38 mm x 15 m)	
			Pneumatic	100 (50)	600 (41)	165 (75)		24R561	24R562	24R563			
			Hydraulic	100 (50)	600 (41)	143 (65)		24R558	24R559	24R560			
	XD 8015	Diesel Fuel	12 VDC Electric, 1/2 HP	100 (50)	600 (41)	175 (79)		24R549	24R550	24R551	24R117	24T253 – 1-1/2 in x 100 ft (38 mm x 30 m)	
		1 001	24 VDC Electric, 1/2 HP	100 (50)	600 (41)	175 (79)		24R552	24R553	24R554		(00 11111 x 00 111)	
			115 VAC Electric	100 (50)	600 (41)	175 (79)		24R555	24R556	24R557			

## Reel with Motor - 2 in (51 mm) Inlet/Outlet **XD 70 / XD 80 Reels**

	Reel	Fluid	Motor	Hose Capacity of Reel ft (m)	Maximum Pressure	Weight	Inlet/ Outlet	Reel Part Number by Color			Hose Accessories (Must be ordered separately)	
	Size	Fluiu	ivioloi	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)	2 in/2 in (51 mm/	24T023	24T024	24T025		127167 – 2 in x 33 ft (51 mm x 10 m)
100			Hydraulic	33 (10)	600 (41)	106 (48)		24T020	24T021	24T022	- 24R118 -	
	XD 7020	20 Diesel	12 VDC Electric, 1/2 HP	33 (10)	600 (41)	137 (62)		24T011	24T012	24T013		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			24 VDC Electric, 1/2 HP	33 (10)	600 (41)	137 (62)		24T014	24T015	24T016		
A A STATE OF THE S			115 VAC Electric	33 (10)	600 (41)	137 (62)		24T017	24T018	24T019		
		Fuel	Pneumatic	50 (15)	600 (41)	169 (76)	51 mm)	24R576	24R577	24R578		24T254 – 2 in x 50 ft (51 mm x 15 m)
			Hydraulic	50 (15)	600 (41)	147 (67)		24R573	24R574	24R575		
)	XD 8020	8020	12 VDC Electric, 1/2 HP	50 (15)	600 (41)	179 (81)		24R564	24R565	24R566		
			24 VDC Electric, 1/2 HP	50 (15)	600 (41)	179 (81)		24R567	24R568	24R569		
			115 VAC Electric	50 (15)	600 (41)	179 (81)		24R570	24R571	24R572		



























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60 / 70 / 80

>>> Ordering Information

## **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	Fluid	Hose ID in (mm)				Pressure   Ib (kg)		Size	Metallic	Yellow	White	
			1/2 (13)	3/4 (19)	1 (25)	1-1/2 (38)	2 (51)	por (bar)		NPT(F)	Blue	IGIIOW	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
The same of the sa		Grease	-	_	50 (15)	-	-	3,000 (207)	88 (40)	1 in/1 in	24T107	24T108	24T109
2	XD 7010	Air/Water/ Diesel Fuel	-	_	100 (30)	-	-	600 (41)	86 (39)	(25 mm/25 mm)	24T110	24T111	24T112
		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
	VD 7015	Waste Oil Evac.	-	_	_	50 (15)	-	600 (41)	87 (39)	1-1/2 in/	24T116	24T117	24T118
	XD 7015		-	-	-	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	Diesei 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
	127271	Pneumatic valve to control XD 60/70/80 pneumatic powered hose reels. 2-position, 3-way valve.
	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.
N CONTRACTOR OF THE PARTY OF TH	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.
	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.
81.	127223	Hazardous-location push-button on/off switch. Use for 115 and 220 VAC.
	127218	Hazardous-location junction box
100	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	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
	24T327	Stainless steel hose guide for XD 60
	24T328	Stainless steel hose guide for XD 70
	24T329	Stainless steel hose guide for XD 80
<b>10</b>	24R072	Roller guide kit with bracket for XD 40 and XD 60
	24T330	Roller guide kit with bracket for XD 70
	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)
E	24T335	Arm kit with roller guide for XD 60 (24R072)
11	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
VOICE VOICE	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**

s s	Part Number	Description
E man C man	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 Identification Wraps**

Vinyl hose wrap for easy identification of meter fluid

	Part Number	Description
GORACO	17S659	Red
GGRACO	17S660	Blue
OGRACO	17S661	Green
O GRACO	17S662	Yellow
O GRACO	17S663	White

## **Air/Water/Antifreeze Hoses**



Part Number	Description	Compatible Reel Series
253848	3848 3/8 in x 35 ft (10 mm x 11 m) hose for air/water, 300 psi (20.6 bar) SDX 10, XDX 10	
253849 3/8 in x 50 ft (10 mm x 15 m) hose for air/water, 300 psi (20.6 bar) SDX 10, XDX 10		SDX 10, XDX 10
253850 3/8 in x 65 ft (10 mm x 20 m) hose for air/water, 300 psi (20.6 bar) SDX 20, XDX 20		SDX 20, XDX 20
253852	1/2 in x 35 ft (13 mm x 11 m) hose for air/water, 300 psi (20.6 bar)	SDX 10, XDX 10
253853	1/2 in x 50 ft (13 mm x 15 m) hose for air/water, 300 psi (20.6 bar)	SDX 20, XDX 20
16A684	1/2 in x 75 ft (13 mm x 23 m) hose for air/water, 300 psi (20.6 bar)	XD 30
126359	1/2 in x 100 ft (13 mm x 30 m) hose for air/water, 300 psi (20.6 bar)	XD 40, XD 60
16A707 3/4 in x 50 ft (19 mm x 15 m) hose for air/water, 300 psi (20.6 bar) XD 30		XD 30
126360	3/4 in x 75 ft (19 mm x 23 m) hose for air/water, 300 psi (20.6 bar)	XD 40
126361	3/4 in x 100 ft (19 mm x 30 m) hose for air/water, 300 psi (20.6 bar)	XD 40, XD 60
126362	1 in x 50 ft (25 mm x 15 m) hose for air/water, 300 psi (20.6 bar)	XD 40, XD 60
126363	1 in x 75 ft (25 mm x 23 m) hose for air/water, 300 psi (20.6 bar)	XD 50
126364	1 in x 100 ft (25 mm x 30 m) hose for air/water, 300 psi (20.6 bar)	XD 50, XD 70

## **Oil Hoses**



Part Number	Description	Compatible Reel Series
26C121	1/2 in x 35 ft (13 mm x 11 m) hose for oil, 2,000 psi (138 bar) SDX 10, XDX 10	
26C122	1/2 in x 50 ft (13 mm x 15 m) hose for oil, 2,000 psi (138 bar) SDX 20, XDX 20	
26C123	1/2 in x 75 ft (13 mm x 23 m) hose for oil, 2,000 psi (138 bar)	XD 30
26C124	1/2 in x 100 ft (13 mm x 30 m) hose for oil, 2,000 psi (138 bar)	XD 40, XD 60
126376	3/4 in x 75 ft (19 mm x 23 m) hose for oil, 1,500 psi (103 bar)	XD 40, XD 60
126377	77 3/4 in x 100 ft (19 mm x 30 m) hose for oil, 1,500 psi (103 bar) XD 40, XD 60	
126503	1 in x 50 ft (25 mm x 15 m) hose for oil, 1,275 psi (88 bar)	XD 40, XD 60
126504	1 in x 75 ft (25 mm x 23 m) hose for oil, 1,275 psi (88 bar)	XD 50
126505	1 in x 100 ft (25 mm x 30 m) hose for oil, 1,275 psi (88 bar)	XD 70, XD 80























## **Grease Hoses**

	Part Numb
	109158
	124470
	124461
	126076
	16/67/

Part Number	Description Compatible Reel Series	
109158	1/4 in x 50 ft (6 mm x 15m) hose for grease, 5,000 psi (345 bar) SDX 10, XDX 10	
124470	124470 3/8 in x 35 ft (10 mm x 11 m) hose for grease, 4,800 psi (331 bar) SDX 10, XDX 10	
124461	3/8 in x 50 ft (10 mm x 15 m) hose for grease, 4,800 psi (331 bar) SDX 20, XDX 20	
126076	3/8 in x 75 ft (10 mm x 23m) hose for grease, 5,000 psi (345 bar)	XD 30
16A674	1/2 in x 50 ft (13 mm x 15 m) hose for grease, 5,000 psi (345 bar)	XD 30

#### **Waste Oil Evacuation Hoses**



Part Number	Description Compatible Reel Ser	
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 bar)       XD 50		XD 50	
		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**

-	O			100
,	W		- 1	9
	1	6		

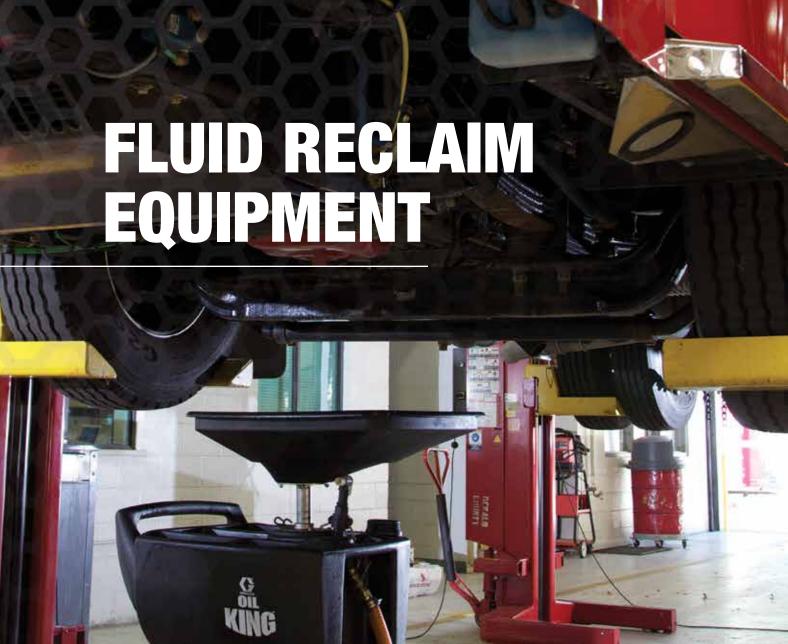
Part Number	Description	Compatible Reel Series
125242	3/4 in x 50 ft (19 mm x 15 m) hose for DEF fluid, 50 psi (3 bar)	XD 30

#### **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
126075	1/2 in x 50 ft (13 mm x 15 m) hose for pressure wash, 4,500 psi (310 bar)	XD 30

Notes	



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() GRACO



#### **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

echnical 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.









#### **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-, rustand 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

echnical 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.



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## **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

chnical 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	



Part Number	Description
26C061	24 gal (90 l) steel tank with suction probes and adapters
26C062	24 gal (90 l) steel tank with suction probes, adapters and sight glass
260063	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
- · Fleet services facilities
- · Service shops

## Typical Fluids Handled

• Used oil

Techi	Fechnical Specifications		
I	Fluid	Used oil	
Ī	Fluid Capacity	16 gal (61 l)	
I	Evacuation	Gravity	
Ī	Receiver Material	Steel (239302 does not include drum)	
Ī	Manual	306449	
I	Length	26 in (66 cm)	
1	Width	23 in (58 cm)	
I	Height	42 to 70 in (107 to 177 cm)	
Ī	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	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	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

echnical 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 and mobility are important. Adjustable steel rollers fit track widths.
235346	Narrow rolling used-oil receiver, specially designed for car and truck fast lube facilities where speed and mobility are important. Adjustable steel rollers fit 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





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)
Instruction Manual	308573	313597

## Ordering Information

Part Number	Description
241906	Husky 716 Evacuation Pump
647731	Husky 1050 Evacuation Pump



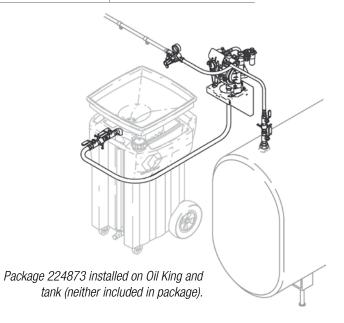




## **Wall Mount Packages**



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
<b>Fluid</b> 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	_





#### **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.

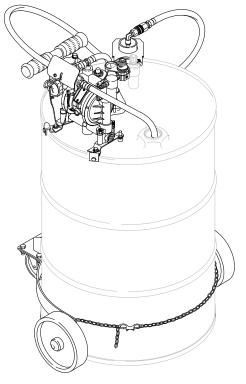




# **Fas-Vac Mobile Packages**



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
Evacuation Kit	224669 / 224666	224702 / 224666
4-Way Valve	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)

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#### **4-Way Evacuation Valve**

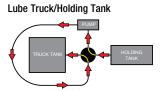
Directional control valve used to simplify the filling and emptying of tanks



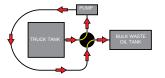
#### **Features and Benefits**

- 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
The f	104266	1/2 NPT(FBE)
1	244844	1/2 NPT(FBE) with gauge
•	207755	3/4 NPT(FBE)
å,	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.
Ŧ	106148	3/8 NPT(FBE) Air Filter. Auto-drain.
Ŧ	106149	1/2 NPT(FBE) Air Filter. Manual drain.
Ŧ	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
0	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.
666	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.
<b>†</b>	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 cap (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	



Pa	age
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SORIES

AIR ACCESS

184 66 300 PSI 21 MAX WPF





## **Air Filter-Regulator**

	Part Number	Inlet	Flow Range	Drain Type	Maximum Working Pressure
120	133215	1/4 in NPT(MBE)	20 cfm (550 lpm)	Semi-automatic	
	133216	1/4 in NPT(MBE)	63 cfm (1,800 lpm)	Automatic	140 psi (9.65 bar)
	133217	3/8 in NPT(MBE)	77 cfm (2,200 lpm)	Automatic	

#### **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).

0 0 0	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
	208390	1/4 in NPT(MBE)	500 psi
	208393	3/8 in NPT(MBE)	500 psi
100	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



#### **Air Needle Valve**

Controls pump speed by restricting air flow to pump or other air-operated equipment.

	Part Number	Inlet	Outlet
500	205090	1/4 in NPSM(M)	1/4 in NPSM(F)
99	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.

alle-	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
	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.

8	Part Number	Inlet
policy	224040	3/4 in NPT(FBE)





#### **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**

	Dowl Number	Description	Includes			
	Part Number	Description	12 in Hose	Swivel Dual-Foot Chuck	Straight-On Chuck	Pop-Out Gauge
4	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
19	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		Fitt	ting	
	(mm)	(bar)		End 1 Thread NPT(M)	End 2 Thread NPT(M)	Part Number
			12 in (0.3 m)			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)			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	109161
	3/8 (9.5)		48 in (1.2 m)	3/8		109162
		4,000 (276)	72 in (1.8 m)			109163
	(212)	(2.3)	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
	1.00	0.000	10 ft (3.1 m)			220590
	1/2 (12.7)	3,000 (207)	16 ft (4.9 m)	1/2	1/2	220592
			20 ft (6.1 m)			220593
			25 ft (7.6 m)			220608
			40 ft (12.2 m)			221092
			50 ft (15.3 m)			221093
			75 ft (22.9 m)		3/4	237861
			18 in (0.4 m)			109108
	2/4	2.250	72 in (1.8 m)	3/4	3/4	109105
	3/4 (19.1)	2,250 (155)	10 ft (3.0 m)			111010
			75 ft (22.9 m)	1/2	1	237865
			50 ft (15.2 m)	172	· ·	237866
	1 (25.4)	212 (14.6)	50 ft (15.2 m)	1	1	241908
	1 (25.4)	125 (8.7)	50 ft (15.2 m)	1	1	249058





## **Air/Water Hoses**

For use with low pressure air and water. Hoses are male NPT at both ends.

	ID Inch	Max PSI	Hees I swall-	Fitt	ting	Doub Nove to a
	(mm)	(bar)	Hose Length	End 1 Thread NPT(M)	End 2 Thread NPT(M)	Part 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)	( /	25 ft (7.6 m)		1/2	109127
			40 ft (12.2 m)		1/2	109128
			40 ft (12.2 m)	3/8	1/4	218491
			18 in (0.5 m)		3/8	204560
			4 ft (1.2 m)	3/8		109130
	3/8 (9.5)		6 ft (1.8 m)	3/8		203320
		180 (12.4)	10 ft (3.1 m)			109131
			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)	1/2		205418
			10 ft (3.1 m)			214656
	1/2	300	25 ft (7.6 m)	1/2	1/2	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)			110048
	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

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#### **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	













# **Bushings and Pipe Adapters – Reducing, Standard and Expanding**



Outlet	Inlet								
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	-	_			
3/8 in NPT	-	159841	150286	156022	-	_			
1/2 in NPT	-	100206	100081	-	168595	_			
3/4 in NPT	-	100615	100505	100896	_	_			
1 in NPT	-	-	-	100380	158586	_			

## **Street Elbows**



Part Number	Inlet/Outlet
100840	1/4 in NPT
155699	3/8 in NPT
158683	1/2 in NPT
176393	3/4 in NPT

## **Coupling – Standard**



Part Number	Inlet
100451	1/8 in NPT
113093	1/4 in NPT
162024	3/8 in NPT
158581	1/2 in NPT
100385	3/4 in NPT
100474	1 in NPT

## **Hex Nipples - Standard and Reducing**



Male End 2	Male End 1							
	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	_	_			
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			



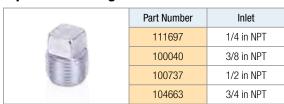








## **Square Head Plug**



## **Swivel Adapters***











			3			
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	-
	3/8 in	157705	-	-	-	-
3/8 in	1/4 in	-	159153	-	155495	-
	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	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 OD		
	Description	Inlet	5/8 in	7/8 in	
	Tube Union Flow 90° Elbow	-	101012	101376	
1 13	Straight Tube Union	_	101009	101340	
	Male Connector	3/4 in NPT	_	101339	
1	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
REELS	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
METERS	Wear parts, including but not limited to o-rings, seals and valves	1 Year
	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
PUMPS	Mini Fire-Ball 225 and Fire-Ball 300 Oil and Grease Pumps	7 Years
5	Wear Parts, including but not limited to o-rings, packings and seals	1 Year
	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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